CHAPTER 2

Systemic Functional Linguistics and Register

2.1 INTRODUCTION

Systemic Functional Linguistics (SFL) is a theory of language and discourse developed by M.A.K. Halliday and his followers. Systemic in SFL refers to a conception of language as a network of systems, or choices, for expressing meaning. Functional refers to a concern for what language does and how it does it, in contrast to more structural approaches.

Halliday began to develop his theory in the 1960s. He was influenced by the British linguist Firth, his teacher, from whom he inherited the notions of language as a set of systems and the importance of context in the interpretation of meaning. Malinowski, a social anthropologist of Polish origin, but working at London University, also had an important impact on Halliday, with his emphasis on the relation between language and context, that is, his idea that you need to be in the particular context to understand the meaning of an utterance, and his notion of multiplicities of languages according to situations. Another influence on Halliday was the American linguist, Whorf, who also insisted on how language was influenced by environment. Another body of work drawn upon by Halliday was that of the Danish linguist, Hjelmslev, and his notion of language as the level of expression of a higher-level semiotic system. A final influence on Halliday was the functional approach of the Prague school of linguistics, especially with regard to the textual metafunction (see below).

Although first and foremost a linguist, Halliday is very much concerned with the role of language in society, particularly education. One of his earliest publications (Halliday et al., 1964) was entitled *The Linguistic Sciences and Language Teaching*. Many of Halliday’s ideas are already present in this early publication and we will draw on it for the account of Halliday’s approach in this chapter. Other key texts to be drawn on here are the book Halliday wrote with his wife (Halliday & Hasan, 1985/1989), *Language, Context, and Text: Aspects of language in a social-semiotic perspective*, which gives a good account of Halliday’s theory of register; *Spoken and Written Language* (Halliday, 1989), which compares the salient features of these two linguistic channels; and the latest version of his book setting out his model of grammar, *An Introduction to Functional Grammar* (revised by Matthiessen [Halliday & Matthiessen, 2004]). We will begin, however, with Halliday’s model of first language acquisition, as set out in a book entitled *Learning How to Mean* (Halliday, 1975).

2.2 A FUNCTIONAL PERSPECTIVE ON CHILD LANGUAGE ACQUISITION

Through a diary study of his child, Nigel, Halliday (1975) developed a theory of language development. The theory is a functional one, as might be expected with a title such as *Learning How to Mean*, with development seen as taking place in a social context, through interaction, rather than
as some innate biological process. The first stage of Nigel’s language learning is described by Halliday as a protolanguage; this is when Nigel developed a small set of words which he developed to express certain functions. The proto-words that made up this set were not learned from the social environment but came from Nigel himself, words such as *da*, *na*, *a* and *yi*. Nevertheless these words were discovered to perform particular functions, of which Halliday identified six, as follows:

1. **Instrumental**: to obtain goods or services – the ‘I want’ function.
2. **Regulatory**: to control the behaviour of others – the ‘do as I tell you’ function.
3. **Interactional**: to interact with others – the ‘me and you’ function.
4. **Personal**: to express the personality of the child – the ‘here I come’ function.
5. **Heuristic**: to explore and learn about the environment – the ‘tell me why’ function.
6. **Imaginary**: to create the child’s own environment – the ‘let’s pretend’ function.

Later, a seventh function is added to the child’s repertoire, the *informative* function – the ‘I’ve got something to tell you’ function.

Halliday explains the development of the protolanguage as follows:

> A child begins by creating a proto-language of his own, a meaning potential in respect of each of the social functions that constitute his developmental semiotic. (Halliday, 1978: 124)

As the various functions of the protolanguage develop, so does the need for a language code through which they can be expressed:

> The text-in-situation by which [the child] is surrounded is filtered through his own functional-semantic grid, so that he processes just as much of it as can be interpreted in terms of his own meaning potential at the time.

(Halliday, 1978: 124)

In this way, with gradually increasing degrees of sophistication, language forms come to be attached to the meaning that the child wishes to express. As the child begins to be involved in more and more complex social relations, so do the demands grow greater and so does the language system increase to cope with them. By the time of secondary schooling, for example, the young adult is introduced to the concept of *grammatical metaphor*, how one type of process is represented in the grammar of another, to use a noun to refer to a process. For example, *The student's refusal to participate* … as opposed to *The student refused to participate* … (see below for more on this).

Since Halliday’s original study, four other longitudinal case studies have been reported (Painter, 2009), each confirming Halliday’s basic position that: ‘the nature of development cannot be viewed as some kind of flowering that occurs independently with the child, or through the child’s autonomous explorations of the environment, but must be seen from its inception as a profoundly social process’ and that ‘the SFL account of language development is one that has always stressed the dialogic, interpersonal nature of the process from birth onwards …’ (Painter, 2009: 95).

### 2.3 Systemic Functional Linguistics

We already mentioned that the term *systemic* in SFL refers to how language is viewed as a network of interrelated systems or set of choices for making meanings. Figure 2.1 is a systems network for *mood*, the system of verb forms used to indicate the speaker’s attitude toward a statement, in the English clause.

We also mentioned how the term *functional* is in opposition to *formal*, that is, language is construed as a practical means of expressing meanings rather than as an abstract set of relations,
which is the approach of many other schools of linguistics, in particular Chomskyan generative grammar. SFL views grammar and lexis (vocabulary) as working together in making meanings: this combination is referred to as lexicogrammar.

According to SFL, meanings are expressed according to three broad metafunctions: ideational, interpersonal and textual. The ideational metafunction is concerned with things (real or imagined) in the world. It is to do with actions, events and states (referred to as processes), for example, run, occur, be; participants in those processes, for example, he, she, man, car, weather, and the circumstances in which those processes occur, that is, how, when, and where. It is divided into two components: the experiential component (to do with experience and understanding of the world) and the logical component (to do with logical relations). The interpersonal function has to do with relationships between participants, not only in spoken texts, but also in written texts (with regard to how the writer interacts with the reader). The textual metafunction relates to the construction of text, how it is held together and what gives it texture. The textual function is an enabling function, because the two other functions ‘depend on being able to build up sequences of discourse, organizing the discursive flow, creating cohesion and continuity as it moves along’ (Halliday & Matthiessen, 2004: 30).

It is important to note that the three metafunctions are not independent of each other and that any stretch of language expresses, or realises, the three functions simultaneously. Hasan (1995: 231) refers to this relationship as like a chemical solution, where each factor affects each of the others. Having said that, while the three metafunctions freely combine together, they do not constrain each other (Halliday & Matthiessen, 2004: 30). Thus, certain linguistic features are more typically expressive of one of the functions than the others. Lexis is typically associated with ideational meanings, for example, while modal verbs are associated with the interpersonal function. Conjunctions, on the other hand, are closely associated with the textual metafunction. Nevertheless, there is overlap. Thus, for example, although lexis, is, as we have said, primarily associated with the ideational metafunction, it may also have an interpersonal dimension to its meaning; for example, words like disgusting, revolting and sordid are typically used to express an individual’s negative attitude towards something or somebody; similarly, pronouns may play both an interpersonal and textual role, interpersonal to show relationships between interlocutors and textual to link up one stretch of text with another.

The metafunctions are related to, or realise, features of what in SFL is called the context of situation. These features are referred to as contextual parameters. Thus, ideational meanings realise what is called the field of discourse (the purpose of the communication and what it is about), interpersonal meanings realise what is called the tenor (the relations between the participants in the text) and textual meanings realise what is referred to as the mode (how the language is organised and functions in the interaction, for example, whether it is written or spoken or some combination of the two.

Figure 2.1  Mood system of the English clause.
systemic functional linguistics and register

Hudson (1980: 49) offers an aide-mémoire to help understand these contextual features: field refers to ‘why’ and ‘about what’ a communication takes place; tenor is about ‘to whom’ the communication is directed, that is, how the speaker or writer sees the person with whom s/he is communicating; and mode is about ‘how’ the communication takes place. The relations between the different levels of contextual parameters, metafunctions and lexicogrammar can be represented as in Table 2.1.

It is important to note that context is not a fixed, deterministic phenomenon, but is dynamic and evolving. Context and language are mutually constitutive. Context constrains choices in language while at the same time choices in language shapes context.

2.4 REGISTER

In any given context of situation, a certain set of contextual parameters comes together in what is called a register. Halliday and Hasan (1985/1989: 38–39), accordingly, define register as ‘a configuration of meanings that are typically associated with a particular situational configuration of field, mode, and tenor’. To put it more simply, register is a set of linguistic choices associated with a particular situation. These situations are usually related to professional activity (the language of teachers, doctors, students, and so forth) or interests (bridge-playing, bird-watching, music-making, and so forth). Examples of registers would be church services, school lessons or sports commentaries (Halliday et al., 1964). As Halliday et al. (1964: 87) point out, a single sentence from any of these registers might enable us to identify it correctly. We can guess that ‘let us pray’ probably comes from a church service, that ‘open your books at page 1’ probably comes from a school lesson and that ‘three players are on yellow cards’ probably comes from a soccer commentary. Nevertheless, it should be noted that the boundaries between registers are difficult, if not impossible, to specify. Thus, register is an idealised concept which allows us to make predictions about what lexicogrammatical features are likely to occur in any given situation. One thing that can be said from the point of view of learners, whether they be first- or second-language (L1 or L2) learners, is that the mixing of items from different registers is a frequent problem. The PhD applicant who wrote to me for the first time using the term of address Hi Sir is just one example.

Taking the contextual parameters one by one, under the heading of field – what is going on in the text and the area of language activity (Halliday et al., 1964: 90) – registers may be identified according to the event of which the language activity forms a part. In some situations, language accounts for the great part of the activity, for example, an essay or academic discussion. Here, the register can be defined in terms of the subject matter, for example, politics, history or biology. In other situations, language plays only a minimal role and here the register refers to the whole event, for example, domestic chores, playing games, performing medical operations.

With regard to registers identified according to tenor – the relations between the participants – level of formality is a primary distinction, colloquial and formal registers being differentiated, although they are related on a cline, rather than as distinct categories. Tenor relations may be more or less permanent. The relationship between a husband and wife is a fairly permanent one (at least traditionally). Casual encounters are likely to vary with the situation. An encounter at a party is likely
to be informal, whilst one in an office is likely to be more formal. Some relationships are socially defined, such as that between teacher and pupil and that between doctor and patient. Some relationships are directly encoded in the language. The *tu/vous* distinction of many languages is determined according to the formality of the relationship. Some languages, such as Japanese, reserve certain grammatical forms for men and others for women.

As for mode, the primary distinction here is between spoken and written, but, within this primary classification there can be subdivisions into, for example, literature, newspaper and advertising for written registers and casual conversation and formal interview and sports commentary for spoken registers. There may also be registers which blur the spoken/written distinction, for example, plays, which are written to be spoken, or political speeches, which are written to be read aloud. Registers labelled at a higher level of classification can be further subclassified. Thus, literature can be broken down into prose and verse; the news register can be broken down into reportage, editorial writing and features writing.

The three dimensions taken together can be used to determine a register. Halliday *et al.* (1964: 93) give the example of a lecture on biology at a technical college. They describe this as being in the scientific field, the polite tenor and the lecturing mode. As another example, they point out that the same lecturer, 5 minutes later, in the staff common room, may switch to the field of cinema, tenor of man among colleagues and mode of conversation, with corresponding changes in linguistic choices.

If we take a concrete example of a text in a certain register, say a biology lecture, to use the example of Halliday *et al.*, we can create a description of its contextual parameters and associated likely lexicogrammar, as in Table 2.2.

### 2.5 LEXICOGRAMMAR

In order to come up with lexicogrammatical specifications of registers, it is necessary to be familiar with the descriptive apparatus of SFL. With reference to a very short text, this next section will map out what might be considered to be the most important features of this apparatus, from a discourse analytic point of view. Given the limited space, a lot more will be left out than can be included, but a flavour of the approach can still be given. At this point, a warning is perhaps warranted that there is rather a lot of terminology to grasp in SFL description. This is off-putting, it must be admitted, for some people, especially as traditional grammatical categories are often replaced by new ones. The rationale for this, however, is to emphasise the functional, semantic (meaning-focused) approach to description. The labels refer to semantic phenomena, whereas the labelling of traditional grammar is more focused on form.

In order to exemplify the various lexicogrammatical features of English as they relate to the

<table>
<thead>
<tr>
<th>Contextual parameter</th>
<th>Lexicogrammar</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Field</strong></td>
<td>Biological lexis</td>
</tr>
<tr>
<td>An area of information about the given biological topic</td>
<td>Relational process clauses (verbs of being and existing) and material process clauses (verbs of doing and happening)</td>
</tr>
<tr>
<td><strong>Tenor</strong></td>
<td>Mostly declarative clauses</td>
</tr>
<tr>
<td>Participants: lecturer as expert giver of knowledge and students as novice recipients of knowledge</td>
<td>Occasional use of imperatives, for example, <em>look at this slide; write this down</em></td>
</tr>
<tr>
<td><strong>Mode</strong></td>
<td>Discourse markers to signal structuring of the lecture such as <em>well, OK, so, right, now</em></td>
</tr>
<tr>
<td>Informal spoken monologue with occasional breaks for questions Supported by visual elements Expository</td>
<td></td>
</tr>
</tbody>
</table>
My favourite pet

My favourite pet is my parrot. He is an African Grey. We got him about 5 years ago. He has a grey body and a red tail. His beak is very sharp and he can bite you. He can say lots of words, like ‘Hello’, ‘How are you today?’ and ‘Who’s a pretty boy then?’ He hasn’t got a name. We just call him ‘parrot’.

Figure 2.2 Short children’s text about a pet parrot.

contextual parameters of field tenor and mode and to the ideational, interpersonal and textual metafunctions, we will use a very short text which was written by my son when he was in primary school (Figure 2.2).

2.5.1 Features related to field and the ideational function

2.5.1.1 Lexis

The first thing to note with respect to field is how the lexis relates semantically to the topic of the text, *my parrot*, that is to say, *my favourite pet* – *my parrot* – *an African Grey* – *a grey body* – *a red tail* – *his beak* – *very sharp* – *can bite*. Lexis is the most obvious way to recognise the field of any text.

2.5.1.2 Rank hierarchy

SFL works with a hierarchy of units, or ranks, as follows:

- clause complex
- clause
- group
- word

Each of these units consists of one or more of the units below it. Thus a group consists of one or more words, a clause consists of one or more groups, and a clause complex consists of one or more clauses. SFL does not use the term *sentence* in this hierarchy, considering *sentence* to be part of the system of orthography (writing) rather than grammar.

Let us take an example clause complex from our sample text: *His beak is very sharp and he can bite you*. This is a clause complex consisting of two clauses (connected by *and*), as follows:

Clause 1: *his beak is very sharp*
Clause 2: *he can bite you*

If we consider the composition of these clauses, we see that the first one, *his beak is very sharp*, consists of three groups:

- a nominal group: *his beak*
- a verbal group: *is*
- an adjectival group: *very sharp*

We see that the first of these groups consists of two words, the second of just one word and the third of two words. In the second clause, *he can bite you*, we have the following breakdown:
a nominal group: he
a verbal group: can bite
a second nominal group: you

Here, there are two nominal groups, each consisting of just one word, but the verbal group is made up of two words (a main verb bite and a modal verb can).

Because this text was written by a child, the groups are short. Some nominal groups, particularly in technical and bureaucratic registers, can be rather long. Here is quite an extreme example consisting of 44 words from a book on linguistics (Thibault 2004: 16) (complex nominal group underlined):

I conclude that language and other semiotic modalities emerge from the primordial many degrees of freedom of the prior, sensor-motor based modalities of semiosis which constitute our earlier, always embodied, always semiotically mediated, transactions with the topological richness and variety of the physical-material processes and flows of the world in which we are immersed.

2.5.1.3 Clauses

The clause is the basic unit of analysis in SFL. A clause is made up of processes (expressed as verbal groups), participants (expressed as nominal groups) and circumstances (expressed as adverbial groups or prepositional phases). These are functional labels, indicating the role of each element in the clause, that is to say, processes involve participants in certain circumstances.

The following is our sample text broken down into clauses.

1. My favourite pet is my parrot.
2. He is an African Grey.
3. We got him about 5 years ago.
4. He has a grey body and a red tail.
5. His beak is very sharp
6. [and] he can bite you.
7. He can say lots of words, like ‘Hello’, ‘How are you today?’ and ‘Who’s a pretty boy then?’
8. He hasn’t got a name.
9. We just call him ‘parrot’.

Most of the clauses in this simple text consist of two participants and a process. For example, the first two clauses can be labelled as follows.

<table>
<thead>
<tr>
<th>Participant</th>
<th>Process</th>
<th>Participant</th>
</tr>
</thead>
<tbody>
<tr>
<td>My favourite pet</td>
<td>is</td>
<td>my parrot</td>
</tr>
<tr>
<td>He</td>
<td>is</td>
<td>an African Grey</td>
</tr>
</tbody>
</table>

There is always a process in any clause and usually one or more participants. The final clause in our sample text has three participants.

<table>
<thead>
<tr>
<th>Participant</th>
<th>Process</th>
<th>Participant</th>
<th>Participant</th>
</tr>
</thead>
<tbody>
<tr>
<td>We</td>
<td>call</td>
<td>him</td>
<td>parrot</td>
</tr>
</tbody>
</table>
The fifth clause is the only clause in our sample text to contain a circumstance. Circumstances are optional elements in the clause.

<table>
<thead>
<tr>
<th>Participant</th>
<th>Process</th>
<th>Participant</th>
<th>Circumstance</th>
</tr>
</thead>
<tbody>
<tr>
<td>We</td>
<td>got</td>
<td>him</td>
<td>about 5 years ago</td>
</tr>
</tbody>
</table>

The process element of a clause may be finite, that is to say, it is marked for tense and takes a subject, or non-finite, that is, it is not marked for tense and does not take a subject. All of the clauses in our sample text are finite. Non-finites are associated more with more complex and more adult registers.

2.5.1.4 Process types: transitivity

Transitivity, in traditional grammar, refers to whether a verb is transitive or intransitive, the former taking a direct object and the latter not. Transitivity in SFL, however, is much broader than this. It is concerned with the whole clause, not just the verb. It includes the different types of processes involved, their relations to the roles of the participants and how the processes, roles and circumstances relate one to another. When we analyse the roles of the participants, the processes and the circumstances in a text, we can see the relationships between the people and the things involved, the processes they engage in and the sort of circumstances in which they occur.

There are six process types: relational, material, verbal, mental, existential and behavioural, only the first three of which occur in our sample text.

2.5.1.5 Relational process clauses

Relational process clauses are to do with being and existing. The most common relational process verb by far is the verb be, although other verbs may also express states of being and existing, such as seem, look, become and have. In our sample text there are many relational process clauses, three with be and two with have. This is because it is a descriptive text expressing relations of being and existing.

The participants in relational process clauses depend on whether the relational process clause is identifying or attributive. In identifying relational process clauses, the participants are identifier, which usually precedes the verb, and identified, which usually follows the verb. The obligatory participant in attributive relational process clauses is the carrier, which comes before the verb. The verb is followed by an attribute, which may be an adjectival or nominal group.

We have examples of each type in our sample text, as follows.

**Identifying clauses**

<table>
<thead>
<tr>
<th>Identifier</th>
<th>Relational process</th>
<th>Identified</th>
</tr>
</thead>
<tbody>
<tr>
<td>My favourite pet</td>
<td>is</td>
<td>my parrot</td>
</tr>
</tbody>
</table>

**Attributive clauses**

<table>
<thead>
<tr>
<th>Carrier</th>
<th>Relational process</th>
<th>Attribute</th>
</tr>
</thead>
<tbody>
<tr>
<td>He</td>
<td>has</td>
<td>a grey body and a red tail</td>
</tr>
<tr>
<td>His beak</td>
<td>is</td>
<td>very sharp</td>
</tr>
<tr>
<td>He</td>
<td>hasn’t got</td>
<td>a name</td>
</tr>
</tbody>
</table>

A way to differentiate attributive and identifying clauses is that with the latter it is possible to reverse the participants; for example, *My favourite pet is my parrot* and *My parrot is my favourite pet* are both possible; with the attributive type this is not the case.

### 2.5.1.6 Material process clauses

Material process clauses contain verbs of doing. They are about actions performed. Typical material process verbs are *run, jump, arrive, leave, eat* and *drink*. Material process clauses have an *actor* as participant and may have a *goal* as a second participant. There are two material process verbs in our sample text, *got* and *bite*.

<table>
<thead>
<tr>
<th>Actor</th>
<th>Material process</th>
<th>Goal</th>
<th>Circumstance</th>
</tr>
</thead>
<tbody>
<tr>
<td>We</td>
<td>got</td>
<td>him</td>
<td>about 5 years ago</td>
</tr>
<tr>
<td>He</td>
<td>[can] bite</td>
<td>you</td>
<td></td>
</tr>
</tbody>
</table>

### 2.5.1.7 Verbal process clauses

Verbal process clauses refer to processes of saying. The participants are: *sayer, receiver* and *verbiage*. We have two examples of a verbal process clause in the parrot text, *He can say lots of words* and *We just call him 'parrot'*. 

<table>
<thead>
<tr>
<th>Sayer</th>
<th>Verbal process</th>
<th>Receiver</th>
<th>Verbiage</th>
</tr>
</thead>
<tbody>
<tr>
<td>He</td>
<td>[can] say</td>
<td>lots of words, like ‘Hello’, ‘How are you today?’ and ‘Who’s a pretty boy then?’</td>
<td></td>
</tr>
<tr>
<td>We</td>
<td>call</td>
<td>him</td>
<td>parrot</td>
</tr>
</tbody>
</table>

### 2.5.1.8 Mental process clauses

Mental processes are to do with thinking and feeling, with things that go on in the mind. Typical mental process verbs are *think, feel, see, believe, want* and *like*. In addition to the verb, mental process clauses may contain two participants: a *senser* and a *phenomenon*. There are no clauses of this type in our sample text, so here are some made-up examples. Note how the ordering of senser and phenomenon is variable, either one coming before or after the verb.

<table>
<thead>
<tr>
<th>Senser</th>
<th>Mental process</th>
<th>Phenomenon</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>[can’t] see</td>
<td>my keys</td>
</tr>
<tr>
<td>Phenomenon</td>
<td>impresses</td>
<td>me</td>
</tr>
</tbody>
</table>

### 2.5.1.9 Existential process clauses

Existential process clauses are clauses referring to existence which are introduced by the ‘empty’ category *there*, usually with the verb *be*. Existential process clauses contain only one par-
participant, the existent. There are no existential process clauses in our example text, so here is a made-up one.

<table>
<thead>
<tr>
<th>There</th>
<th>is</th>
<th>a desk</th>
<th>in the corner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existential process</td>
<td>Existent</td>
<td>Circumstance</td>
<td></td>
</tr>
</tbody>
</table>

### 2.5.1.10 Behavioural process clauses

The behavioural process category is intermediate between material and mental, such processes incorporating elements of both types of meaning. Examples include *watch, listen, laugh* and *cry*. Note how these verbs involve both material action and a mental state. There is usually only one participant in behavioural process clauses, the *behaer*, although there may also be a *behaviour*. There are no existential process clauses in our example text, so here are some made-up examples.

- He stared out of the window
- She breathed a sigh of relief

<table>
<thead>
<tr>
<th>Behaver</th>
<th>Behavioural process</th>
<th>Behaver</th>
<th>Circumstance</th>
</tr>
</thead>
</table>

### 2.5.2 Features related to tenor and the interpersonal function: person, modality and mood

So far, we have been talking about field, as realised through the ideational metafunction, and how it relates to our sample text. Let us now turn to the tenor, as expressed through the interpersonal metafunction, that is, the personal relationships involved in a text between writer/speaker and reader/listener, and in our sample text in particular. The relationship in our sample text here is one of school pupil to teacher; the school pupil is telling the teacher about his parrot. We can note that, although this is a description, it is quite personalised, with the use of first-person pronouns: *my favourite pet, we got him, we just call him* (also one second-person pronoun: *he can bite you*). Descriptive text is not usually personalised like this, certainly not in academic contexts.

One feature of more sophisticated descriptive registers (for example, science textbooks) that this primary school text does have, however, is the near absence of modal verbs. Modal verbs such as *might, must, may, can* and *should* are used to express our attitude to what we are saying, to indicate how confident or not we are about the truth of what we are saying. In our text, there are two modal verbs, in *he can bite you* and in *he can say lots of words*. However, this is more expressive of the parrot’s ability, not the writer’s attitude towards what he is saying. The paucity of modal verbs in our text indicates that the school pupil is confident about what he is telling his teacher and at the same time makes the text less personalised.

This impersonality is further reinforced by the mood of the text, by the fact that it only has declarative clauses; there are no interrogatives (except for the reported interrogatives of the parrot) or imperatives.

### 2.5.3 Features related to mode and the textual metafunction: cohesion, theme and thematic development

When we consider the mode and textual metafunction of a text, in terms of lexicogrammar, we are concerned with the linguistic features which hold the text together and give it its characteristic texture (see Chapters 3 and 4 for more on this).
First, we can consider the **cohesion**, the links between the clauses. In our sample text we find that cohesion is created primarily through the use of personal pronouns and the possessive pronouns *he* and *his* to refer to the parrot. In fact, we can note a chain of such items relating back to *my parrot* in the first clause, as follows: *my parrot* – *he* – *him* – *he* – *his* – *he* – *he* – *he* – *him*.

After cohesion, we can consider **theme** and **thematic development**. Theme is the point of departure of a clause, what the clause is about, while thematic development refers to the pattern of themes across a stretch of text. We see that the parrot or a body part of the parrot (referred to respectively as *he* or *his* in our text) is made the theme of most of the sentences, in order to maintain attention on what is being described.

### 2.6 SUMMARY OF ANALYSIS OF THE PARROT TEXT

This brings us to the end of this brief analysis, which we can now summarise in Table 2.3.

### 2.7 A TEXT IN A SIMILAR, YET DIFFERENT, REGISTER

In order to see how SFL analysis can identify distinctions in registers, let us now look at another text (Figure 2.3) from a similar, yet different, register. This text is taken from some notes for students of elementary biology, not at primary school level, as in the parrot text, but at secondary level. If we conduct a similar analysis on this text as we did for the *parrot* text, we can highlight the similarities and differences of this more advanced register.

#### Table 2.3 Contextual parameters and lexicogrammar of the *parrot* text

<table>
<thead>
<tr>
<th>Contextual parameter</th>
<th>Lexicogrammar</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Field</strong></td>
<td></td>
</tr>
<tr>
<td>A boy’s parrot; its attributes</td>
<td>Field-related lexis</td>
</tr>
<tr>
<td></td>
<td>Relational process clauses (verbs of being and existing) (the majority);</td>
</tr>
<tr>
<td></td>
<td>material process clauses (verbs of doing and happening); one verbal</td>
</tr>
<tr>
<td></td>
<td>process clause; no mental, existential or behavioural process clauses</td>
</tr>
<tr>
<td><strong>Tenor</strong></td>
<td></td>
</tr>
<tr>
<td>Social roles – school pupil to teacher</td>
<td>Use of first-person pronouns</td>
</tr>
<tr>
<td>Social distance – familiar</td>
<td>Very few markers of modality</td>
</tr>
<tr>
<td></td>
<td>All clauses declarative</td>
</tr>
<tr>
<td><strong>Mode</strong></td>
<td></td>
</tr>
<tr>
<td>Written to be read</td>
<td>Cohesion by means of personal pronouns and possessive adjectives</td>
</tr>
<tr>
<td>Descriptive</td>
<td>Theme–theme–theme pattern</td>
</tr>
</tbody>
</table>

#### The iris

(1.) The iris is a circular, coloured structure located in the front of the eye. (2.) In the centre of the iris is a small hole called the pupil. (3.) The iris is made up of radial muscles that contract to dilate the pupil and relax to make the pupil smaller. (4.) The function of the iris is to regulate the amount of light that enters the eye by contracting or dilating the pupil.

Figure 2.3 Short biology text about the iris (clause numbers added).
2.7.1 Field and the ideational metafunction

An important thing to note with respect to field in this iris text is the technical nature of the field-related lexis, for example, the iris, the pupil, radial muscles, contract, dilate, relax, regulate. While the parrot text had terms all relating to parrots, they were everyday terms, already a part of the child's vocabulary. The lexis of the iris text would likely not be understood by a primary school pupil (at least in the early years), so part of the educational process is to acquire technical vocabularies of the various registers of the school curriculum.

Another important difference between our two texts is the greater complexity of the one about the iris. We can see this, first, in the longer nominal groups. In the first clause of the iris text, we have a nominal group consisting of 11 words: a circular, coloured structure located in the front of the eye. The head noun of this group is structure. This head noun is modified by the indefinite article and the two adjectives preceding it, the pre-modifier – circular and coloured. However, most of its length is made up of what follows the head noun, the post-modifier – located in the front of the eye. The phenomenon which allows for this additional lengthy material as post-modifier in the nominal group is referred to as embedding. Embedding is a process which allows for the addition of an element to a group which is from a higher (or sometimes lower) level unit or rank (sometimes also called down-ranking or rank-shifting). Similar types of embedding occur in clauses 3 and 4, although we do not have space to analyse them here.

This type of embedding is indicative of the great flexibility of nominals in English to be expanded (it is not so easily done with verbs, which do not allow such embedding). It is a typical feature of the scientific textbook register. (See Halliday, 1989, Chapter 5, for a more detailed account of the role of embedding in written scientific language along similar lines to the one presented here.)

Alongside embedding, a related phenomenon which also creates greater textual complexity is grammatical metaphor, which was briefly introduced above. Grammatical metaphor refers to the use of a particular grammatical form to express a phenomenon that would be expressed more congruently by another grammatical form. Things are most congruently expressed by nouns, while processes are most congruently expressed by verbs. So a process expressed by a noun (also referred to as nominalisation) is a case of grammatical metaphor (and is, indeed, the most common pattern for the phenomenon). To exemplify this, Halliday (2004: 56) gives the following (made-up) example, where expression (a) is the congruent form and expression (b) is its rewording with grammatical metaphor:

(a) The driver drove the bus too rapidly down the hill, so the brakes failed.
(b) The driver's overrapid downhill driving of the bus resulted in brake failure.

This example does not sound very scientific in either of the two forms, but (b), because of the grammatical metaphor/nominalisation, perhaps sounds more 'scientific' than (a). Halliday also provides some authentic examples (p. 59), some of which are presented as follows (grammatical metaphor/nominalisation in bold [added]):

- Rapid changes in the rate of evolution are caused by external events.
- The thermal losses typical of an insulating system are measured in terms of a quantity called the thermal loss coefficient.
- This breeding effort was anchored in the American species' resistance to phylloxera.
- The growth of attachment between infant and mother signals the first step in the child's capacity to discriminate among people.

In the iris text, we only have one clause incorporating grammatical metaphor, the fourth clause: The function of the iris is to regulate the amount of light that enters the eye by contracting or dilating the pupil. In fact, there are two examples of grammatical metaphor in this clause, both function and...
amount having more congruent wordings. A more congruent wording of the clause might thus be something like the iris does something to regulate how much light.

What both embedding and grammatical metaphor highlight is the greater complexity of technical/academic writing as compared to ‘everyday’ language. This complexity can be opaque to the uninitiated and getting to grips with it is an essential part of the educational process, in both first- and second-language contexts. A practical learning activity to deal with this issue is to practise ‘unpacking’ and ‘repacking’ clauses which contain embedding and grammatical metaphor.

Returning to the iris text, we can note that, in spite of the greater complexity of the clauses, the process types employed are similar to those of the parrot text. As in the parrot text, the majority of the processes in the iris text are relational: is, is, is [made up of], is. The second most frequent type, as in the parrot text again, is material processes: contract, dilate, relax, regulate, enters. This similarity is a register feature of field to do with the fact that both texts are talking about structure (relational processes) and function (material processes), albeit at different levels of technicality. It is also interesting to note that both texts contain verbal processes: call and say in the parrot text and called in the iris text. Both texts involve the naming of structures and their parts.

2.7.2 Tenor and the interpersonal function and mode and the textual function

We can also note some register-specific features of the iris text as compared to the parrot text in the tenor and mode contextual parameters and their interpersonal and textual counterparts.

Considering, first, the tenor/interpersonal dimension, we noted that the parrot text was for the most part impersonal, but with some use of first-person pronouns. The iris text, on the other hand, is completely impersonal. There are no first- or second-person pronouns, only third-person ones. This subtle difference in tenor/interpersonal function between the two texts is indicative of the different relationship between writer and reader; in the expertise of the textbook writer, compared to the novice-like writing of the school pupil.

Turning now to mode/textual function, whereas in the parrot text, cohesion was created by the use of personal pronouns and adjectives, in the iris text, it is created primarily by lexical repetition. The nominal groups the pupil and the iris are each mentioned four times in the iris text. Lexical repetition like this is a common feature of scientific writing. Whereas in other types of writing we may be encouraged to avoid repetition and to strive for what is sometimes referred to as elegant variation (Fowler & Fowler, 1973), in scientific writing, clarity is considered more important than style. The school pupil/writer of the parrot text has clearly not learned this convention of scientific writing yet.

Another feature of mode/textual function in the iris text which is not present in the parrot text is the use of marked theme. In the iris text, iris is made the theme of each of the sentences to maintain attention on what is being discussed, just as parrot or a part of the parrot is the theme of clauses of the parrot text. However, in the second clause of the iris text, a marked pattern is employed, with the circumstance – in the centre of the iris – being placed in initial position. Such use of marked themes is a typical feature of the scientific textbook register, especially in descriptions of structure, where attention is drawn to particular structural parts.

2.7.3 Summary of analysis of the iris text

Table 2.4 is a summary of the analysis of the iris text, for the purposes of comparison with Table 2.3, the summary of the parrot text.
Conversational Interaction: Giving and Demanding Goods and Services or Information

<table>
<thead>
<tr>
<th>Role in exchange</th>
<th>Commodity exchanged</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Giving</strong></td>
<td>Offer:</td>
<td>Statement:</td>
</tr>
<tr>
<td></td>
<td><em>Would you like this pen?</em></td>
<td><em>He’s giving her the pen.</em></td>
</tr>
<tr>
<td><strong>2. Demanding</strong></td>
<td>Command:</td>
<td>Question:</td>
</tr>
<tr>
<td></td>
<td><em>Give me that pen!</em></td>
<td><em>What is he giving her?</em></td>
</tr>
</tbody>
</table>

Table 2.5

<table>
<thead>
<tr>
<th>Contextual parameter</th>
<th>Lexicogrammar</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Field</strong></td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>Field-related (biological) lexis</td>
</tr>
<tr>
<td></td>
<td>Relational process clauses (verbs of being and existing) and material process clauses (verbs of doing and happening)</td>
</tr>
<tr>
<td><strong>Tenor</strong></td>
<td></td>
</tr>
<tr>
<td>Teacher to student; impersonal</td>
<td>Third person</td>
</tr>
<tr>
<td></td>
<td>No modal forms</td>
</tr>
<tr>
<td></td>
<td>All clauses declarative</td>
</tr>
<tr>
<td><strong>Mode</strong></td>
<td></td>
</tr>
<tr>
<td>Written to be read</td>
<td>Lexical repetition</td>
</tr>
<tr>
<td>Descriptive and didactic</td>
<td>Theme–theme–theme pattern</td>
</tr>
<tr>
<td></td>
<td>One example of marked theme</td>
</tr>
<tr>
<td></td>
<td>Complex nominal groups</td>
</tr>
<tr>
<td></td>
<td>One case of nominalisation</td>
</tr>
<tr>
<td></td>
<td>Embedded clauses</td>
</tr>
</tbody>
</table>

2.8 CONVERSATION AS REGISTER

To complement the focus on written text thus far, this section will consider Halliday’s approach to the analysis of the conversational register. We will draw for our account primarily on Eggins and Slade (2005), Halliday and Matthiessen (2004), Martin (1992) and Thornbury and Slade (2006). (In Chapter 7, we will consider a different, but complementary, approach to analysing conversation, that of Conversation Analysis.)

Halliday’s model of speech exchange is based on two pairs of variables. According to Halliday, there are two basic functions in conversational interaction: giving and demanding. The speaker either gives something to the listener, or demands something. The two imply each other: giving implies receiving and demanding implies giving. Another pair of variables concerns what is given or demanded: this may be either goods and services or information. If I say something with the aim of getting you to give me something or to do something, this is an exchange of goods and services. If I say something with the aim of getting you to tell me something, this is an exchange of information. The two pairs of variables—giving and demanding, on the one hand, and goods or services and information, on the other hand—give four primary speech functions: offering, commanding, stating and questioning, as shown in Table 2.5.

Each of the speech functions carries with it a desired response: offering implies accepting, commanding implies complying, stating implies acknowledging and questioning implies answering. At the same time, the listener has the option of rebuffing a speech function once it is initiated: an offer may be rejected, a command may be refused, a statement may be contradicted and a question may be disclaimed. These options are shown in Table 2.6.

Table 2.6

<table>
<thead>
<tr>
<th>Role in exchange</th>
<th>Commodity exchanged</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Giving</strong></td>
<td>Offer:</td>
<td>Statement:</td>
</tr>
<tr>
<td></td>
<td><em>Would you like this pen?</em></td>
<td><em>He’s giving her the pen.</em></td>
</tr>
<tr>
<td><strong>2. Demanding</strong></td>
<td>Command:</td>
<td>Question:</td>
</tr>
<tr>
<td></td>
<td><em>Give me that pen!</em></td>
<td><em>What is he giving her?</em></td>
</tr>
</tbody>
</table>
Although there is no one-to-one relation, with the exception of offering, the examples in Table 2.6 suggest typical grammatical realisations of the different functions. This is done through the mood system. Thus, interrogative clauses are typically used to ask questions, imperatives are typically used to realise commands and declaratives are typically used to express statements.

Halliday refers to typical grammatical realisations of speech function as congruent, while alternative realisations are referred to as incongruent. Thus, where Get me a coffee, please, with its imperative mood for a command, is a congruent pattern, an incongruent alternative might be I’d like a coffee (declarative) or Could you get me a coffee? (interrogative).

It is also worth noting how the responding speech functions may echo the initiation with a part of the verbal group called an operator (for example, do/don’t, does/doesn’t, will/won’t, can/can’t, has/hasn’t), as in Are you having a coffee? Yes, I am. This seems to be a particular feature of the English language and has traditionally been an important focus in English language teaching.

Halliday’s model of speech function has been applied and developed by Eggins and Slade (2005). Eggins and Slade use the term move to refer to speech functional units. A move is typically realised as a speaker turn at talk, but often a single turn may consist of more than one move in a move complex. We can see this in the analysis presented in Table 2.7, which is a conversational transcript from an advising session conducted by two students (with one acting as consultant). The conversation is broken down into speaker turns and moves.

Table 2.6  Speech functions and responses (Halliday & Matthiessen, 2004: 108, adapted)

<table>
<thead>
<tr>
<th>Initiating speech function</th>
<th>Supporting</th>
<th>Confronting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offer</td>
<td>Acceptance</td>
<td>Rejection</td>
</tr>
<tr>
<td>Shall I get you a coffee?</td>
<td>Yes, please do</td>
<td>No, don't bother</td>
</tr>
<tr>
<td>Command</td>
<td>Compliance</td>
<td>Refusal</td>
</tr>
<tr>
<td>Get me a coffee, please</td>
<td>All right</td>
<td>No, I can't</td>
</tr>
<tr>
<td>Statement</td>
<td>Acknowledgement</td>
<td>Contradiction</td>
</tr>
<tr>
<td>He's getting her a coffee</td>
<td>Oh, is he?</td>
<td>No, he isn't</td>
</tr>
<tr>
<td>Question</td>
<td>Answer</td>
<td>Disclaimer</td>
</tr>
<tr>
<td>Are you having a coffee?</td>
<td>Yes, I am</td>
<td>I don't know</td>
</tr>
</tbody>
</table>

Although there is no one-to-one relation, with the exception of offering, the examples in Table 2.6 suggest typical grammatical realisations of the different functions. This is done through the mood system. Thus, interrogative clauses are typically used to ask questions, imperatives are typically used to realise commands and declaratives are typically used to express statements.

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Table 2.7  Extract from student advising session (Michigan Corpus of Academic Spoken English: MICASE) (http://quod.lib.umich.edu/cgi/c/corpus/corpus?c=micase;page=simple)

<table>
<thead>
<tr>
<th>Speaker/turn</th>
<th>Move/move complex</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1 Statement</td>
<td>so. i see that you’re from Hartland Michigan</td>
</tr>
<tr>
<td>S2 Acknowledgement</td>
<td>Yes</td>
</tr>
<tr>
<td>S1 Statement</td>
<td>this is, right up the road</td>
</tr>
<tr>
<td>S2 Acknowledgement</td>
<td>mhm,</td>
</tr>
<tr>
<td>S1 Statement</td>
<td>like forty minutes from here</td>
</tr>
<tr>
<td>S2 Acknowledgement</td>
<td>Yeah</td>
</tr>
<tr>
<td>S1 Statement</td>
<td>and uh, you say that you’re interested in prebusiness and economics</td>
</tr>
<tr>
<td>S2 Acknowledgement</td>
<td>Mhm, i wro~ i w~ i’m interested in the um, international aspect</td>
</tr>
<tr>
<td>Acknowledgement</td>
<td>more, of a um, of a, program or whatnot</td>
</tr>
<tr>
<td>Acknowledgement</td>
<td>so, like the international, business i was gonna do, it’s a really, you know open field,</td>
</tr>
<tr>
<td>Acknowledgement</td>
<td>you know like all that stuff</td>
</tr>
<tr>
<td>Acknowledgement</td>
<td>but i don’t, think that that’s what i wanna do anymore, so</td>
</tr>
<tr>
<td>S1 Question</td>
<td>Okay, so what, what changed your mind and what has it been changed to?</td>
</tr>
<tr>
<td>S2 Answer</td>
<td>um, i, don’t know if i wanna sp~ like i wanna experience like you know, cultures and and the world</td>
</tr>
</tbody>
</table>
We can see in this table that there is one rather lengthy turn which is broken down into separate moves which together make up an acknowledgment move. It must be said, however, that the boundaries of such moves are often difficult to identify. For example, the final exchange has been coded as a question and answer, but it might be argued that the question is not one move but two, given that there are two separate questions here: Okay, so what, what changed your mind? and What has it been changed to?

One feature which can help in recognising discourse boundaries is rhythm and intonation. Speakers are able to speed up and slow down in order to control the turns in an interaction. Thus, a decision as to whether the two questions mentioned above make up one move or two might be decided by whether the speaker runs on from one to the other or creates a pause. Although we do not have detailed prosodic information for our transcript from the MICASE corpus, the corpus transcript does indicate where longer pauses occur. Given that no pause is indicated here, the decision can be made to count it as one move.

What this sort of analysis can do is to demonstrate how an interaction progresses. It can show who does the initiating and who responds (S1, the adviser, does all of the initiating here); what form the initiations take: offers, commands, statements or questions (statements and one question here, but mostly statements, which lead up to the question); what form the responses take: supporting or confronting? (supporting here; S2 is in a less powerful position than S1). And, in terms of the grammatical realisations, it can show whether they are congruent or incongruent (all congruent here). In short, it is a powerful tool in the analysis of interaction. It also offers potential for organising (part of) a language syllabus.

### 2.9 Sinclair and Coulthard’s Model of Classroom Interaction

In the 1970s, two linguists in Birmingham in the UK, Sinclair and Coulthard, directed a research project analysing classroom interaction in English primary schools. Sinclair and Coulthard were interested in seeing if Halliday’s rank hierarchy for grammatical analysis could be extended to classroom discourse. The findings of this project were published in a book entitled *Towards an Analysis of Discourse: The English used by teachers and pupils* (Sinclair & Coulthard, 1975).

In Halliday’s model of speech functions, as we have seen, exchanges consist of two units:

- **Initiation:** Would you like a chocolate?
- **Response:** Yes, please.

Sinclair and Coulthard noticed, however, that in their classroom data, exchanges are made up of three units, which, anticipating Eggins and Slade (2005), they referred to as moves: an initiation, a response and a follow-up, as in:

- **Initiation:** What’s the capital of France?
- **Response:** Paris
- **Follow-up:** Right

The pattern is predominant in classrooms, because the interaction is concerned with the display of information: teachers ask questions to which they already know the answer; pupils respond with the required information; and teachers follow up with confirmation to pupils as to whether they are right or not. The following example of a three-part exchange is from Sinclair and Coulthard’s data:
Initiation: What makes a road slippery?
Response: You might have rain or snow on it.
Follow-up: Yes, snow, ice.

(Sinclair and Coulthard, 1975: 68).

Another phenomenon noted by Sinclair and Coulthard, again anticipating Eggins and Slade (2005), was that moves do not necessarily correspond to turns at talk. A given turn may consist of one or more moves. In the following extract, for example, the teacher’s second turn consists of two moves: follow-up (Yes. To keep you strong) and initiation (Why do you want to be strong?):

Teacher: Can you tell me why you eat all that food?
Yes?
Pupil: To keep you strong.
Teacher: Yes. To keep you strong.
Why do you want to be strong?

Sinclair and Coulthard were not only concerned with moves and exchanges, however. As already mentioned, their research was an attempt to apply Halliday’s rank scale for grammar to classroom discourse. Based on the data they collected from primary schools, Sinclair and Coulthard proposed the following ranks:

Lesson
Transaction
Exchange
Move
Act

The highest level, the lesson, is divided up into transactions, whose boundaries are marked by discourse markers such as now, then, right. Transactions consist of series of exchanges which are characterised by the initiation–response–follow-up (IRF) pattern. Exchanges are made up of moves, which are the single actions of initiation–response–follow-up. Acts, of which there are over 20 types, are the specific actions assigned to moves, such as eliciting an answer, bidding for a turn, providing information, and so forth. Thus, in the previous extract of data quoted, the teacher’s initiation consists of two acts: an elicit (Can you tell me why you eat all that food?) and a cue (Yes?).

As with Halliday’s rank scale model, each level consists of one or more units of the level below. Sinclair and Coulthard were partially successful in their application of Halliday’s approach, although they were only able to specify the boundaries of transactions and not their internal structure.

A lot has been written about IRF and its effectiveness (or not) as a teaching tool. Some writers have noted how the pattern does not allow the student any initiative; the teacher does all of the initiating and follow-up work and thus is in overall control of the discourse. If we consider this in the light of language classes, it is clear that the students are not only getting no opportunity to initiate or follow up, but are overall getting very little opportunity to produce English (this apart from any ideological issues concerning the unequal distribution of power in the classroom). This insight lends support to a move away from teacher-fronted classrooms towards pair and group work, where learners are given the opportunity to participate more fully in the interaction.

Another insight from the model is that display questions are very specific to certain discourse situations, such as classrooms, and quizzes; such discourse is inauthentic in so far as it does not correspond to how people normally interact outside these institutional contexts.

On the other hand, if we look at Sinclair and Coulthard’s data, we can see that IRF is interspersed with informing moves, moves where the teacher introduces new knowledge. In the
following extract, for example, the student does not get the correct answer, thus allowing the teacher to introduce new information into the discourse, with an informing move.

Initiation: And these symbols have a special name. Does anybody know that special name?
Response: Is it Arabic?
Follow-up: No, it isn't Arabic.
Inform: Well, they're called hieroglyphics. It's hieroglyphic writing. And these, each one of these is an hieroglyph.

(Sinclair and Coulthard, 1975: 68).

In addition, the pattern allows the opportunity for scaffolding – support for learners on the part of the teacher when they are struggling for words – as shown in the following dialogue from Walsh (cited in McCarthy & Slade, 2007: 863):

[the class are discussing parking fines]

Pupil: … or if my car
Teacher: is parked
Pupil: is parked illegally, the policeman take my car and … er … go to the police station, not police station, it's a big place where they have some cars, they
Teacher: Yes, where they collect the cars=
Pupil: = collect the cars and if I have a lot of … erm
Teacher: stickers … or fines
Pupil: stickers … or fines
Teacher: yeah
Pupil: Erm I I don’t know … because no erm, if I have for example 100 fines [Teacher: fines] and I have money in the bank the government take the money from the bank [Teacher: good], no consult

2.10 SPEECH AND WRITING

A fundamental distinction can be made with regard to the contextual parameter of mode between spoken and written language. Halliday's main contribution to the literature on speech and writing is his book *Spoken and Written Language* (Halliday, 1989). Here we will consider this work, but also contributions from other linguists. A comparison of any transcribed spoken text and a written text is likely to reveal a number of significant differences, (consider, for example, the texts in Figures 2.2 and 2.3, above). According to Chafe and Danielewicz (1987), spoken text is fragmented (loosely structured) and involved (interactive with the listener). Written text is integrated (densely structured) and detached (lacking in interaction with the listener).

Some linguistic features of spoken text are as follows:

- phonological contractions and assimilations;
- hesitations, false starts and filled pauses;
- repetition;
- sentence fragments rather than complete sentences;
- structured according to prosodic features rather than clauses;
- high incidence of discourse markers at the beginning or end of tone groups;
• relatively frequent use of questions and imperatives;
• first- and second-person pronouns;
• deixis (reference outside the text – *this, that, here, there*).

Linguistic features of written text, on the other hand, are:

• longer information units (complete clauses and sentences);
• complex relations of coordination and subordination;
• high incidence of attributive adjectives;
• wider range and more precise choice of vocabulary than in speech;
• high degree of nominalisations;
• longer average word length;
• greater use of passive voice.

In spite of these differences, however, spoken and written text are not two totally distinct categories. Halliday (1989: 46) argues that there is a cluster of registers that share the written medium, on the one hand, and a cluster of registers that share the spoken medium, on the other, but that there are nevertheless certain features which are characteristic of either mode. With the advent of electronic media, the distinction between certain registers is becoming blurred, many 'virtual' texts exhibiting features typical of both speech and writing.

Different spoken and written registers can be situated along a continuum marking different degrees of 'spokenness' and 'writtenness' and exhibiting to a greater or lesser extent the linguistic features listed above. Casual conversation would be at one extreme of spokenness, while academic writing might be at the other extreme of writtenness. Other registers, such as radio news, academic lectures, formal ceremonies (for example, marriages and coronations), and so forth, for spoken language, and business letters, fiction, personal letters, e-mails and text messages, and so forth, for written language, would be situated at different points along the continuum. If we compare the *parrot* text and the *iris* text used as examples in this chapter, we can see the *parrot* text as closer to the 'spoken' end of the continuum and the *iris* text closer to the 'written' end.

Ochs (1979) suggests that the positioning of the different registers along the spoken/written continuum depends at least in part to what degree the language of a given register is planned or unplanned. Clearly, casual conversation is unplanned, while academic writing is carefully planned. Academic lectures, on the other hand, are less spontaneous than casual conversation, but more spontaneous than academic writing.

McCarthy and Slade (2007) add a further dimension, that of explicitness, with written text being more explicit and spoken language more implicit and dependent on context. McCarthy and Slade (2007: 860) present a diagram to show the differences on the various scales we have mentioned, as shown in Figure 2.4.

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**Figure 2.4** Comparison of some spoken and written text types (adapted from McCarthy & Slade, 2007: 860).
2.11 LEXICAL DENSITY

In spite of the arguments for no absolute distinctions between speech and writing, it is nevertheless possible to talk of general tendencies. One way of contrasting the relative complexity of speech and writing is in terms of lexical density (Halliday, 1989; Ure, 1971). Lexical density is a statistical measure of the relative frequency of lexical words and grammatical words in a stretch of text. The category of lexical words (also referred to as content words) includes nouns, verbs, adjectives and adverbs. Grammatical words (also referred to as function words) include determiners, pronouns, prepositions, conjunctions, numerals and auxiliary verbs. Given that a text consists of only these two types of words, we can express lexical density as the ratio of lexical words to the total number of words.5

To take an example, if a stretch of text has, say, 60 lexical items and 40 grammatical items, the ratio of lexical items to the total (100 words) is 60 per cent or 0.6, which is the lexical density, depending upon how you want to express it.

The formula can be stated as in Figure 2.5.

Typically, written text will have a higher lexical density than spoken text. Halliday is keen to stress, however, that this does not mean that written text is more complex than spoken. Both types of text have their individual type of complexity. Halliday describes writing as the world of ‘things’ rather than ‘happenings’, of ‘product’ rather than ‘process’, and of ‘being’ rather than ‘becoming’. Spoken text, on the other hand, is the world of happening, of processes and of becoming. Writing reflects upon the world, while speech represents the world as action or process. In terms of the grammar, written text is characterised by lexical intricacy, while spoken text is characterised by complex chains of clauses. ‘[T]he complexity of written language is lexical, while that of spoken language is grammatical’ (Halliday, 1989: 63).

To illustrate this, Halliday (1989: 81) provides two sets of wordings that are paraphrases of each other, one typical of writing and the other of speech, as shown in Table 2.8.

The written versions of these paraphrases are characterised by nominals: visit, sense, futility, action, violence, improvements, costs, installation, opinion, change, enthusiasm; the spoken versions are characterised by verbs: had visited, had ended up feeling, tried to do, had been, has improved, install, doesn’t cost, rejoiced, change. Both sets of paraphrases represent different types of complexity.

2.12 APPRAISAL

Developed by Martin and White (Martin, 2000; Martin & White, 2005), appraisal, or appraisal theory, is an attempt to develop the minutiae of the interpersonal function.6 Appraisal is concerned with the ways we express our views and react to the views of others. It can be identified at the level of the word or group. There are three systems in appraisal – graduation, attitude and engagement. We will deal with them very briefly in turn, drawing extensively on two very useful websites: http://www.grammatics.com/appraisal/ and http://www.alvinleong.info/sfg/sfgappraisal.html (see Martin & White, 2005).
2.12.1 Graduation

Graduation is concerned with grading and scaling of the interpersonal force attaching to utterances. There are two subsystems: force, which is to do with intensity of interpersonal force (slightly, somewhat, very, completely); and focus, which concerns the precision of our interpersonal focus (I kind of like this, this is the genuine article).

2.12.2 Attitude

Attitude is to do with how speakers and writers express their attitude towards people and phenomena. It has three subsystems: affect, which refers to emotional attitude (I love/hate you); judgement, which refers to evaluation of behaviour (She played very well/badly); and appreciation, which relates to the evaluation of objects and products in terms of their aesthetic or other value (He played a beautiful shot; That's a really dangerous place).

2.12.3 Engagement

Engagement is how we express our commitment to what is stated in what we say or write. It has four subsystems: disclaiming, in which we distance ourselves from what has been said or written (It is said that; I deny that); proclamation, where we assert that something is true (It is true that; I must say that); acknowledgement, where we acknowledge a range of possibilities (It is possible that; It seems that); and attribution, through which we report something that has been said or written (Scientists have discovered that; According to Smith (2010)).

2.13 CRITIQUE

Hallidayan theory and SFL in general have been critiqued on a number of counts. Most of these are rather technical and we will not go into them here. We will merely point out some of the more salient ones (see Butler, 2003, for some of the more technical ones). First, from the point of view of the student and from the point of view of the applied practitioner, many find the terminology off-putting, as already mentioned, and not always intuitive. The counterargument, as already mentioned again, is that the labels are semantic ones which point to the functional value of the categories. In addition, using only traditional terms restricts us to talking about only certain areas of grammar. A huge number of grammatical features (that often cause severe problems for learners) are simply ignored.
in traditional grammar because there is no metalanguage for talking about them – especially, for example, in the area of transitivity.

Some have critiqued SFL for dealing in binary oppositions, thereby not allowing for scalar gradations of meaning, as is possible, for example, in more pragmatic accounts of language (see Chapters 5 and 6). Everything has to be either/or and never somewhere in between. The counterargument here is that it is possible to go to ever more delicate distinctions. Thus, where there is a choice, say, of mood between indicative and imperative, indicative can be further differentiated between interrogative and declarative, interrogative can be divided according to closed/polar (yes/no) and open (‘Wh’-) and so forth.

Another criticism is the lack of an empirical basis for the claim for three contextual parameters and three corresponding metafunctions. Other linguists have come up with other functions. Jakobson (1960), for example, has six contextual parameters and corresponding functions. Related to this is the more general critique that SFL does not devote enough attention to analysing context (contrast this with more ethnographic or sociocognitive approaches), preferring to focus more on the lexicogrammar (van Dijk, 2008). On the other hand, proponents of SFL would argue that it is the only school with a robust model to link the text and context systematically. It is no good talking about context if you cannot show how it is systematically construed or expressed by the lexicogrammar.

Finally, even if the tripartite divisions are accepted, it may be difficult to decide which features of the lexicogrammar correspond to which metafunction and contextual parameter.

In spite of these possible criticisms, as will be emphasised in the next section, Halliday’s framework offers great potential for application to pedagogy.

2.14 APPLICATION TO PEDAGOGY

We mentioned in the introduction to this chapter that Halliday has always been concerned with ‘applied’ issues. He refers to his model as appliable linguistics and the research centre set up in his name in 2005 at City University of Hong Kong is called the Halliday Centre for Intelligent Applications of Language Studies. As well as coauthoring The Linguistic Sciences and Language Teaching, Halliday was director of two influential curriculum development projects in the UK in the 1960s and early 1970s. Both of these projects (Breakthrough to Literacy at primary level and Language in Use For Secondary Schools) were very influential in reforming the teaching of English in the British school system. Fundamental to these projects was the concept of register, as set out in The Linguistic Sciences and Language Teaching, and the need for the child ‘to be taught the varieties of the language appropriate to different situations: the range and use of its registers and restricted languages’ (Halliday et al., 1964: 241). Halliday’s social commitment comes through in these projects, as it does in the following quotation from The Linguistic Sciences and Language Teaching:

We cannot afford in any way to neglect the language requirements of those who are going to become nurses, engineers, technicians, draughtsmen, transport workers, private secretaries, shorthand typists or members of any other of the thousand and one occupations that by some miracle feed, clothe and house us … Each of us has to learn to manipulate English in a range of varieties, some of which are developing very rapidly. … What can we tell the compiler of a computer programming manual about the use of English in that restricted language?

(Halliday et al., 1964: 243).

Halliday’s theory was very influential in the Council of Europe’s Common European Framework project for language teaching and his model of acquisition underpins the basic theory of communicative language teaching. After Halliday moved to Australia in the 1970s, Halliday and Hallidayan theory were again influential in the development of programmes for both first-language teaching and the teaching of immigrants in that country.
Halliday’s theory of register can be seen to underpin the development of the English for Specific Purposes (ESP) movement, the concept of register as situated variety of language being fundamental to that movement. Needs analysis – the specification of the language that learners are likely to need in a given target situation – and essential to ESP, indeed, can be seen as a form of register analysis.

Let us take as examples the questions ‘what kind of English?’ and ‘for what purposes?’ The items to be taught are absolutely determined by the answers to these questions, and obviously the reply ‘we should teach the whole of English’ – which would imply English as spoken and written at all times, in all places, about all subjects – is an unreal one and therefore useless.

(Halliday et al., 1964: 202).

As we have seen in this chapter, Halliday sees language as a resource for making meanings. Through interaction, we shape our world and our individual identity. As Halliday’s study of his child, Nigel, showed, the acquisition of language is an interactive process through which the learner develops control of the functions of language and the grammatical resources required for their realised. This model can be seen to be operating in the communicative approach to language teaching, with its emphasis on the importance of interaction as both the means and goal of language teaching.

### 2.15 QUESTIONS FOR DISCUSSION

1. Do you agree with Halliday’s model of language development as based on interaction? What are the strengths and weaknesses of this theory, as compared to the competing theory that says that humans have an innate ability for language acquisition and are preprogrammed to learn their first language? What about second-language learning?
2. Think of a register and then write down some typical phrases that might help you to identify it if you heard or read them. Show these typical phrases to your classmates. Can they recognise the register?
3. Compare a register you are familiar with in your first language with the same register in your second language, if you know one. What differences are there in field, tenor or mode when they are compared, if any?
4. Make lists of at least five material process verbs, five relational process verbs and five verbal process verbs.
5. If you have ever learned an additional language, what approach did your teachers use: Sinclair and Coulthard’s model of exchange structure or pair and group work? Did all of your teachers use the same approach?
6. Sinclair and Coulthard’s model of exchange structure has been claimed by some to apply also in everyday language. Write down at least two three-part exchanges that might occur in everyday interaction.
7. Draw a vertical line and write down casual conversation at the top and research articles at the bottom. Write in other spoken and written registers you are familiar with along this line according to how ‘spoken’ or ‘written’ you judge them to be.
8. Take a short text and see if you can identify any of the features of appraisal in it, as listed in this chapter.
9. In a group or with a partner, discuss the potential advantages and disadvantages of SFL and register theory as they relate to language teaching.

### 2.16 FURTHER READING