**Aitchison’s Linguistics**

Jean Aitchison

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**Contents**

[*Introduction*](javascript:void(0))

[*Only got a minute?*](javascript:void(0))

[*Only got five minutes?*](javascript:void(0))

[**Part one: Starting out**](javascript:void(0))

[**1 What is linguistics?**](javascript:void(0))

[What is a linguist?](javascript:void(0))

[How does linguistics differ from traditional grammar?](javascript:void(0))

[The scope of linguistics](javascript:void(0))

[**2 What is language?**](javascript:void(0))

[Use of sound signals](javascript:void(0))

[Arbitrariness](javascript:void(0))

[The need for learning](javascript:void(0))

[Duality](javascript:void(0))

[Displacement](javascript:void(0))

[Creativity (productivity)](javascript:void(0))

[Patterning](javascript:void(0))

[Structure dependence](javascript:void(0))

[Human language versus animal communication](javascript:void(0))

[Origin of language](javascript:void(0))

[The role of language](javascript:void(0))

[**3 The study of language**](javascript:void(0))

[Nineteenth century: historical linguistics](javascript:void(0))

[Early- to mid-twentieth century: descriptive linguistics](javascript:void(0))

[Mid- to late-twentieth century: generative linguistics and the search for universals](javascript:void(0))

[Twenty-first century: future trends](javascript:void(0))

[**4 Deciding where to begin**](javascript:void(0))

[Language as a game](javascript:void(0))

[Single-language specialists versus universalists](javascript:void(0))

[**Part two: The inner circles**](javascript:void(0))

[**5 Sound patterns**](javascript:void(0))

[Sorting out the basic sounds](javascript:void(0))

[The phonemes of English](javascript:void(0))

[Allophones](javascript:void(0))

[Sound combinations](javascript:void(0))

[Shared properties of phonemes](javascript:void(0))

[Non-segmental phonemes](javascript:void(0))

[Metrical phonology](javascript:void(0))

[**6 Words and pieces of words**](javascript:void(0))

[Defining words](javascript:void(0))

[Identifying words](javascript:void(0))

[Morphemes](javascript:void(0))

[Recognition of morphemes](javascript:void(0))

[Types of morpheme](javascript:void(0))

[Allomorphs](javascript:void(0))

[Word classes](javascript:void(0))

[Major word classes](javascript:void(0))

[**7 Sentence patterns**](javascript:void(0))

[Linking words together](javascript:void(0))

[Constituent analysis](javascript:void(0))

[Tree diagrams](javascript:void(0))

[Rewrite rules](javascript:void(0))

[Identifying constituents](javascript:void(0))

[NP tests](javascript:void(0))

[Adding in extra patterns](javascript:void(0))

[Layers of branches](javascript:void(0))

[Complex sentences](javascript:void(0))

[Verbs: the syntax–meaning overlap](javascript:void(0))

[**8 Meaning**](javascript:void(0))

[Word meaning](javascript:void(0))

[Semantic fields](javascript:void(0))

[Coping with overlaps](javascript:void(0))

[Synonyms and opposites](javascript:void(0))

[Classification (inclusion)](javascript:void(0))

[Fuzziness and family resemblances](javascript:void(0))

[Making sense of the world](javascript:void(0))

[The meaning of sentences](javascript:void(0))

[**Part three: The outer rings**](javascript:void(0))

[**9 Using language**](javascript:void(0))

[The cooperative principle](javascript:void(0))

[Speech acts](javascript:void(0))

[Remembered frameworks](javascript:void(0))

[Discourse analysis](javascript:void(0))

[Taking it in turns](javascript:void(0))

[Repairs](javascript:void(0))

[Politeness](javascript:void(0))

[**10 Language and society**](javascript:void(0))

[The notion of a language](javascript:void(0))

[Dialect and accent](javascript:void(0))

[From high to low](javascript:void(0))

[Speech versus writing](javascript:void(0))

[Charting phonological variation](javascript:void(0))

[Phonological variation in British English](javascript:void(0))

[Social networks](javascript:void(0))

[Language and sex](javascript:void(0))

[Power talking](javascript:void(0))

[Change in language styles](javascript:void(0))

[Multilingual communities](javascript:void(0))

[Pidgins and creoles](javascript:void(0))

[**11 Language and mind**](javascript:void(0))

[Psycholinguistic evidence](javascript:void(0))

[Acquiring language](javascript:void(0))

[The content–process controversy](javascript:void(0))

[The rule-governed nature of child language](javascript:void(0))

[Learning the meaning of words](javascript:void(0))

[Doing it by hand](javascript:void(0))

[Recognizing words](javascript:void(0))

[Understanding syntax](javascript:void(0))

[Speech production](javascript:void(0))

[Speech disorders](javascript:void(0))

[Language and the brain](javascript:void(0))

[**12 Language and style**](javascript:void(0))

[Style and stylistics](javascript:void(0))

[The same bright, patient stars](javascript:void(0))

[Ways with words](javascript:void(0))

[Twisting words](javascript:void(0))

[Gluing it all together](javascript:void(0))

[Saying it again, but subtly](javascript:void(0))

[Searching for the skeleton: poems, news](javascript:void(0))

[The language of advertising](javascript:void(0))

[**Part four: Changes and comparisons**](javascript:void(0))

[**13 Language change**](javascript:void(0))

[How language changes](javascript:void(0))

[Spread of change within a language](javascript:void(0))

[Causes of language change](javascript:void(0))

[Natural tendencies](javascript:void(0))

[Therapeutic changes](javascript:void(0))

[Changes that trigger one another](javascript:void(0))

[Interacting changes](javascript:void(0))

[Reconstruction](javascript:void(0))

[**14 Comparing languages**](javascript:void(0))

[Contrastive linguistics](javascript:void(0))

[Language similarities](javascript:void(0))

[Genetic similarities](javascript:void(0))

[Building a family tree](javascript:void(0))

[Reconstructing the parent language](javascript:void(0))

[Unreliability of reconstructions](javascript:void(0))

[Linguistic areas](javascript:void(0))

[Language types](javascript:void(0))

[Morphological criteria for language classification](javascript:void(0))

[Word-order criteria](javascript:void(0))

[**15 Attitudes towards change**](javascript:void(0))

[A tradition of worry](javascript:void(0))

[Progress and decay fallacies](javascript:void(0))

[Proper behaviour](javascript:void(0))

[Standard English](javascript:void(0))

[Non-standard English](javascript:void(0))

[**Part five: Towards a universal grammar**](javascript:void(0))

[**16 Seeking a suitable framework**](javascript:void(0))

[Simple models of grammar](javascript:void(0))

[Deep and surface structures](javascript:void(0))

[Transformational grammar](javascript:void(0))

[Deep structure](javascript:void(0))

[Transformations](javascript:void(0))

[**17 Trouble with transformations**](javascript:void(0))

[Waving a magic wand](javascript:void(0))

[Preserving the meaning](javascript:void(0))

[Generative semantics](javascript:void(0))

[Trace theory](javascript:void(0))

[Limiting the power of transformations](javascript:void(0))

[Sharing out the work](javascript:void(0))

[Offloading](javascript:void(0))

[Combining](javascript:void(0))

[Slimmed-down transformations](javascript:void(0))

[**18 Back to basics**](javascript:void(0))

[Universal Grammar (UG)](javascript:void(0))

[From deep structure to D-structure](javascript:void(0))

[Government and binding](javascript:void(0))

[Broadening the range](javascript:void(0))

[The bare bones](javascript:void(0))

[*Where now?*](javascript:void(0))

[*Further reading*](javascript:void(0))

[*List of symbols and abbreviations*](javascript:void(0))

[*Phonetics: the study of speech sounds*](javascript:void(0))

[*Index*](javascript:void(0))

**Aitchison’s Linguistics**

Jean Aitchison

**Lecture 1**

**Introduction**

This book is an introduction to introductions to linguistics.

There are several books on the market which call themselves ‘introductions’ to the subject, but which are in fact more suited to second-year students. This book is to help people working by themselves to break into the ‘charmed circle’ of linguistics. It explains basic concepts and essential terminology.

Linguistics is a specialized field, so technical vocabulary cannot be avoided – though I have tried to explain every term used as clearly as possible

Linguistics is a field sometimes split by controversies. Wherever possible, I have taken a ‘middle-of-the-road’ view. Not that a middle-of-the-road view is necessarily right, but it is possibly more helpful for those new to the subject. Hopefully, readers will view this book as a stepping-stone to further linguistic study, and will eventually decide for themselves on which side of the road they wish to stand over key language issues.

Linguistics is a fast-changing subject, and parts of it have moved on considerably since the first edition of this book was published in 1972. Above all, linguistics has continued to expand, like a tree which grows numerous new branches. This new edition contains a number of changes, including updated suggestions for further reading.

I am most grateful to all those who have made helpful suggestions and comments, especially to any students or readers who spotted errors in the older editions. I hope none remain in this new edition, but if anyone finds any, I would be very grateful to know about them.

Happy reading!

Jean Aitchison, 2010

**1: *Only got a minute?***

The use of language is an integral part of being human. Linguistics is the study of language, and how it works. This book explains the main design features of language, and shows how language differs from animal communication. Language is a patterned activity, which involves three major types of organization: sound patterns (phonology), word patterns (morphology and syntax) and meaning patterns (semantics). These three constitute the core of any language, sometimes known as the *grammar.* But beyond grammar, this book covers language usage and conversation (pragmatics), social variation within a language (sociolinguistics), language and mind (psycholinguistics), literary language (stylistics), language change (historical linguistics), types of language (typological linguistics). It also points out links with other disciplines, such as language teaching (applied linguistics), philosophy (philosophical linguistics), anthropology (anthropological linguistics), artificial intelligence (computational linguistics), and dictionary making (lexicography and terminology).

**5: *Only got five minutes?***

**All normal humans acquire at least one language in the early years of their life, and use it frequently. Linguistics is the systematic study of language, and aims to cover all its main branches**.

**Descriptive linguistics**

A key part of linguistics is describing the languages of the world, including previously unwritten languages, in a coherent and well-organized way. Such a description is known as a grammar.

A grammar covers sound patterns (phonology), within-word patterns (morphology), word patterns (syntax) and meaning patterns (semantics). Sometimes morphology and syntax are bracketed together as morphosyntax.

Grammars handle the parts of language that are most easily describable, in that the patterns are partly detachable from the external world. Yet, in recent years, perhaps the greatest attention has been paid to areas of linguistics which handle how speakers use language to interact with the world.

**Language–world interaction**

Several different branches of linguistics explore how speakers interact with the world in their use of language. The best-known are pragmatics, sociolinguistics, psycholinguistics and stylistics.

Pragmatics is a huge field, which looks especially at how human beings interact with one another. People typically cooperate in their dealings with each other, they organize their speech in the order of occurrence of events, they take it in turns to talk, and they try to be polite to one another.

Sociolinguistics explores social factors which lead to speech variation within a community, especially differences in geographical location, social class and sex. Sociolinguistics also re-examines, and in some cases dismisses, old myths, such as the long-standing, but false belief that women talk more than men.

Psycholinguistics, the study of language and mind, examines speech in the mind of individuals. It explores how children acquire language, how humans comprehend one another and how they organize speech for production. It also looks at language and the brain, particularly at brain areas most relevant to language, and outlines what happens when things go wrong, such as when someone suffers a stroke.

Stylistics, the study of literary language, includes inquiry into the language of the media, especially newspapers and advertising.

**Language change**

In the nineteenth century, the main interest of historical linguists was the reconstruction of a proto-language, such as Proto-Indo-European, the ancestor from which numerous well-known existing languages developed. This is still an interesting topic, but in the twenty-first century is no longer predominant. In the twentieth century, linguists became particularly concerned with studying language change as it happens. Variation within language was at one time thought to be random, but was later realized to be an indication that a change was in progress. Linguists realized that changes work their way gradually through a language, moving from one group to another, and also from one word to another.

Causes of language change also became clearer. Natural tendencies, such as a propensity to leave the endings off words, sometimes disrupt patterns. Then therapeutic changes smooth out the disruptions. Languages always remain patterned, otherwise human communication would break down.

**Chomsky and transformational grammar**

Noam Chomsky is the linguist whose fame and influence have spread furthest outside linguistics. He still attracts considerable attention. It is important to understand why his work has been so influential, and what his main ideas were. Recently, linguists have started to move in new directions, away from the abstract ideas of Chomsky, and towards a more ‘down-to-earth’ approach to linguistics.

**Happy reading!**

Language is a key component of human behaviour, so everybody (ideally) will enjoy finding out how it works.

**Lecture 2**

**What is linguistics?**

This chapter explains how linguistics differs from traditional grammar studies, and outlines the main subdivisions of the subject.

Most people spend an immense amount of their life talking, listening and, in advanced societies, reading and writing. Normal conversation uses 4,000 or 5,000 words an hour. A radio talk, where there are fewer pauses, uses as many as 8,000 or 9,000 words per hour. A person reading at a normal speed covers 14,000 or 15,000 words per hour. So someone who chats for an hour, listens to a radio talk for an hour and reads for an hour possibly comes into contact with 25,000 words in that time. Per day, the total could be as high as 100,000.

The use of language is an integral part of being human. Children all over the world start putting words together at approximately the same age, and follow remarkably similar paths in their speech development. All languages are surprisingly similar in their basic structure, whether they are found in South America, Australia or near the North Pole. Language and abstract thought are closely connected, and many people think that these two characteristics above all distinguish human beings from animals.

**Insight**

Normal humans use language incessantly: speaking, hearing, reading and writing. They come into contact with tens of thousands of words each day.

An inability to use language adequately can affect someone’s status in society, and may even alter their personality. Because of its crucial importance in human life, every year an increasing number of psychologists, sociologists, anthropologists, teachers, speech therapists, computer scientists and copywriters (to name but a few professional groups) realize that they need to study language more deeply. So it is not surprising that in recent years one of the fastest-expanding branches of knowledge has been linguistics – the systematic study of language.

Linguistics tries to answer the basic questions ‘What is language?’ and ‘How does language work?’. It probes into various aspects of these problems, such as ‘What do all languages have in common?’, ‘What range of variation is found among languages?’, ‘How does human language differ from animal communication?’, ‘How does a child learn to speak?’, ‘How does one write down and analyse an unwritten language?’, ‘Why do languages change?’, ‘To what extent are social class differences reflected in language?’ and so on.

**What is a linguist?**

A person who studies linguistics is usually referred to as a**linguist**. The more accurate term ‘linguistician’ is too much of a tongue-twister to become generally accepted. The word ‘linguist’ is unsatisfactory: it causes confusion, since it also refers to someone who speaks a large number of languages. Linguists in the sense of linguistics experts need not be fluent in languages, though they must have a wide experience of different types of language. It is more important for them to analyse and explain linguistic phenomena such as the Turkish vowel system, or German verbs, than to make themselves understood in Istanbul or Berlin. They are skilled, objective observers rather than participants – consumers of languages rather than producers, as one social scientist flippantly commented.

**Insight**

A linguist in the sense of someone who analyses languages need not actually speak the language(s) they are studying.

Our type of linguist is perhaps best likened to a musicologist. A musicologist could analyse a piano concerto by pointing out the theme and variations, harmony and counterpoint. But such a person need not actually play the concerto, a task left to the concert pianist. Music theory bears the same relation to actual music as linguistics does to language.

**How does linguistics differ from traditional grammar?**

One frequently meets people who think that linguistics is old school grammar jazzed up with a few new names. But it differs in several basic ways.

First, and most important, linguistics is **descriptive**, not prescriptive. Linguists are interested in what *is* said, not what they think *ought* to be said. They describe language in all its aspects, but do not prescribe rules of ‘correctness’.

**Insight**

Those who work on linguistics describe languages; they do not dictate how to use them.

It is a common fallacy that there is some absolute standard of correctness which it is the duty of linguists, schoolteachers, grammars and dictionaries to maintain. There was an uproar in the USA when in 1961 *Webster’s Third New International Dictionary of the English Language* included words such as*ain’t* and phrases such as *ants in one’s pants*. The editors were deliberately corrupting the language – or else they were incompetent, argued the critics. ‘Webster III has thrust upon us a dismaying assortment of the questionable, the perverse, the unworthy and the downright outrageous,’ raged one angry reviewer. But if people say *ain’t* and *ants in one’s pants*, linguists consider it important to record the fact. They are observers and recorders, not judges.

‘I am irritated by the frequent use of the words *different to* on radio and other programmes’ ran a letter to a daily paper.

‘In my schooldays of fifty years ago we were taught that things were *alike to* and *different from*. Were our teachers so terribly ignorant?’ This correspondent has not realized that languages are constantly changing. And the fact that he comments on the *frequent* use of *different to* indicates that it has as much right to be classified as ‘correct’ as *different from*.

The notion of absolute and unchanging ‘correctness’ is quite foreign to linguists. They might recognize that one type of speech appears, through the whim of fashion, to be more socially acceptable than others. But this does not make the socially acceptable variety any more interesting for them than the other varieties, or the old words any better than new ones. To linguists the language of a pop singer is not intrinsically worse (or better) than that of a duke. They would disagree strongly with the *Daily Telegraph* writer who complained that ‘a disc jockey talking to the latest Neanderthal pop idol is a truly shocking experience of verbal squalor’. Nor do linguists condemn the coining of new words. This is a natural and continuous process, not a sign of decadence and decay. A linguist would note with interest, rather than horror, the fact that you can have your hair washed and set in a *glamorama* in North Carolina, or your car oiled at a *lubritorium* in Sydney, or that you can buy apples at a *fruitique* in a trendy suburb of London.

A second important way in which linguistics differs from traditional school grammar is that linguists regard the spoken language as primary, rather than the written. In the past, grammarians have over-stressed the importance of the written word, partly because of its permanence. It was difficult to cope with fleeting utterances before the invention of sound recording. The traditional classical education was also partly to blame. People insisted on moulding language in accordance with the usage of the ‘best authors’ of the ancient world, and these authors existed only in written form. This attitude began as far back as the second century bc, when scholars in Alexandria took the authors of fifth-century Greece as their models. This belief in the superiority of the written word has continued for over two millennia.

But linguists look first at the spoken word, which preceded the written everywhere in the world, as far as we know. Moreover, most writing systems are derived from the vocal sounds. Although spoken utterances and written sentences share many common features, they also exhibit considerable differences. Linguists therefore regard spoken and written forms as belonging to different, though overlapping systems, which must be analysed separately: the spoken first, then the written.

**Insight**

Spoken and written language need to be analysed separately. Both are important, and neither is better than the other.

A third way in which linguistics differs from traditional grammar studies is that it does not force languages into a Latin-based framework. In the past, many traditional textbooks have assumed unquestioningly that Latin provides a universal framework into which all languages fit, and countless schoolchildren have been confused by meaningless attempts to force English into foreign patterns. It is sometimes claimed, for example, that a phrase such as *for John* is in the ‘dative case’. But this is blatantly untrue, since English does not have a Latin-type case system. At other times, the influence of the Latin framework is more subtle, and so more misleading. Many people have wrongly come to regard certain Latin categories as being ‘natural’ ones. For example, it is commonly assumed that the Latin tense divisions of past, present and future are inevitable. Yet one frequently meets languages which do not make this neat threefold distinction. In some languages, it is more important to express the duration of an action – whether it is a single act or a continuing process – than to locate the action in time.

In addition, judgements on certain constructions often turn out to have a Latin origin. For example, people frequently argue that ‘good English’ avoids ‘split infinitives’ as in the phrase *to humbly apologize*, where the infinitive *to apologize*is ‘split’ by *humbly*. A letter to the *London Evening Standard*is typical of many: ‘Do split infinitives madden your readers as much as they do me?’ asks the correspondent. ‘Can I perhaps ask that, at least, judges and editors make an effort to maintain the form of our language?’ The idea that a split infinitive is wrong is based on Latin. Purists insist that, because a Latin infinitive is only one word, its English equivalent must be as near to one word as possible. To linguists, it is unthinkable to judge one language by the standards of another. Since split infinitives occur frequently in English, they are as ‘correct’ as unsplit ones.

**Insight**

Each language must be described separately, and must never be forced into a framework devised for another.

In brief, linguists are opposed to the notion that any one language can provide an adequate framework for all the others. They are trying to set up a universal framework. And there is no reason why this should resemble the grammar of Latin, or the grammar of any other language arbitrarily selected from the thousands spoken by humans.

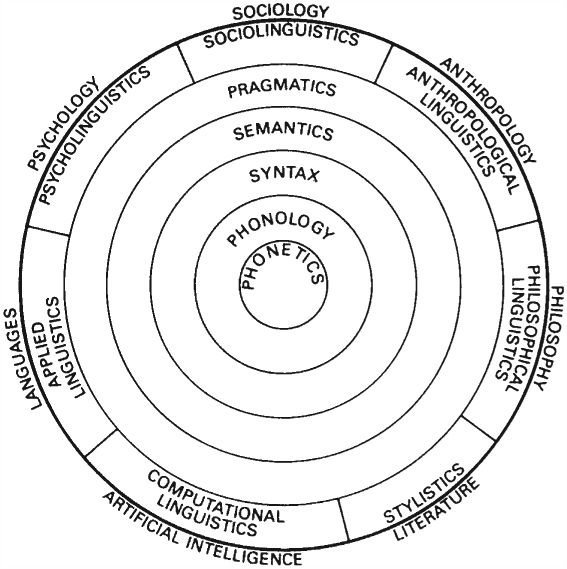
**Lecture 3**

**The scope of linguistics**

Linguistics covers a wide range of topics and its boundaries are difficult to define.

A diagram in the shape of a wheel gives a rough impression of the range covered.

In the centre is **phonetics**, the study of human speech sounds. A good knowledge of phonetics is useful for a linguist. Yet it is a basic background knowledge, rather than part of linguistics itself. Phoneticians are concerned with the actual physical sounds, the raw material out of which language is made. They study the position of the tongue, teeth and vocal cords during the production of sounds, and record and analyse sound waves. Linguists, on the other hand, are more interested in the way in which language is patterned. They analyse the shape or **form** of these patterns rather than the physical substance out of which the units of language are made. The famous Swiss linguist, Ferdinand de Saussure, expressed the difference well when he compared language with a game of chess. The linguist is interested in the various moves which the chessmen make and how they are aligned on the board. It does not matter whether the chessmen are made of wood or ivory. Their substance does not alter the rules of the game.



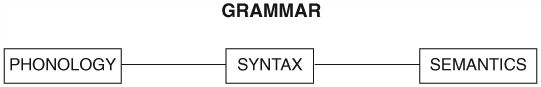
*Figure 1.1.*

**Insight**

The patterns of any language are more important than the physical substance out of which they are made.

Although phonetics and linguistics are sometimes referred to together as ‘the linguistic sciences’, phonetics is not as central to general linguistics as the study of language patterning. For this reason, information about phonetics has been placed in an appendix at the end of the book.

In [Figure 1.1](javascript:void(0)), phonetics is surrounded by **phonology** (sound patterning), then phonology is surrounded by **syntax**. The term ‘syntax’, used in its broadest sense, refers to both the arrangement and the form of words. It is that part of language which links together the sound patterns and the meaning.**Semantics** (meaning) is placed outside syntax. Phonology, syntax and semantics are the ‘bread and butter’ of linguistics, and are a central concern of this book. Together they constitute the **grammar** of a language.



*Figure 1.2.*

But a word of warning about differences in terminology must be added. In some (usually older) textbooks, the word ‘grammar’ has a more restricted use. It refers only to what we have called the syntax. In these books, the term ‘syntax’ is restricted to the arrangement of words, and the standard term **morphology** is used for their make-up. This is not a case of one group of linguists being right in their use of terminology, and the other wrong, but of words gradually shifting their meaning, with the terms ‘syntax’ and ‘grammar’ extending their range.

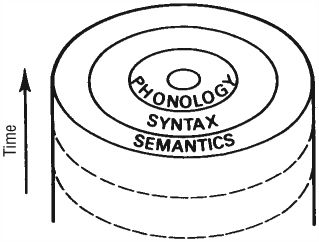
**Insight**

The word *grammar* refers to sound patterns, word patterns and meaning patterns combined, and not (as in some older books) word order and word endings only.

Around the central grammatical hub comes **pragmatics**, which deals with how speakers use language in ways which cannot be predicted from linguistic knowledge alone. This fast-expanding topic has connections both with semantics, and with the various branches of linguistics which link language with the external world: **psycholinguistics** (the study of language and mind), **sociolinguistics** (the study of language and society), **applied linguistics** (the application of linguistics to language teaching), **computational linguistics** (the use of computers to simulate language and its workings), **stylistics** (the study of language and literature), **anthropological linguistics** (the study of language in cross-cultural settings) and **philosophical linguistics** (the link between language and logical thought).

These various branches overlap to some extent, so are hard to define clearly. Psycholinguistics, sociolinguistics and stylistics are perhaps the ones which have expanded fastest in recent years. For this reason, they are given chapters to themselves in this book.

Finally, there are two important aspects of linguistics which have been omitted from the diagram. The first is **historical linguistics**, the study of language change. This omission was inevitable in a two-dimensional diagram. But if the wheel diagram is regarded as three-dimensional, as if it were the cross-section of a tree, then this topic can be included. A grammar can be described at one particular point in time (a single cut across the tree), or its development can be studied over a number of years, by comparing a number of different cuts made across the tree-trunk at different places.



*Figure 1.3.*

Because it is normally necessary to know how a system works at any one time before one can hope to understand changes, the analysis of language at a single point in time, or **synchronic** linguistics, is usually dealt with before historical or **diachronic** linguistics.

The second omission is **linguistic typology**, the study of different language types. This could not be fitted in because it spreads over several layers of the diagram, covering phonology, syntax and semantics.

This chapter has explained how linguistics differs from traditional grammar studies, and has outlined the main subdivisions within the subject. The next chapter will look at the phenomenon studied by linguistics: **language**.

***THINGS TO REMEMBER***

* *A normal person is likely to come into contact with tens of thousands of words each day.*
* *A person who studies linguistics is known as a linguist.*
* *A (linguistic) linguist analyses languages, but does not necessarily speak them.*
* *A linguist describes languages, but does not prescribe (dictate) how to use them.*
* *All languages, and all aspects of a language, are interesting.*
* *Languages change constantly.*
* *Spoken and written language need to be analysed separately.*
* *No language must be forced into the framework of another.*
* *Language patterns are more important to a linguist than the substance out of which the patterns are formed.*
* *Language can be analysed at a single point in time (synchronic linguistics), or its development over a number of years can be studied (diachronic linguistics).*

**Lecture 4**

**What is language?**

This chapter outlines some important ‘design features’ of human language, and explores the extent to which they are found in animal communication. It also looks at the main purposes for which language is used.

Linguistics can be defined as ‘the systematic study of language’ – a discipline which describes language in all its aspects and formulates theories as to how it works.

But what exactly *is* language? People often use the word in a very wide sense: ‘the language of flowers’, ‘the language of music’, ‘body language’ and so on. This book, in common with most linguistics books, uses the word to mean the specialized sound-signalling system which seems to be genetically programmed to develop in humans. Humans can, of course, communicate in numerous other ways: they can wink, wave, smile, tap someone on the shoulder, and so on. This wider study is usually known as ‘the psychology of communication’. It overlaps with linguistics, but is not the concern of this book.

It is also clear that humans can transfer language to various other media: written symbols, Braille, sign language, and so on. Sign language in particular has interesting characteristics which are not all predictable from the spoken word. However, language based on sound is more widespread, and perhaps more basic, and so has been given priority in this book.

But can language be defined? And how can it be distinguished from other systems of animal communication? A useful approach was pioneered by the American linguist Charles Hockett. This is to make a list of **design features**, and to consider whether they are shared by other animals. Some important ones will be discussed in the next few pages.

**Use of sound signals**

When animals communicate with one another, they may do so by a variety of means. Crabs, for example, communicate by waving their claws at one another, and bees have a complicated series of ‘dances’ which signify the whereabouts of a source of nectar.

But such methods are not as widespread as the use of sounds, which are employed by humans, grasshoppers, birds, dolphins, cows, monkeys, and many other species. So our use of sound is in no way unique.

**Insight**

Sound signals have several advantages. They can be used in the dark, and at some distance, they allow a wide variety of messages to be sent, and they leave the body free for other activities.

Humans probably acquired their sound-signalling system at a fairly late stage in their evolution. This seems likely because all the organs used in speech have some more basic function. The lungs are primarily used for breathing. Teeth, lips and tongue are primarily for eating. The vocal cords (thin strips of membrane deep in the throat) were used primarily for closing off the lungs in order to make the rib cage rigid for actions requiring a great effort. When people lift something heavy, they automatically hold their breath. This is caused by the closing of the vocal cords. The grunt when the heavy object is dropped is caused by the air being expelled as the vocal cords open. Millions of years ago we possibly needed a rigid rib cage for swinging in the trees – but humans still need this mechanism today for such actions as weightlifting, defecation and childbirth.

**Insight**

All the organs used in speech have some more basic function, such as eating or breathing. Humans may therefore have acquired language at a relatively late stage in their evolution.

**Arbitrariness**

There is often a recognizable link between the actual signal and the message an animal wishes to convey. An animal who wishes to warn off an opponent may simulate an attacking attitude. A cat, for example, will arch its back, spit and appear ready to pounce.

In human language, the reverse is true. In the great majority of cases, there is no link whatsoever between the signal and the message. The symbols used are **arbitrary**. There is no intrinsic connection, for example, between the word *elephant*and the animal it symbolizes. Nor is the phrase ‘These bananas are bad’ intrinsically connected with food. Onomatopoeic words such as *quack-quack* and *bang* are exceptions – but there are relatively few of these compared with the total number of words.

**Insight**

In most words, no link exists between the sounds used and their meaning.

**The need for learning**

Many animals automatically know how to communicate without learning. Their systems of communication are genetically inbuilt. Bee-dancing, for example, is substantially the same in bee colonies in different parts of the world, with only small variations. Even in cases where an element of learning is involved, this is usually minor. In one experiment a chaffinch reared in a soundproof room away from other chaffinches developed an abnormal type of song. Yet when the bird was exposed to only occasional tape recordings of other chaffinches, its song developed normally.

This is quite different from the long learning process needed to acquire human language, which is culturally transmitted. A human brought up in isolation simply does not acquire language, as is shown by the rare studies of children brought up by animals without human contact. Human language is by no means totally conditioned by the environment, and there is almost certainly some type of innate predisposition towards language in a new-born child. But this latent potentiality can be activated only by long exposure to language, which requires careful learning.

**Duality**

Animals which use vocal signals have a stock of basic sounds which vary according to species. A cow has under 10, a chicken has around 20, and a fox over 30. Dolphins have between 20 and 30, and so do gorillas and chimpanzees. Most animals can use each basic sound only once. That is, the number of messages an animal can send is restricted to the number of basic sounds, or occasionally the basic sounds plus a few simple combinations.

Human language works rather differently. Each language has a stock of sound units or **phonemes** which are similar in number to the basic sounds possessed by animals; the average number is between 30 and 40. But each phoneme is normally meaningless in isolation. It becomes meaningful only when it is combined with other phonemes. That is, sounds such as *f*, *g*,*d*, *o*, mean nothing separately. They normally take on meaning only when they are combined together in various ways, as in *fog*, *dog*, *god*.

This organization of language into two layers – a layer of sounds which combine into a second layer of larger units – is known as **duality** or **double articulation**. A communication system with duality is considerably more flexible than one without it, because a far greater number of messages can be sent.

**Insight**

The organization of language into two layers, one layer of mostly meaningless sounds arranged into a second layer of larger units, makes language powerful and flexible, and is rare in animal communication.

At one time, it was thought that duality was a characteristic unique to human language. But now some people claim that it exists also in birdsong, where each individual note is meaningless. It is the combination of notes into longer sequences which constitutes a meaningful melody.

**Displacement**

Most animals can communicate about things in the immediate environment only. A bird utters its danger cry only when danger is present. It cannot give information about a peril which is removed in time and place. This type of spontaneous utterance is nearer to a human baby’s emotional cries of pain, hunger or contentment than it is to fully developed language.

**Insight**

Unlike most other animals, humans can discuss objects and events that are removed in time and place.

Human language, by contrast, can communicate about things that are absent as easily as about things that are present. This apparently rare phenomenon, known as **displacement**, does occasionally occur in the animal world, for example, in the communication of honey bees. If a worker bee finds a new source of nectar, it returns to the hive and performs a complex dance in order to inform the other bees of the exact location of the nectar, which may be several miles away. But even bees are limited in this ability. They can inform each other only about nectar. Human language can cope with any subject whatever, and it does not matter how far away the topic of conversation is in time and space.

**Lecture 5**

**Creativity (productivity)**

Most animals have a very limited number of messages they can send or receive. The male of a certain species of grasshopper, for example, has a choice of six, which might be translated as follows:

1. *I am happy, life is good.*
2. *I would like to make love.*
3. *You are trespassing on my territory.*
4. *She’s mine.*
5. *Let’s make love.*
6. *Oh how nice to have made love.*

Not only is the number of messages fixed for the grasshopper, but so are the circumstances under which each can be communicated. All animals, as far as we know, are limited in a similar way. Bees can communicate only about nectar. Dolphins, in spite of their intelligence and large number of clicks, whistles and squawks, seem to be restricted to communicating about the same things again and again. And even the clever vervet monkey, who is claimed to make 36 different vocal sounds, is obliged to repeat these over and over.

**Insight**

Most animals are restricted in what they can communicate about. Humans can talk about anything, and be understood.

This type of restriction is not found in human language, which is essentially **creative** (or **productive**). Humans can produce novel utterances whenever they want to. A person can utter a sentence which has never been said before, in the most unlikely circumstances, and still be understood. If, at a party, someone said, ‘There is a purple platypus crawling across the ceiling,’ friends might think the speaker was drunk or drugged, but they would still understand the words spoken. Conversely, in an everyday routine situation, a person is not obliged to say the same thing every time. At breakfast, someone might say ‘This is good coffee’ on one day, ‘Is this coffee or dandelion tea?’ on the next, and ‘It would be cheaper to drink petrol’ on the next.

**Patterning**

Many animal communication systems consist of a simple list of elements. There is no internal organization within the system.

Human language, on the other hand, is most definitely not a haphazard heap of individual items. Humans do not juxtapose sounds and words in a random way. Instead, they ring the changes on a few well-defined patterns.