DIKTAT
INTRODUCTION TO LINGUISTICS

OLEH:
SUSANA WIDYASTUTI
NIP. 132 316 016

JURUSAN PENDIDIKAN BAHASA INGGRIS
FAKULTAS BAHASA DAN SENI
UNIVERSITAS NEGERI YOGYAKARTA
NOVEMBER, 2008

Kegiatan ini Dilaksanakan Berdasarkan Surat Perjanjian
Pelaksanaan Penulisan Diktat Antara Pembantu Dekan I dengan
Dosen Fakultas Bahasa dan Seni Universitas Negeri Yogyakarta
Nomor: 07/Kontrak-Diktat/H.34.12/PP/VI/2008
Preface

This module is aimed at introducing the basic concepts and essential terminology of linguistics. Linguistics is a highly technical field and technical vocabulary cannot be avoided. Therefore, a clear and brief explanation on each term is extremely needed to see the correlation between those terms.

This module is to be used by the third semester- students of English Department, as it gives fundamental concepts of linguistics before they take other courses of linguistics branches. This module is designed to assist the students to learn the nature of language and its function in daily life and linguistics as the study of language.

Students are expected to read the resources and websites which are listed on the references page. Doing the exercises at the end of every chapter is highly recommended for students’ comprehension.
## Contents

1. Language 3
2. Linguistics 10
3. Theories of Linguistics 15
4. The languages of the world 23
5. Phonetics: Description of Sounds 30
6. Phonology: Sound Arrangement 38
7. Morphology: Words and Pieces of Words 46
8. Syntax: Sentence Patterns and Analysis 56
9. Semantics: Meanings of words and sentences 64
10. Pragmatics: Language in Use 72
11. Sociolinguistics: Language and society 81
12. Psycholinguistics: Language and Mind 88
01 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.

Talking, shouting, whispering, lying, swearing, telling jokes or tales, in short: communication of all sorts by means of articulate sound is something we are so familiar with that we hardly ever come to think about it as something unique. However, no other creature on this planet shows the ability to communicate verbally in the way we do. Take a minute to think about the immense impact spoken and written language has on your everyday life! You could not possibly do without it in situations where you meet other people, like in school, university, or at the breakfast table. The examples are innumerous.

In this section, we will take a look at the unique features of human language. As you will see when we proceed, the human curiosity concerning language is no modern phenomenon. Language has been examined by linguists and philosophers for several millennia. Therefore, we can look back on a respectable stock of literature on the topic originating from the times of Ancient Greece until the present day. The result is a compendium of linguistic disciplines that are interwoven with the domains of, among others, philosophy, psychology, neurology, and even computer science: a vast and fascinating network of knowledge.

To keep you fascinated (which I hope you are) and to keep you from becoming intimidated (which I hope you are not), we will start right away with the very principles that make human language so special.
The Origins of Language

Language is highly developed form of animal signaling, but how and when did we start to talk? Until recently, most linguists regarded this fascinating topic as outside linguistics, many agreeing with the 19-th century linguist William Dwight Whitney that ‘the greater part of what is said and written upon it is mere windy talk’.

Language probably developed in east Africa, around 100,000 years ago. Three preconditions must have existed. First, humans had to view the world in certain common ways: they noticed objects and actions, for example. Second, they were able to produce a range of sounds – a spin-off of walking upright, according to one view. Third, they must have attained the ‘naming insight’, the realization that sound sequences can be symbols which ‘stand for’ people and objects. For example, human make some agreement to use some vocal symbol, for example “lion” to describe a big hairy animal like cat. The ability of communication using language gives some benefit for human civilization.

These preconditions enabled early humans to build up a store of words. But how about linguistic rules, conventional word arrangements? In all probability, rules came about among early humans in much the same way as new rules emerge in any language today. Briefly, preferences tend to become habits, and habits become ‘rules’.

What is human language?

Language is a highly elaborated signaling system. We call the aspects that are peculiar to it the design features of language. Some of these we find only with the language of human beings, others we have in common with animals. Another aspect of human language is that we express thoughts with words.
Design features of language

- **A principle feature** of human language is the *duality of patterning*.

  It enables us to use our language in a very *economic* way for a virtually infinite production of linguistic units. How does this principle work?

  All human languages have a *small, limited set* of speech sounds. The limitation derives from the restricted capacity of our *vocal apparatus*. The speech sounds are referred to as consonants and vowels. Linguistically speaking, the distinctive speech sounds are called phonemes, which are explained in more detail in the chapter on phonology.

  You cannot use isolated phonemes for communication, because phonemes are by themselves meaningless. But we can assemble and reassemble phonemes into larger linguistic units. These are commonly called "words". Although our capacity to produce new phonemes is limited, we frequently coin new words. Hence, our capacity to produce vocabulary is unlimited.

- **Displacement**

  In contrast to other animals, humans have a sense of the past and the future. A gorilla, for example, cannot tell his fellows about his parents, his adventures in the jungle, or his experience of the past. The use of language to talk about things other than "the here and now", is a characteristic of humans. Displacement is thus our ability to convey a meaning that gently repeats the same patterns in its dance, whereas humans are able to invent ever new contexts.

- **Open- The ended-ness**

  Humans have the ability to transcend the immediately perceptible sphere of space and time. Although some animals seem to possess abilities appropriating those of displacement, they lack the freedom to apply this to new contexts. The dance of the honey-bee, for instance, indicates the locations of rich deposits of food to other bees. This ability of the bee corresponds to displacement in human
language, except for a lack of variation. The bee freq say things that have never been said before, including the possibility to express invented things or lies, is also a peculiar feature of human language.

• **Stimulus-freedom**

This is another aspect that distinguishes human language from animal communication. The honey-bee must perform its dance, the woodchuck must cry out in order to warn his fellows when it beholds an eagle. Humans have the ability to say anything they like in any context. This ability is only restricted in certain ceremonial contexts such as church services, etc., where a fixed form is expected to be followed. The possibility to violate this fixed linguistic behavior is then the source of jokes, such as a bride's "no".

• **Arbitrariness**

Why is a table called “table”? Obviously, the thing never told us its name. And tables do not make a noise similar to the word. The same applies to most of the words of our language. Hence, words and their meaning have no priori connection. We cannot tell from the sound structure which meaning is behind it. Language is not motivated, as we can also put it. There are, however, exceptions to this rule: language can be iconic, which means that there is a direct correlation between form and meaning. The length of a phrase, for example, could represent a length of time the phrase refers to, like in "a long, long time ago". Here, the extension serves to visually represent the semantic emphasis. Iconicity in language can be found frequently. Another example for non-arbitrariness are onomatopoeia. These are words that seem to resemble sounds. There are many examples for onomatopoetic words, like splash or bang. Some names for animals are also onomatopoetic, for example, "cuckoo". Still, since animals such as the bird are named differently in different languages, there can be no ultimate motivation for the name.
• **The human vocal tract**
  An elaborated language requires a highly sophisticated speech organ that will enable the speaker to produce the many differentiated sounds. Only humans are endowed with a speech organ of this complexity.

**The Role of Language**

But why did language begin? Social chit-chat, the meaningless small talk of everyday life, may have played a key role, as it does today: “Hallo, how nice to see you. How are you? Isn’t the weather terrible?” Keeping in touch via talking could have replaced the friendly grooming indulged in by primates, according to one view. It has been called ‘grooming talking’.

The use of language for persuading and influencing others has probably always been important. Language can of course communicate feelings and emotions, though this aspect of language is not well developed. Humans, like other primates, can convey emotions via screams, grunts, sobs, gestures, and so on. So they need language only to confirm and elaborate these more primitive signals. These days, various other biologically less important functions of language are also found. Humans may use language for purely aesthetic reasons. In writing poetry, for example, people manipulate words in the same way as they might model clay and paint a picture. Or they may in order to release nervous tension, a function seen when people mutter to themselves in anger and frustration.

**Language as a Means of Communication**

There is more to communication than just one person speaking and another one listening. Human communication processes are quite complex. We differentiate verbal and nonverbal, oral and written, formal and informal, and intentional and unintentional communication. In addition, there is human-animal communication and human-computer communication. A famous statement says that we are not able to *not* communicate. In this chapter, we will concentrate on verbal communication between humans in either spoken or written form.
Verbal communication involves the use of linguistic symbols that mean something to those who take part in the process. These symbols are spoken words in oral communication and their realization as alphabetical units in written communication.

Oral communication refers to messages that are transmitted "out loud" from one person to another. We all participate in this process every day, for example, as speakers or listeners when talking, watching TV, or answering the phone. The most prominent feature of oral communication is that it is not permanent unless it is recorded.

Written communication is primarily verbal but involves also other elements due to the variations in writing. In contrast to oral communication, it is not transitory, but permanent. Thus, written messages enable us to keep exact records of language and communication. Living in a purely oral culture would limit our capacity of cultural development enormously.

Elements of the communication process

Here are the various components of the communication process in detail.

- **Input.** The sender has an intention to communicate with another person. This intention makes up the content of the message.
- **Sender.** The sender encodes the message, e.g. the idea of "piece of furniture to sit on" = /bɪˈfɜːr/ . Thus he gives expression to the content.
- **Channel.** The message is sent via a channel, which can be made of a variety of materials. In acoustic communication it consists of air, in written communication of paper or other writing materials.
- **Noise.** The channel is subjected to various sources of noise. One example is telephone communication, where numerous secondary sounds are audible. Even a solid channel such as paper can be crushed or stained. Such phenomena are also noise in the communicative sense.
• **Receiver.** The receiver *decodes* the incoming message, or expression. He "translates" it and thus receives the

• **Output.** This is the *content* decoded by the receiver.

• **Code.** In the process, the relevance of a code becomes obvious: The codes of the sender and receiver must have at least a certain set in common in order to make communication work.

![Figure 1.1 Communication process](image)

### Questions:

1. Suggest at least three properties of language which are rare or absent in animal communication.
2. What do you understand by the role of language?
3. Suggest some reasons why people talk.
4. Language is a means of communication. Explain this statement.
5. How would you differ written communication from oral communication?
Linguistics is the scientific study of language. It endeavors to answer the question--what is language and how is represented in the mind? Linguistics is a social science that shares common ground with other social sciences such as psychology, anthropology, sociology and archaeology. It also may influence other disciplines such as English, communication studies and computer science. Linguistics for the most part though can be considered a cognitive science. Along with psychology, philosophy and computer science, linguistics is ultimately concerned with how the human brain functions.

Linguistics try 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 analyze an unwritten language?’. ‘Why do languages change?’, ‘To what extent are social class differences reflected in language?’ and so on.

A Swiss scholar, Ferdinand de Saussure (1857–1913), is considered as the father of modern linguistics, with his published lecture “Cours de linguistique generale”. He insists that language is not a thing, a substance, but a form, a structure, a system. His image is that thought and sound are like the front and back
of a piece of paper (and the paper is the linguistic sign); you can distinguish between
the two, but you can’t separate them.

Saussure proposes the terms *langage, langue* and *parole*. He (and other
structuralist and post-structuralist theorists) talk about language in general as
*langage*, the system of a certain language as *langue* (from the French word for
language), and the language of an individual as *parole*.

**What is a Linguist?**

A Linguist is someone who engages in studying linguistics. He focuses on
describing and explaining language; not concerned with the prescriptive rules of the
language. A Linguist is not required to know many languages and is not an
interpreter. The underlying goal of the linguist is to try to discover the universals
concerning language. That is, what are the common elements of all languages. The
linguist then tries to place these elements in a theoretical framework that will
describe all languages and also predict what can not occur in a 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 some 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’.

Second, linguists regard the *spoken* language as primary, not the written. In
the past, grammarians have over-stressed the importance of the written word, partly
because of its permanence. 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 analyzed separately: the spoken first, then the written.

Third, linguistics 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 school children have been confused by meaningless attempts to force English into foreign patterns. In short, linguists are opposed to the notion that any one language can provide an adequate framework for all the others.

**Disciplines within linguistics**

Linguistics cover a wide range of topics and its boundaries are difficult to define. Below are several different disciplines within linguistics. The fields of phonetics, phonology, morphology, syntax, semantics and language acquisition are considered the core fields of study and a firm knowledge of each is necessary in order to tackle more advanced subjects.

![Figure 2.1 Disciplines of Linguistics]
Phonetics

Phonetics is the study of the production and perception of speech sounds. It is concerned with the sounds of language, how these sounds are articulated and how the hearer perceives them. Phonetics is related to the science of acoustics in that it uses much the same techniques in the analysis of sound that acoustics does.

Phonology

Phonology is the study of the sound patterns of language. It is concerned with how sounds are organized in a language. Phonology examines what occurs to speech sounds when they are combined to form a word and how these speech sounds interact with each other. It endeavors to explain what these phonological processes are in terms of formal rules.

Morphology

Morphology is the study of word formation and structure. It studies how words are put together from their smaller parts and the rules governing this process. The elements that are combining to form words are called morphemes. A morpheme is the smallest unit of meaning you can have in a language. The word cats, for example, contains the morphemes cat and the plural -s.

Syntax

Syntax is the study of sentence structure. It attempts to describe what is grammatical in a particular language in term of rules. These rules detail an underlying structure and a transformational process. The underlying structure of English for example would have a subject-verb-object sentence order (John hit the ball). The transformational process would allow an alteration of the word order which could give you something like The ball was hit by John.
Semantics

Semantics is the study of meaning. It is concerned with describing how we represent the meaning of a word in our mind and how we use this representation in constructing sentences. Semantics is based largely on the study of logic in philosophy.

Other Disciplines

- **Sociolinguistics**: Sociolinguistics is the study of interrelationships of language and social structure, linguistic variation, and attitudes toward language.
- **Neurolinguistics**: Neurolinguistics is the study of the brain and how it functions in the production, perception and acquisition of language.
- **Historical Linguistics**: Historical linguistics is the study of language change and the relationships of languages to each other.
- **Anthropological Linguistics**: Anthropological linguistics is the study of language and culture and how they interact.
- **Pragmatics**: Pragmatics studies meaning in context.

Questions:

1. How would you define linguistics?
2. Point out three ways in which linguistics differs from traditional school grammar.
3. What is a linguist?
4. Why do linguists regard speech rather than writing as primary?
5. Briefly explain the terms phonology, syntax and semantics.
In linguistics, any one of several schools of 20th-century linguistics committed to the structuralist principle that a language is a self-contained relational structure, the elements of which derive their existence and their value from their distribution and oppositions in texts or discourse. This principle was first stated clearly, for linguistics, by the Swiss scholar Ferdinand de Saussure (1857–1913). Saussurean structuralism was further developed in somewhat different directions by the Prague school, glossematics, and other European movements.

In the United States the term structuralism, or structural linguistics, has had much the same sense as it has had in Europe in relation to the work of Franz Boas (1858–1942) and Edward Sapir (1884–1939) and their followers. Nowadays, however, it is commonly used, in a narrower sense, to refer to the so-called post-Bloomfieldian school of language analysis that follows the methods of Leonard Bloomfield, developed after 1930. Phonology (the study of sound systems) and morphology (the study of word structure) are their primary fields of interest. Little work on semantics has been done by structural linguists because of their belief that the field is too difficult or elusive to describe.

**Ferdinand de Saussure**

Semiotics, the study of signs and sign-using behaviour, was defined by one of its founders, the Swiss linguist Ferdinand de Saussure, as the study of “the life of signs within society.” Although the word was used in this sense in the 17th century by the English philosopher John Locke, the idea of semiotics as an interdisciplinary mode for examining phenomena in different fields emerged only in the late 19th and
early 20th centuries with the independent work of Saussure and of the American philosopher Charles Sanders Peirce.

Peirce’s seminal work in the field was anchored in pragmatism and logic. He defined a sign as “something which stands to somebody for something,” and one of his major contributions to semiotics was the categorization of signs into three main types: (1) an icon, which resembles its referent (such as a road sign for falling rocks); (2) an index, which is associated with its referent (as smoke is a sign of fire); and (3) a symbol, which is related to its referent only by convention (as with words or traffic signals). Peirce also demonstrated that a sign can never have a definite meaning, for the meaning must be continuously qualified.

Saussure treated language as a sign-system, and his work in linguistics has supplied the concepts and methods that semioticians apply to sign-systems other than language. One such basic semiotic concept is Saussure’s distinction between the two inseparable components of a sign: the signifier, which in language is a set of speech sounds or marks on a page, and the signified, which is the concept or idea behind the sign. Saussure also distinguished parole, or actual individual utterances, from langue, the underlying system of conventions that makes such utterances understandable; it is this underlying langue that most interests semioticians.

This interest in the structure behind the use of particular signs links semiotics with the methods of structuralism, which seeks to analyze these relations. Saussure’s theories are thus also considered fundamental to structuralism (especially structural linguistics) and to poststructuralism.

Modern semioticians have applied Peirce and Saussure's principles to a variety of fields, including aesthetics, anthropology, psychoanalysis, communications, and semantics. Among the most influential of these thinkers are the French scholars Claude Lévi-Strauss, Jacques Lacan, Michel Foucault, Jacques Derrida, Roland Barthes, and Julia Kristeva.

Until the beginning of the 20th century, scholars were occupied with research on the history of languages and the roots of words in ancient tongues. The famous linguist Ferdinand de Saussure coined this approach the diachronic analysis and moved to the analysis of the system of language, which he assumed to be of greater
importance. Saussure stated this in the first decades of this century and thus formed the fundament of modern linguistics.

Diachronic versus synchronic view

Diachronic linguistics views the historical development of a language. Thus, on the diachronic axis we can go back and forth in time, watching the language with all its features change. Synchronic linguistics views a particular state of a language at some given point in time. This could mean Modern English of the present day, or the systematic analysis of the system of Shakespeare's English. However, no comparisons are made to other states of language or other times.

Modern linguistics, following Ferdinand de Saussure, is primarily interested in the synchronic point of view. Saussure postulated the priority of synchrony: no knowledge of the historical development of a language is necessary to examine its present system. He arrived at this radical viewpoint due to his conviction that linguistic research must concentrate on the structure of language. Later, the whole paradigm was hence called structuralism.

The two axes of the synchronic view

When we look at the structure of language, we find sentences and words. This is, however, a very rough view. A grammar of a language must be more precise. One axis of the synchronic view is syntagmatic analysis. Here we examine the relationships of all elements of a sentence to one another. We ask ourselves exactly what element appears where and under which condition in a sentence. For example, where do nouns appear? Where are auxiliary verbs applied? All word classes show certain syntagmatic relationships. They can be defined by distribution
analysis, a method that classifies elements according to their appearance within the logical order of a sentence.

Let's have a look at an example:

\[
A + _____ + crosses + the + street
\]

Obviously, a noun must appear in the blank space, for example:

\[
A \text{ woman} \text{ crosses } \text{ the } \text{ street}.
\]

Of course, nouns and verbs are not all the same. They do not fit into contexts freely. Hence we apply paradigmatic analysis. In our example, the idea of a sandwich crossing the street is impossible. As you can see, the elements of language obviously evince paradigmatic relationships. Elements can be substituted by others of the same paradigmatic class, such as street, lane, road, etc. Articles can also be exchanged. Words that belong to the same paradigmatic class thus belong to the same grammatical class. They also belong to the same lexical field. The following diagram shows the two axes of synchronic analysis:

```
<table>
<thead>
<tr>
<th>a</th>
<th>woman</th>
</tr>
</thead>
<tbody>
<tr>
<td>the</td>
<td>lady</td>
</tr>
<tr>
<td></td>
<td>female</td>
</tr>
<tr>
<td></td>
<td>*sandwich</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>crosses</td>
</tr>
<tr>
<td></td>
<td>the</td>
</tr>
<tr>
<td></td>
<td>street</td>
</tr>
<tr>
<td></td>
<td>a</td>
</tr>
<tr>
<td></td>
<td>lane</td>
</tr>
<tr>
<td></td>
<td>road</td>
</tr>
</tbody>
</table>
```

Figure 3.2 two axes of synchronic analysis

**Noam Chomsky**

The other famous linguist is Noam Chomsky, who joined the staff of the Massachusetts Institute of Technology in 1955 and in 1961 was appointed full professor in the Department of Modern Languages and Linguistics (now the Department of Linguistics and Philosophy). From 1966 to 1976 he held the Ferrari P. Ward Professorship of Modern Languages and Linguistics. In 1976 he was appointed Institute Professor. Chomsky has been teaching at MIT continuously for the last 50 years.
It was during this time that Chomsky became more publicly engaged in politics: he became one of the leading opponents of the Vietnam War with the publication of his essay "The Responsibility of Intellectuals" in *The New York Review of Books* in 1967. Since that time, Chomsky has become well known for his political views, speaking on politics all over the world and writing numerous books. His far-reaching criticism of US foreign policy and the legitimacy of US power has made him a controversial figure.

Chomsky has in the past received various death threats because of his criticisms of U.S foreign policy. He was on a list created by Theodore Kaczynski, better known as the Unabomber, of planned targets; during the period that Kaczynski was at large, Chomsky had all of his mail checked for explosives. Chomsky also states that he frequently receives undercover police protection, in particular while on the MIT campus, though Chomsky himself states that he does not agree with the police protection.[4]

Despite his criticisms, Chomsky has stated that he continues to reside in the United States because he believes it remains the "greatest country in the world,"[5] a comment that he later clarified by saying, "Evaluating countries is senseless and I would never put things in those terms, but that some of America's advances, particularly in the area of free speech, that have been achieved by centuries of popular struggle, are to be admired." Chomsky travels frequently, giving lectures on politics. His lectures are often criticized as being unmoving. Chomsky has acknowledged this criticism, seeing it more as a virtue: "I'm a boring speaker and I like it that way...I doubt that people are attracted to whatever the persona is...People are interested in the issues, and they're interested in the issues because they are important. In 2003 he was elected as a member of Serbian Academy of Sciences and Arts.

**Contributions to linguistics**

*Syntactic Structures* was a distillation of his book *Logical Structure of Linguistic Theory* (1955, 75) in which he introduces transformational grammars. The theory takes utterances (sequences of words) to have a syntax which can be
(largely) characterised by a formal grammar; in particular, a Context-free grammar extended with transformational rules. Children are hypothesised to have an innate knowledge of the basic grammatical structure common to all human languages (i.e. they assume that any language which they encounter is of a certain restricted kind). This innate knowledge is often referred to as universal grammar. It is argued that modelling knowledge of language using a formal grammar accounts for the "productivity" of language: with a limited set of grammar rules and a finite set of terms, humans are able to produce an infinite number of sentences, including sentences no one has previously said.

The Principles and Parameters approach (P&P) — developed in his Pisa 1979 Lectures, later published as Lectures on Government and Binding (LGB) — make strong claims regarding universal grammar: that the grammatical principles underlying languages are innate and fixed, and the differences among the world's languages can be characterized in terms of parameter settings in the brain (such as the pro-drop parameter, which indicates whether an explicit subject is always required, as in English, or can be optionally dropped, as in Spanish), which are often likened to switches. (Hence the term principles and parameters, often given to this approach.) In this view, a child learning a language need only acquire the necessary lexical items (words, grammatical morphemes, and idioms), and determine the appropriate parameter settings, which can be done based on a few key examples.

Proponents of this view argue that the pace at which children learn languages is inexplicably rapid, unless children have an innate ability to learn languages. The similar steps followed by children all across the world when learning languages, and the fact that children make certain characteristic errors as they learn their first language, whereas other seemingly logical kinds of errors never occur (and, according to Chomsky, should be attested if a purely general, rather than language-specific, learning mechanism were being employed), are also pointed to as motivation for innateness.

More recently, in his Minimalist Program (1995), while retaining the core concept of "principles and parameters", Chomsky attempts a major overhaul of the
linguistic machinery involved in the LGB model, stripping from it all but the barest necessary elements, while advocating a general approach to the architecture of the human language faculty that emphasises principles of economy and optimal design, reverting to a derivational approach to generation, in contrast with the largely representational approach of classic P&P.

Chomsky's ideas have had a strong influence on researchers investigating the acquisition of language in children, though some researchers who work in this area today do not support Chomsky's theories, often advocating emergentist or connectionist theories reducing language to an instance of general processing mechanisms in the brain.

**Generative grammar**

The Chomskyan approach towards syntax, often termed generative grammar, though quite popular, has been challenged by many, especially those working outside the United States of America. Chomskyan syntactic analyses are often highly abstract, and are based heavily on careful investigation of the border between grammatical and ungrammatical constructs in a language. (Compare this to the so-called pathological cases that play a similarly important role in mathematics.) Such grammatical judgments can only be made accurately by a native speaker, however, and thus for pragmatic reasons such linguists often focus on their own native languages or languages in which they are fluent, usually Spanish, English, French, German, Dutch, Italian, Japanese or one of the Chinese languages. However, as Chomsky has said:

Sometimes generative grammar analyses break down when applied to languages which have not previously been studied, and many changes in generative grammar have occurred due to an increase in the number of languages analyzed. It is claimed that linguistic universals in semantics have become stronger rather than weaker over time. The existence of linguistic universals in syntax, which is the core of Chomsky's claim, is still highly disputed. Still, Richard Kayne suggested in the 1990s that all languages have an underlying Subject-Verb-Object word order. One of the prime motivations behind an alternative approach, the functional-typological
approach or linguistic typology (often associated with Joseph Greenberg), is to base hypotheses of linguistic universals on the study of as wide a variety of the world's languages as possible, to classify the variation seen, and to form theories based on the results of this classification. The Chomskyan approach is too in-depth and reliant on native speaker knowledge to follow this method, though it has over time been applied to a broad range of languages.

**Chomsky's hierarchy**

Chomsky is famous for investigating various kinds of formal languages and whether or not they might be capable of capturing key properties of human language. His Chomsky hierarchy partitions formal grammars into classes, or groups, with increasing expressive power, i.e., each successive class can generate a broader set of formal languages than the one before. Interestingly, Chomsky argues that modelling some aspects of human language requires a more complex formal grammar (as measured by the Chomsky hierarchy) than modeling others. For example, while a regular language is powerful enough to model English morphology, it is not powerful enough to model English syntax. In addition to being relevant in linguistics, the Chomsky hierarchy has also become important in computer science (especially in compiler construction and automata theory).

His best-known work in phonology is *The Sound Pattern of English*, written with Morris Halle (and often known as simply SPE). Though extremely influential in its day, this work is considered outdated (though it has recently been reprinted), and Chomsky does not publish on phonology anymore.

**Questions:**

1. List down Saussure’s major contributions in linguistics.
2. List down Chomsky’s major contributions in Linguistics.
3. Mention some other linguists discussed in this chapter and the theories they proposed.
4. Explain briefly the development of linguistics.
The Languages of the World

This chapter explores the languages in the world and their groupings into language family. It also discusses the history of English language.

How many languages are spoken in the world?

Ethnologue lists 6,912 living languages in the world today. Keep in mind, however, that the number of languages may never be determined exactly. Languages are not always easily treated as discrete entities with clearly defined boundaries because they represent a continua of features extending across geographic, political and social boundaries. Not all scholars agree on the criteria that clearly distinguish "language" from "dialect". At the same time, estimates of how many people speak a given language can vary considerably. Some surveys include only first language (native) speakers, others include both first and second language speakers (i.e., those who use the language in daily life but are not native speakers of it).

As a result of such indeterminacy, some mutually intelligible varieties such as German and Dutch are considered to be separate languages because they are spoken in different countries (political considerations), while mutually unintelligible Mandarin and Cantonese are considered to be varieties of Chinese because they are spoken in one country, share a common writing system of great antiquity, and are perceived to be one language by speakers of distinct varieties (historical, political and social considerations). In addition, some languages are poorly studied. As a
result, it has not been possible to establish whether they are separate languages or dialects of other languages.

**Top 20 Languages**

The table below presents speaker estimates for the world's top 20 languages (given in millions). The first column lists the languages on the basis of the number of mother-tongue (first-language) speakers they have. The second column gives population estimates for those countries where the language has official status.

<table>
<thead>
<tr>
<th>Mother-tongue speakers</th>
<th>Official-language populations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Chinese (1,000)</td>
<td>1 English (1,400)</td>
</tr>
<tr>
<td>2 English (350)</td>
<td>2 Chinese (1,000)</td>
</tr>
<tr>
<td>3 Spanish (250)</td>
<td>3 Hindi (700)</td>
</tr>
<tr>
<td>4 Hindi (200)</td>
<td>4 Spanish (280)</td>
</tr>
<tr>
<td>5 Arabic (150)</td>
<td>5 Russian (270)</td>
</tr>
<tr>
<td>6 Bengali (150)</td>
<td>6 French (220)</td>
</tr>
<tr>
<td>7 Russia (150)</td>
<td>7 Arabic (170)</td>
</tr>
<tr>
<td>8 Portuguese (135)</td>
<td>8 Portuguese (160)</td>
</tr>
<tr>
<td>9 Japanese (120)</td>
<td>9 Malay (160)</td>
</tr>
<tr>
<td>10 German (100)</td>
<td>10 Bengali (150)</td>
</tr>
<tr>
<td>11 French (70)</td>
<td>11 Japanese (120)</td>
</tr>
<tr>
<td>12 Panjabi (70)</td>
<td>12 German (100)</td>
</tr>
<tr>
<td>13 Javanese (65)</td>
<td>13 Urdu (85)</td>
</tr>
<tr>
<td>14 Bihari (65)</td>
<td>14 Italian (60)</td>
</tr>
<tr>
<td>15 Italian (60)</td>
<td>15 Korean (60)</td>
</tr>
<tr>
<td>16 Korean (60)</td>
<td>16 Vietnamese (60)</td>
</tr>
<tr>
<td>17 Telugu (55)</td>
<td>17 Persian (55)</td>
</tr>
<tr>
<td>18 Tamil (55)</td>
<td>18 Tagalog (50)</td>
</tr>
<tr>
<td>19 Marathi (50)</td>
<td>19 Thai (50)</td>
</tr>
<tr>
<td>20 Vietnamese (50)</td>
<td>20 Turkish (50)</td>
</tr>
</tbody>
</table>

Figure 4.1 Top 20 Languages in the World
Language Isolates

A language isolate is a language that does not have another language related to it. Many languages are related to other languages, because they both come from an older language, and are similar to other languages. These groups that are similar are called language families. Most languages belong to a language family, but some are not related to other languages. These languages are called language isolates. Some language isolates are Basque, Japanese, Ainu and Zuni.

Language Families in the World

The comparative method allows us to establish relationships among languages common ancestors for different existing languages, and patterns for historical development. It also makes possible the groupings of language into language families. One such family is Indo-European family, the ancestor of such diverse living languages as English, Russian, Persian, Hindi, Irish, and Albanian, and of languages that are no longer spoken, such as Latin, Sanskrit, Tocharian, and Gothic. The language families in the world are as follows.

- The Indo-European Family

  The largest family of languages and the family with the largest number of speakers. Languages include English, Spanish, Portuguese, French, Italian, Russian, Greek, Hindi, Bengali; and the classical languages of Latin, Sanskrit, and Persian.

- The Uralic Family

  A family found in Europe (Hungarian, Finnish) and Siberia (Mordvin) with complex noun structures.

- The Altaic Family

  A family includes Europe (Turkish) through Central Asia (Uzbek), Mongolia (Mongolian), to the Far East (Korean, Japanese).
• The Sino-Tibetan Family

An important Asian family of languages that includes the world's most spoken language, Mandarin.

• The Malayo-Polynesian Family

A family consisting of over 1000 languages spread throughout the Indian and Pacific Oceans as well South East Asia. Languages include Malay, Indonesian, Maori and Hawaiian.

• The Afro-Asiatic Family

This family contains languages of northern Africa and the Middle East. The dominant languages are Arabic and Hebrew.

• The Caucasian Family

Georgian and Chechen are the main languages. They are known for their large number of consonants.

• The Dravidian Family

The languages of southern India (in contrast to the Indo-European languages of northern India). Tamil is the best known of these languages.

• Austro-Asiatic Family

Languages include Vietnamese and Khmer.

• Niger-Congo Family

This family features the many languages of Africa south of the Sahara. The large numbers of languages include Swahili, Shona, Xhosa and Zulu.
Where is English?

History of English language

Looking at a living language, one of the most interesting aspects is language change. All languages, except for the extinct ones, change permanently. Usually we do not notice the change that takes place during our own time because it happens quite slowly. But if we take a look back over a considerable span of time, language change becomes more obvious. Of course there were no textbooks in the beginnings of language, but fortunately linguists have developed certain methods to trace back words even beyond earliest records. Thus we have knowledge not only of the last 1500 years of English. We can even make an assumption about the very roots of the language.

English is an Indoeuropean language. Indoeuropean was discovered to be the parent language of most European, Anterior-Asian, and Indian languages. As a rule, according to prototypical features of some of these languages, two main branches are defined in the Indoeuropean language tree, namely an eastern branch and a western branch. However, scholars have disputes about where the divisions within the Indoeuropean language family are to be placed. For example, in
examining languages other than the prototypical, it has been found that not all languages can be classified into one of the two main branches, the eastern and western branches, of language families.

**Old English Period**

In 449, Germanic tribes invaded Britain. It gives some effect on language. Characteristic of Old English is that the vocabulary is almost purely Germanic, for example many words have sound *sk* like skiff, skirt, etc. But in 858, the Danes started to invade Britain. The Danish rule lasted from 1014 until 1042. It makes changing on language. Germanic style changes to Danish style. For example, the sound *sk* change to *sh* (skirt-shirt, skiff-ship). In 1066, the Normans invaded England. Through the influence of Norman, Old English Period gradually ended.

**Middle English Period**

In 1066, the Normans attacked England. The Norman invasion had an effect on England’s institutions and language. About ten thousand French words had been taken over by English and most of them have remained in the language until now. Therefore, many French terms were borrowed. One example is the name of animals and their meat.

<table>
<thead>
<tr>
<th>Animal</th>
<th>Meat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sheep</td>
<td>Mutton</td>
</tr>
<tr>
<td>Cow</td>
<td>Beef</td>
</tr>
<tr>
<td>Swine</td>
<td>Pork</td>
</tr>
</tbody>
</table>

**Modern English Period**

Modern English began in 1500 and lasts until now. There is an important phonological change of English vowel in Modern English. There is some changing in short vowel from Middle English to Modern English. In Middle English there is *sak* (sæk) but in Modern English there is no *sak* just sack (sæk).
**English Language Imperialism**

Example of language imperialism was seen in post-independence India. The powers-that-be started off trying to make Hindi as the sole "National language" of India, but due to protests from southern states (where Dravidian languages like Kannada, Telugu, Tamil, Malayalam, Konkani, Tulu, etc are spoken), the "National language" policy did not take off. Hindi, along with English has been made the "Official Languages of the Indian Union Government". However after start of economic liberalization in 1991, English has become the lingua franca of business, higher education and research.

**Questions:**

1. Explain the history of English language.
2. Why does language change?
3. How would you define language isolate?
4. Explain the language family of English language.
5. What could you say about English language imperialism?
Phonetics is the study of the sounds of human speech. It is concerned with the actual properties of speech sounds (phones), and their production, audition and perception. Phonetics deals with the sounds themselves rather than the contexts in which they are used in languages.

Phonetics has three main branches, they are:

- articulatory phonetics, concerned with the positions and movements of the lips, tongue, vocal tract and folds and other speech organs in producing speech;
- acoustic phonetics, concerned with the properties of the sound waves when we speak; and
- auditory phonetics, concerned with speech perception, principally how the brain forms perceptual representations of the input it receives.

**Units of Representation**

Anyone who hears a language spoken for the first time finds it hard to break up the flow of speech into individual units of production. Even when hearing our own language spoken, we do not focus attention on individual sounds as much as we do on meaning of words, phrases, and sentences. Many alphabets, including IPA represent speech in the form of feature, segment and syllable.

*Feature* is the smallest building blocks of phonological structure. Segments are produced by coordinating a number of individual articulatory gestures (e.g. jaw movement, lip shape, tongue placement); features refer to these individual activities.
Segment is an individual speech sound. It is the portion of speech with relatively constant phonetic features. There are several kinds of evidence that suggest that speakers have the linguistics knowledge that makes it possible to break down a stream of speech into sound segments. Errors in speech production provide one kind of evidence for the existence of segments. Slips of the tongue such Kolacodor for Kodacolor and welcome wat for welcome mat show segments shifting and reversing position within words. This suggests that segments are individual units of linguistic structure and should be represented individually in a system of transcription.

And the last is syllable. Syllable can be defined phonetically as a peak of sonority surrounded by less sonorous segments. For example, the words a and go each contain one syllable, the word laughing two syllables, and the word telephone three syllables. In counting the syllable in these words, we are in effect counting the vowels. A vowel is thus said to form the nucleus of a syllable.

The sound Producing system

Sound is produced when air is set in motion. Think of the speech in production mechanism as consisting of an air supply, a sound source that sets the air in motion in ways specifically relevant to speech production and a set of filters that modifies the sound in various ways. The air supply is provided by the lungs. The sound source is in the larynx, where a set of muscle called vocal folds are located. The filters are the organs above the larynx; the tube of the throat between the oral cavity and the larynx which is called the pharynx, the oral cavity, and the nasal cavity. These are collectively known as the vocal tract.
Sound Classes

The sounds of language can be grouped into classes, based on the phonetic properties that they share. Sounds fall into two major classes, vowels and consonants. Another class, the glides, share properties of both vowels and consonants. They can be distinguished on the basic differences in articulation, the acoustic properties, and their function as syllabic or non-syllabic elements.

Vowels, Consonants and Glides: Articulatory Differences

- Consonantal sounds, which may be voiced or voiceless, are generated by stopping or pressing the airflow (i.e., with either a complete closure or narrowing of the vocal tract).
- Vowels, which are voiced, are produced by modulating the phonational stream.
- Glides, which are voiced, are produced with a vowel-like articulation

Vowels, Consonants and Glides: Acoustic Differences

Acoustic Differences: result of different articulation of vowels and consonants

- Vowels: more sonorous (acoustically powerful; producing more 'sound') than consonants, and perceived as louder and longer lasting.
Sonority scale: vowels > glides > liquids > nasals > fricatives > obstruents

- Glides are less sonorous than vowels, but more sonorous than consonants

More Differences: Syllabic and Non-syllabic Sounds

Another distinction between sound classes: ability to function as syllabic or non-syllabic elements. Syllable is peak of sonority surrounded by less sonorous segments. Due to their greater sonority, usually vowels form the basis (nucleus) of syllables (i.e., in counting syllables in words, we are in fact counting vowels). Think of vowels and consonants not simply as types of articulations but as elements that may or may not be syllabic.

Place and Manner of Articulation of Vowels and Consonants.

Consonants

Consonant is phonemes marked by constriction or closure in the breath channel – letter other than a, e, i, o and u.

1. Places of Articulation

Place of Articulation is point at which the airstreams can be modified to produce a distinctive sound. Places of articulation: lips, oral cavity, pharynx, glottis

- Labial: phones produced with the lips participating.
- Dentals: phones produced with the teeth participating.
- Alveolar: phones produced with the alveolar ridge participating (Alveolar ridge: small ridge protruding from just behind the upper front teeth).
- Alveopalatal (Post-alveolar): phones produced with the alveopalatal (=post-alveolar) area participating (Alveopalatal/ post-alveolar area: area just behind the alveolar ridge where the roof of the mouth rises sharply).
- Palatal: phones produced with the palate participating (Palate: highest part of the roof of the mouth).
- Velar: phones produced with the velum participating (Velum: soft area toward the rear of the roof of the mouth).
- Uvular: phones produced with the uvula participating (Uvula: small fleshy flap of tissue which hangs down from the velum) [note: not found in English].
- Pharyngeal: phones produced with the pharynx participating (Pharynx: area of the throat between the uvula and the larynx) [note: not found in English].
- Glottal: phones produced using the vocal folds as primary articulators.

2. **Manners of Articulation**

Manners of articulation is the manner how organ and place of articulation make contact. For any place of articulation, there may be several manners, and therefore several homorganic consonants.

a. Nasal: Sound produced when the velum is lowered to allow air to pass through the nasal passages (both consonants and vowels can be nasal).

b. Oral: Sound produced when the velum is raised, cutting off the airflow through the nasal passages. Oral sounds are

- **Stops**: produced with a complete and momentary closure of airflow. In the world’s languages: bilabial, dental, alveolar, palatal, velar, uvular and glottal stops; English: bilabial, alveolar and velar stops [p b t d k ŋ m n].
- **Fricatives**: produced with a continuous airflow passing through a very narrow opening, accompanied by a continuous audible noise English: bilabial, dental, alveolar and postal veolar fricatives.
- **Sibilants**: type of fricative for which the airflow is guided by a groove in the tongue toward the teeth, creating a high-pitched and very distinctive sound (acoustic criterion).
- **Affricates**: produced when a stop articulation is slowly released of the closure. Implosion of the stop, but no explosion; instead of an explosion, the homorganic fricative (=same organ and place of articulation) is produced.
- **Liquids**: Generic term for the sound classes laterals and rhotics.
- **Laterals**: produced in a way that air escapes through the mouth along the lowered sides of the tongue (generally voiced).
- **Rhotics**: r-sounds. “Being r-like” are a strangely elusive feature, and the very same sounds that function as rhotics in some systems may pattern with fricatives, approxi-mants or stops in others.
Vowels

Vowel is a sonorous voiced sound produced by modulating the phonational stream. It is characterized by an open configuration of the vocal tract (i.e., there is no build-up of air pressure above the glottis). Vowels are syllabic elements: they form the nucleus (peak) of syllables.

2 major types of vowels are simple vowels and diphthongs
- Simple vowels: no noticeable change in quality during articulation.
- Diphthongs: change in quality within a single syllable (in contrast to hiatus) due to tongue movement away from the initial vowel articulation toward a glide position. Longer than the simple vowels. Diphthongs are treated as single vowels (they form a single syllable).

Processes

- Articulatory process: articulatory adjustments that occur during the production of connected speech; the articulation of one sound affecting that of another sound. There are two basic effects of articulatory processes:
  Efficiency: some articulatory processes result in a more efficient (easier) articulation of a series of sounds (precise timing and coordination of speech is relaxed)
  Clarity: other articulatory processes result in a more distinct output, which makes the utterance easier to perceive.
- Assimilation: articulatory process by which a sound changes to match another sound in a word.
- Dissimilation: process by which two sounds become less alike articulatorily or acoustically.
### Consonants (Pulmonic)

<table>
<thead>
<tr>
<th>Bilabial</th>
<th>Labiodental</th>
<th>Dental</th>
<th>Alveolar</th>
<th>Postalveolar</th>
<th>Retroflexes</th>
<th>Palatal</th>
<th>Velar</th>
<th>Uvular</th>
<th>Pharyngeal</th>
<th>Glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td>p</td>
<td>b</td>
<td>t</td>
<td>d</td>
<td>t q</td>
<td>c j</td>
<td>k g</td>
<td>q g</td>
<td>?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Consonants (Non-Pulmonic)

<table>
<thead>
<tr>
<th>Clicks</th>
<th>Voiced Implosives</th>
<th>Ejectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>o</td>
<td>Bilabial</td>
<td>b</td>
</tr>
<tr>
<td>l</td>
<td>Dental</td>
<td>d</td>
</tr>
<tr>
<td>ꙃ</td>
<td>Palatal</td>
<td>t</td>
</tr>
<tr>
<td>Ꙅ</td>
<td>Palatal lateral</td>
<td>k</td>
</tr>
</tbody>
</table>

### Vowels

<table>
<thead>
<tr>
<th>Close</th>
<th>Central</th>
<th>Back</th>
</tr>
</thead>
<tbody>
<tr>
<td>i y</td>
<td>i u</td>
<td>o u</td>
</tr>
<tr>
<td>a o</td>
<td>e o</td>
<td>o</td>
</tr>
</tbody>
</table>

### Other Symbols

- Voicless labial-velar fricative: ꙃ ꙅ ꙇ ꙉ ꙋ ꙍ Ꙏ Ꙑ ꙑ Ꙓ Ꙕ ꙕ Ꙗ ꙗ Ꙙ ꙙ Ꙛ ꙛ Ꙝ ꙝ Ꙟ ꙟ Ꙡ ꙡ Ꙣ ꙣ Ꙥ ꙥ Ꙧ ꙧ Ꙩ ꙩ Ꙫ ꙫ Ꙭ ꙭ ꙮ ꙯ ꙰ ꙱ ꙲ ꙳ ꙴ ꙵ ꙶ ꙷ ꙸ ꙹ ꙺ ꙻ ꙼ ꙽ ꙾ ꙿ
- Voiced labial-velar fricative: ꙃ ꙅ ꙇ ꙉ ꙋ ꙍ Ꙏ ꙏ Ꙑ ꙑ Ꙓ Ꙕ ꙕ Ꙗ ꙗ Ꙙ ꙙ Ꙛ ꙛ Ꙝ ꙝ Ꙟ ꙟ Ꙡ ꙡ Ꙣ ꙣ Ꙥ ꙥ Ꙧ ꙧ Ꙩ ꙩ Ꙫ ꙫ Ꙭ ꙭ ꙮ ꙯ ꙰ ꙱ ꙲ ꙳ ꙴ ꙵ ꙶ ꙷ ꙸ ꙹ ꙺ ꙻ ꙼ ꙽ ꙾ ꙿ
- Voiced labial-palatal approximant: ꙃ ꙅ ꙇ ꙉ ꙋ ꙍ Ꙏ ꙏ Ꙑ ꙑ Ꙓ Ꙕ ꙕ Ꙗ ꙗ Ꙙ ꙙ Ꙛ ꙛ Ꙝ ꙝ Ꙟ ꙟ Ꙡ ꙡ Ꙣ ꙣ Ꙥ ꙥ Ꙧ ꙧ Ꙩ ꙩ Ꙫ ꙫ Ꙭ ꙭ ꙮ ꙯ ꙰ ꙱ ꙲ ꙳ ꙴ ꙵ ꙶ ꙷ ꙸ ꙹ ꙺ ꙻ ꙼ ꙽ ꙾ ꙿ
- Voiceless alveolar fricative: ꙃ ꙅ ꙇ ꙉ ꙋ ꙍ Ꙏ ꙏ Ꙑ ꙑ Ꙓ Ꙕ ꙕ Ꙗ ꙗ Ꙙ ꙙ Ꙛ ꙛ Ꙝ ꙝ Ꙟ ꙟ Ꙡ ꙡ Ꙣ ꙣ Ꙥ ꙥ Ꙧ ꙧ Ꙩ ꙩ Ꙫ ꙫ Ꙭ ꙭ ꙮ ꙯ ꙰ ꙱ ꙲ ꙳ ꙴ ꙵ ꙶ ꙷ ꙸ ꙹ ꙺ ꙻ ꙼ ꙽ ꙾ ꙿ
- Voiceless epiglottal fricative: ꙃ ꙅ ꙇ ꙉ ꙋ ꙍ Ꙏ ꙏ Ꙑ ꙑ Ꙓ Ꙕ ꙕ Ꙗ ꙗ Ꙙ ꙙ Ꙛ ꙛ Ꙝ ꙝ Ꙟ ꙟ Ꙡ ꙡ Ꙣ ꙣ Ꙥ ꙥ Ꙧ ꙧ Ꙩ ꙩ Ꙫ ꙫ Ꙭ ꙭ ꙮ ꙯ ꙰ ꙱ ꙲ ꙳ ꙴ ꙵ ꙶ ꙷ ꙸ ꙹ ꙺ ꙻ ꙼ ꙽ ꙾ ꙿ
- Epiglottal plosive: ꙃ ꙅ ꙇ ꙉ ꙋ ꙍ Ꙏ ꙏ Ꙑ ꙑ Ꙓ Ꙕ ꙕ Ꙗ ꙗ Ꙙ ꙙ Ꙛ ꙛ Ꙝ ꙝ Ꙟ ꙟ Ꙡ ꙡ Ꙣ ꙣ Ꙥ ꙥ Ꙧ ꙧ Ꙩ ꙩ Ꙫ ꙫ Ꙭ ꙭ ꙮ ꙯ ꙰ ꙱ ꙲ ꙳ ꙴ ꙵ ꙶ ꙷ ꙸ ꙹ ꙺ ꙻ ꙼ ꙽ ꙾ ꙿ

### Diacritics

<table>
<thead>
<tr>
<th>Diacritics</th>
<th>Discritics may be placed above a symbol with a descender, e.g. ꙃ</th>
</tr>
</thead>
<tbody>
<tr>
<td>ꙃ</td>
<td>Voiceless</td>
</tr>
<tr>
<td>ꙅ</td>
<td>Breathy voiced</td>
</tr>
<tr>
<td>ꙇ</td>
<td>Creaky voiced</td>
</tr>
<tr>
<td>ꙉ</td>
<td>Dental</td>
</tr>
<tr>
<td>ꙋ</td>
<td>Apical</td>
</tr>
<tr>
<td>ꙍ</td>
<td>Lingual</td>
</tr>
<tr>
<td>Ꙏ</td>
<td>Labial</td>
</tr>
<tr>
<td>ꙏ</td>
<td>Laminar</td>
</tr>
<tr>
<td>Ꙑ</td>
<td>Nasal</td>
</tr>
<tr>
<td>ꙑ</td>
<td>Palatal</td>
</tr>
<tr>
<td>Ꙓ</td>
<td>Lateral release</td>
</tr>
<tr>
<td>Ꙕ</td>
<td>No audible release</td>
</tr>
<tr>
<td>ꙕ</td>
<td>Centralized</td>
</tr>
<tr>
<td>Ꙗ</td>
<td>Voiceless</td>
</tr>
<tr>
<td>ꙗ</td>
<td>Pharyngeal</td>
</tr>
<tr>
<td>Ꙙ</td>
<td>Synthesis</td>
</tr>
<tr>
<td>ꙙ</td>
<td>Mid-centralized</td>
</tr>
<tr>
<td>Ꙛ</td>
<td>Syllabic</td>
</tr>
<tr>
<td>ꙛ</td>
<td>Advanced Tongue Root</td>
</tr>
<tr>
<td>Ꙝ</td>
<td>Retracted Tongue Root</td>
</tr>
</tbody>
</table>

### Figure 5.2 The International Phonetic Alphabet
Questions:

1. How would you define phonetics?
2. Distinguish between vowels and consonants.
3. Explain the sound producing process.
5. How would you define assimilation and dissimilation?
Phonology is the study of how sounds are organized and used in natural languages. It is the study of the sound patterns of language. Phonology is the component of a grammar which includes the inventory of sounds (phonetic and phonemic units) and rules for their combination and pronunciation. Phonology examines what occurs to speech sounds when they are combined to form a word and how these speech sounds interact with each other. Phonology is just one of several aspects of language. It is related to other aspects such as phonetics, morphology, syntax, and pragmatics. The phonological system of a language includes an inventory of sounds and their features, and rules which specify how sounds interact with each other.

At one extreme, phonology is concerned with the anatomy and physiology - the organs of speech and how we learn to use them. At another extreme, phonology shades into socio-linguistics as we consider social attitudes to features of sound such as accent and intonation. Here is an illustration that shows the place of phonology in an interacting hierarchy of levels in linguistics:
Phoneme

A phoneme is a speech sound that helps us construct meaning. That is, if we replace it with another sound (where this is possible) we get a new meaning or no meaning at all. If we replace the initial consonant \( /r/ \) from rubble, we can get double or Hubble (astronomer for whom the space telescope is named) or meaningless forms (as regards the lexicon of standard English) like fubble and wubble. The same thing happens if we change the vowel and get rabble, rebel, Ribble (an English river) and the nonsense form robble.

The amazing discovery is that people systematically ignore certain properties of sounds. They perceive two different sounds as the same sound. We call the stored versions of speech sounds phonemes. Thus phonemes are the phonetic alphabet of the mind. That is, phonemes are how we mentally represent speech; how we store the sounds of words in our memory.

Though the phonetic alphabet is universal, we can write down the speech sounds actually uttered in any language, the phonemic alphabet varies from language to language. For example, English has no memorized front rounded vowels like German or French, and French has no \( \theta \). This leads to seeming contradictions when we consider both actual productions of speech sounds as well as their memorized representations. English has no memorized nasal vowels, but English speakers do make nasalized vowels when vowels and nasal consonants come together in speech.

Minimal pairs

How do we find out what's in someone's mind? How do we figure out how people store the sounds of words in their memories? One trick that we can use is to look for minimal pairs of words. A minimal pair is a pair of words that have different meanings and which differ in only one sound. Since the difference between the two sounds is meaningful, the words must be stored differently in memory. Since the words differ in only one sound, this difference must be stored in memory. Thus the difference in sounds is significant, and so the two sounds must both be phonemes. Sometimes it isn't possible to find minimal pairs for all words. But speakers can also
tell when a contrast would yield a distinct possible word, even if this is not an actual
word.

In English, [sɪp] and [zɪp] is a minimal pair. These two words are different
words of English. But they differ only in their initial sound. Therefore, the [s]/[z]
difference is significant for English speakers. Therefore both [s] and [z] are stored in
the memory. Thus, [s] and [z] are part of the English mental alphabet. We notate
elements in the memory by putting them in-between slashes / /. In this case /s/ and
/z/ are part of an English speaker's alphabet for memorizing words. [ræm] and [ræn]
and [ræŋ] are all distinct words of English. Therefore, the speech sounds (in the
mouth) [m], [n] and [ŋ] are all significant to the mind. And therefore, English includes
the phonemes /m/, /n/ and /ŋ/.

The phonetic context (or frame) [b_t] can be used to find minimal pairs for
many English vowels:

- [bit] ("beat") /i/
- [bɪt] ("bit") /ɪ/
- [bet] ("bait") /ɛ/
- [bɛt] ("bet") /ɛ/ 
- [bæt] ("bat") /æ/
- [but] ("boot") /u/
- [bot] ("boat") /o/
- [bɒt] ("bought") /ɔ/ (You may have [ɑ] here.)
- [bʌt] ("but") /ʌ/

This minimal set establishes all these vowels as mentally distinct, and therefore
phonemic.

Allophones

An allophone is a phonetic variant of a phoneme in a particular language. In
English, each vowel phoneme has both an oral nasalized allophone. The choice of
the allophone is not random or haphazard; it is rule-governed, as illustrated by the
general principle determining the occurrence of oral and nasalized vowel in English.
[p] and [ph] are allophones of the phoneme /p/. The aspirated variant [ph] and the unaspirated one [p] are both allophones of the phoneme /p/, and each occurs in a different and predictable set of environments. For example, words spot, spill, pot, and pill. This can be tested by holding a sheet of paper in front of the mouth and saying these words. In the case of spot and spill, the paper remains motionless. But, when pot and pill are pronounced, the accompanying puff of breath makes the paper billow out.

[t] and [th] are allophones of the phoneme /t/. The examples of these allophones are till, tar, still, and star. Like as in words pill and pot, the accompanying puff of breath makes the paper blow up if words till and tar are pronounced. In other hands, if we pronounce words still and star, the paper remains motionless.

### Complementary Distribution

Complementary distribution is the mutually exclusive relationship between two phonetically similar segments. It exists when one segment occurs in an environment where the other segment never occurs. When oral vowels occur, nasal vowels do not occur and vice versa. It is in this sense that the phones are said to complement each other or to be in complementary distribution. Here are some examples of complementary distribution.

- bee → [bi] → [bĩ]
- lay → [le] → [lẽ]
- bang → [bæŋ] → [bæŋ]

As these words illustrate, in English, oral vowels occur in final position and before non-nasal consonant; nasalized vowels occur only before nasal consonants. [i] and [ĩ] are in complementary distribution. Of course, there is a difference between their distribution and the two allophones of the phoneme /i/ can occur in the same environment, whereas [i] and [ĩ] never occur in the same environment or under the same conditions.
Free Variation

Free variation in linguistics is the phenomenon of two (or more) sounds or forms appearing in the same environment without a change in meaning and without being considered incorrect by native speakers. The word *economics* may be pronounced with /ɪ/ or /e/ in the first syllable; although individual speakers may prefer one or the other, and although one may be more common in some dialects than others, both forms are encountered within a single dialect and sometimes even within a single idiolect. Another example is the comparative of many disyllabic adjectives which can be formed either with the word *more* or with the suffix -er, for example *more stupid* or *stupider*.

When phonemes are in free variation, speakers are strongly aware of the fact, and will note, for example, that *tomato* is pronounced differently in British and American English, or that *either* has two pronunciations which are fairly randomly distributed. However only a very small proportion of English words show such variations. In the case of allophones, however, free variation is exceedingly common and along with differing intonation patterns is the most important single feature in the characterizing of regional accents.

Syllable

A syllable is a unit of organization for a sequence of speech sounds. It is typically made up of a syllable nucleus (most often a vowel) with optional initial and final margins (typically, consonants). Syllables are often considered the phonological "building blocks" of words. They can influence the rhythm of a language, its prosody, its poetic meter, its stress patterns, etc. There are some types of syllable, they are:

- A word that consists of a single syllable (like English *cat*) is called a monosyllable, for examples: cat, dog, book, etc.
- A word that consists of two syllable is called disyllable, for examples, *monkey, medic, better*
A word that consists of three syllables is called a trisyllable. For example, *indigent*, *index*, *induce*.

A word that consists of more than three syllables is called a polysyllable. For example, *inimical*, *interim*, *interfere*.

The general structure of a syllable consists of an onset and rhyme. Onset is obligatory in some languages, optional or even restricted in others. Rhyme consists of a nucleus which is obligatory in all languages and a Coda which is optional in some languages, highly restricted or prohibited in others.

![Figure 6.1 syllable structure](image_url)

**Tree representation of a CVC syllable**

In some theories of phonology, these syllable structures are displayed as tree diagrams (similar to the trees found in some types of syntax). The syllable nucleus is typically a sonorant, usually making a vowel sound, in the form of a monophthong, diphthong, or triphthong, but sometimes sonorant consonants like [l] or [r]. The syllable onset is the sound or sounds occurring before the nucleus, and the syllable coda (literally 'tail') is the sound or sounds that follow the nucleus. The term rhyme covers the nucleus plus coda. In the one-syllable English word *cat*, the nucleus is *a*,
the onset c, the coda t, and the rhyme at. This syllable can be abstracted as a consonant-vowel-consonant syllable, abbreviated CVC.

**Syllable and Stress**

Syllable structure often interacts with stress. In Latin, for example, stress is regularly determined by syllable weight. A syllable counts as heavy if it has a long vowel in its nucleus, or a diphthong in its nucleus, or one or more coda(e). Although English does not have tones, it possesses important non-segmental features – characteristics with exist alongside the phonemes. In particular, each word and group of words has in its own rhythm, an interplay of stressed and unstressed syllables.

<table>
<thead>
<tr>
<th>Happy</th>
<th>happiness</th>
<th>unhappiness</th>
</tr>
</thead>
<tbody>
<tr>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In the words above, the most stressed syllable have the most stars, and the least stressed the smallest number of stars. The actual quantity of stress given to a syllable does not matter very much. The important point is the relative amount given to each. In happiness, for example, it is essential to give the greatest amount of stress to hap-, and the least to -pi-

**Feature**

Feature is the smallest building blocks of phonological structure. In English, the class of labial sounds includes the class of bilabial sound /b/ /p/ /m/ as well as the labio-dentals /f/ and /v/. Coronals include the alveolars /d/ /t/ /n/ /s/ /z/, the palatals /š/ /ž/ and the affricates /č/ /ř/. Thus, for example a /b/ is both [+ bilabial] and [- labial].
The non nasal stop, and the fricatives form a major class of sound. Because the air stream can not escape through the nose, it is either full obstructed in its passage through the vocal tract, as in non nasal stop and affricates, or partially obstructed production of fricatives. These sounds are called *obstruents* and are distinguished from the other major class of sound, which are called *sonorants*.

Feature specification of major natural classes of sound is represented as follows.

<table>
<thead>
<tr>
<th>Features</th>
<th>Obstruents</th>
<th>Nasals</th>
<th>Liquids</th>
<th>Glides</th>
<th>Vowels</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>O</td>
<td>N</td>
<td>L</td>
<td>G</td>
<td>V</td>
</tr>
<tr>
<td>Consonantal</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sonorant</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Syllabic</td>
<td>-</td>
<td>+/-</td>
<td>+/-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Nasal</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Figure 6.2  Features of major natural classes of sound

**Questions:**

1. What do you know by the term phoneme?
2. What is a minimal pair? Suggest at least ten examples of minimal pairs in English.
3. What is an allophone? Give examples.
4. What are distinctive features?
5. How might allophones differ from free variation?
This chapter looks at the problems encountered in identifying and defining the notion 'word'. It then discusses the identification and description of morphemes. Finally, it looks at the way in which words can be assigned to 'word classes' (parts of speech).

Morphology is the field within linguistics that studies the internal structure of words. While words are generally accepted as being the smallest units of syntax, it is clear that in most languages, words can be related to other words by rules. For example, English speakers recognize that the words *dog*, *dogs*, and *dog-catcher* are closely related. English speakers recognize these relations from their knowledge of the rules of word-formation in English. They intuit that *dog* is to *dogs* as *cat* is to *cats*; similarly, *dog* is to *dog-catcher* as *dish* is to *dishwasher*. The rules understood by the speaker describe specific patterns (or regularities) in the way words are formed from smaller units and how those smaller units interact in speech. In this way, morphology is the branch of linguistics that studies patterns of word-formation within and across languages, and attempts to formulate rules that model the knowledge of the speakers of those languages.

**Word Classes**

In every language, there are a limited number of types of lexical item. These different kinds of words are traditionally known as 'parts of speech', though in linguistic terminology the label word class is more common. Word classes are conventionally given labels, such as noun, verb, adjective.

English is sometimes considered to have four major word classes, they are noun (n), verb (V), adjective (A), and preposition (P). Consider the following example:
Verb, noun, adjective and adverb belong to open word classes as new words can be added to the class as the need arises. The other classes belong to closed word classes as the words are made up of finite sets which are never expanded. They are pronoun, determiner, preposition, and conjunction.

<table>
<thead>
<tr>
<th>Verb</th>
<th>be, drive, grow, sing, think</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noun</td>
<td>brother, car, David, house, London</td>
</tr>
<tr>
<td>Adjective</td>
<td>big, foolish, happy, talented, tidy</td>
</tr>
<tr>
<td>Adverb</td>
<td>happily, recently, soon, then, there</td>
</tr>
<tr>
<td>Pronoun</td>
<td>She, He, it, they, We, I</td>
</tr>
<tr>
<td>Determiner</td>
<td>a, an, my, some, the</td>
</tr>
<tr>
<td>Preposition</td>
<td>at, in, of, over, with</td>
</tr>
<tr>
<td>Conjunction</td>
<td>and, because, but, if, or</td>
</tr>
</tbody>
</table>

Figure 7.1 Word Classes

Criteria for Word Classes

We begin by grouping words more or less on the basis of our instincts about English. We somehow "feel" that brother and car belong to the same class, and that brother and drives belong to different classes. We need a much more reliable and more systematic method for distinguishing between word classes. We can use a combination of three criteria for determining the word class of a word:

The Meaning of the Words

Using this criterion, we generalize about the kind of meanings that words convey. For example, we could group together the words brother and car, as well as David, house, and London, on the basic that they all refer to people, places, or things. In fact, this has traditionally been a popular approach to determining
members of the class of nouns. It has also been applied to verbs, by saying that they
denote some kind of "action", like \textit{cook}, \textit{drive}, \textit{eat}, \textit{run}, \textit{shout}, and \textit{walk}.

However, this approach also has some serious limitations. The definition of
a noun as a word showing a person, place, or thing, is not enough, since it excludes
abstract nouns such as \textit{time}, \textit{imagination}, \textit{repetition}, \textit{wisdom}, and \textit{chance}. Similarly,
to say that verbs are "action" words excludes a verb like \textit{be}, as in \textit{I want to be happy}.
What "action" does \textit{be} refer to here? So although this criterion has certain validity
when applied to some words, we need other, more strict criteria as well.

\textbf{The form or `shape' of the word}

Some words can be assigned to a word class on the basis of their form or
`shape'. For example, many nouns have a characteristic -\textit{tion} ending: \textit{action},
\textit{condition}, \textit{contemplation}, \textit{demonstration}, \textit{organization}, \textit{repetition}. Similarly, many
adjectives end in -\textit{able} or -\textit{ible}: \textit{acceptable}, \textit{credible}, \textit{miserable}, \textit{responsible},
\textit{suitable}, \textit{terrible}

Many words also take what are called inflections, that is, regular changes in
their form under certain conditions. For example, nouns can take a plural inflection,
usually by adding an -\textit{s} at the end:

\begin{itemize}
  \item car -- cars
  \item dinner -- dinners
  \item book -- book
\end{itemize}

Verbs also take inflections:

\begin{itemize}
  \item walk -- walks -- walked -- walking
\end{itemize}

\textbf{The position or `environment' of a word in a sentence}

This criterion refers to where words typically occur in a sentence, and the
kinds of words which typically occur near to them. We can illustrate the use of this
criterion using a simple example. Compare the following:

\begin{itemize}
  \item I \textit{cook} dinner every Sunday
\end{itemize}

In the first sentence \textit{cook} is a verb. We can see that it is a verb because it takes the
inflections which are typical of verbs:
I cook dinner every Sunday
I cooked dinner last Sunday
I am cooking dinner today
My son cooks dinner every Sunday

We can see that *cook* is a noun in the following sentence because it takes the plural -s inflection.

The *cooks* are on holiday

If we really need to, we can also apply a replacement test, based on our first criterion, replacing *cook* in each sentence with "similar" words. Notice that we can replace verbs with verbs, and nouns with nouns, but we cannot replace verbs with nouns or nouns with verbs:

*I chef dinner every Sunday
*The *eat* is on holiday

**Morpheme**

Morpheme is a minimal unit of grammar and it can be defined as the smallest syntactic unit. Morphemes vary in size. Neither syllables nor length are any guide to their identification. The essential criterion is that a morpheme cannot be cut up into smaller syntactic segments. The following sentence has eleven morphemes.

<table>
<thead>
<tr>
<th>The</th>
<th>sleep</th>
<th>walk</th>
<th>ing</th>
<th>albatross</th>
<th>chant</th>
<th>ed</th>
<th>a</th>
<th>dream</th>
<th>y</th>
<th>lullaby</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
</tr>
</tbody>
</table>

Figure 7.2 Mopheme

Free forms of morphemes are those that can occur as separate words; bound forms are items such as affixes and suffixes that must be recognized as components of grammatical structure. Morphology studies morphemes, and includes the study of inflectional as well as lexical units.

*Doors* consists of 2 morphemes, They are *door* and *-s.*

*Tables* consists of 2 morphemes, they are *table* and *–s.*

*Indestructible* consists of 3 morpheme, they are *In-, destruct* and *–able.*
Recognition of Morphemes

Morpheme can be recognized by comparing wide variety of utterances. We can recognize morpheme by finding the other words that are related. For example:

Sniff-ed  Grunt-ed
Plodd-ed  Blind-ed
God-ly  Personal-ly

The partial similarity between sniffed, grunted, plodded, and blinded enables us to isolate the segment –ed. We can isolate the segment –ly by finding the partial similarity between Godly and personally. We can define sniff, grunt, plod, blind, -ed, and -ly as morpheme.

We can also recognize morpheme by finding the root of the word, for example:

Personal
Personify
Personage

The partial similarity between personal, personify, and personage, we can isolate the segments –al, -ify, and –age and consider person as the root of the words.

Bound and Free Morphemes

Bound morphemes are morphemes that can not occur by themselves. Free morphemes are morphemes that can occur by themselves. In the word "doors" there are two morphemes: "door" and "-s". The morpheme "door" can be used by itself, so it is called a free morpheme. But the morpheme "s" cannot be used by itself, therefore, "-s" is called a bound morpheme.

Inflectional and Derivational Morpheme

Inflectional morphemes are morphemes that never change the category. Inflectional morphemes do not change the "core" meaning of the word. Inflectional morphemes usually occur "outside" derivational ones. Inflectional morphemes carry certain meaning but it does not change the word category.
Table – tables  noun
Wait – waited  verb
Short – shorter  adjective

The segment –s changes the singular form (table) into a plural form (tables) but it does not change the word class of table.

Derivational morphemes are morphemes that create entirely new word and also change the “core” meaning of the word.

Happy – Happiness
Dark – Darkness
Ironic – Ironically

The segment –ness, -al, and -ly changes the word class of those words from adjective into noun.

Affixes

Morphemes added to free forms to make other free forms are called affixes. Affixes are themselves bound morphemes because they are used only when attached to a root morpheme and/or another bound morpheme. Affixes may be derivational, like –ness and pre- or inflectional, like plural –s and past tense –ed. There are four principle kinds of affixes. They are prefixes (at beginning) — "un-" in "unable", suffixes (at end) — "-ed" in "walked", circumfixes (at both ends) — "en--en" in "enlighten", and infixes (in the middle) -- "bloody-" in "in-bloody-credible". Circumfixes always seem to consist of otherwise attested independent prefixes and suffixes. Infixed are not used very much in English but occur frequently in other languages.

Zero morphemes

Some affixes consist of no sounds at all. Zero morphemes do exist but are obviously hard to spot because you can't hear them. In these cases you have to notice what is not there.
The relation between "yellow" (adjective) and "yellow" (verb) is exactly the same as that between "white" and "whiten", which we just considered. But the form of "yellow" doesn't change.

```
Verb
/ \
Adjective -Ø
| yel low
| Mean ing: "to make (more) yellow"
```

**Allomorphs**

Sometimes a morpheme has only one phonological form, but frequently it has a number of variants known as allomorphs. Allomorphs may vary considerably. Totally dissimilar forms may be allomorphs of the same morpheme. *Cats, dogs, horses, oxen, geese* all contain the English plural morpheme. An allomorph is said to be phonologically conditioned when its form is dependent on the adjacent phonemes. An allomorph is said to be lexically conditioned when its form seems to be a purely accidental one, linked to a particular vocabulary item.

In brief, allomorphs are variation of morpheme. Allomorph is one or two or more complementary morphs which manifest a morpheme in its different phonological or morphological environments. The concept occurs when a unit of
meaning can vary in sound (phonologically) without changing meaning, it is used in linguistics to explain the comprehension of variations in sound for a specific morpheme. English plural morpheme provides excellent examples of both phonologically and lexically conditioning.

\[ \text{[s]} \rightarrow \text{maps, ots, births} \]
\[ \text{[z]} \rightarrow \text{days, pies, shampoos, pianos, zebras} \]
\[ \text{[iz]} \rightarrow \text{ashes, surprises, ages, approaches} \]

**Compounds**

The combination of two free forms is called a *compound*. In English the head of a compound is usually the right-hand member (bird). The head supplies the category (Noun) and basic meaning (bird-ness) for the whole compound. For examples, *blackbird, sleepwalker, bookcase, happy hour*, etc.

```
Noun
   /
  / \
Adj Noun
  |   |
black bird
```

Meaning: a particular kind of bird

Figure 7.4 Compounds

**Reduplication**

Reduplication is the copying of a part of a word. As in the case of infixes, we need to say what part of the word is copied. Consider the data from Samoan:

<table>
<thead>
<tr>
<th>Verb</th>
<th>3 singular</th>
<th>3 plural</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>manao</td>
<td></td>
<td>mananao</td>
<td>'wish'</td>
</tr>
<tr>
<td>atamaki</td>
<td></td>
<td>atamamaki</td>
<td>'be wise'</td>
</tr>
<tr>
<td>malosi</td>
<td></td>
<td>malolosi</td>
<td>'be strong'</td>
</tr>
</tbody>
</table>

Figure 7.5 Reduplication
Blend Words

Blend words are words which are comprised of parts from two other words. Blend words have two parts folded into one; much like the two parts of a suitcase fold into one unit. The first list contains some easily recognized blend words which are common enough, and you've probably used them without knowing they are blends. The second list is less commonly used, but should be somewhat familiar and entertaining nonetheless.

<table>
<thead>
<tr>
<th>Blend Word</th>
<th>Meaning</th>
<th>Blend Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>bash</td>
<td>bang + smash</td>
<td>bleep</td>
<td>blankout + beep</td>
</tr>
<tr>
<td>because</td>
<td>by + cause</td>
<td>blotch</td>
<td>blot + botch</td>
</tr>
<tr>
<td>bit</td>
<td>binary + digit</td>
<td>blurt</td>
<td>blow + spurt</td>
</tr>
<tr>
<td>flare</td>
<td>flame + glare</td>
<td>clash</td>
<td>clap + crash</td>
</tr>
<tr>
<td>goodbye</td>
<td>God + be (with) + ye</td>
<td>doodle</td>
<td>dodger + toddle</td>
</tr>
<tr>
<td>intercom</td>
<td>internal + communication</td>
<td>flurry</td>
<td>flutter + hurry</td>
</tr>
<tr>
<td>smog</td>
<td>smoke + fog</td>
<td>squiggle</td>
<td>squirm + wriggle</td>
</tr>
<tr>
<td>workaholic</td>
<td>work + alcoholic</td>
<td>waddle</td>
<td>wade + toddle</td>
</tr>
</tbody>
</table>

Word From Names

An eponym as we will use the term here is a proper noun—the name of a person or place—from which a regular common noun that is derived. Words like sandwich and silhouette are solid eponyms. Some eponymous words are still capitalized but those not capitalized and used as ordinary common nouns are most clearly eponyms. The important, defining property is that the word does not refer exclusively to the eponym as does Marxism but is used to refer to a general category, as boycott and fuchsias. The ability to undergo inflection such as the plural is an indication of the strict eponymous status of a word.

<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
<th>Eponym</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghan</td>
<td>A covering, a quilt or shawl, made of knitted or crocheted squares.</td>
<td>The people of Afghanistan (Afghans).</td>
</tr>
<tr>
<td>America</td>
<td>A large North American nation with its capital in Washington, DC.</td>
<td>Amerigo Vespucci (1454-1512), an Italian merchant and cartographer who drew some of the first maps of the Americas. In 1507 Martin Waldseemiller produced a world map on which he named the new continent “America” after Vespucci.</td>
</tr>
</tbody>
</table>
Clipped Words

Some spellers choose to write the clipped form of some words. A clipped word is a word shortened by common use. Clipped words are favored because they are easier to spell. Some common clipped words are listed below.

- memo – memorandum
- mike – microphone
- bike – bicycle
- burger – hamburger
- phone – telephone
- champ – champion
- photo – photograph
- pike – turnpike
- plane – airplane
- rhino – rhinoceros
- exam – examination

Acronyms

Acronyms are abbreviations, such as NATO, laser, and IBM that are formed using the initial letters of words or word parts in a phrase or name. Acronyms are usually pronounced in a way that is distinct from that of the full forms for which they stand: as the names of the individual letters (as in IBM), as a word (as in NATO), or as a combination (as in IUPAC). Another term, alphabetism, is sometimes used to describe abbreviations pronounced as the names of letters.

Questions:

1. How would you define a morpheme?
2. Distinguish between inflection and derivation.
3. How might one identify word classes?
4. Mention at least three ways of word forming. Provide examples.
5. How many morphemes do the following words consist of?
   a. disagreements
   b. reconstruction
Syntax: Sentence Patterns and Analysis

This chapter discusses the ways in which words can be linked together to form larger units. It explains how to analyze sentences into their ‘constituents’ (component parts), and shows ways of representing this type of analysis.

Syntax is the subfield of linguistics that studies the internal structure of sentences and the interrelationships among their component parts and the arrangement of words in sentences, clauses, and phrases, and the study of the formation of sentences and the relationship of their component parts. Sentences are made up of particular elements which are ordered in particular ways.

Linking Words Together

Different languages use different devices for showing the relationship of one word to another. Most languages have one or two favourite devices. The following are especially common.

Word Order

The device used most frequently in English is word order.

*The large spider frightened Aunt Maltida.*
*Aunt Maltida frightened the large spider.*

The words themselves in these two sentences are identical. It is the word order which indicates who frightened whom, and it is the spider which is large, not Aunt Maltida. Languages which rely heavily on word order are known as configurational languages.
Inflections

In a language, such as Latin, word endings or inflections, indicate the relationship between words. In the sentence:

*Magna aranea perterruit Matildam amitam.*
*Large spider frightened Matilda aunt.*

‘The large spider frightened Aunt Matilda.’.

The word order is irrelevant. The sentence would still mean the same if the words were arranged differently as in:

*Magna Matildam perterruit amitam aranea.*
*Large Maltida frightened aunt spider.*

The endings alone hat was show that it is the spider that terrified Aunt Matilda, not the reverse, and that it is the spider, not Aunt Matilda, which is large. In linguistic terminology, Latin is non-configurational language. Word order is not critical, though some word order preferences are found.

Function Words

Another common device, used to some extent both in English and Latin, is the use of function words. These are words such as *by, of, that,* which indicate relationships between parts of the sentence:

*Aunt Matilda was terrified by a spider.*
*The queen of Sheba.*
*I know that Penelope will come.*

*Matilda amita ab aranea perterrita est.*
*Matilda aunt by spider frightened is [was].*

There is some disagreement as to what count as a function word in English. Part of the problem is that several English words, such as *to,* can be used both as a function word, and as a content word (one with intrinsic meaning):

*Paul wants to go home.* (function word)
*Peter went to the river.* (content word ‘towards’)

In addition, there are borderline cases, where *to* does not fit well into either type of usage:

*Andrew’s suit was made to order.*
*It seems to me a good idea.*
Sentence types

One way to categorize sentences is by the clauses they contain. A clause is a part of a sentence containing a subject and a predicate. Here are the four sentence types:

Simple Sentences

The most basic type of sentence is the simple sentence, which contains only one clause. A simple sentence can be as short as one word:

Run!

Usually, however, the sentence has a subject as well as a predicate and both the subject and the predicate may have modifiers. All of the following are simple sentences, because each contains only one clause:

Melt!
Ice melts.
The ice melts quickly.
The ice on the river melts quickly.

Compound Sentences

A compound sentence consists of two or more independent clauses (or simple sentences) joined by coordinative conjunctions like “and,” “but,” and “or”:

Canada is a rich country, but still it has many poor people.

Complex Sentences

A complex sentence contains one independent clause and at least one dependent clause. Unlike a compound sentence, however, a complex sentence contains clauses which are not equal. Consider the following examples:

Although my friend invited me to a party, I do not want to go.

Compound-complex sentences

A compound-complex sentence contains 3 or more clauses (of which at least two are independent and one is dependent).

I don’t like dogs, and my sister doesn’t like cats because they make her sneeze.
Constituent Analysis

Sentences are not simply random words strung together by means of various devices. We do not find English sentences such as:

*The large spider terrified Aunt Matilda swims of Sheba by a car.

Instead, English has a limited number of recurring sentence patterns. A fundamental technique of syntactic analysis is to identify these patterns by a process of successive substitution. Take the sentence:

*The duck hit the burglar.*

In this sentence, *the* and *duck* can be replaced by a single word such as *Donald, it,* without altering the basic sentence pattern. This suggests that these two words are closely linked, and together constitute a single, larger component. Similarly, the words *the* and *burglar* go together, since they also could be replaced by a word such as *Albert, him.* So as a first stage, we have reduced a sentence with five original components down to three basic ones.

![Figure 8.1 Constituent analysis](image)

Of these three components, the final two could be replaced by a single word such as *slept.* We therefore conclude that they could be bracketed together as a single, larger component. We have therefore reduced a sentence with five original components down to two basic ones.

![Figure 8.2 Constituent analysis](image)
The linguistic procedure which divides sentences into their component parts or constituents in this way is known as constituent analysis. The test of substitution is basic to such an analysis, though the process is not always as straightforward as the example above.

**Tree Diagram**

These successive layers of constituents which make up a sentence can be shown most clearly on a tree diagram – so called because its branches resemble the branches of a tree. In a tree diagram, a basic sentence type at the top branches downwards in ever-increasing complexity. The advantage of a tree diagram is that each join or node on the tree can be labeled, so that the whole construction becomes clearer.

*The child found the puppy*

![Tree Diagram](image)

Figure 8.3 Tree Diagram

This tree diagram shows how a phrase or sentence can be broken down into smaller units.
Rewrite Rules

An alternative way of expressing the information found on a tree diagram is by means of rewrite rules. A rewrite rule is a replacement rule, in which the symbol to the left of an arrow is replaced by an expanded form written to the right of the arrow.

In ordinary sentences, the sentence (S) is always subdivided into noun phrase (NP) and verb phrase (VP). NPs always contain Nouns and VPs always contain Verbs, PPs consist of Prepositions followed by a Noun Phrase. Remember this rules belong to syntactic rules not particular structure rules.

\[ S \rightarrow NP \quad VP \]

means ‘replace the symbol S by NP VP’

\[ NP \rightarrow D \quad N \]

means ‘replace the symbol NP by D N’

\[ VP \rightarrow V \quad NP \]

means ‘replace the symbol S by V NP’

The essential structure of *The duck bit the burglar* can therefore be summarized in just three rules:

\[ S \rightarrow NP \quad VP \]

\[ NP \rightarrow D \quad N \]

\[ VP \rightarrow V \quad NP \]

On a tree diagram, these rules would appear as in the following figure.

![Figure 8.4 Tree Diagram](attachment:tree_diagram.png)
The sentence *The man went to the office* would appear as in the figure below.

![Tree Diagram](image)

**Figure 8.5 Tree Diagram**

The great advantage of rewrite rules is that they are perfectly explicit. They do not leave anything to the imagination. By following them, you could produce a perfect English sentence even if you did not know any English, since the rules are applied mechanically, step by step, one symbol at a time.

**Sentence Ambiguity**

Ambiguity is the property of words, terms, notations and concepts (within a particular context) as being undefined, indefinable, or without an obvious definition and thus having an unclear meaning. A word, phrase, sentence, or other communication is called “ambiguous” if it can be interpreted in more than one way. The ambiguity effect is a cognitive bias where decision making is affected by a lack of information, or "ambiguity".

*She calls the girl with microphone.*

There are two perceptions from this sentence. First, ‘She calls the girl using microphone’. Second, ‘She calls the girl who brings microphone.’
Questions:

1. What is a tree diagram? Why is it useful?
2. What are rewrite rules?
3. Draw a tree diagram for each of the following sentences.
   a. The dog ran down the street
   b. The girl met the man at the restaurant.
4. Inflections indicate the relationship between words. Explain this statement.
5. How would you define ‘sentence ambiguity’?
This chapter explains what linguists are trying to do when they deal with 'semantics', the study of meaning. It shows that the meanings of 'lexical items' (words) are linked together in intricate lexical structures. It also outlines how the meaning of sentences might be handled.

The study of meaning is normally referred to as semantics. In particular, it is the study of how meaning is structured in sentences, phrases, and words. The English term "semantics" comes from the Greek *semantikos* which means to show or give signs. Semantics can be applied to different kinds of symbol systems, such as computer languages and similar coding systems. In general, however, semantics generally refers to how meaning is conveyed through the symbols of a written language.

Semantics can be understood when it is contrasted with another linguistic term, syntax. Syntax is the study of rules regarding how symbols are arranged. Syntax is the study of the structure of a language while semantics is the study of the meaning of a language. In short, semantics is the study of the linguistics meaning of words, phrases, and sentences. Semantics can be defined in a narrow sense as the study of the relationship between words and their meaning--in other words, the study of how words mean and how such variables as context, connotation, and intent influence the meaning of a word or statement.

Semanticist seeks to understand the connections and interactions between the symbols for things (words are symbols) and the things themselves (the actual objects or ideas the words refer to). Words are the tools of thought, but they are not the thoughts themselves. We know, for example, that a single thing can be named by many different words and that a group of many different things can be named by
the same word; yet the single thing remains the same in itself regardless of the word applied to it and the different things remain different from each other regardless of their description by a single word.

A wooden alphabet block could be described or labeled as a "block," a "toy," a "child's learning tool," a "wooden cube," or a "manufactured object," but its essence would remain the same regardless of the name. Similarly, a cactus, an oak tree, and a rose bush could all be described as a "plant," but they all remain different.

When studying semantics, it is important to recognize the generally accepted meaning of a word or term rather than the literal meaning. Take the term “water pill” for example. The term “water pill” is an accepted term for a kind of diuretic. These pills are often taken by people who, for one reason or another, are retaining too much water in their bodies. If we were to look at the literal meaning of the word “water pill,” the term would seem to indicate a pill filled with water. Of course, it is quite the opposite; when the pill is ingested it causes a person to lose water.

**Lexical meaning: Denotation and Connotation**

The *denotative* meaning of a word is its literal meaning – the definition which you find in the dictionary. The *connotative* meaning of a word is the emotions and feelings that a word creates.

<table>
<thead>
<tr>
<th>Word</th>
<th>Denotative meaning</th>
<th>Connotative meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Mother</em></td>
<td>A female parent</td>
<td>Love and security</td>
</tr>
<tr>
<td><em>Cat</em></td>
<td>A carnivorous mammal, domesticated as a rat catcher or pet</td>
<td>If you like cats, the word ‘cat’ would mean ‘graceful motion, affectionate playfulness, noble reserve and admirable self sufficiency’. If you do not like cats, that would mean ‘stealthiness, spitefulness, coldness and haughty disdain.’</td>
</tr>
</tbody>
</table>

Figure 9.1 Denotation and Connotation
This brings up an important point about connotation, because there are two different kinds of it connotation, i.e. personal connotation and general connotation. Personal connotation is what we have just described with the word "cat." It is the emotions or feelings a word creates in you or in any one individual. General connotation is different – it’s what a word means to a large group of people; a mind picture that is shared. Take a man’s beard, for example. In Victorian times, the image of a bearded man was that of a proper older gentleman – a grandfather, perhaps. But in the 1960's, a bearded man came to mean “unshaven hippie.” General connotation doesn’t mean that everybody in the world thinks the same way about something, just that large groups of people do.

**Phrase meaning**

Words and morphemes are the smallest meaningful units in language. For the most part, however, we communicate in phrase and sentences, which also have meaning. The meaning of a phrase or sentence depends on both the meaning of its words and how these words are structurally combined (idioms are exceptional). Words and sentences can be used to refer to, or point out, objects; and both may have some further meaning beyond this referring capability.

Let’s take the meaning of *red* and *balloon* as an example. The semantic rule to interpret the combination *red balloon* adds the property “redness” to the properties of *balloon*. The phrase *the red balloon*, because of the presence of the definite article ‘the’, means “a particular instance of redness and ballooniness.” A semantic rule for the interpretation of the accounts for this. The phrase *large balloon* would be interpreted by a different semantic rule, because part of the meaning of *large* is that it is a relative concept. *Large balloon* means “*large for a balloon*.” What is large for a balloon may be small for a house and gargantuan for a cockroach.

Meanings build on meanings. Noun phrases are combinations of meanings of nouns, adjectives, articles, and even sentences. (The Noun Phrase *the fact he knew too much* is a combination of *the*, *fact*, and the sentence *he knew too much.*) In turn, sentences are combinations of Noun Phrases, Verb Phrases, and so on. All these combinations make sense because the semantic rules of grammar combine the meaning of the parts to give the meaning of the whole.
Semantics and Pragmatics

In linguistics, pragmatics is the study of the use of natural language in communication; more generally, the study of the relations between languages and their users. It is sometimes defined in contrast with linguistic semantics, which can be described as the study of the rule systems that determine the literal meanings of linguistic expressions. Pragmatics is then the study of how both literal and non-literal aspects of communicated linguistic meaning are determined by principles that refer to the physical or social context (broadly construed) in which language is used. Among these aspects are conversational and conventional "implications" (e.g., "John has three sons" conversationally implicates that John has no more than three sons; "He was poor but honest" conventionally implicates an unspecified contrast between poverty and honesty). Other aspects include metaphor and other tropes and speech acts.

Semantic relations among words

Synonyms

Synonyms are the words that sound different but have the same or nearly the same meaning. There are dictionaries of synonyms that contain many hundreds of entries, such as:

- apathetic/phlegmatic/passive/sluggish/indifferent
- pedigree/ancestry/genealogy/descent/lineage

There are no perfect synonyms, no two words ever have exactly the same meaning. Still, the following pairs of sentences have very similar meaning.

- He’s sitting on the sofa. / He’s sitting on the couch.
- I’ll be happy to come. / I’ll be glad to come.

Antonyms

Because semantics is a study steeped in the meaning of words, it often uses synonymy and antonymy in its investigations. It is quite common to describe the world around us in terms of opposites and commonalities. For example, say a woman named Grace was trying to describe the way that her daughter looks. She
might say, “She isn’t as tall as her father, but she looks exactly like her Aunt Drew.” If
the listener knew both the father and the aunt of the daughter who is being
described, this information would probably help him to imagine what she looked like.
The same exercise is applied by linguists when they use synonyms (words that have
similar meanings) and antonyms (words that have opposite meanings) to describe a
word, phrase, or sentence.

The meaning of a word may be partially defined by saying what it is not. Male
means not female. Dead means not alive. Words that are opposite in meaning are
often called antonyms.

In English there are a number of ways to form antonyms. You can add the
prefix un like in ‘likely/unlikely’, ‘able/unable’, ‘fortunate/unfortunate’; or you can add
non, like ‘entity/nonentity’, ‘conformist/nonconformist’; or you can add in like
‘tolerant/intolerant’, ‘discreet/indiscreet’, ‘decent/indecent’. Other prefixes may also
be used to form negative words morphologically: il-, as in illegal, mis-, as in
misbehave, dis-, as in displease. The suffix –less, as in toothless, also negates the
meaning of a stem morpheme.

Homonyms

Homonyms are different words that are pronounced the same, but may or
may not be spelled the same. To, too, and two are homonyms because they are
pronounced the same, despite their spelling differences. Homonyms can create
ambiguity. A word or a sentence is ambiguous if it can be understood or interpreted
in more than one way. The sentence

She cannot bear children.

may mean “She is unable to give birth to children.” or “She cannot tolerate
children.” The ambiguity is due to the two words bear with two different meanings.
Sometimes additional context can help to disambiguate the sentence:

She cannot bear children if they are noisy.
She cannot bear children because she is sterile.

Both words bear in the above sentence are verbs. There is another homonym
bear, the animal, which is noun with different semantic properties. The adjective
bare, despite its different spelling, is a homonym of these words because it too has a different meaning. Bare, as a verb, is yet another homonym.

Polysemy

A word may have several closely related but slightly different meaning. Such a word is said to be polysemous. It is unusual for a polysemous word to share one of its meanings with another word, a kind of partial synonyms.

Mature and ripe are polysemous words which are synonyms when applied for fruit, but not when applied to animals. Deep and profound are another such pair. Both may apply to though, but only deep applies to water.

Semantic relations among sentences

Paraphrase

When synonyms occur in otherwise identical sentences, the sentences will be paraphrases. Sentences are paraphrases if they have the same meaning (except possibly for minor differences in emphasis). Thus the use of synonyms may create lexical paraphrase, just as the use of homonyms may create lexical ambiguity.

Sentence may also be paraphrased because of structural differences that are not essential to their meaning. For example:

The girl kissed the boy.
The boy was kissed by the girl.

Although there may be a difference in the emphasis in these two sentences—in the second the emphasis is on what happened to the boy, whereas in the first the emphasis is on what the girl did—the meaning relations between the verb kiss and the two noun phrases are the same in both cases, and on this basis the two sentences are paraphrase of each other.

Entailment

In logic, entailment (or logical implication) is a relation between sets of formulae such that, if A and B are sets of formulae of a formal language, then A entails B if and only if every model (or interpretation) that makes all the members of A true, makes at least one of the members of B true. Another way of stating this is to say that the class K of models of A is a (possibly improper) subclass of the class K'
of models of some subset $B'$ of $B$. Alternatively, we can say that $A$ entails $B$ if and only if, for every subset $B'$ of $B$, the class of models of $A$ is a subclass of the union of the classes of each $B'$.

In symbol:

$$A \models B$$

It is stated that the set $A$ of sentences entails the set $B$ of sentences. Notice that entailment is a semantic relation. Often it is stated less generally for $B$ a single formula rather than a set of formulae. In our definition, this is equivalent to the case when $B$ is a singleton consisting of a sole formula.

Let the set $A$ of sentences include 'All horses are animals' and 'All stallions are horses', and the set $B$ of sentences include 'All stallions are animals'. Then $A \models B$, i.e. $A$ entails $B$, holds.

**Contradiction**

Contradiction is a sentence that is strange, or anomalous; yet it is certainly an English sentence. It conforms to all the grammatical rules of the language. It is strange because it represent a contradiction.

*That bachelor is pregnant.*

It is anomalous because the word bachelor contains the semantic property “male,” whereas the word “pregnant” has the semantic property “female”. Through a semantic redundancy rule, pregnant will also be marked (- male). The anomaly arises from trying to equate something that is (+male) with something that is (+male).

**Semantic features**

Semantic features are a formal or notational device for expressing the presence or absence of semantic properties by pluses and minuses.

<table>
<thead>
<tr>
<th>woman</th>
<th>father</th>
<th>girl</th>
<th>mare</th>
<th>stalk</th>
</tr>
</thead>
<tbody>
<tr>
<td>+ female</td>
<td>+ male</td>
<td>+ female</td>
<td>+ female</td>
<td>+ motion</td>
</tr>
<tr>
<td>+ human</td>
<td>+ human</td>
<td>+ human</td>
<td>- human</td>
<td>+ slow</td>
</tr>
<tr>
<td>-young</td>
<td>+ parent</td>
<td>+ young</td>
<td>- young</td>
<td>+ purposeful</td>
</tr>
<tr>
<td>. . .</td>
<td>. . .</td>
<td>. . .</td>
<td>. . .</td>
<td>. . .</td>
</tr>
</tbody>
</table>

*Figure 9.2 Semantic Features*
The semantic features of woman are [+female], [+human], [-young].

**Thematic role**

Thematic role is the semantic relationship between a predicate (e.g. a verb) and an argument (e.g. the noun phrases) of a sentence. Thematic roles include:

- Agent, as the one who deliberately performs the action (e.g. Bill ate his soup quietly)
- Experimenter, as the one who receives sensory or emotional input (e.g. The smell of lilies filled Jennifer's nostrils).
- Theme, as the recipient of an action but does not change its state (e.g. Bill gave Mary a present).
- Patient. It undergoes the action and has its state changed (e.g. The falling rocks crushed the car).
- Instrument. It is used to carry out the action (e.g. Jamie cut the ribbon with a pair of scissors).
- Cause. It mindlessly performs the action (e.g. An avalanche destroyed the ancient temple).
- Location. It shows where the action occurs (e.g. Johnny and Linda played carelessly in the park).
- Goal. It is what the action is directed towards (e.g. The caravan continued on toward the distant oasis).
- Source. It shows where the action originated (e.g. The rocket was launched from Central Command).

**Questions:**

1. How might a linguist study the internal relationships between lexical items?
2. How does denotation differ from connotation? Give examples.
3. There are no perfect synonyms. Explain this statement.
4. How would you define 'entailment'? Give examples.
5. How might one represent the meaning of sentences?
A subfield of linguistics developed in the late 1970s, pragmatics studies how people comprehend and produce a communicative act or speech act in a concrete speech situation which is usually a conversation. It distinguishes two intents or meanings in each utterance or communicative act of verbal communication. One is the informative intent or the sentence meaning, and the other the communicative intent or speaker meaning. The ability to comprehend and produce a communicative act is referred to as pragmatic competence which often includes one's knowledge about the social distance, social status between the speakers involved, the cultural knowledge such as politeness, and the linguistic knowledge explicit and implicit. Pragmatics concerns itself with how people use language within a context and why they use language in particular ways. On a very basic level, "pragmatics" refers to the way we convey meaning through communication. This meaning includes verbal and non-verbal elements and varies depending on the context, the relationship between people talking, and many other social factors.

We have defined semantics as the study of meaning. Given this definition, we may be tempted to think that once we understand the semantics of a language, we completely understand that language. However, meaning involves more than just the semantic interpretation of an utterance. To fully understand the meaning of a
sentence, we must also understand the context in which it was uttered.

Consider the word *ball*. If we say, “He kicked the ball into the net,” we may visualize a round, black and white soccer ball. If we say, “She dribbled the ball down the court,” we may visualize a basketball. Given another sentence, “She putted the ball in from two feet away,” we would visualize another ball, a golf ball. In these examples, the word *ball* is understood in different ways depending on what type of action is associated with it. Whatever understood meaning is common to *ball* in all these contexts would be part of the word’s core meaning. If we think of enough types of balls, we can come up with an invariant core meaning of *ball* that will allow speakers to refer to any ball in any context. Nevertheless, even though we can discover a word’s *invariant core*, we normally understand more than that. It is the context that fills in the details and allows full understanding — such as the usual color of a soccer ball, the size of a basketball, or the weight of a golf ball.

The next question to ask, then, is “What is context?” Is it simply the reality that fills in meaningful details missed by a theory such as the invariant core theory? The short answer is *no*. The long answer is: context can be divided into four subparts of which reality is but the first. This aspect of context can be called the physical context; that is, where the conversation takes place, what objects are present, and what actions are taking place. Second, we have an epistemic context; this is background knowledge shared by the speakers and hearers. Third, we have a linguistic context; this is utterances previous to the utterance under consideration. Finally, we have a social context; this is the social relationship and setting of the speakers and hearers.

As an example, let’s look at how context helps people interpret a sarcastic remark. Suppose that two people, talking loudly, walk into an individual study section of the library (physical context). They sit down, still talking loudly, but no one says anything to them. After about five minutes, a person across the table from them says, “Talk a little louder, won’t you? I missed what you just said.” The hearers will (normally) interpret this utterance as a request for them to be quiet, despite the fact that literally the speaker requests them to talk louder (just the opposite). Certain
contextual facts help to signal that this is a request for silence: The utterance interrupts their conversation and breaks the silence between them and others (linguistic context); The request is made in a sarcastic tone (linguistic context); People don’t usually talk to strangers (epistemic context); Libraries are quiet places (epistemic context); And they are in the library (physical context). From these observations, the hearers should conclude that the utterance is a request for silence. Thus, pragmatics does more than fill in the details.

**Speech acts**

Just as people can perform physical acts, such as hitting a baseball, they can also perform mental acts, such as imagining hitting a baseball. People can also perform another kind of act simply by using language; these acts are called speech acts. We use language to do an extraordinarily wide range of activities. We use it to convey information, request information, give orders, make requests, make threats, give warnings, make bets, give advice, and so on, as the following sentences suggest:

(1) *John Jones has bad breath.*
(2) *Who ate my porridge?*
(3) *Shut up.*
(4) *Please scratch my nose.*
(5) *Do that again, and I’ll punch your lights out.*
(6) *There is a gremlin in the back seat of your car.*
(7) *Five bucks says that the Vikes will beat the Pack this Saturday.*
(8) *You ought to go to class at least once a quarter.*

There can be little doubt that it is our ability to do things with language – to perform speech acts – that makes language useful to us. In fact, with language we can do things that would otherwise be impossible. Consider (4), a request for a hearer to scratch the speaker’s nose. If we did not have language, how would this request be made? We could imagine the speaker taking the hearer’s hand and
rubbing his nose with it, but would this action have the same force as a spoken request? Probably not. How would the hearer know that the speaker meant “scratch” and not “rub”? How would the hearer know that this action was a request and not an order? The action itself could not convey the politeness of the word “please”, a major difference between requests and orders. In (6), we could warn the speaker that a gremlin is in the back seat of his car by pointing at it, but how could we give the advice in (8) without words? It would certainly be difficult. We use language for all sorts of things.

Some of these uses seem to be of greater linguistic importance than the others because the language makes available special syntactic structures for marking them. For direct speech acts we have a declarative sentence type, which is dedicated to assertions, an interrogative sentence type which is dedicated to questions, and an imperative sentence type which is dedicated to orders and requests. In addition to these direct speech acts, however, we can also make indirect speech acts.

1. The garbage isn’t out yet.
2. Could you take out the garbage?
3. Would you mind taking out the garbage?
4. I would like for you to take out the garbage.

Typically, with an indirect speech act, what the speaker actually means is different from what she or he literally says.

Speech act theory stated by Searle broadly explains utterances as having three parts or aspects. They are locutionary acts which are simply the speech acts that have taken place, illocutionary acts which are the real actions which are performed by the utterance, where saying equals doing, as in betting, plighting one’s troth, welcoming and warning, and perlocutionary acts which are the effects of the utterance on the listener, who accepts the bet or pledge of marriage, is welcomed or warned.

Locutionary act, which can also be said as literal level, is to perform an act of saying something or it can be formulated as (s says to h that X). S is an abbreviation
of speaker, h is an abbreviation of hearer, X is certain words spoken with a certain sense and reference, and P is an abbreviation of proposition or the basic unit of meaning of an utterance. Locutionary act is “the basic act of utterance or a meaningful linguistic expression.” For example, when a bartender is uttering an utterance like “The bar will be closed in five minutes”, the bartender is performing the locutionary act of saying that the bar will be closed in five minutes starting from the time of the utterance.

Illocutionary act can also be called as implied level. It is an act of doing something (in saying X, s asserts that P). Illocutionary act is performed via the communicative force of an utterance. For example is when the bartender is uttering an utterance like “The bar will be closed in five minutes”, the bartender is performing the illocutionary act of informing the patrons of the bar that the bar will be closed soon and he perhaps does an act of urging them to order a last drink.

Perlocutionary act, which can also be called as implied act, is to perform an act of affecting someone (by saying X, s convinces h that P). Perlocutionary act is the result of the effect of an utterance. Perlocutionary act brings the hearer to learn something, persuade, deceive, encourage, irritate, frighten, amuse, get the hearer to do something, inspire, impress, distract, get the hearer to think about, relieve tension, embarrass, attract attention, bore. By uttering an utterance like “The bar will be closed in five minutes”, the bartender intends to perform the perlocutionary act of causing the patrons to believe that the bar will be closed and of getting them to order one last drink.

Yule, based on Searle’s categorization, classifies five types of general functions performed by speech acts (declarations, representatives, expressives, directives, and commissives). Firstly, declarations are kinds of speech acts that change the world via utterance. It means that the speaker of the utterance brings about the new state of affairs. Declarations are “illocutions whose successful performance brings about the correspondence between the propositional content and reality, e.g., sentencing, christening, naming, appointing, etc.”

Secondly, representatives are kinds of speech acts that state what the speaker believes to be the case or not, e.g., statements of fact, assertions, conclusions, and descriptions. It can also be said that the speaker wants to convey
his belief that some proposition is true. Thirdly, **expressives** are kinds of speech acts that state what the speaker feels, e.g., statements of pleasure, pain, likes, dislikes, joy, and sorrow. By making an utterance, the speaker wants to express his psychological state. Fourthly, **directives** are kinds of speech acts that are used by the speaker to get someone to do something, e.g., commands, orders, requests, and suggestions. Fifthly, **commissives** are kinds of speech acts that the speaker uses to commit themselves to some future action, e.g., promises, threats, refusals, and pledges. The examples of those kinds of speech acts, as explained by Yule, are:

1. Referee: You're out! (a declaration)
2. Chomsky didn’t write about peanuts. (a representative)
3. Congratulations! (an expressive)
4. Don’t touch that! (a directive)
5. I’ll be back. (a commissive)

**Felicity Conditions**

To recognize the performance of speech acts, some appropriate conditions should be taken into consideration. The conditions are called as **felicity conditions**. When a person utters “I sentence you to six months in prison”, his performance will be inappropriate if he is not a judge in a courtroom. The utterance cannot be assessed in relation to truth and falsity but it can only be assessed in relation to the **sufficient conditions** (known as **felicity conditions**).

There are also preconditions on speech acts that need focusing on, i.e., **general, content, preparatory, sincerity, and essential conditions**. **General conditions** are conditions in which the users of language understand the language being used and are not play-acting and being nonsensical but have a certain purpose. The **content conditions** are conditions about the content of the utterance. When people make a promise, their content of their utterance must be about a future event. Besides, when making a promise, they deal with two **preparatory conditions**. The first condition is that the event will not occur by itself and second condition is that the event will have a positive effect.

In relation to the **preparatory conditions**, there is a condition named **sincerity condition**. For a promise, the speaker truly intends to carry out the future action. The
last is essential condition. It covers the fact that by the act of uttering a promise, the speaker intends to create an obligation to carry out the action as promised. It means that the utterance changes the speaker’s state from non-obligation to obligation.

**The Cooperative Principles of H.P. Grice**

In communication, the participants (both of the sender and the receiver) want to understand each other and to be understood, so that the purpose of the conversation can be reached. For this reason, the participants must cooperate each other so that the communication becomes effective and efficient. Thus, the Cooperative Principle has to be assumed in the communication. Such principle, which is typically called as Cooperative Principle, consists of four maxims. Grice classifies maxims into four categories and they are briefly explained in order.

The first maxim is maxim of quality, as stated by Grice: “(i) do not say what you believe to be false, (ii) do not say that for which you lack adequate evidence.”

The main point of maxim of quality is a matter dealing with the truth. The participants must not say what they believe to be false and must not say something that does not have adequate evidence. For example, an utterance “Ronaldo has ten cars”, implicates “I believe that he has ten cars and I have adequate evidence about it.”

The second maxim is maxim of quantity, which says “(i) make your contribution as informative as it required, (ii) do not make your contribution more informative than is required.” In a conversation, each of the participants must present the message as informative as is required. On the other hand, they should also not give various kinds of information, which are not required. For example, an utterance “The hand phone is red” implicates the hand phone has no other colors except red since there is no further information about the colors that the hand phone may contain.

The third maxim is maxim of relation, which expects the participant to “be relevant.” It means that each of the participants must say something that is relevant to the subject of the conversation. The participants of the conversation are difficult in understanding the topic if it has no relevance and the utterances will appear quite unconnected. The examples of this maxim appear in the following conversation.

*A: When will you go?*

*B: Right after 'Believe or not' finished.*
It is only the basis of assuming the relevance of B’s response that A can understand it as providing a partial answer to his question. B’s answer can be assumed that he is not in the position to provide full information. However, when A thinks about the time when ‘Believe or not’ finished, it might provide him with the means of deriving a partial answer. A may infer that B intends to convey that the time is at least after a serial TV’s game namely ‘Believe or not’ normally finished.

The last maxim is maxim of manner. In a conversation, each of the participants must say something orderly and briefly. It means that they must avoid saying something that can cause ambiguities and obscurities. Grice says “Be perspicuous, and specifically (i) avoid obscurity, (ii) avoid ambiguity (iii) be brief, and (iv) be orderly.” “He locks the door and leaves his house” is different from “He leaves his house and locks the door” in meaning.

Implicature

One of the central concepts in pragmatics is implicature. Implicature is “what a speaker can imply, suggest, or mean as distinct from what the speaker literally says.” Implicature is an additional stated meaning. It has to be assumed in order to maintain the Cooperative Principle. On the basis of the stated definitions, it can be concluded that implicature is an implied message that is based on the interpretation of the language use and its context of communication. Grice points out that there are two kinds of implicature, namely conventional and conversational implicature.

Conventional implicature is determined by the conventional meaning of the words used. Conventional implicature is not based on pragmatic principles or maxims, but is simply attached by convention to particular lexical items or expressions. It does not need special context for its interpretation. For example, when a boy says “Andy is smart but her sister is stupid”, the boy contrasts the utterance “Andy is smart” with the utterance “her sister is stupid” via the conventional implicature of but.

Conversational implicature is an implicature that is emphasized based on the maxims and context. It is an implicature derived from a general principle of conversation plus several maxims that speakers normally obey.
Questions:

1. What is pragmatics?
2. How would you define ‘context’ in pragmatics?
3. How would you define speech act theory?
4. Explain what is meant by felicity conditions. Give two examples.
5. What are the cooperative principles as stated by Grice? Why should we consider them?
Sociolinguistics

Language and Society

This chapter is concerned with sociolinguistics, which analyzes variation within a language. It looks at differences between speech and writing, and at variation in pronunciation between different social classes. It also outlines divergence between men’s and women’s language. It then discusses multilingual communities and pidgins and creoles.

Sociolinguistics is often defined as the study of language and society. Whereas many linguists concentrate on discovering unity beneath the diversity of human languages, sociolinguistics tries to analyze the social factors which lead to this diversity. In brief, sociolinguistics is interested in language differences, and especially in variation within a particular language.

Speech Varieties

Within a speech community, there is considerable language variation. The speech of its members varies according to many factors, including geographical, location, age, occupation, socio-economic status, ethnic group and sex. More interesting to sociolinguistics is variation within a single geographical area. This is of two main types: variation within the speech of a single person, and variation between people. These two interact and it is not always possible to separate them. Every native speaker is normally in command of several different language styles, sometimes called registers, which are varied according to the topic under discussion, the formality of the occasion, and the medium used (speech, writing, or sign).

Other type of variation is less clear cut. The same person might utter any of the following three sentences, depending on the circumstances:

- I should be grateful if you would make less noise.
- Please be quiet.
- Shut up!
Here the utterances range from a high or formal style, down to a low or informal one—and the choice of a high or low style is partly a matter of politeness.

**Language and Sex**

Language and sex are the area of sociolinguistics which studies the relationship between language and sex. Both have biological and sociocultural differences. Sex refers to categories distinguished by biological characteristics. Sex is as an independent variable related to linguistic variables with social status, style, age, and ethnicity. Sex serves as fundamental basis for the differentiation of roles, norms, and expectations in all societies.

The term ‘gender’ refers to social construction and ideological process. It is influenced by sociohistorical criteria and cultural conditioning. Through the ideological process, individuals are positioned as men or women. In other words, gender is also a name for the social and cultural construction of a person’s sex and sexuality. Gender is more appropriate for distinguishing people on the basis of their socio-cultural behavior, including speech. Gender differences in language are often just one aspect of pervasive linguistic differences which reflect social status or power differences in the society.

Gender and gender roles are normatively reciprocal, although men and women are supposed to be different from each other. Gender roles create different ways for men and women to experience life, culture and society. This difference is expected to be sources of attraction. The differences of gender are complex, particularly in the society and era where women move into traditional gender roles to question. Moreover, there are also two aspects of gender role. The aspects are masculine and feminine. Femininity is a culturally defined form of mitigation or denial power and masculinity is the affirmation of power.

Linguistics of sex varieties arises because language as a social phenomenon related to social attitudes between men and women. Their different attitudes explain why the sex differentiation is portrayed. It makes sense that society evaluates the different characteristics in two sexes. Men and women use different linguistics elements in all speech communities.
Women are more linguistically polite than men. Women are more status-conscious than men in society. For this reason, they tend to be more sensitive to the social significance of social class related to linguistic variables. The orientation of women's overt prestige is a result of their powerless position in society. Women tend to use standard version of language and men speak more vernacular language. The standard forms are used by women to respond positively to their addressees by accommodating to their speech.

Supportive speech is more often associated with women than with men. Power talking may be used by either sex, though it is more typically male. Male speakers do not only talk more, they also interrupt more, even though they may not perceive themselves as doing so.

**Dialects and Idiolects**

Dialect is a type of language spoken by a group of people. Sometimes people who live in the same place and similar in some way make a dialect. There is no agreed difference between a dialect and a language. Many people think "languages" must be the way powerful people speak, and "dialects" must be the way people without power speak. Some dialects are called "languages". They may spell words differently and be known as a language (for example, English is a Germanic dialect). Dialects can differ anywhere languages can differ: lexicon, morphology, syntax, semantics, and phonology.

An idiolect is a variety of a language unique to an individual. It is manifested by patterns of word selection and grammar or words, phrases, idioms, or pronunciations that are unique to that individual. Every individual has an idiolect; the grouping of words and phrases is unique, rather than an individual using specific words that nobody else uses. An idiolect can easily evolve into an ecolect—a dialect variant specific to a household.
Dialect Differences

Because dialect differences are related to the knowledge of language between speakers, the followings should be taken into consideration:

- Dialects can differ anywhere languages can differ: lexicon, morphology, syntax, semantics, phonology, etc.
- Distinctive attributes of dialects can be found in other languages of the world. That is, a dialect is just another possible human language.
- Linguistics does not define "good" or "bad" languages, it simply explains how languages work in general. "Good" and "bad" are judgments about language, social statements, not linguistic statements.
- As with other social statements, judgments about other people's languages tell you more about the people making the judgments than about the people who are being judged.
- Because dialects are just possible languages, each person's language belongs to some dialect. That is, everyone speaks with an accent. The accent is just more or less similar to someone else's accent.

Variety in the Dialects of English

Sounds

The speech sounds (elements) can be different in different dialects. The low-back quadrant of the vowel space is a major source of variation between different dialects of English. The most noticeable in the US is the [a]/[ɛ] ("cot"/"caught") merger. Another major source of variation is the pronunciation of vowels before [r]. Some dialects have lost lax vowels before [r] and this leads to a contextual merger of [æ]/[ɛ]/[e] before [r] ("marry"/"merry"/"Mary").

Rules

One noticeable difference between dialects is between rhotic (r-full) and non-rhotic (r-less) dialects. Because /r/ reappears before vowels ("Hom eric")
this is best described as a rule deleting /r/ before consonants and at the ends of words. This is noticeable enough to be mocked on T-shirts, e.g. "I pahked my cah in Hahvahd Yahd". Another difference is called "Canadian raising". The words "writer" and "rider" both have flaps in pronunciation, but have different vowels: "writer" [rajər], "rider" [rajər].

Lexicon

Perhaps the most obvious difference in dialects is the use of different words, such as: lift/elevator, lorry/truck, sofa/couch/chesterfield, dinner/supper and so on. Word formation rules can also differ between dialects. One noticeable difference between speakers is their treatment of plurals of words borrowed from other languages, e.g. Latin/Greek plurals: criterions/criteria, datums/data. Another difference is in the formation of the past tenses of certain words: learned/learnt, dived/dove.

Sentences

• "Have" questions

Dialects differ in their use of "do-support" for questions involving main verb "have". That is, do you say "Has he a car?" or "Does he have a car"?"

• Conjunctions and case

Another difference is the case of pronouns following a conjunction. Do they appear in the same case as they would when not conjoined? A default case? The opposite case? For example, do you say "between you and me" or "between you and I"? "Luke and me went to the store" or "Luke and I went to the store"?

• Double negatives

Many people criticize dialects employing "double" negatives as "illogical" -- two negatives make a positive in multiplication. But "double" negatives are really negative agreement (like subject-verb agreement) and are displayed in many
languages (including older versions of English). For example in English we can answer a question negatively: *Who arrived? Nobody.*

But the standard languages differ on how to form negative statements: *I do not see anybody.* Standard English uses "anybody" instead of "nobody" in negative statements. *I did not see nobody,* which is exactly what some dialects of English use, the "double" negative. They are not illogical or stupid. They simply have a rule of negative agreement that Standard English does not have. Just as Boston dialects have a rule dropping r that standard American English does not have. Negative agreement is used in many dialects of English (and in many other languages).

**Words Borrowing**

*Loanwords* are words adopted by the speakers of one language from a different language (the *source language*). A loanword can also be called a *borrowing*. The abstract noun *borrowing* refers to the process of speakers adopting words from a source language into their native language. *Borrowing* is a consequence of cultural contact between two language communities. For example, the Germanic tribes in the first few centuries A.D. adopted numerous loanwords from Latin as they adopted new products via trade with the Romans. Few Germanic words, on the other hand, passed into Latin.

Languages are always borrowing words from one another, even if they change the pronunciation and spelling a little. Many times the new word comes along with the new item, such as spaghetti (Italian), camel (Hebrew), and chocolate (Mexican-Indian by way of Spanish). Ketchup (sometimes spelled catsup) comes from the Chinese sauce pronounced "ke-tsiap." Since Chinese doesn't use an alphabet like English, English users adopted different spellings that are still used today. Here are some more words from other languages:

- **German**  
  - kindergarten, blitz, poodle

- **French**  
  - salad, restaurant, garage

- **Spanish**  
  - rodeo, tornado, potato

- **Italian**  
  - piano, carnival, studio
**Lingua Franca**

*Lingua franca* is a language used as a second language, usually for trading purposes. English is now the principal lingua franca of the world.

**Pidgin and Creole Languages**

Adopting *lingua franca* is not the only solution to the problem of communication between groups of people speaking different languages. In some cases, a *pidgin* develops. A *pidgin* is a restricted language system which arises in order to fulfill essential communication needs among people with no common language. It is no one’s first language, and is used at first in a limited set of circumstances. Such a system typically develops on trade routes and in coastal areas. A *pidgin* is usually based on one language, though it soon acquires an admixture of other languages, as well as independent constructions of its own. For example, Tok Pisin which is spoken in Papua New Guinea, is based on English and any of the words sound somewhat like English ones.

In short, *Pidgin* is a Language created by adults when they share no common language. Pidgins are not "complete" languages, they lack true syntax in a general rule-governed sense. When children learn a pidgin language as a first language it becomes a Creole language. Because the children learn as their first (or only) language, they add to the pidgin all of the complex resources of human language, including a true, complete recursive syntax.

**Questions:**

1. Distinguish between dialect and idiolect.
2. How would you define speech varieties?
3. English has some dialects and they differ in some aspects. Elaborate this statement.
4. In what ways might women’s speech differ from men’s?
5. What is a pidgin? And how might it be distinguished from a creole?
Psycholinguistics is the study of the mental processes involved in the comprehension, production, and acquisition of language. Much psycholinguistic work has been devoted to the learning of language by children and on speech processing and comprehension by both children and adults. Traditional areas of research include language production, language comprehension, language acquisition, language disorders, language and thought, and neurocognition.

An important focus of psycholinguistics is the largely unconscious application of grammatical rules that enable people to produce and comprehend intelligible sentences. Psycholinguists investigate the relationship between language and thought, a perennial subject of debate being whether language is a function of thinking or thought a function of the use of language. However, most problems in psycholinguistics are more concrete, involving the study of linguistic performance and language acquisition, especially in children. The work of Noam Chomsky and other proponents of transformational grammar have had a marked influence on the field. Neurolinguists study the brain activity involved in language use, obtaining much of their data from people whose ability to use language has been impaired due to brain damage.

**Why psycholinguistics?**

Natural language is one of the most powerful means of influencing people. It is not solely the logic and power of argumentation but emotional potential of speech
that makes influential impact. Different wording of the same thought may cause different reaction ranging from irritation to enthusiasm. Evidently, there are some hidden channels that are very important in our communication.

Gifted writers, poets, true leaders and creative speakers, successful entrepreneurs, marketing and sales people -- those with charisma are all good at this art intuitively. They use many of the techniques, but, as a rule, cannot explain how they manage to achieve the effect. Now, there is a science with special methods and approaches that are well out of commonly known scope. It is called psycholinguistics.

Imagine, if you are able to create text with predetermined influential power and to foresee its effect on recipients. Or you can analyze psychological peculiarities of the author of the text, uncover the hidden stimulus in communication and avoid being manipulated. Psycholinguistic analysis can help you to do that. It goes deeply to the inner layer of all the meanings, to the very implicit of the motivations. Once a goal is formulated it allows to develop a narrowly targeted strategy with great probability of success.

In 1952, the Social Science Research Council in USA invited three linguists and three psychologists to have an interdisciplinary conference discussing a new field of study: psycholinguistics — a marriage of linguistics and psychology, in which psychology is imported into linguistics. As a scientific term, psycholinguistics was used since 1954, within the publication of Charles E. Osgood & Thomas A. Sebeok's entitled Psycholinguistics: a Survey of Theory and Research Problems

**Sub-disciplines within Psycholinguistics**

1. Theoretical psycholinguistics

Theoretical linguistics is language theories related to human mental processes in using language (phonological, diction, syntax, discourse and intonation arrangement)
2. Developmental psycholinguistics
   The process of language acquisition (both first language and second language)

3. Social psycholinguistics
   Social psycholinguistics is the social aspects of language, that language is a string of thought and insights

4. Educational psycholinguistics
   It covers the educational aspects in formal education: the role of language in the teaching of reading, language proficiency

5. Neuro-psycholinguistics
   It studies the relation between language and the brain: what happens to language input and how output is programmed and formed inside the brain

6. Experimental psycholinguistics
   It covers the act and effect of using language

7. Applied psycholinguistics
   It is considered as the application of all above subfields into other subjects

The study of psycholinguistics covers how language is acquired and produced by users, how brain works on language, language acquisition, the difference between children language acquisition and language learning, linguistic interference, language development, and the role of motivation in foreign language learning.

This discipline investigates the following areas:

- Language, Mind and Brain
- Mental Lexicon
- Language Processing
- Speech Generation
- Language Acquisition
- Second-Language Learning
- And much more
Language acquisition and disorders

Psycholinguistics also studies language acquisition which is how we acquire language. We undergo child language acquisition, development, and maturation. We acquire second, third, fourth or even more languages in school or when we travel abroad. Another feature of personal linguistic developments is language disorders due to malfunctions of certain areas of the brain.

Child language acquisition

Children have to learn language from scratch, although the capability to speak is inherent in everyone. There are certain milestones and stages of language acquisition during the child's first months and years.

- **I**: 0-8 weeks. Children of this age are only capable of reflexive crying. We also call this the production of vegetative sounds.
- **II**: 8-20 weeks. Cooing and laughter appears in the child's vocal expression.
- **III**: 20-30 weeks. The child begins with vocal play. This includes playing with vowels (V) and consonants (C), for example: "AAAOOOOOUUUUIII!".
- **IV**: 25-50 weeks. The child begins to babble. There are two kinds of babbling, a) reduplicative babbling CVCV, e.g., "baba", and b) variegated babbling, e.g., VCV "adu".
- **V**: 9-18 months. The child starts to produce melodic utterances. This means that stress and intonation are added to the sound chains uttered.

After having passed these milestones, children are, in essence, capable of pronouncing words of the natural language.

**Stages**

From this time on, children start to produce entire words. There are three stages, each designating an increasing capability to use words for communicative purposes:
1. **Single words and holophrases.**
Children may use a word to indicate things or persons, e.g., "boo" (=book), or "mama". Also, a single word is employed to refer to entire contexts. At this stage, "shoe" could mean "Mama has a nice shoe", "Give me my shoe" or even "I want to wear my new red shoes when we go for a walk"!

2. The next stage is the usage of **two word phrases**. This stage is also called *telegraphic speech*. It begins around the second birthday, maybe sooner or later, depending on the child. Examples are "Dada gone", "cut it", "in car", "here pear". At this stage, children design so-called *pivot grammars*. This means that the child has a preference for certain words as the pivotal (axis) words, implementing a variety of other words at different points in time to create phrases:

![Figure 9.1 telegraphic speech](image)

3. The child begins to form **longer utterances**. These lack grammatical correctness at first and are perceived as, though meaningful, rather rough assemblies of utterances. Examples are "dirty hand wash it", "glasses on nose", "Daddy car coming", or even "car sleeping bed", which a boy uttered, meaning that the car was now parked in the garage.

There are many phonological and grammatical features of speech development, all of which cannot be listed here. A characteristic of children's early language is the *omission of consonants* at the beginning, ending, or in consonant clusters in words. Examples: "boo" instead of "book", "at" instead of "cat", or "ticker" instead of "sticker". Children learn grammatical morphemes, commonly referred to as "endings", in a certain order. They often start with the present progressive "-ing", as
in "Mama talking". More complex forms, such as the contractable auxiliary be (as in "Pat's going") are learned at a later point in time.

**Language development and maturation**

Parents from different cultures behave differently towards their children as far as linguistic education is concerned. In some areas of the world, people think that *baby talk*, or *Motherese* hems linguistic development. There are also cultures where parents talk to their children as they would to adults), or where they do not put so much thought into how to teach their children language at all. When taking a closer look, no particular advantages or disadvantages can be found.

Children's language is creative, but rule-governed. These rules comprise the seven *operating principles* of children's language. These principles correspond to the essential communicative needs of a child. One main aspect in all principles is the predominant use of the active voice, the passive voice requiring a more complex understanding of concepts.

- The instrumental principle serves to indicate the personal needs of the child. These are the "I want" phrases.
- The regulatory principle helps to demand action of somebody else: "Do that."
- "Hello" is the utterance - among others - which represents the interactional principle. It is very important for establishing contact.
- The personal principle carries the *expressive function*. "Here I come" is a proper substitution for many phrases.
- The heuristic "Tell me why"-principle is very important because once the child is able to form questions, language helps in the general learning process.
- The imaginative principle comes in when the child wants to impart his or her dreams or phantasies. It is also what applies when the child pretends.
- The informative principle is also important for children's communication. To tell others about the own experience soon becomes important.
Second language acquisition

Some aspects of second language acquisition are similar to first language acquisition. The learner has already acquired learning techniques and can reflect on how to learn best. However, learning languages depends on the personality, age, intelligence, and active learning strategies of the learner.

The learners of a second language (L2) start out with their own language, which we call source language. They are on their way to learn a target language (TL). All that lies in between we call interlanguage. All L2 speakers are on some stage of interlanguage. Beginners are closer to their source language (SL), experts of L2 are closer to the target language. And if we don't continue with our studies, our interlanguage competence may even decrease. People who have lived in foreign countries for a long time are often so close to the target language that they hardly differ from native speakers.

Language disorders

The principle language disorders are aphasia, anomia, dyslexia, and dysgraphia. Usually, language disorders are caused by injuries or malfunctions of the brain. Neurologists were able to locate those areas of the brain that play a central role in language production and comprehension by examining patients whose brains had suffered damages in certain areas.

Aphasia

This is a disorder in the ability to process or produce spoken language. Two scientists, Broca and Wernicke, were able to locate two areas of the brain responsible for these activities. They are broca’s area and wernicke’s area.

Both Broca’s and Wernicke’s areas are located in the left half of the brain. The executive centers, however, are located in the right hemisphere. A separation of the two halves of the brain effects the capability of converting linguistic information into action, or vice versa.
**Anomia**

Anomia is the loss of access to certain parts of the lexis. Anomia patients are unable to remember the names of things, people, or places. There is often a confusion between semantically related words. Undoubtedly, you will have experienced this phenomenon yourself! We are all prone to it at times. It usually increases with age, although pure anomia is a much more acute state and is not related to aging.

**Dyslexia**

This is a disorder of reading where the patient is not capable to recognize the correct word order. Patients also tend to misplace syllables. There is also an overgeneralization of the relation between printed words and their sound value. For example, a patient may transport the pronunciation of "cave" = /kæv/ to "have" = */hæv/ instead of /hæv/.

**Dysgraphia**

Dysgraphia is a disorder of writing, mainly spelling. Patients are not able to find the correct graphemes when putting their speech into writing. Also, they are not able to select the correct order of graphemes from a choice of possible representations.

**Errors**

Errors in linguistic production are not a malfunction caused by disease. They occur frequently and are part of the communication process. Here are examples of the usual types of errors made:

- **Anticipation.** Sounds appear in words before their intended pronunciation:
  
  take my bike → bake my bike.

  This error reveals that further utterances were already planned while speaking.
- **In preservation errors**, the opposite is the case. Sounds are “kept in mind” and reappear in the wrong place:
  pulled a tantrum → pulled a pantrum

- **Reversals** (*Spoonerisms*) are errors where sounds are mixed up within words or phrases:
  harpsichord → carpsihord

- **Blends** occur when two words are combined and parts of both appear in the new, wrong word:
  grizzly + ghastly → grastly

- **Word substitution** gives us insight into the mental lexicon of the speaker. These words are usually linked semantically.
  Give me the orange. → Give me the apple.

- **Errors on a higher level** occur when the structural rules of language above the level of pronunciation influence production. In the below example, the past tense of "dated" is overused. The speaker "conjugates" the following noun according to the grammatical rules of "shrink-shrank-shrunk":
  Rosa always dated shrinks → Rosa always dated shranks.

- **Phonological errors** are the mixing up of voiced and unvoiced sounds:
  Terry and Julia → Derry and Chulia

- **Force of habit** accounts for the wrong application of an element that had been used before in similar contexts. For example, in a television broadcast by BBC, the reporter first spoke about studios at Oxford university. When he then changed the topic to a student who had disappeared from the same town he said: "The discovery of the missing Oxford studio" instead of "The discovery of a missing Oxford student."
Questions:

1. What does psycholinguistics cover?
2. What does a psycholinguist try to find out?
3. Children's language is creative, but rule-governed. Explain this statement.
4. Outline the principle language disorders and their symptoms.
5. How does first language acquisition differ from second language acquisition?
Linguistic Websites

1. http://cogprints.org/


10. www.lingnet.org


12. http://www2.arts.gla.ac.uk/IPA/links.html
REFERENCES


