Introduction

This book is a practical introduction to the aspects of linguistics that generalist speech and language therapists (SLTs) need to understand in order to be able to use the published tools that are available for analysing clients' language abilities. Linguistics is the study of the organising principles of language. It is concerned with language in general, not with specific languages, although from a practical point of view we may wish to apply the principles to a particular language (here, English).

If you are reading this book you are probably interested in Speech and Language Therapy. Perhaps you are studying on a degree course leading to registration as an SLT – if so, one would certainly hope that you are interested in Speech and Language Therapy! Or perhaps you are considering enrolling on such a degree, or are a qualified SLT already but want to brush up on your language analysis skills. Whatever your interest, read on!

1.0 Why do speech and language therapy students need to study linguistics?

We said in the previous section that this book was about linguistics, but some students seem to wonder why, when they have enrolled on a degree in Speech and Language Therapy, they need to spend time studying linguistics, which is, after all, a separate academic discipline which can be studied to degree level in its own right. A short answer to this question is that professional bodies say that students need this knowledge. The Royal College of Speech and Language Therapists (RCSLT), which is the professional body that provides leadership and sets professional standards for SLTs in the United Kingdom, produces curriculum guidelines that specify the knowledge bases that speech and language therapists must acquire before registration, and one academic discipline that they stipulate is general linguistics. This is in addition to the related subjects of phonetics, psycholinguistics, sociolinguistics, bilingualism and language development.

The RCSLT curriculum guidelines are drawing attention to the fact that linguistics is one of the key underpinning disciplines of Speech and Language Therapy, alongside...
subjects like anatomy and physiology, psychology and sociology. A newly qualified speech and language therapist who had not mastered these different disciplines to the required level would struggle to carry out their role.\(^1\) Understanding the structure and function of language systems is as fundamental to the job of an SLT as understanding the structure of the human body is to the job of a doctor. It would be strange, not to say worrying, to be treated by a doctor who did not know about the structure or function of the human body, and it would be just as strange and worrying to be treated by an SLT who did not know about the structure and function of language.

### 1.1 Why do speech and language therapy students need this book?

Learning linguistics in the context of a Speech and Language Therapy degree presents various challenges. Like most students entering higher education today, those studying Speech and Language Therapy typically arrive with little prior knowledge of linguistics or even basic grammar. Many ‘introductory’ texts assume that students already have an accurate understanding of, for example, part-of-speech labels, but for many, this is not the case. Also, though a practical understanding of linguistics is fundamental to Speech and Language Therapy practice, it competes for space in the curriculum with the other knowledge bases that students need to acquire during their degree (life sciences, clinical skills, etc.). Given that they must acquire quite sophisticated linguistic knowledge in a very limited time, students need to focus on just those aspects of linguistics that they will need to master in order to be able to carry out their clinical work, rather than equally interesting but less relevant topics that are covered in many introductory linguistics texts, such as language evolution, historical linguistics or non-human communication.

There are some texts that omit these peripheral subjects and just focus specifically on the core areas of linguistics. These are typically written for students on linguistics degree courses or people with an interest in linguistics per se, rather than as one of several disciplines underpinning their main focus of study. As such, they usually provide more detail than is strictly necessary for an introductory text for SLTs, often illustrating them with examples from a wide range of languages. This is not to say that the material covered in these texts is not interesting and important in its own right; this approach is appropriate where the aim is to provide a wide-ranging and in-depth understanding of the subject.

But the needs of students on Speech and Language Therapy courses are different. A comparison of core linguistics texts with assessments and other clinical resources that are routinely used by SLTs shows that the latter focus on only a subset of

\(^1\)Admittedly, the remit of specialist SLT posts may involve tightly focused areas that do not require linguistic analysis skills. Specialisms in dysphagia or motor speech disorders are two areas that spring to mind. But SLTs who occupy such posts generally only do so after working for some time as a generalist, using the wider spectrum of SLT skills.
the structures and concepts covered in the former. Most of these resources also focus on the English language; whilst we acknowledge that many SLTs work in multicultural and multilinguistic settings, the one language that students on UK speech and language therapy courses absolutely must be able to describe is English. Given the limited amount of time that students of speech and language therapy have to devote to the linguistics strand of their degree, they need a text that will focus tightly on the core structures that are examined in the most commonly used clinical resources, and for students graduating in the United Kingdom, the language that they most need to know about is English.

1.2 Aims of this book, and what this book will not aim to do

The aim of the book will therefore be to provide the student with a practical introduction to those core linguistic concepts that are most often the subject of clinical resources and to illustrate these concepts with examples from English. As an introductory text with this applied aim, it will avoid reference to formal linguistic models and engagement with current controversies in the field of linguistics. By introducing the concepts and terminology of traditional linguistic description alongside those employed within speech and language therapy (where these differ), it will enable students to explore the subject in more detail using more advanced texts.

The book will focus on the core areas of (to use traditional linguistic terminology) morphology, syntax, semantics, discourse and pragmatics. It will not attempt to cover phonology, which is traditionally considered part of ‘speech’ rather than ‘language’ by SLTs. Similarly, we will not attempt to provide in-depth coverage of any psycholinguistic or sociolinguistic concepts, although we will refer to concepts from these fields where necessary to elucidate relevant material. It is beyond the scope of the book to analyse languages other than English, and such topics can be dealt with more effectively in more specialised texts.

The focus of this book is the techniques of core linguistics that are needed to carry out analysis of disordered language, rather than the products of such analysis. The latter is the province of clinical linguistics, and the interested reader is referred to the further reading list at the end of this chapter. This decision has motivated the choice of language data that we analyse in this book. For example, occasionally in exercises we have used picture materials to generate extended pieces of language for analysis. For the reasons just stated, we have deliberately not attempted to reproduce the kinds of disordered samples that SLT clients would be likely to produce in response

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2 Phonology is a linguistic system just as much as morphology, syntax and the other topics that we will cover. We note that in the RCSLT Curriculum Guidelines published in 2010, phonology is listed under General Linguistics, and that it is an area assessed in the CELF-4; but, for example, phonology is grouped with ‘articulation’ rather than ‘language’ in the RCSLT Clinical Guidelines (Section 5.3). It is not possible to cover phonology without first providing at least an outline account of phonetics; so inclusion of phonology would increase the size of the text considerably. So although phonology is certainly part of theoretical linguistics, we decided, in the interests of keeping the text to a manageable size, to exclude this topic.
to such materials. Instead, we have chosen to illustrate the concepts that we are trying to impart by using examples from non-disordered language, reasoning that this is appropriate for an introductory linguistics text. Once readers have acquired these concepts, they are in a position to understand texts that focus on disordered samples.

Many of the examples that we have used are modelled on those found in clinical resources. We have avoided directly quoting the resources themselves because of copyright restrictions. It should be borne in mind that the specific examples used in the clinical resources have been validated using normative data; our examples, though they imitate the structure of these resources, have not been normed in this way.

Linguistics is a huge subject area, and as we noted earlier, introductory texts cover a great deal that is not directly relevant to speech and language therapy. In choosing which topics to cover in this text, we have been guided by the concepts that are addressed in speech and language therapy resources. Where we judged it necessary, we have explored additional topics that are not directly addressed in clinical resources, to provide relevant background to those topics that are addressed, or to set them in a wider context.

We recognise that there is a great deal more to communication than we will aim to cover in this text. Particularly when language is disrupted, non-verbal means of communication such as gesture are potentially extremely important, both to the client, and from a professional point of view, to the SLT. But we are concerned here with language, not communication. Communication is a means of conveying meaning (social, emotional, transactional, informational, etc.) between individuals. Language is one form of communication, albeit a highly intricate form that is characterised by a large number of complex rules.

This book will not attempt to impart any clinical knowledge at all. In particular, it will not try to teach students how to administer, score or interpret specific assessments or use therapy materials. For this, students must use the guidance of their clinical educators and the manuals that are provided with clinical resources.

1.3 Some preliminaries

We will continue this chapter by noting a few fundamental assumptions that should be stated explicitly before we begin.

A first observation concerns the notion of ‘standard English’. Our main focus here is core linguistics, and we are using data modelled on the material that will be encountered in the widely available clinical resources that SLTs use. In these resources, target items are almost always framed in terms of a notional ‘standard English’ – the variety of English that is considered not to contain particular dialectal variants. It is obviously of great importance that students of Speech and Language Therapy should acquire theoretical concepts and practical knowledge and skills relevant to language variation, and indeed sociolinguistics, whose province these concepts are,
is a curriculum requirement for Speech and Language Therapy courses. It is not, however, the topic of this book. The core linguistic concepts that we wish to elucidate here can perfectly well be illustrated using standard English, and that is what we will do. But readers should not conclude that this is the whole story.

Clinically, it is important to distinguish between the processing (mental operations) involved in receptive language (comprehension) and expressive language (production). Although students need to understand the psycholinguistic frameworks that differentiate these activities, the descriptive linguistic frameworks that are relevant are common to them both. Similarly, we are mainly focusing on aspects of language that are common to both the spoken and written forms.

We should also draw the distinction between competence, the body of abstract knowledge that a speaker has about the way that language works, and performance, the way that a piece of language is produced on a particular occasion, when it is subject to competing processing demands, limitation of resources such as working memory and so on. Our goal here is to provide a background to enable the reader to understand the model of competence that is encapsulated in the resources that SLTs use.

1.3.1 Levels of description in language

Having set out the scope of this book, we now turn to a preliminary discussion of the way that a subject as broad as language can be split into manageable components.

1.3.1.1 Three aspects of language

We suggested earlier that language, as one form of communication, was a means of conveying meaning. In fact, it is useful to distinguish at least three aspects of language of which meaning is just one. Let us start by cutting the linguistic cake three ways. We can think of language as involving meaning, form and function (alternatively, meaning, form and use).

Many words in English have more than one meaning. This ambiguity is the source of many children’s jokes: Why wouldn’t the elephant travel by train? – Because his trunk wouldn’t fit in the luggage rack; Why do you always stand on a chair when you sing? – So that I can reach the high notes.

The form dimension involves what words or sentences look or sound like. If the form of a word is disrupted, it may be mispronounced or misspelt. Sentence form may be disrupted by words being used in the wrong order. Think of the way that the Star Wars character Yoda speaks: he consistently produces utterances that violate the standard form of English, saying things like Take you to him I will, or Help you I can. His meaning is clear, but there is no denying that his form is non-standard.

A speaker may select words with the meaning that they want to convey and pronounce all the words correctly and in the right order, with nothing omitted, and yet the utterance may still be put to an inappropriate use or may be interpreted by the
listener as having a function other than the one that the speaker intends. Misuse of function often occurs in comedy. In the US sitcom ‘The Big Bang Theory’, one of the characters, Sheldon, is very brainy but struggles with many social conventions including the interpretation of sarcasm. On one occasion he irritates his neighbour, Penny, in several ways including claiming that she snores. ‘You might want to see an otolaryngologist’, says Sheldon, then realising that she does not know what that word means, adds ‘. . . a throat doctor’. Penny replies, ‘What kind of doctor removes shoes from asses?’, to which Sheldon helpfully responds ‘Depending on the depth, that’s either a proctologist or a general surgeon’. There is no problem here with the meanings of the individual words, or with the form of the words or the sentences. Instead, Sheldon interprets Penny’s utterance as a request for information, rather than recognising its intended function, namely a threat. One could argue that this example is about the ‘meaning’ of Penny’s utterance, but it is not ‘meaning’ in the same sense as was being used earlier with the children’s joke examples, where the alternative meanings of trunk or high could be found in a dictionary. In the Sheldon/Penny example, there is no dictionary where we can look up the appropriate interpretation of Penny’s utterance – it is all down to the context in which the utterance occurs and Sheldon’s failure to recognise the absurdity of having a doctor whose role is to remove shoes from asses.

These are light-hearted examples, but the three-way distinction between meaning, form and function has a serious point in the context of speech and language therapy, because each of these dimensions can be separately affected in clients with language problems. An example of a clinical problem with meaning might occur when a client is unable to select a word with the intended meaning but selects a meaning-related word instead, such as saying son for daughter. Clients present with various types of problem with form, from difficulties with articulating speech sounds to omission of words or parts of words (e.g. saying I go now instead of I am going now) or putting words in the wrong order (e.g. What you are doing? instead of What are you doing?). A client may correctly interpret the form and word-by-word meaning of Who do you think you’re looking at? but not realise that it functions as a threat.

**Exercise 1.1**

Discuss these examples in terms of meaning, form and function/use:

Stan: I’ve got free tickets for the new James Bond movie – would you like to come?
Archie: Is the Pope a Catholic?

The former President of the United States, George W. Bush, was often satirised for errors that he made when speaking in public. On one occasion he complained about ‘rumours on the Internets’.

Someone intends to say ‘Atlas carried the world on his shoulders’ but says instead ‘Atlas carried the world on his elbows’.
1.3.1.2  A more detailed characterisation of language

The meaning/form/function characterisation of language is useful, but it is not fine-grained enough for all purposes. Linguists identify a larger number of dimensions to language and these dimensions are also recognised in the literature and clinical resources that SLTs use, though the labels that are used sometimes vary. The following are the main elements of the language system as they are conceptualised in this approach:

- **Phonetics:** the physical characteristics of the sounds that are used in language.
- **Phonology:** the sound system of the language.
- **Prosody:** This refers to the sound level of language, and it is related to both phonetics and phonology, but it refers to aspects such as intonation, the ‘melody’ of spoken language, and stress pattern. For example, the word *trusty* meaning ‘able to be trusted’ is stressed on the first syllable, while *trustee* meaning ‘official of a trust’ is stressed on the second syllable but is pronounced in exactly the same way in other respects.
- **Lexicon:** The store of words that the person knows. For each word that a person knows, specifications of the meaning, pronunciation, spelling and grammatical properties are stored in the lexicon.
- **Morphology:** This level of representation is concerned with the internal structure of words. The basic units of morphology are called morphemes. Our knowledge of the morphology of English tells us that the word *clinical* consists of two morphemes, *clinic* and *-al*, and that these two elements must occur in this order; it also tells us that the word *clinical* is related to the words *clinic* and *clinician*. It also allows us to work out the meanings of new words that we have not encountered before, that are made up of morphemes that we already know. For example, the term *Bushisms* was coined to refer to the speech errors produced by George W. Bush, making use of three existing morphemes combined in a way that allowed people who had never seen the word before to work out what it meant.
- **Syntax:** This level is concerned with the way that words are combined to produce phrases (e.g. *a whale*), phrases are combined to produce clauses (e.g. *a whale is a mammal*) and clauses are combined to produce sentences (e.g. *A shark is a fish but a whale is a mammal*). It tells us that *The nurses are going on strike* is a permissible sentence of English but that randomly ordering the words to say *Nurses the on going are strike* is not. It also tells us when the use of particular form of a word is dictated by features of another word in the sentence, so that we can recognise that *The nurse are going on strike* contains an error (and how to fix it). Note that in the previous example we have adopted the convention of indicating an unacceptable form by placing an asterisk before it.
- **Semantics:** This system is concerned with the meaning of individual words, phrases and sentences. Our knowledge of semantics tells us, among other things, that *walk, skip* and *run* are words related in meaning, that *big* and *small* have opposite meanings, and that *Eric is taller than Iain* cannot be true at the same time as *Iain is taller than Eric*, if *Iain* and *Eric* refer to the same entities in both sentences.
**Discourse:** This term is used in various disciplines that focus on language, but here it is used to explain the way that longer sequences of sentences, such as paragraphs, are structured. For example, in paragraphs it is unusual to continue to refer to individuals by their full name after they have first been mentioned; in subsequent sentences we might use *he* or *she*. In SLT, the term *narrative* is often used when we are concerned with longer sequences of sentences.

**Pragmatics:** This label is given to a wide range of phenomena that relate to language in use. It includes language function as discussed in the previous section, and this aspect of pragmatics explains the way that we use language to make jokes, be sarcastic, pay a compliment, apologise and so on. It is also concerned with the rules of conversation.

In addition, we could identify **orthography**, the spelling system of the written language. Though many of the aspects of language that we will consider in this book are common to its spoken and written forms, there are some instances where the two differ, and we will identify these as we go along.

**Exercise 1.2**

Use the terms that we have just introduced to comment on the following examples:

An advertisement of a Mazda car (with a picture of a car parked on the driveway leading to a large mansion): ‘The perfect car for a long drive’.

George W. Bush, who was mentioned earlier, claimed soon after his election that ‘They misunderestimated me’.

Two more Bushisms: ‘Rarely is the question asked “is our children learning?” ’; ‘The literacy level of our children are appalling’.

Judy is sitting in the living room huddled in front of the fire when Howard walks in and sits down, leaving the door wide open. Judy says ‘Were you born in a barn?’ Howard gets up and closes the door.

**1.4 How this book is organised**

Each chapter will provide an introduction to a specific area of linguistic description that is relevant to the work of a generalist SLT. Chapter 2 will consider the issues relevant to evaluating processing of words and non-words. Chapters 3 and 4 look at semantics, at the word and sentence levels, respectively. Chapter 5 takes a preliminary look at parts of speech. Chapter 6 considers some relevant aspects of morphology (word structure). Chapters 7 to 10 are concerned with syntax (sentence structure). Chapters 11 to 13 are concerned with pragmatics (language in use). Chapters 14 to 16 look at the issues relevant to analyses of discourse or narratives – extended pieces of language.
1.5 Exercises

The text of each chapter is interspersed with practical exercises to help readers to consolidate their learning. At the end of each chapter is a set of exercises that draw on clinical resources (assessments and therapy packages) that readers may be able to access. We also constantly refer to such resources during chapters to show readers that the concepts that we are presenting are relevant to clinical practice. Because many resources have long and complicated names, clinicians tend to refer to them by abbreviations, and where such abbreviations are widely used, we have employed them in the chapter as well. In case students are unfamiliar with them, at the start of each of the following chapters we have listed in full the names of all the resources that we will reference in that chapter, along with abbreviations where appropriate. Full details of the resources that we have referenced are in Appendix B.

Exercises using clinical assessments

1.3. The Children’s Communication Checklist (CCC-2) is a parent-completed screening instrument that is used to help the clinician to identify areas that need further investigation. Have a look at the following items in the response booklet: 12, 15, 19, 36, 43, 54, 55. Which of the areas listed below do they address (a single item may address more than one)?

- Lexicon
- Morphology
- Syntax
- Semantics
- Pragmatics

1.4. For each of the areas identified in your answer to the previous question, identify an assessment that explores that area in more detail.

Further reading

Introductory text for psycholinguistic topics that will not be covered in detail in this book: Fernandez and Cairns (2011).

To get a feel for the field of Clinical Linguistics, consult the journal Clinical Linguistics or the textbook of the same name by Cummings (2008).