



BUKU MATERI POKOK
PBIS4202/25KS/MODUL 1 - 6

EDISI 1

INTRODUCTION *to* LINGUISTICS

Refnaldy, dkk.

Refnaldy

PENERBIT UNIVERSITAS TERBUKA

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Edisi 1
Cetakan pertama, Agustus 2006

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410
REF REFNALDY
m Materi pokok introduction to linguistics; 1 – 6;
PBIS4202/2SKS /Refnaldy -- Cet.1 -- Jakarta:
Universitas Terbuka, 2006
6 modul; ill. 21 cm.
ISBN 979-689-927-2
1. *linguistics*
1. Judul .



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Overview

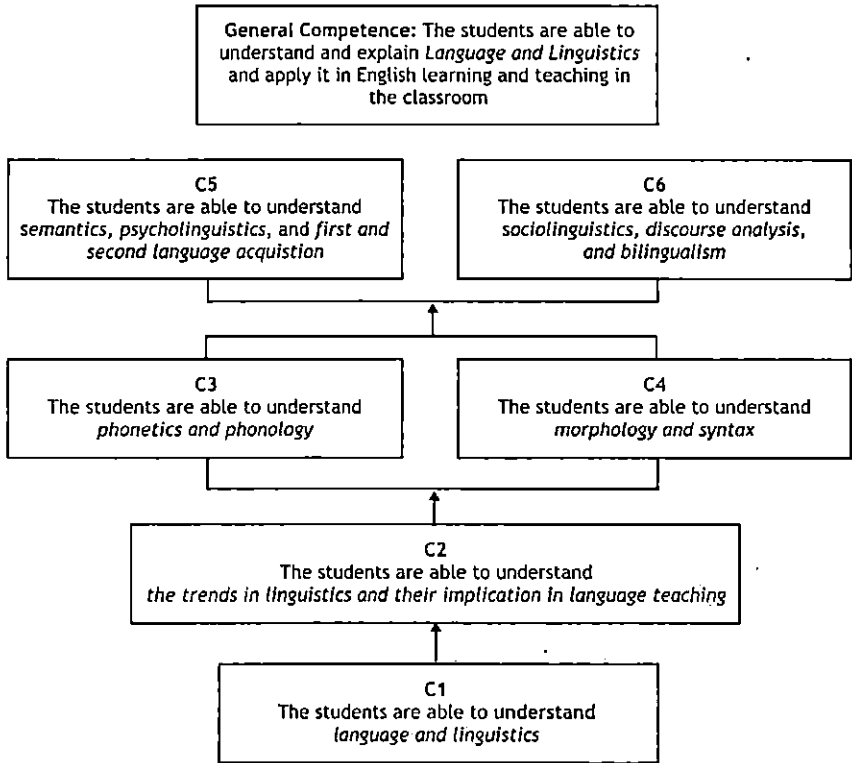
Introduction to Linguistics/PBIS4202 is a compulsory course for the students of English Education Study Program. This printed media consists of six modules. Module 1 discusses *Language and Linguistics* in which the students are provided with the materials about the nature of language, linguistics, linguistics and language teaching, and linguistics classification. Module 2 discusses *Trends in Linguistics and Their Implication in Language Teaching*. The materials to be discussed in this module are traditional grammar, structural approach, transformational-generative grammar, and functional-national approach. Module 3 discusses *Phonetics and Phonology* in which the students are provided with the discussion about speech production, place of articulation, manner of articulation, vowels and diphthongs, phonemes and allophones, and phonological process. Module 4 discusses *Morphology and Syntax* including words and word structure, word-formation processes, and syntax. Module 5 discusses *Semantics and Psycholinguistics* including semantics, first language acquisition, and second language acquisition. Module 6 discusses *Sociolinguistics* in which the students are provided with the discussion about sociolinguistics, discourse analysis, and bilingualism.

Please be sure that you have mastered module 1 before you continue to the next module. In accordance with this, you have to follow the activities in each module which are really suggested to do in order to learn and master the modules successfully.

Good Luck.

INSTRUCTIONAL ANALYSIS

Introduction to Linguistics/PBIS4202



Language and Linguistics

Dr. Jufrizal, M.Hum.



INTRODUCTION

Welcome to module 1 of Introduction to Linguistics course. The topic of this module is Language and Linguistics. Since it is a module about the science of language, you are coming to the course which relates to content or knowledge. It means that you need to read and comprehend the content of this module well. The materials to be discussed in this module are the nature of language, animal communication and human language, the characteristics of human language, linguistics, linguistics and language teaching, and linguistics classification. After studying this module, you are expected to be able to:

1. know and comprehend the nature of language;
2. mention and write the definitions of language;
3. mention and write the similarities and/or differences between animal communication and human language;
4. know and comprehend the science of language;
5. mention and write the definitions of linguistics;
6. mention and write the relationship between linguistics and language teaching;
7. know and understand the linguistics classifications;
8. mention and write the definition and linguistic studies which belong to micro-linguistics;
9. mention and write the definition and linguistic studies which belong to macro-linguistics;
10. mention and write other classifications of linguistics.

To achieve these objectives well and systematically, the materials of this module are presented respectively as follow:

1. Unit 1 : The nature of language, which includes what is language, animal communication and human language, and the characteristics of human language.
2. Unit 2 : The science of language which includes what is linguistics, linguistics and language teaching.
3. Unit 3 : Linguistics classification which includes the discussion about microlinguistics and macrolinguistics.

Please study by yourself (or discuss with your friends) the contents of each unit seriously. In accordance with this, please be sure that you have mastered unit 1 before you continue to the next units. It is expected that by studying and mastering these three units you will have enough introductory knowledge about linguistics that is really needed to study the next topics in the module of Introduction to Linguistics. Furthermore, your understanding of module 1 necessarily helps you to come to linguistics and language teaching as well. The following activities are really suggested to do in order to learn and master this module successfully:

1. Read carefully the explanation of each topic or part.
2. Don't forget to pay serious attention to examples or illustrations given.
3. You are expected to memorize definitions and/or basic concepts drawn in this module.
4. Do the exercises as well as possible.
5. Please use a good dictionary (if possible, possess the linguistic dictionary) if you find unfamiliar words or terms.
6. Evaluate yourself by checking your answers or your responses to the questions given with the key to the answers provided.

Study hard and good luck!

UNIT 1

The Nature of Language

This is unit 1 of module 1 of Introduction to Linguistics subject. Read and learn this unit seriously but please be relaxed. Language department students, including English Department students, need to know the phenomena of language. Language is a part of our life; we live in “the ocean of language” and most of our interactions is conducted by using language. However, not all of people ask question “What is language?” Language is a complex but also interesting phenomenon to be understood. Linguists have been trying to study and express what the language is. In addition to this, language teachers have been trying to find and develop methods or techniques of how to teach language well. So that, studying about language actually is interesting and challenging. All right, let’s begin our discussion about the nature of language with *What is language?*

1. What is Language?

Whatever people do—whether they play, quarrel, cook, wash, etc.—when they come together they will talk. We live in a world of language. We are the only “animals” that talk by means of language. According to the philosophy expressed in the myths and religions of many people, it is language that becomes the source of human’s life and power. To some people of Africa, a newborn baby is a *kuntu* (thing), not a *muntu* (person). Only by the act of learning does the baby become a human being. According to this tradition, we all become ‘human’ because of language; because we all come to know at least one language (see Fromkin et. al., 1990:3).

Linguists are in a broad agreement about some important characteristics of human language, and definition of a language widely associated with linguistics may be used to illustrate areas of agreement. This particular definition states that ‘language is a system of arbitrary vocal symbols used for human communication’. The definition is rather imprecise in that it contains a considerable redundancy, particularly in employing both of the

terms *system* and *arbitrary*; some redundancy is perhaps excusable, however, for it allows certain points to be more heavily emphasized than they would otherwise have been (Wardhaugh, 1972:3).

The key term in the above definition is 'system'. We may observe that a language must be systematic, for otherwise it could not be learned or used consistently. A very basic observation is that each language contains two systems: a system of sounds and a system of meaning. It is also said that language is arbitrary. The term 'arbitrary' in the definition does not mean that everything about language is unpredictable, for languages do not vary in every possible way. It means that we cannot predict exactly which specific features we will find in a particular language if we are unfamiliar with that language or with a related language. The term 'vocal' in the definition refers to the fact that the primary medium of language is sound, and it is sound for all languages, no matter how well developed are the writing systems. In the definition above, the term 'symbol' refers to the fact that there is no connection between the sounds that people use and the objects to which those sounds refer. Language is a symbolic system in which words are associated with objects, ideas, and actions by convention so that 'a rose by any other name would smell as sweet'. The term 'language as human' refers to the fact that the kind of system that interests us is possessed only by human beings and is very different from the communication systems that other forms of life possess. Human languages are different from systems of nonhuman communication. The final term that relates to language is 'communication'. It means that language is used for communication (See Wardhaugh, 1972:3—8).

Lim (1975:1—3) also agrees that language is used for communication, and it is made up of sounds. Similarly with Wardhaugh's (1972), Lim sees language based on its characteristics. Language is *systematic*; when we think of language as made up of sounds, we soon find out that only certain sounds occur in any one language and that these occur in certain regular, predictable patterns. Language is highly organized system in which each unit plays an important part which is related to other parts. Another feature of human language is that it is *productive* or *creative*. This refers to the ability of native speakers to understand and produce any number of sentences (even though

those which they have never heard before) in their mother tongue. In addition, language is *recursion*; as well. It means that sentences may be produced with other sentences inside them by means of relativization (dependent and independent clauses); or by using conjunction. Also, language is *arbitrary*. The relation between a word and its meaning is a matter of convention. There is no necessary connection between the sounds people use and the topics to which these sounds refer. It is also mentioned and proved by linguists that language is a *social and psychological phenomena*. In this case, language is equally complex. In accordance with language as a social phenomenon, we can see that language is possessed by society; the speech community of a particular language. In this case, the same language is used by the same speech community or a group of people in particular social relations. In other side, language as a psychological phenomenon refers to the fact that language belongs to individual person. Each person possesses a language and it is inside someone's self. Language is oneself. Therefore, if we would like to learn language as social and psychological phenomenon, our task is quite complex. It needs serious and further studies. The topics about language as a social and psychological phenomenon will come to you in the next module.

2. Animal Communication and Human Language

The main function of human language is as a tool of communication. Since it is a main tool of communication, language has a highly important role in human's life. Does communication belong to human beings only? As a matter of fact, communication, in this case communication system, is possessed by other creatures as well, such as animals and plants. Thus, what is communication? Let's see basic introductory concepts about communication. According to Crane, et. al. (1981:3—4), communication is a process in which information is transmitted from a source—the sender—to a goal—the receiver. The communication process, at least, involves five steps:

- Encoding the information into a symbolic system. All communication uses signals or symbols. If a person wants to transmit the information "I am really thirsty", he or she must first put that information into symbolic system of language—in this case in the English language.

- b. Selecting a mode of communication. Next he or she may choose to verbalize this message, or opposed to writing it or miming it.
- c. Delivering the symbols through a medium. A medium is the physical basis for communication, for example light, air, or ink. In this case, the medium is the air which conveys the sound waves of a verbalized message.
- d. Perceptual processing of the symbols by the receiver. If the communication is to occur, a receiver must perceive the symbols; the receiver must see or hear or feel the symbols sent. In this example, the human ears receive the sound waves.
- e. Decoding of the symbols to obtain the information. Even if the receiver perceives the symbols, nothing is communicated unless the receiver is able to decode the message contained in the sound waves. One assumes that the receiver knows the individual words and grammar of the language, and thus comprehends the message.

In another way, O'Grady et. al. (1993:496) state that communication is a matter of passing or exchange of information—distinguishes what is living and what is nonliving in nature. Communication is found even in the apparently passive world of plants; trees, for example, have been found to pass on information about advancing predators by means of chemical signals. O'Grady et. al. (1993) also add that communication could be divided into vocal communication and nonvocal communication. Vocal communication is the communication by means of sounds (language) and nonvocal communication is that by means of nonsounds (nonlanguage).

All right! Instead of mentioning the term 'language', it is in the right sense to use the term 'communication system' or "language" (language in quotation mark) to refer to animal communication. How can the animals communicate among themselves and with human beings? Animals communicate among themselves and with human beings so effectively that they are frequently said to use "language". From the linguist's point of view, however, the "languages" used by animals are not the same as what human has. The vocal and nonvocal communications are used by animals to communicate each other. The vocal communication used by an animal is not

as real as language possessed by human, but it is just particular sounds. Besides having "sounds" as a means of communication, animals also communicate with nonvocal communication. Some of the nonvocal communications usually used by various types of animals are as follow:

- a. Scent; it is chemically based. Scent communication is used by different species such as molds, insects, and mammals. Chemical substances used by animals specifically for communicative purposes are called *pheromones*. The shine mold signals its reproductive readiness through the release of a pheromone. Dogs and other canines leave a urine-based pheromone as an identification mark to stake out their territory, and many nonhuman primates have specialized scent glands for the same purpose.
- b. Light; probably the best known light user in North America is firefly or lightning-bug. This small flying beetle uses light flashes in varying patterns to signal its identity, sex, and location.
- c. Electricity; certain species of eels in the Amazon River basin communicate their presence and territoriality by means of electrical impulses.
- d. Color; the color—or color patterns—of many animals plays an important role in their identification by members of their own species and other animals. The octopus changes color frequently and this coloring is used for a wide range of messages, including territorial defense and mating readiness.
- e. Facial expressions; these are specific types of gesture that communicate meaning. When a male baboon yawns, bares its fangs, and retracts its eyebrows, it is indicating a willingness to fight. A wide variety of facial expressions is found among chimpanzees.
- f. Posture; this is a common communication device among animals. Dogs, for example, lower the front part of their bodies and extend their front legs when they are playful. Postural communication is found in both human and nonhuman primates as well.
- g. Gesture; a gesture may be defined as active posturing. Humans wave their arms in recognition of farewell, dogs wave their tails in excitement,

and cats flick their tails when irritated. (See O'Grady et. al., 1993:496—498).

According to Crane et. al. (1981:4—9), basically a specific animal's behavior may be considered a communication if another animal's behavior apparently changes as a result. Some animals communicate by using sounds, gestures, or other types of body languages. Many animal calls and actions occur in response to very specific stimuli and call forth a very specific response. Often the animal cannot vary the message – or can vary it only slightly—and can convey only a very limited range of signals. Thus, animal communication seems to be stereotyped and limited. But bees, for instance, can communicate sophisticated messages. Bees can use gestures, sounds, and postures to communicate. However, we can see and understand that the bee's vocabulary is quite limited. Its communication is stereotyped compared with human communication.

Some animals have their communicative behavior handed to them on a genetic platter, and it develops as they mature; other animals must learn their communicative system. The buck of bee communication, for example, has been shown to be genetically built in, or innate. Many birds have calls or songs that are completely innate. Other birds demonstrate a mixed pattern; that is, there is an innate component and a learned component of their songs. The innate and learned components of the song of the chaffinch have been studied carefully.

Now let's come to human communication system. In relation to the linguistic point of view, we should keep in mind that the main instrument of human communication is language. As a result, what we mainly discuss about human communication system in this part is human language even though some points about human communication system in general are included as well. Some ways of communication are learned, and some others are innate. Like the skylark's song, human communication (at least its spoken and written aspects) seems to be almost totally learned. However, most linguists and psychologists assume that human language has an innate component: an ingrained predisposition to language that causes us all to learn language, provided we have contact with it. Many linguists believe that

there is a more important innate aspect of language that results in a basic similarity among all the world's languages. If this is true, we are then a good deal like chaffinch. Such hypotheses are, at this moment, well beyond proof. (Crane, et. al., 1981:9).

Language is clearly a form of communication; but it has never been very well defined. Language is most commonly defined as a form of communication that is nonstereotyped and nonfinite; that is, it is learned and creative. By creative we generally mean that language is unlimited in its scope. Speakers of a language are able to produce and interpret an unlimited number of utterances that they have never before heard. It might be also said that language is the form of communication used by humans; all other definitions seem to be attempts to sort out what differentiates human communication from that of other species (Crane et. al., 1981:9—10).

Some linguists and psychologists have been trying to search and see the communication used by certain animals; apes, chimpanzees, and gorillas for instance. The results of their researches and experiments about the language used by these types of animals showed that within a couple of years the apes could communicate in a fairly restricted manner with their human colleagues by using vocabularies that ranged from about a hundred to three hundred symbols and beyond. According to the researchers (researcher teams: The Premachs (1972); the Gardners (1969); Patterson —see also Bourne (1971); Hayes (1977)), the apes were not just communicating as other animals communicate; they were using language (Crane et. al., 1981:9—10). The result seemed to challenge the belief that using language is a uniquely human ability.

But in fact human language is creative but not the apes' language. Human can talk about the weather, funny religion practices, the quintessence of show, and utter nonsense. Human may lie, play word games, and abuse their grammar in quest of art. These are the examples of the creative and fundamentally human sorts of things that make language a language. Apes, in this case, could not do such creative types of communication. Therefore, language in turn is often said to help make humans human. Language seems to be a necessary basis for our personal and social identity and for our social relationships (Crane et. al., 1981:9—11).

Related to the human communication system, we should note that there are three systems of human communication. The three systems are in the form of *speech*, *writing*, and *gesture*. For most people, speech is the basic system of communication. Writing, however, allows the preservation of communications over space and through time, and its great importance in human history and in complex societies would be hard to overestimate. The role of gesture is less obvious. Among the deaf, of course, it may replace speech as the principle form of communication; but for most people it is an important supplement to speech. Together these systems allow us to communicate in a variety of situations with subtle shades of meaning (Crane et. al., 1981:14).

Speech requires the manipulation of the tongue, lips, vocal cords, lungs, velum, and all other parts of what is commonly called the vocal tract. Physiologically it requires such complex integration of nerves that it is difficult to imagine how anyone ever learns to speak. It is the fact that when humans communicate by means of spoken language, they express meanings that are conveyed through sounds. Understanding the relationship between meaning and sound is the departure point for linguistic inquiry.

The relationship between the sounds of words and their meaning cannot be stated absolutely and logically. It is stated that speech is arbitrary and segmentable. Some words seem to contradict the principle that the relationship between sounds and meanings has no logical or necessary relationship (arbitrary). There are few words which are called onomatopoeic words. For instances: *buzz*, *swish*, *bang*, *meow*, etc. Sounds are strung together to form meaning-bearing units, and these units strung together to form sentences. This stringing-together is accomplished according to a system of rules called grammar. All languages are assumed to share some basic underlying similarities in their grammars (Crane et. al., 1981:14—17).

The second system of human communication is writing. Linguists are usually more interested in speech than writing, and writing has often been viewed as reflection of speech. It is assumed that speech precedes writing. Today there are three basic types of writing, namely logographic, syllabic, and alphabetic. Some languages in the world, most notably Chinese, have writing system in which each symbol represents a word; such a writing

system is called logographic. The earlier symbols of logographic are mostly pictorial representations which are called pictographs. In a syllabic writing system, each symbol represents a syllable. The examples of this writing system are Egyptian hieroglyphs. Syllabic writing served as the source of alphabetic writing. Alphabetic writing is that each letter represents a particular spoken sound of a language. Most countries, for instances England, Indonesia, etc., use this system of writing. On the other hand, mixed writing system are used by some countries. For examples writing system used in Japan; Kanji are logographs, Hiragana and Katakana are the two Japanese syllabories; and Romaji is the Japanese system of writing that uses the Roman alphabet (see Crane et. al.; 1981:17—22).

The third system of human communication is gesture. A gesture is physical manipulation that is neither verbal nor graphic but is communication. The term gesture includes all human communication that involves waving of the hands, facial signals, grunts, and other vocalizations that do not make up words. The gesture is frequently called body language. Gesture could be various manipulations of the environment that have communicative intent such as smoke signals. Gesture was basic to the development of human communication and that it is still much used. The widely-discussed forms of gestural communication fall under the heading of kinesics; the study of the positioning and movement of the body and its parts during conversation. Different cultures often employ different gestures, although certain gestures, such as smile, are more or less universal. Another factor in gestural communication is what we call proxemics; the study of the space maintained between two speakers in conversation. Actually, this "social space" varies from culture to culture. As one example, individuals from the Middle East and certain Mediterranean countries position themselves much more closely to each other during speech than American and Northern Europeans do. Other forms of communication that also includes gesture is lip reading, which is a combination of speech and gesture. Lip reading is really only a part of what the deaf generally call face reading. Kinesics, paralanguage, proxemics, lip and face reading occur most often along with speech, not in place of it (see for more information Crane et. al., 1981: 14—26).

All right! Before you continue to the next part, please come to the following exercise. Then, if you have been sure that you are in good mastering in this topic, you are allowed to continue to the next part.

3. Characteristics of Human Language

It has been known already that as main tool of communication, language has a highly important role in human's life. Language is a specific human's characteristics that make them different from other creatures (say animals or plants). Not all of communication tools or communication systems could be categorized as language; that is human language. In order to differentiate between communication systems (tools) and language, it is necessary for us to know the characteristics of human language. Let's have close look at Wardhaugh's (1972) and Lim's (1975) to know the characteristics of human language. The first thing that we have to know about language is that it is made up of sounds and used for communication. In relation to the sounds used for communication, Lim (1975) mentions the characteristics of (human) language. The first one is that language is *systematic*. What does it mean? When we think of language as made up of sounds, we soon find out that only certain sounds in any one language and that these occur in certain regular and predictable patterns. The system of language could be predictable and learnable. Since language is systematic so that it is possibly learned consciously. Language is a highly organized system in which each unit plays an important part which is related to other parts.

Secondly, language is productive or creative. As it has been mentioned above, this characteristic refers to the ability of native speakers to understand and produce any number of sentences (even though those they have never heard before) in their mother tongue. Native speakers are able to produce or create various sentences or expressions almost without any serious problems at any speech event. In other side, the native speakers could possibly understand almost all variations of utterances in their mother tongue. Thirdly, language is recursion. Recursion means the sentences may be produced with other sentences inside them by means of relativization (dependent in independent clause) or by using conjunctions.

The fourth characteristic of language is arbitrary. By arbitrary, it is meant that the relation between a word and its meaning is a matter of convention. There is no necessary or logical connection between the sounds people use and the topics to which these sounds refer to. Furthermore, other characteristic of language is that it is social phenomena and it is psychological phenomena, as well. Language as social phenomena refers to the fact that language belongs to a particular group of people in certain society. In addition to this, language as psychological phenomena refers to the fact that language is possessed by individual person; language is “inside” ourselves. In linguistics, the phenomena of language in society are studied in sociolinguistics, while the phenomena of language as psychological matters are learned in psycholinguistics.

Now, let’s come to exercise and formative test before you go on to the next unit. Try to understand the information presented in this unit and see how far your comprehension is by doing exercise and formative test. Your comprehension about the content of this unit will be valuable for the further discussion of this module. Have a good mastery!



EXERCISES

Exercise 1

The following terms are found in the explanation above. Please write the definition or the meaning of each term clearly and briefly. It is suggested that you use your (linguistics) dictionary if necessary.

- 1) language :
- 2) philosophy :
- 3) linguist :
- 4) system :
- 5) arbitrary :
- 6) vocal :
- 7) symbols :
- 8) human :

- | | | |
|------------------------------|---|-------|
| 9) communication | : | ..... |
| 10) sounds | : | ..... |
| 11) meaning | : | ..... |
| 12) writing | : | ..... |
| 13) convention | : | ..... |
| 14) productive | : | ..... |
| 15) creative | : | ..... |
| 16) recursion | : | ..... |
| 17) social phenomenon | : | ..... |
| 18) psychological phenomenon | : | ..... |
| 19) speech community | : | ..... |
| 20) language as human | : | ..... |

Exercise 2

Answer the following questions clearly and briefly. If it is necessary, give your own examples or illustrations to support your answers.

- 1) Why do you think that the language department students (including English department students) need to learn the language phenomena?
- 2) Why do you think that the studies of language could be interesting as well as challenging?
- 3) What is language?
- 4) What are the characteristics of human language?
- 5) What do you mean by language as social and psychological phenomena?

Exercise 3

Answer the following questions or give response to the following cases clearly and briefly! Don't forget to give your own examples or illustration to make your answer better!

- 1) What do you mean by communication?
- 2) What the processes involved in communication?

- 3) What is the difference between vocal communication and non-vocal communication?
- 4) What are the examples of non-vocal communication usually used by various types of animals?
- 5) Is it the same between vocal communication of animals and human language?
- 6) Human language is learned and creative. What does this statement mean?
- 7) What are the three systems of human communication?
- 8) What do you mean by lip reading?
- 9) What is kinesics?
- 10) "Social space" varies from culture to culture. What does it mean?

Exercise 4

Answer the following questions or give response to the following cases clearly and briefly! Please support your answers or response with your own examples or illustration whenever necessary!

- 1) Why do you think that language has a highly important role in our life?
- 2) Not all of communication systems could be categorized as language. What does it mean?
- 3) What are the characteristics of language?
- 4) What do you mean by language is systematic?
- 5) What does productive or creative refer to?
- 6) Language is recursion. What does it mean?
- 7) What does arbitrary mean?
- 8) What do you mean by language is social phenomena?

KEY TO EXERCISES**Exercise 1**

- 1) a system of arbitrary vocal symbols used for human communication
- 2) the search or the study for knowledge, especially the study for the nature and meaning of existence
- 3) the experts or the scientists of language studies
- 4) group of things or parts working together in a regular relations
- 5) a matter of convention
- 6) sounds
- 7) sign, mark, object, etc., looked upon as representing something
- 8) man or mankind
- 9) a process in which information is transmitted from a source(s) to a receiver(s)
- 10) vocals
- 11) something communicated or intended
- 12) symbolic transcription of spoken language
- 13) informal, natural agreement of group of people about something
- 14) could be produced or made in unproblematic manners
- 15) could be created or made in unproblematic manner
- 16) may be produced with other sentences inside them by means of relativization
- 17) phenomena which belong to social group of people
- 18) phenomena which belong to "inside" of human's body
- 19) a group of people which speak in the same language (code)
- 20) only human that has language

Exercise 2

- 1) Because they are going to teach language to learners. It is impossible to teach language if the teachers do not know what the language is. Thus, beside having language skills, the language teachers has to have knowledge about language itself.

- 2) We live in the “world” or the “ocean” of language. Language is inside and outside ourselves. We use language in daily life, but to explain or to know the nature of language is not an easy job.
- 3) a system of arbitrary vocal symbols used for human communication
- 4) systematic, productive or creative, recursion, arbitrary, social phenomena, psychological phenomena
- 5) Language exists “outside” and “inside” of ourselves.

Exercise 3

- 1) a process in which information is transmitted from a source – the sender – to a goal – the receiver. Communication happens by means of communication tools.
(a) encoding the information into a systematic system; (b) selecting a mode of communication; (c) delivering the symbols through a medium; (d) perceptual processing of the symbols by the receiver; and (e) decoding of the symbols to obtain the information.
- 2) the vocal communication happens by means of particular sound while the non-vocal communication is done by means of other than sound system
- 3) scent, light, electricity, color, facial expression, posture, gesture
- 4) No, it is not. Human language has certain characteristics which makes it becomes ideal language, while the vocal communication of animals is typically and limited.
- 5) Human language could be learned consciously, because it is systematic and predictable. Language can be created and developed by the native speakers.
- 6) speech, writing, gesture
- 7) a combination of speech and gesture which is normally a part of what the deaf generally call face reading
- 8) the study of the positions and movement of the body and its parts during conversation
- 9) In any speech event or conversation, different societies which have different cultures and styles may have various space among the

participants. People in middle east and Mediterranean countries position themselves much more closely to each other during speech than the Americans and Northern Europeans do.

Exercise 4

- 1) Because human's life must have been more difficult, confusing, static, or complicated if there is no language.
- 2) There many ways of communication. Language is just one way among many ways of communication.
- 3) systematic, productive, creative, recursive, arbitrary, social phenomena, psychological phenomena
- 4) Certain sounds in any one language occur in certain regular and predictable patterns. Language has predictable and learnable system.
- 5) The native speakers are able to understand and produce any number of sentences, including those they have never heard before in their mother tongue.
- 6) The sentences may be produced with other sentences inside them by means of relativization (dependent in independent clause) or by using conjunctions.
- 7) The relation between word and its meaning is a matter of convention. There is no necessary or logical connection between the sounds people use and the topics to which these sounds refer to.
- 8) Language is possessed by group of people; the speech community of the language. No society without language and the use, meaning, or style of a language is relatively influenced by the social characteristics.



SUMMARY

We live in “the ocean of language”. Human beings are the only ‘animals’ that talk by means of language. Many definitions about language have been formulated by linguists based on their own point of view. One particular definition of language states that “ language is a system of arbitrary vocal symbols used for human communication”. The main function of human language is as a tool of communication.

Communication is a process in which information is transmitted from a source – the sender – to a goal – the receiver. The communication process, at least, involves the following steps: (a) encoding the information into a symbolic system; (b) selecting a mode of communication; (c) delivering the symbols through a medium; (d) perceptual processing of the symbols by the receiver; and (e) decoding of the symbols to obtain the information.

The language used by human beings (human language) is not the same with language used by animals. Animals communicate among themselves by means of vocal communication (sounds) and non-vocal communication (non-sounds). Some non-vocal communications used by various types of animals are: scent, light, electricity, color, facial expressions, posture, and gesture. Animal communication seems to be stereotyped and limited. Related to human communication system, there are three system of communication, namely speech, writing, and gesture. Characteristics of human language are systematic, productive or creative, recursion, arbitrary, social phenomena, and psychological phenomena.



FORMATIVE TEST 1 _____

Please answer the following questions clearly and briefly. Your own examples, reasons, and illustration should be given wherever necessary to make your answers better.

- 1) Language department students need to study linguistics in general. Why do you think so?
- 2) How do you know that language is social phenomena and psychological phenomena?
- 3) In any communication process, there are, at least, five steps involved. What are they?
- 4) What are the differences between human language and animal "language"?
- 5) "Ideal" language is only possessed by human race. How do you prove it?
- 6) What do you mean by *convention*?
- 7) Is it possible for us to produce and to understand unlimited various sentences or utterances in our mother tongue? Give your reasons!

- 8) How can you prove that language is just one tool of communication in human's life?
- 9) Does individual person or group of people possess language? Give your own examples or reasons!
- 10) What could happen if there is no language in human's life?

Check your answers with the Key which is provided at the end of this module, and score your right answers. Then use the formula below to know your achievement level of the lesson in this module.

Formula:

$$\text{Level of achievement} = \frac{\text{Scores of the right answers}}{\text{Total score}} \times 100\%$$

Meanings of level of achievement:

90% - 100% = very good

80% - 89% = good

70% - 79% = average

< 70% = bad

If your level of achievement reaches 80% or more, you can on to the next Unit. **Good!** But if your level of mastery is less than 80%, you have to study again this unit, especially parts which you haven't mastered.

UNIT 2

The Science of Language

Welcome to unit 2! In this unit you are studying about the science of language. There are two topics that you are going to learn in this unit, namely *what is linguistics*, and *linguistics and language teaching*. In first part, you are expected to know and understand about the definitions and/or the basic concepts about linguistics. As we know, the terms *linguistics* (as a noun) and *linguistic* (as an adjective) are frequently used and found in linguistic texts. In addition, in second part, the relationship between linguistics and language teaching will be discussed. Please more serious in studying this unit in order to have better mastery. Good luck!

1. What is Linguistics

When we know a language, we can speak and be understood by others who know that language. This means that you have capacity to produce sounds that signify certain meanings and to understand or interpret the sounds produced by others (see Fromkin et. al., 1990). Our knowledge about language is simply called linguistic knowledge. Thus, what is linguistics? Lim (1975:3) defines that linguistics is the scientific study of language. Linguistics has also the framework or theoretical methods that could be categorized as the scientific method; in this case scientific method for human and social studies. Language analysis is done systematically within the framework of some general theory of language structure.

The word “linguistics” was firstly used in England in 1837. Linguistics scholars like Henry Sweet and Otto Jespersen have tried to infuse the findings of linguistics into language teaching for nearly a hundred years. The modern study of language has its root in antiquity. The kind of grammar commonly taught in schools before the coming of modern linguistics is called traditional grammar. A major weakness of this grammar is that it is inconsistent in the criteria used for defining the part of speech. Another characteristics of traditional grammar is that it is normative or prescriptive.

That is, it tells us how the language ought to be used, instead of describing how it actually is used. Unlike philology, which deals with the analysis of written text, linguistics is most concerned with spoken language, even though the written language is still in concerning.

Historically, the earliest grammar of any language, as far as we know, was Panini's grammar of Sanskrit, the classical language of India. Written in about the fourth or fifth century B.C., Panini's remarkable work represents a highly developed approach to linguistics. It was the period of the ancient grammarians. Still in the era of ancient grammar, the study of language in the Western world began with the ancient Greeks. Among the very early studies of language, Plato's *Cratylus* is perhaps the best known largely because of its naïve approach in seeking the origins of words. The study of language was more fruitful under Plato's successors, Aristotle and Dionysius Thrax. Aristotle classified the part of speech in the third century B.C., and he is often regarded as the founder of classical European grammar. But the oldest known grammar of Greek was written by Dionysius Thrax, who live near the end of the second century B.C.. Thrax identified eight basic word classes: noun, verb, pronoun, article, participle, preposition, conjunction, and adverb. To Thrax, the principal units of grammatical description were the word and the sentence.

Another major force in ancient Greek linguistics was the Stoic school of grammar, which enjoyed its greatest success in the second century B.C.. The Stoics were the first to distinguish between proper and common nouns. The approach of the ancient Greeks to grammar was continued and modified by the Romans. Writing in the first century B.C., Varro noted that the word endings discussed by the Stoics and Thrax could be further subdivided according to type. Latin grammar achieve its most precise formulation in the works of Priscian and Donatus, who wrote grammars of Latin at approximately the time of the Roman Empire's decline. For centuries these descriptive grammars served as the basis for learning Latin and for learning about language in general.

After the fall of Rome and through the Dark Ages, Latin continued to be a respected language, both in scholarly and religious circles. The first major new development in linguistics, however, did not take place until the

thirteenth century, when *speculative* or *modistic* grammar rose to popularity. Speculative grammar resulted from the collision of traditional Latin descriptive grammar and scholastic philosophy, represented by Catholic philosophers like St. Thomas Aquinas. Although, in fact, the speculative grammarians concentrated on Latin, their work led to the assumption that language has a universal basis; that all languages are essentially the same in nature and differ only in their surface characteristics. With the coming of the Renaissance and Columbus's discovery of the New World, several linguistic developments occurred, and views of language became more diverse. Then, in the seventeenth century, the idea that beneath these differences all languages are essentially the same in nature surfaced again.

In the nineteenth century, new developments in linguistics were stimulated by close attention to concrete data and exciting philological studies. Thus, a new approach emerged the historical-comparative linguistics. The nineteenth-century linguists were challenged by the growth of the natural sciences, and they were wise enough to turn their attention to a scientific method of dealing with language data. Their efforts also included many attempts to expand the horizons of linguistics, such as the beginnings a acoustic phonetics and the study of dialects and bilingualism.

The structuralist theory of language (structural linguistics) was the first major new approach to descriptive linguistics in the twentieth century. Introduced by the Swiss linguist Ferdinand de Saussure and then pioneered in the United States by Leonard Bloomfield, structuralism flourished for about thirty years, until the early 1960s. In its emphasis on the investigation of concrete linguistic data, structuralism logically followed the late nineteenth-century neo-grammarians school. However, structuralism was geared toward descriptive linguistics. Structural linguistics typically involved isolating, classifying, analyzing, and segmenting the observed language data. One main criticism of the structural linguistics, however, is that it made no attempt to deal with how humans understand and interpret the meanings of sentences; that is, Bloomfield's theory of structuralism excluded the mind from linguistic consideration. For this reason, structuralism is often linked with the psychological theory of behaviorism, which similarly restricts itself to that which is concrete and observable.

At the end of 1950s and it was popular 1960s, Noam Chomsky broke the structural tradition in linguistics by introducing the Transformational-Generative Grammar (TGG). TGG appears to have made a rather rapid break from structuralism, but the period of transition, although short in time, is worthy of study. TGG emphasizes that human language is creative – that humans are able to produce and interpret an infinitely large number of sentences that they have never heard before. It attempts to describe what a person knows about his or her language, but it also claims that all languages are grounded in universal facts and principles. By postulating deep structures, which are representations that contain the essential meanings of sentences and that underlie actual utterances, TGG is in direct opposition to structuralism.

Linguistics theory has undergone considerable revision and modification in the past fifteen years up to now. The development and innovation of linguistics is particularly seen in its approach to meaning and language use. Linguistics has also drawn on other sciences to form a large number of linguistic subfields, most notably psycholinguistics and sociolinguistics. In addition, the development of linguistic theories brings meaningful effects and contributions to other area of applied linguistics, for instance toward the language teaching.

2. Linguistics and Language Teaching

So far, you have learned what the linguistics is and its brief history. In this part, you are going to see the relationship between linguistics and language teaching. According to Currie (1975:31), the rise in interest in theoretical linguistics has triggered off a wide development in applied linguistics in universities and in colleges of education and other center of language research. As a matter of fact, the development of linguistic theories gives effect to the practical application in language teaching. The ancient and traditional grammar had become the basic references in developing and managing the language teaching before the structural linguistics and TGG came. It is found today that the theoretical basis of language teaching methodology cannot be separated from the current issues of linguistic theories.

Stern (1994:119—121) argues that it is hardly imaginable that a language could be taught without some underlying conceptions of the general nature of language. It would be unreasonable for language teaching theory to disregard what linguistics has to say about language. In the course of the review of recent trends we observed that language teaching theory has been strongly affected and, at a certain stage, even thrown into confusion by recent development in linguistics. That is why the role of linguistics needs clarifying. The linguists take an objective view of language and all linguistic phenomena. Educators frequently recognize the 'good' or 'bad', the 'right' or 'wrong' in language and point out the value of a creative approach to the use of language.

Furthermore, Stern (1994) states that linguistics is a theoretical science. Linguistics formulates explanations which are designed to account for the phenomena of language. For many linguistic scholars the central purpose of linguistics is the development of theories on aspects of language and a general theory of language. Here is an obvious difference between a language teacher and a linguist. The language educator is concerned with the teaching of particular language or some aspects of language. His main concern usually is not language in general, although teaching a particular language offers good opportunities for making observations on the nature of language. It has in fact been said that one of the best ways of understanding the nature of language is to try to teach (or to learn) a language. It is the fact as well that the changes in linguistic theory had important implications for the view of language in language teaching.

During the period 1940—1960 the idea that language teaching theory implies a theory of language and that linguistics had a direct contribution to make to language pedagogy became more and more accepted. The main impact of linguistic theory can be seen in (1) language description as an essential basis of the language curriculum and corpus selection; (2) emphasis on linguistic forms reflected in the divisions into phonological and grammatical exercises and gradation of linguistic items; (3) contrastive analysis as a principle of curriculum development; (4) primacy of speech; (5) linguistic patterns as units of instruction and of testing (Stern, 1994).

A language teaching theory expresses or implies answers to questions about the nature of language. These questions relate language teaching theory directly to theoretical linguistics. As we reminded ourselves, the task of language teaching or learning prompts the teacher almost invariably, and the learner not infrequently, to think about the nature of language. The view of language in a language teaching theory has bearing on what we teach when we say 'we influence a learner's approach to the language. The development and controversies of linguistic theories can help us to identify views of language implicit in language teaching theories. The continuing developments in linguistic theory and in language pedagogy as well as the constant changes in the languages themselves, demand the permanent study of language and languages and a review of the relations between linguistic theory and language pedagogy (see Stern, 1994).



EXERCISES

Exercise 1

Answer the following questions or give response to the following cases clearly and briefly! Your own examples or illustration will be valuable to make your answers better.

- 1) What is linguistics?
- 2) What is the major weakness of traditional grammar?
- 3) What are the characteristics of traditional grammar?
- 4) What do you mean by the ancient grammar?
- 5) What are the main ways of analysis in structural linguistics?
- 6) What is the main criticism of structural linguistics?
- 7) What does the TGG attempt to describe?
- 8) Why do you think that TGG is in direct opposition to structuralism?
- 9) How is the development of linguistics in twentieth century?
- 10) Does linguistics have effects to language teaching?

Exercise 2

Please answer the following questions or give response to the following cases clearly and briefly! It is expected that you support your answers with your own examples or illustration.

- 1) Is it possible to teach a language without any attention to what linguistics says about language? Give your reasons or illustration!
- 2) The development and trends in linguistic theories gives effects to the development of language teaching. How can you prove it?
- 3) What are the contributions of linguistics to language teaching?
- 4) What is the main task of linguists?
- 5) What is the main task of language teachers (educators)?
- 6) In one side, linguistics is a theoretical science. What does this statement mean?
- 7) Good language teachers know about language and are able to bring it into the language teaching activities. Arrange your reasons and examples to prove the statement.
- 8) Related to linguistics and language teaching, what should the (candidate) language teachers do in order to be professional teachers?

KEY TO EXERCISES**Exercise 1**

- 1) the scientific study of (human) language.
- 2) It is inconsistent in the criteria used for defining the part of speech. It is also highly normative and prescriptive.
- 3) It concentrates (focuses) on definitions, especially on the definitions of parts of speech. It is normative and prescriptive, as well.
- 4) It refers to the grammar (linguistics) at the period before the traditional period. For instances: Sanskrit grammar, Greek grammar.
- 5) isolating, classifying, analyzing, and segmenting the observed language data

- 6) It made no attempt to deal with how humans understand and interpret the meaning of sentence (language).
- 7) it attempts to describe what a person knows about his/her language and it also claims that all languages are grounded in universal facts and principles.
- 8) Because TGG attempts to describe what a person knows about his/her language, those which are not seriously tried to analyze in structural linguistics.
- 9) Linguistics in the twentieth century tends to develop into macro and micro classification based on the scope of the study. The studies conducted by the end of the century become more specific and come to detailed explanation.
- 10) Yes it does. The change and the development of linguistic science, directly or indirectly, influence the development and innovation of approaches, methods, and techniques of language teaching.

Exercise 2

- 1) No it is not. A language teacher may face difficulties in classroom teaching-learning process because some aspects of the language teaching need linguistic statements and conclusions about language itself. Teaching abstract things, concepts, or formulation about certain rules need linguistic conclusion about the system and patterns of language.
- 2) Ancient and traditional linguistics (grammar) became theoretical foundation of traditional methods of language teaching. Structural linguistics was the base of the appearance and the development of audio-lingual method and oral-aural approach. TGG and pragmatics motivated the coming of communicative language teaching, contextual teaching, and some current methods in communicative teaching.
- 3) Linguistics provides the language teaching with theoretical foundation and points of view about language in general.
- 4) studying, searching, or formulating system or pattern of language specifically or generally

- 5) To transfer the concepts or phenomena of language and to encourage and to train the students in order to have language skills.
- 6) Linguistics gives us the theoretical foundation and concepts about language.
- 7) Good language teachers may have knowledge about language, unless they will get difficulties in the classroom teaching learning process. In addition, they should be able to choose and to apply the theories into practical uses.
- 8) They have to have linguistic knowledge or theories about language and know various practical activities in order to have successful teaching learning processes.



SUMMARY

Many aspects related to language are challenging as well as interesting. As a science, linguistics appears as a social and "humanity" science. Linguistics is built and framed by means of theories and basic concepts that could stand among the other disciplines and sciences. In order to know the "nature of language" we are to come to linguistics, the scientific study of language. Linguistics actually has begun since the ancient time. Linguistics has been developing since long time ago up to now. This condition may bring the conclusion that linguistics is really a science among other sciences.

A new situation was created for language pedagogy by the development of a science of language in the course of the present century. Language teaching theory cannot disregard a discipline which shares with it its central concern for language. Linguistics is an active and growing field of study, far from approaching a state of finality. Theories battle with each other. New concepts, new models and changes in emphasis come and go. It is not surprising to find that this prolonged state of unrest and agitation creates problems for a language pedagogy that attempts to take linguistics into account. In certain respects the perspectives of linguistics and pedagogy are different. A major preoccupation of linguistics is the development of theory of language. Another is the creation of conceptual tools for the description of natural languages in general. Language pedagogy has a practical objective, effective language learning; and it is committed to the teaching of particular languages.



FORMATIVE TEST 2

Please answer the following questions clearly and briefly. Your own examples, reasons, and illustration should be given wherever necessary to make your answers better.

- 1) What is the difference between linguistics and language teaching?
- 2) How can you differentiate between traditional grammar (linguistics) and structural linguistics?
- 3) Do you think that all basic principles and terms used in traditional linguistics are useless and meaningless in structural linguistics or in TGG? Give your reasons and examples!
- 4) What are the contributions of linguistics to language teaching?
- 5) Linguistics is not the same with language teaching. However, they have particular relationships each other. What are their relationships?
- 6) Why do you think that language teachers (educators) frequently recognize the 'good' or 'bad', the 'right' or 'wrong' in language?
- 7) What are the characteristics of "linguistics" as a science?
- 8) Why do people want to know and study "the nature of language"?

Check your answers with the Key which is provided at the end of this module, and score your right answers. Then use the formula below to know your achievement level of the lesson in this module.

Formula:

$$\text{Level of achievement} = \frac{\text{Scores of the right answers}}{\text{Total score}} \times 100\%$$

Meanings of level of achievement:

90%	- 100%	=	very good
80%	- 89%	=	good
70%	- 79%	=	average
< 70%		=	bad

If your level of achievement reaches 80% or more, you can on to the next Unit. **Good!** But if your level of mastery is less than 80%, you have to study again this unit, especially parts which you haven't mastered.

UNIT 3

Fundamentals and Concepts of Linguistics Classification

So far you have studied the nature of language and the science of language. Hopefully, the information and materials presented in the unit 1 and unit 2 could give you good basic foundation of the introduction to linguistics. In unit 3, you are coming to learn about linguistics classification. The topics discussed in this unit are micro-linguistics and macro-linguistics. As a science, linguistics have been becoming more and more challenging for most social experts, especially for those who are interested in language. The study of language not only tends to be interesting but also goes to wide development. During the early periods, language was studied in a relatively narrow scope; say language was studied based on the language itself. However, nowadays the study of language has been developing to be much wider. Consequently, linguistics today is not only the study of language in the scope of language itself, but it is seen from other sides of language environments as well. In accordance with this, linguistics has been one big discipline of human's science.

This unit tries to give you a brief introduction to linguistics classification based on two big classifications; micro and macro linguistics. This brief discussion will provide you with information about the division of linguistics and some branches (fields) of linguistics. By knowing the linguistics classification and fields in linguistic studies, you will be able to see the linguistic phenomena deeply and systematically. Then it will be easier for you to study and categorize the linguistic phenomena in the right path. This knowledge will also lead you to study language further or to apply them in language teaching in practical ways.

As a science, linguistics have been becoming more and more challenging for most social experts, especially linguists and others who are interested in language. The study of language not only tends to be interesting but also goes to wide development. During the early periods, language was studied in a

relative narrow scope, but nowadays it has been developing to much wider. Consequently, linguistics today is not only the study of language in the scope of language itself, but it is seen from other sides of language environments, as well. In accordance with this, linguistics has been one big discipline of human's science.

The development of linguistics has a tendency to be "linguistics plus"; linguistics which is more than internal segments of language itself. This unit tries to give a brief introduction to linguistics classification based on two big classification; micro and macro linguistics. This brief discussion will provide you with information about the division of linguistics and fields of linguistics. By knowing the linguistics classification and some fields of linguistics, you will be able to see the linguistic phenomena deeply and specifically. Then it will be easier for you to study and categorize the linguistic phenomena in the right path. This knowledge will also lead you to study language further or to apply them in language teaching.

1. Microlinguistics

In general and based on the scope of the study, linguistics could be classified into two big classifications, namely microlinguistics and macrolinguistics. Meanwhile, based on the purpose of linguistics itself, it may be divided into two divisions, as well. They are theoretical linguistics and applied linguistics. Theoretical linguistics is a type of linguistic study to find and to formulate rules operating in language. On the other hand, applied linguistics is the linguistic study or activity in language field which aims to overcome practical problems. Theoretical linguistics could be either general or specific. General theoretical linguistics (frequently called general linguistics) tries to study and understand general characteristics of various languages. While specific theoretical linguistics attempts to study specific characteristics of certain language (see Kridalaksana in Kentjono, 1990:11).

Then, what is microlinguistics? The term microlinguistics refers to the branches or fields of linguistics which studies language based only on the language itself; the study of language from internal side of the language. The fields/branches of linguistics which could be categorized as microlinguistics are theoretical linguistics, descriptive linguistics, and historical-comparative

linguistics. In this category, theoretical linguistics refers to the field of linguistics focusing on general theories and methods in linguistic studies. In this sense, descriptive linguistics (it is also called synchronic linguistics) is the branch of linguistics which studies the system of languages in certain time; without paying attention to its development from one period to other periods. The following fields of linguistics are the descriptive linguistics.

- a. phonology (the study of sounds system of a particular language);
- b. morphology (the study of words structure and its parts);
- c. syntax (the study of sentence, including phrase and clause);
- d. semantics (the study of linguistic meaning); and
- e. lexicology (the study of vocabulary of lexicon).

Historical-comparative linguistics (it is also called diachronic linguistics) studies the development and comparison of certain language(s) in relation to time (or periods). The historical-comparative linguistics could be specified into:

- a. historical-comparative phonology;
- b. historical-comparative morphology;
- c. historical-comparative syntax;
- d. historical-comparative semantics; and
- e. historical-comparative lexicology (see Kridalaksana in Kentjono, 1990:11—13).

2. Macrolinguistics

According to Lyons as quoted by Kridalaksana in Kentjono (1990:11), macrolinguistics is the classification of linguistics that studies language in relation to factors outside of the language. It includes the interdisciplinary studies of language and applied linguistics. Interdisciplinary studies of language is the study of language in which its materials and approaches use other disciplines of science. There many fields or branches of linguistics which belong to macrolinguistics. They are: phonetics, stylistics, philosophy of language, psycholinguistics, sociolinguistics, ethnolinguistics, philology, semiotics, ephygraphy, language teaching, translation, lexicography, applied phonetics, applied sociolinguistics, international language establishment,

specific language establishment, medical linguistics, graphology, and mechanolinguistics.

Let's see in brief explanation of those linguistic fields mentioned above. Phonetics is the study of linguistic sounds for all languages. It is the interdisciplinary study between linguistics and physic, anatomy, and psychology. Stylistics is a science to study language in the form of literature. It is the combination between linguistics and literature. Then, philosophy of language is a science that studies the nature and position of language and basic concepts and theories of linguistics. Next, let's see psycholinguistics. Psycholinguistics is the study to see the relationship between language and human behavior. Meanwhile, sociolinguistics tries to study the relation between language and society. In other side, ethnolinguistics studies the relationship between language and countryside society or society with no written system. Philology is the study of language, culture, and history of a country as they are written or printed in written materials. And then, semiotics is a science which studies figures, symbols, or signs. Ephygraphy, in this case, is the study about ancient inscription.

In the part of applied linguistics, macrolinguistics may have language teaching, translation, lexicography, applied phonetics, applied sociolinguistics. International language establishment includes the attempt to create international mutual intelligibility of language or communication by means of created language, such as Esperanto, Novial, Basic English, etc. Specific language establishment includes the establishment of certain terms and language style for particular field, for instance terms for military, flight, sailing, etc.. Medical linguistics refers to the study of speech defects (or language errors). It is also called language pathology. Graphology is the science about writing system, while mechanolinguistics includes the use of linguistics in computer science and the attempt to create the translating machine, and computer for linguistic studies. This field is also called computerized linguistics (see Kridalaksana in Kentjono, 1990:11—15).

Beside the micro and macro linguistics, there is also "the history of linguistics". The history of linguistics is a branch of linguistics that studies the development of linguistics per period and studies the effect of other sciences and social regulations (such as belief, culture, education, etc.) to

linguistics all time (Kridalaksana in Kentjono, 1990). The history of linguistics may give us information how the science about language have begun and developed until present time and the prediction for the future. However, the prediction of linguistics in the future time is not the main thing which is discussed in this field although the prediction is possibly argued.

It is belied that you have got information about the linguistics classification under the subtopics microlinguistics and macrolinguistics. These two terms refers to the classification of linguistics based on the scope of study. Other bases of classification, such as based on purpose, time, and type have been included this unit as well. Now we are coming to exercise. Do exercise well!

All right! Please be serious but relax! Before you continue to part II which talks about macrolinguistics, why don't you do the following exercise first! Try to understand and train yourself in a good way!.



EXERCISES

Exercise 1

Please answer the following questions clearly and briefly! In order to make your answers better, please give your own reasons, examples, or illustration wherever necessary!

- 1) Why do you think that linguistics becomes more challenging?
- 2) What do you mean by : (a) theoretical linguistics?; (b) applied linguistics?; (c) microlinguistics?
- 3) What is the main point that indicates one linguistic study is the microlinguistics or not?
- 4) What are the fields or branches of linguistics which could be categorized as the microlinguistics?
- 5) What is the difference between synchronic and diachronic linguistics?
- 6) What is applied linguistics?

- 7) What is the difference between general theoretical linguistics and specific theoretical linguistics?
- 8) What is the main aim of historical-comparative linguistics?

Exercise 2

Answer the following questions clearly and briefly! You are expected to give your own examples or reasons wherever necessary to make your answers better.

- 1) What is the difference between microlinguistics and macrolinguistics?
- 2) What are the fields of linguistic studies which belong to macrolinguistics?
- 3) What is the difference between synchronic and diachronic linguistics?
- 4) What do linguists study in phonetics?
- 5) Is it the same between philology and epygraphy?
- 6) Language teaching belongs to applied linguistics and macrolinguistics. Why do you think so?
- 7) What do you mean by international language establishment?
- 8) What is specific language establishment?
- 9) What is pathology?
- 10) What are the matters that we study in history of linguistics?

KEY TO EXERCISES

Exercise 1

- 1) The phenomena of language could be seen from the side of language itself and from its relationship with other aspects of human's life. The more the humans do and know about the world, the more they have to use and think with language. That is why linguistics becomes more challenging.
- 2) (a) a type of linguistic study to find and to formulate rules operating in language; (b) the linguistic study or activity in language field which aims to overcome practical problems; (c) the fields of linguistics which studies

language based only on the language itself; the study of language from internal side of the language

- 3) If the language study attempts to study a particular language from the grammatical system of the language.
- 4) theoretical linguistics, descriptive linguistics, and historical-comparative linguistics
- 5) Synchronic linguistics is the field of linguistics which studies the system of languages in certain time; without paying attention to its development from one period to other periods. In other side, diachronic linguistics studies the development and comparison of certain language(s) in relation to time (periods).
- 6) The linguistic study or activity in language field which aims at problem solving of practical phenomena.
- 7) General theoretical linguistics is the linguistic studies which are aimed to study and to understand general characteristic of various languages. In other side, specific theoretical linguistics attempt to study specific characteristics of certain language.
- 8) To study the development and comparison of certain language(s) in relation with their make.

Exercise 2

- 1) Microlinguistics is the study of language based only of the language itself; the study of language from internal side of the language. In other side, macrolinguistics is the study of language in relation to factors outside of the language; it is interdisciplinary study of language.
- 2) phonetics, stylistics, philosophy of language, psycholinguistics, sociolinguistics, ethnolinguistics, philology, semiotics, ephygraphy, language teaching, translation, lexicography, applied phonetics, applied sociolinguistics, international language establishment, specific language established.
- 3) Synchronic linguistics is the study of language system in particular one time, while the diachronic linguistics studies the development from one period to other periods.

- 4) to study the linguistic sounds from all human languages
- 5) No, it is not. In one side, philology is the study language, culture, and history of the country as they are written materials. In other side, ephygraphy is the study about ancient inscription.
- 6) Because language teaching is a kind of language study or activity in language field which aims to overcome practical problems. Moreover, language teaching belongs to interdisciplinary study, in which its materials and approaches use other discipline as a science.
- 7) they attempt to create international mutual intelligibility of language or communication by means of created language, such as Esperanto, Noval, Novial, etc.
- 8) the establishment of certain time and language style for particular fields such as military, flight, sailing , et.
- 9) The study of speech defect (or language errors). It is called medical linguistics, as well.
- 10) The history of linguistics studies the development of linguistics per period and studies the affect of other sciences and social regulation, such as belief, culture, education , etc.



SUMMARY

As the summary of this unit, let's see carefully the diagram of linguistics classification introduced by Kridalaksana (see Kentjono, 1990:12). The diagram shows the classification of linguistics as what we have studied above.

Diagram of linguistics classification:

Microlinguistics:

Theoretical linguistics:

- General: 1. Linguistic theory
 2. Descriptive linguistics
 3. Historical-comparative linguistics

- Specific: 1. Descriptive linguistics
 2. Historical-comparative ling.

- Interdisciplinary linguistics:
 - phonetics
 -stylistics
 -language philosophy
 - psycholinguistics
 - sociolinguistics
 -ethnolinguistics
 - philology
 - semiotics
 - ephigraphy

- Applied linguistics:
 - language teaching
 - translation
 - lexicography
 - applied phonetics
 -applied sociolinguistics
 - international lang.establishment
 -specfc.lang.establishment
 - medical linguistics
 -graphology
 - mechanolinguistics

Linguistics History

Macrolinguistics

Note: ===== separates microlinguistics from macrolinguistics
 _____ separates applied linguistics from non-applied linguistics



FORMATIVE TEST 3

Answer the following questions or give response to the following cases clearly and briefly! Don't forget to support your answers with your own examples, reasons, or illustration wherever necessary!

- 1) Why do you think that linguistics has a good development as a social science among other sciences?
- 2) Why do the linguists need to classify the linguistics?
- 3) How can the linguists classify the linguistics?
- 4) What is the main difference between theoretical linguistics and applied linguistics?
- 5) All fields of applied linguistics are categorized into macrolinguistics. Why is it so?
- 6) What are the advantages of studying phonetics?
- 7) Linguistics is so broad. Is there anybody that could master all the branches of linguistics? Give your own reasons!
- 8) Which of the linguistics classification that might be regarded as the core linguistics? Why do you think like that?
- 9) Do we need translation in language teaching? Add your answer with examples and reasons!
- 10) What are the contributions of linguistics for you and for human beings?

Check your answers with the Key which is provided at the end of this module, and score your right answers. Then use the formula below to know your achievement level of the lesson in this module.

Formula:

$$\text{Level of achievement} = \frac{\text{Scores of the right answers}}{\text{Total score}} \times 100\%$$

Meanings of level of achievement:

90% - 100% = very good

80% - 89% = good

70% - 79% = average

< 70% = bad

If your level of achievement reaches 80% or more, you can on to the next module. **Good!** But if your level of mastery is less than 80%, you have to study again this unit, especially parts which you haven't mastered.

Key to Formative Test

Formative Test 1

- 1) Because they are going to “bring” the language phenomena into the classroom teaching-learning process. So that, they have to have theoretical concepts about language and then they should be in good choice to encourage the learners to have good language skills.
- 2) We can see in reality that the language used in particular society and other program KT. In other side, language is “inside” ourselves.
- 3) (a) encoding the information into a symbolic system; (b) selecting a mode of communication; (c) delivering the symbols through a medium; (d) perceptual processing of the symbols by the receiver; and (e) decoding of the symbols to obtain the information
- 4) Human language has certain characteristics; systematic, productive or creative, recursion, arbitrary, social and psychological phenomena of language. These characteristics are not possessed by animals in the middle age.
- 5) It is only human race that has such a kind ideal language. No animals are able to speak like human do.
- 6) Informal or just natural agreements between group of people. There is no necessary or logical connection between the sounds and to which it refers to.
- 7) Yes, it is. We have linguistic competence in our own mother tongue.
- 8) There may be ways of communication used by people, for instance gesture, posture, symbols, etc.. Language is just one way of communication.
- 9) Yes, it does. No people without language and no language without speech (language).
- 10) Our life could be more static, complicated, problematic, confusing, etc. In addition, no development or no creativity without language.

Formative Test 2

- 1) Linguistics is the study about human language, while language teaching refers to how to encourage the students with language aspects in order to

have good language skills.

- 2) Traditional grammar focused on definition of linguistic aspects and parts of speech. Structural linguistics typically involved isolating, classifying, analyzing, and segmenting the observed language data.
- 3) No, I don't. some of basic-linguistic terms and concepts used in traditional and structural linguistics are still used in TGG and in current theories of linguistics.
- 4) Linguistics gives theoretical foundation and reference to the language teaching.
- 5) both linguistics and language teaching concern in studying language; (b) linguistics and language teaching give contributions to human's life; (c) theories of language formulated by linguists, then used practically in language teaching.
- 6) Because they need to introduce the "ideal" language, prescriptive, and normative language.
- 7) Linguistics: (a) has theoretical frame work; (b) follows scientific methods; (c) collects the data objectively; (d) has contribution to human's life.
- 8) Because language is both "inside" and "outside" ourselves. Language has a highly important role in communication and in human's life.

Formative Test 3

- 1) Because linguistics has been using the scientific methods as the general framework. And the development of linguistics becomes bigger and bigger in current time.
- 2) In order to be more specific, systematic, and scientific in conducting the research.
- 3) Based on: the scope of the study, types of the study, and the relationship with other sciences of the study.
- 4) Theoretical linguistics focuses more on the formulation of the theories about language, while applied linguistics focuses more on problem solving matters.
- 5) Because they are in interdisciplinary type of study.
- 6) To know the nature of human's speech sounds, to know the

characteristics of human speech sounds, to know the place and manner of articulation.

- 7) No, there is not. It is impossible for someone to know all aspects and types of research in linguistic studies.
- 8) Microlinguistics, because those which belong to microlinguistics study the language in specific scope.
- 9) Yes, we do. We need translation in linguistics and in language teaching. If the teacher avoids English, it could be problematic and monotonous.
- 10) Linguists give us data, information, facts, etc., about language.

Bibliography

- Crane, L. Ben *et. al.* (1981). *An Introduction to Linguistics*. USA: Harcourt Brace Jovanovich, Inc.
- Currie, William B. (1975). *New Directions in Teaching English Language*. London: Longman Group Limited.
- Fromkin, Victoria, *et. al.* (1990). *An Introduction to Language*. Sydney: Holt, Rinehart and Winston.
- Kentjono, Joko. (1990). *Dasar-Dasar Linguistik Umum*. Jakarta: Fakultas Sastra Universitas Indonesia.
- Lim, Kiat Boey. (1975). *An Introduction to Linguistics for the Language Teacher*. Singapore: Singapore University Press.
- O'Grady, William *et. al.* (1993). *Contemporary Linguistics: An Introduction*. New York: St. Martin Press.
- Stern, H.H. (1994). *Fundamental Concepts of Language Teaching*. Oxford: Oxford University Press.
- Wardhaugh, Ronald. (1972). *Introduction to Linguistics*. New York: McGraw Hill Book.

Trends in Linguistics and Their Implication in Language Teaching

Refnaldi, M.Litt.



INTRODUCTION

Congratulation! You have passed module 1. Welcome to module 2. The topic of this module is trends in linguistics and their implication in language teaching. The materials which are to be discussed in this module are traditional grammar, structural approach, transformational-generative grammar, and functional-notional approach. After learning this module, you are expected to be able to:

1. understand the trends in linguistics and their implication in language teaching
2. differentiate among the three prominent approaches; structural approach, transformational approach, and functional approach
3. understand teaching materials which are developed from structural approach, transformational approach, and functional approach.

To achieve these objectives systematically, the materials of this module are presented respectively as follow:

1. Unit 1 : Schools of Linguistics in Language Teaching
2. Unit 2 : Teaching Materials Based on Three Different Approaches

The following activities are really suggested to do in order to learn this module successfully.

1. Read carefully the explanation of each topic.
2. Don't forget to give serious attention to examples given.
3. Do the exercises as well as possible.
4. Look up the meaning of difficult words in your dictionary.
5. Evaluate yourself by checking your answers or your responses with the key answers provided.

Good luck!

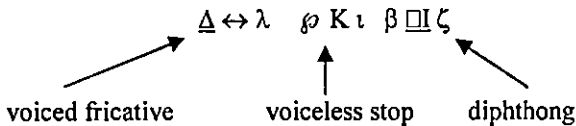
UNIT 1

Schools of Linguistics in Language Teaching

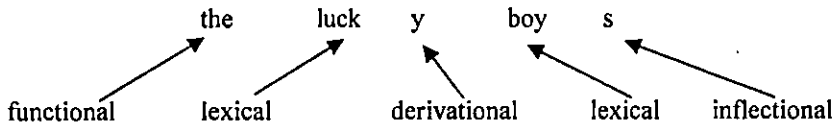
A grammatical model of a language is an attempt to represent systematically and overtly what the native speaker of that language intuitively knows. A model is thus a system of rules that relates patterned sounds to predictable meanings and which reflects a speaker's ability to 'make infinite use of finite means',

As yet, there is no model for English which totally satisfies all requirements for an 'adequate grammar of the language, although many models have been advanced and they all have their uses. We shall look briefly at the different models advanced in this century in Britain and in the United States and we shall indicate their respective strengths and weaknesses.

We need to consider two levels of description used in the study of language. We have described linguistic expressions as sequences of sounds which can be represented phonetically. For example:



We can take the same linguistic expression and describe it as a sequence of morphemes. For example:



With these descriptions, we could characterize all the words of a language in terms of their phonetic and morphological make-up.

However, we have not yet accounted for the fact that these words can only be combined in a limited number of patterns. We recognize that the phrase *the lucky boys* is a well-formed piece of English, but that the following two 'phrases' are not at all well-formed:

*boys the lucky *lucky boys the

(Beside each of these ill-formed structures there is an asterisk, which is a conventional way of indicating that a structure is ill-formed, or ungrammatical.)

So, we need a way of describing the structure of phrases and sentences which will account for all of the grammatical sequences and rule out all the ungrammatical sequences. Providing such an account involves us in the study of grammar. We should note that this term is frequently used to cover a number of different phenomena.

Types of grammar

Each adult speaker of a language clearly has some type of 'mental grammar', that is, a form of internal linguistic knowledge which operates in the production and recognition of appropriately structured expressions in that language. This 'grammar' is subconscious and is not the result of any teaching. A second, and quite different, concept of 'grammar' involves what might be considered 'linguistic etiquette', that is, the identification of the 'proper' or 'best' structures to be used in a language. A third view of 'grammar' involves the study and analysis of the structures found in a language, usually with the aim of establishing a description of the grammar of English, for example, as distinct from the grammar of Russian or French or any other language. There are, in fact, other ways in which the term 'grammar' may be used. However, given these three concepts, we can say that, in general, the first may be of most interest to a psychologist, since it deals with what goes on in people's minds, the second may be of interest to a sociologist, since it has to do with people's social attitudes and values, while the third is what occupies many linguists, since the concern is with the nature of language, often independently of the users of the language. The study of grammar, in

this narrow sense of the study of the structure of expressions in a language, has a very long tradition.

You may already be familiar with many of the terms used in a grammatical description, particularly the terms for the: parts of speech, as illustrated in this sentence:

The lucky boys saw the clowns at
 article adjective noun verb article noun preposition

The circus and they cheered loudly
 article noun conjunction pronoun verb adverb

1. Traditional Grammar

Until the 1920s, most models of English were based on Latin, the grammar of which was itself based on Greek. Study of the nature and structure of language goes back at least as far as Plato and Aristotle for western European languages. Greek was comprehensively described by Dionysius Thrax towards the end of the second century BC. All Greek words were classified in terms of case, gender, number, tense, voice and mood. Three centuries later, Apollonius Dyscolus improved on the Thrax model by including rules for combining words into acceptable sentences.

Latin grammarians adopted the Greek model for their own language and, since Greek and Latin were structurally very similar, the belief grew that grammatical categories which were valid for Greek and Latin were valid for all languages. Vernacular grammars in Europe appeared as early as the seventh century (the first was a grammar of Irish) but since Latin was the language of religion and scholarship, English and other European languages were described according to Latin categories. Where they failed to match the Latinate system they were regarded as 'debased', or 'deficient' and, if it were possible, they were modified to resemble the Latin model. This model was particularly unsuited to modern English, which is virtually an uninflected language. Let us illustrate what we mean. In Latin, a noun like 'dominus' meaning 'lord' could be declined as follows:

	<i>Singular</i>	<i>plural</i>
<i>nominative</i>	Dominus	domini
<i>vocative</i>	Domine	domini
<i>accusative</i>	dominum	dominos
<i>genitive</i>	Domini	dominorum
<i>dative</i>	Domino	dominis
<i>ablative</i>	Domino	dominis

Although Latin described six cases in the noun in both the singular and the plural, there are only eight distinct forms of 'dominus', the dative and ablative being the same and the genitive singular being identical in form to the nominative and vocative plural. Grammarians who followed the Latin model for English often declined English nouns as follows:

	<i>singular</i>	<i>plural</i>
<i>nominative</i>	Lord	lords
<i>vocative</i>	O lord	O lords
<i>accusative</i>	lord	lords
<i>genitive</i>	lord's	lords'
<i>dative</i>	to the lord	to the lords
<i>ablative</i>	by/with/from the lord	by/with/from the lords

Notice, however, that there are only two distinct *forms* of 'lord', that is 'lord' and 'lords'. All the other distinctions are carried by prepositions, by an exclamatory 'O' or by the positioning of an apostrophe. If we pronounce the genitive singular, we will notice that it is identical in sound to the nominative plural, a feature that is shared by many Indo-European languages. The English verb system was even more distinct from Latin. If we consider only the simple present of 'portare' the equivalent of 'carry', we find that it is marked for person and number:

<i>1st sing.</i>	porto	I carry
<i>2nd sing.</i>	portas	you (<i>sing.</i>) carry
<i>3rd sing.</i>	portat	he/she/it carries
<i>1st pl.</i>	portamus	we carry
<i>2nd pl.</i>	portatis	you (<i>pl.</i>) carry
<i>3rd pl.</i>	portant	they carry

The equivalent English system has only two distinct forms, namely 'carry' and 'carries' but marks the gender of the subject (as being masculine, feminine or neuter) in the third person singular.

In addition to the terms used for the parts of speech, traditional grammatical analysis also uses a number of other categories, including 'number', 'person', 'tense', 'voice' and 'gender'. These categories can be discussed in isolation, but their role in describing language structure becomes clearer when we consider them in terms of concord or agreement. For example, we say that the verb *likes* 'agrees with' the noun *boy* in the sentence *The boy likes his dog*. This agreement is partially based on the category of number, that is, whether the noun is singular or plural. It is also based on the category of person, which covers the distinctions of first person (involving the speaker), second person (involving the hearer) and third person (involving any others). The different forms of English pronouns are usually described in terms of person and number, in that we have first person singular (I), second person singular (*you*), third person singular (*he, she, it*) and so on. So, in the sentence *The boy likes his dog*, we have a noun *boy* which is third person singular and the verb *likes* 'agrees with' the noun,

In addition, the form of the verb must also be described in terms of another category, that of tense. In this case, the verb is in the present tense, which results in a different form from the past tense (e.g. *liked*). And, the sentence is in the active voice, rather than the passive voice, which would have produced the form *The boy is liked by his dog*.

Our final category is that of gender, which is used to describe the agreement between *boy* and *his* in our example sentence. In English, we have to describe this relationship in terms of natural gender, mainly derived from a biological distinction between male and female. The 'agreement' between *boy* and *his* is based on a distinction English makes between reference to male entities (*he, his*), female entities (*she, her*), and sexless entities, or animals, when the sex of the animal is irrelevant (*it, its*).

This type of biological distinction is quite different from the more common distinction found in languages which use grammatical gender. In this latter sense, nouns are classified according to their gender class and, typically, articles and adjectives take different forms to 'agree with' the

gender of the noun. Spanish, for example, has two grammatical genders, masculine and feminine, illustrated by the expressions *el sol* ('the sun') and *la luna* ('the moon') respectively. German uses three genders, masculine *der Mond* ('the moon'), feminine *die Sonne* ('the sun') and neuter *das Feuer* ('the fire'). Note the different forms of the articles in both the Spanish and German examples, corresponding to differences in the gender class of the nouns. Also note that the gender distinction is not based on a distinction in sex. A young girl is biologically 'female', but the German noun *das Mädchen* is grammatically 'neuter'. The French word *le livre* ('the book') is grammatically masculine, but we would not consider books to be biologically male. So, the grammatical category of gender is very usefully applied in describing a number of languages (including Latin), but may not be particularly appropriate for English.

It is one thing to adopt the grammatical labels (e.g. 'noun', 'verb') to categorize words in English sentences: it is quite another thing to go on to claim that the structure of English sentences should be like the structure of sentences in Latin. Yet this was an approach taken by some grammarians, mainly in eighteenth century England, who set out rules for the correct or 'proper' use of English. This view of grammar as a set of rules for the 'proper' use of a language is still to be found today and may be best characterized as the prescriptive approach. Some familiar examples of prescriptive rules for English sentences are as follows:

- (1) You must not split an infinitive.
- (2) You must not end a sentence with a preposition.

There are many such rules which generations of English teachers have attempted to instill in their pupils via corrections such as the following:

shall

I ~~will~~ visit my uncle at Ester.

I

John is taller than ~~me~~.

In fact, it may be a valuable part of one's education to be made aware of this 'linguistic etiquette', or the 'proper' use of the language. If it is a social expectation that someone who writes well should obey these prescriptive

rules, then social judgments such as "poorly educated" may be made about someone who does not follow these rules.

However, it is worth considering the probable origins of these rules and asking whether they are appropriately applied to the English language. Let us take one example: "You must not split an infinitive."

The infinitive in English has the form *to* + the verb, e.g. *to go*, and can be used with an adverb such as *boldly*. So, at the beginning of each televised 'Star Trek' episode, Captain Kirk uses the expression *to boldly go* . . . This is an example of a split infinitive. Captain Kirk's English teacher should have taught him to say *to go boldly*. If Captain Kirk had been a Roman astronaut, speaking Latin, he would have used the expressions *ire* ('to go') and *audacter* ('boldly'). Now, in saying *Ire audacter* . . . in Latin, Captain Kirkus would not even have the opportunity to split his infinitive (*ire*), because Latin infinitives are single words and just do not split.

So, it would be very appropriate in Latin grammar to say that you cannot split an infinitive. But is it appropriate to carry this idea over into English, where the infinitive does not consist of a single word, but of two words, *to* and *go*? If it is a typical feature of the use of English that speakers and writers do produce forms such as *to boldly go* or *to solemnly swear*, then we may wish to say that there are structures in English which differ from those found in Latin, rather than to say that the English forms are "bad" because they are breaking a supposed rule of Latin grammar.

Much of the prescriptivism of school grammars derives from Latin models. Stylists have argued that English sentences should not end with a preposition because prepositions could never occur at the end of a sentence in Latin. Such a claim overlooks the fact that, in Latin, a preposition always governed a noun or pronoun and therefore could not occur without a following nominal. English, however, has always permitted prepositions to occur in sentence-final position, especially in colloquial speech: Similarly, generations of students of English have been taught that such sentences as:

It's me.

She's taller than me.

are wrong: Latin had the same case before and after the verb 'BE' and so should English. This view, which tries to push English into a Latin mould, ignores the parallelism of such sets as:

He arrived before I did. He's taller than I am.

He arrived before me. He's taller than me.

It also ignores the fact that, in English, 'me' is not only accusative. It is also the emphatic form of the pronoun:

Who's there?

Me.

Latin-oriented grammars failed because they did not recognize that each language is unique in its organization and patterns. Their strength lay in the fact that they recognized that languages were complex and flexible and that, at some level, languages were fundamentally similar.

2. Structuralism

It may be that using a well-established grammatical description of Latin is a useful guide for studying some languages (e.g. Italian or Spanish), is less useful for others (e.g. English), and may be absolutely misleading if you want to describe some non-European languages. This last point became clear to those linguists who wanted to describe the structure of North American Indian languages at the end of the nineteenth century. The categories and rules which were appropriate for Latin grammar just did not seem to fit the Indian languages encountered. As a consequence, throughout the present century, a rather different approach has been taken. The analyst collects samples of the language he or she is interested in and attempts to describe the regular structures of the language as it is used, not according to some view of how it should be used. This is called the descriptive approach and it is the basis of most modern attempts to characterize the structure of different languages.

This approach to languages developed in the US and illustrates the point that the development of any discipline is influenced by the cultural and political setting in which it evolves. In the early part of this century, grammars of languages produced in the US often differed considerably from those produced in Britain. The anthropological approach with its emphasis on

the spoken medium was favored in the US because of the existence of numerous unwritten and dying Amerindian languages. Linguists who worked on such languages carried over the skills and insights they acquired into their examination of English. In Britain, on the other hand, linguists spent a lot of time on Indic languages, many of which had long traditions of literacy and scholarship. British linguists, not unnaturally, paid more attention to the written medium and to orthographic systems.

Structuralism had one of its clearest statements in Leonard Bloomfield's *Language*, published in 1933. This model of grammar is still influential and worthy of detailed comment. Structuralists began with the premise that each language was unique and must be described in terms of its own individual patterning. They rejected such meaning-based definitions as 'a sentence is a group of words which expresses a complete idea', asking quite legitimately what an incomplete idea was, and they attempted to look on language study as a science where scientific precision would be required in all formulations.

Structuralists envisaged language as a highly structured, predictable system where one could move from sound to sentence, discovering the significant units at each level and providing rules for combining them. They started with sound and defined a 'phoneme' as the smallest unit of a language's sound system. Each language had an inventory of sounds and a linguist's task was to establish which phonemes were significant in the language being described. One step above phonemes came 'morphemes'. These were composed of phonemes and were defined as the smallest unit of syntax. There were two kinds of morphemes, bound morphemes like 'un-' which could not occur in isolation and free morphemes like 'kind' which could.. Free morphemes were equivalent to words. Word classes were determined by both form and function. Nouns, for example, differed in form between singular and plural, with plurality being indicated by means of adding /s/, /z/, or /iz/, to the singular, thus:

gnat + /s/	gnats
tree + /z/	trees
horse + /iz/	horses

Nouns also fitted into such test frames as:

(the) _____ seemed very
 funny
 good
 happy
 tired
 unreliable

By means of examining forms and functions of words and by means of creating test frames, structuralists avoided relying on 'meaning' and they showed that English consisted of words belonging to open classes and to closed sets. *Open classes* were groups of words like nouns, verbs, adjectives and adverbs which were potentially open-ended, that is, it would be almost impossible to list all the nouns or verbs in English largely because new ones can be created and, in addition, words can move from one class to another. ('Motown', for example, was created by blending 'motor' and 'town'. 'Motor' was originally a noun but can also be used as a verb.) *Closed sets* were words like determiners and pronouns where the items in the sets could be exhaustively listed. Among the closed sets were auxiliary verbs and prepositions which were also described as 'function words' because their primary role was to express grammatical relationships. In the sentence 'Do you like cheese?', for example, the 'do' is there to form a question but has little semantic value.

By means of such study, structuralists worked out that English contained the following word classes: nouns, verbs (head-verbs and auxiliaries), adjectives, adverbs, determiners, prepositions, conjunctions (coordinating and subordinating), pronouns, and exclamations.

This classification did not differ radically from the Latin-oriented model for English. Nor is this surprising in view of the fact that Latin and English are related languages. Where the structuralists did differ fundamentally from earlier linguists was: in giving priority to speech; in assuming that if native speakers used a structure regularly then that structure was correct; in ruling out reliance on meaning; in offering precise instructions *for* building phonemes into morphemes, morphemes into words, words into phrases, clauses and sentences; and in aiming to rely on verifiable, repeatable data.

Structuralists attempted to make the study of language as scientific as the study of chemistry. Their achievements were considerable and all subsequent

models of English have utilized the discoveries and techniques of structuralism. They had weaknesses, however. Because they believe that all languages could be analyzed in terms of elements in sequence, with successive elements being increasingly predictable, they undervalued the creativity of speakers and the fact that sentences could look alike and yet be very different.

The sentences 'John asked me what to do' and 'John persuaded me what to do' look alike and were analyzed identically by structuralists. In the first sentence, however, John was to perform the action whereas 'I' was to perform it in the second. Their techniques worked beautifully for the regular parts of English:

cat	Cat + s		
mat	Mat + s		
love	Love + d	Lov + ing .	Love + s
shove	Shove + d	Shov + ing	Shove + s

but were less satisfactory for the irregular parts:

foot	foot + plural	= feet	(and not *foots)	
man	man + plural	= men		
drive	drove	driving	drives	driven
sing	sang	singing	sings	sung

One type of descriptive approach is called structural analysis and its main concern is to investigate the distribution of forms (e.g. morphemes) in a language. The method employed involves the use of 'test-frames' which can be sentences with empty slots in them. For example:

The _____ makes a lot of noise.
I heard a _____ yesterday.

There are a lot of forms which can fit into these slots to produce good grammatical sentences of English (e.g. *donkey, car, dog, radio, child*, etc.). Consequently, we can suggest that because all of these forms fit in the same

test-frame, they are likely to be examples of the same grammatical category. The label we give to this grammatical category is, of course, 'noun'. However, there are many forms which do not fit the test-frames above. Examples would be *Kathy, it, the dog, a car*, and so on. For these forms, we require different test-frames, which could be like this:

_____ makes a lot of noise.
I heard _____ yesterday

Among the forms which fit these test-frames are *Kathy, Margaret Thatcher, it, the dog, an old car, the professor with the Scottish accent*, and many more. Once again, we can suggest that these forms are likely to be examples of the same grammatical category. The common label for this category is 'noun phrase'. By developing a set of test-frames of this type and discovering what forms fit the slots in the test-frames, you can produce a description of (at least some) aspects of the sentence structures of a language.

Immediate constituent analysis

An approach with the same descriptive aims is called immediate constituent analysis. The technique employed in this approach is designed to show how small constituents (or components) in sentences go together to form larger constituents. In the following sentence, we can identify eight constituents (at the word level): *Her father brought a Shotgun to the wedding.*

How do those eight constituents go together to form constituents at the phrase level? Does it seem appropriate to put the words together as follows: *brought a, father brought, shotgun to, to the*? We don't normally think of these combinations as phrases in English. We are more likely to say that the phrase-like constituents here are combinations of the following types: *Her father, a shotgun, the wedding*, which are noun phrases; *to the wedding*, which is a prepositional phrase; *brought a shotgun*, which is a verb phrase.

This analysis of the constituent structure of the sentence can be represented in different types of diagrams. One type of diagram simply shows the distribution of the constituents at different levels.

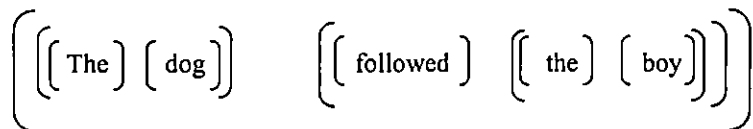
Her	father	brought	a	shotgun	to	the	wedding
-----	--------	---------	---	---------	----	-----	---------

This type of diagram can be used to show the types of forms which substitute for each other at different levels of constituent structure.

Her	father	brought	a	shotgun	to	the	wedding
The	man	saw	the	thief	in	a	car
Sam		took	Anne		to	Paris	
He		came			here		

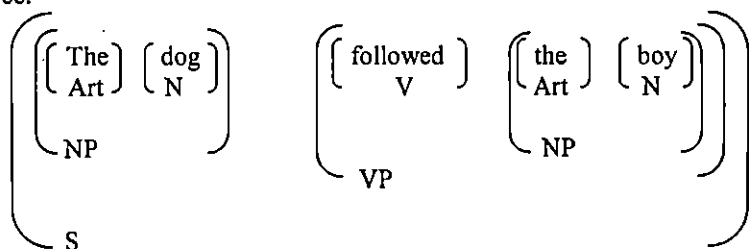
Labeled and bracketed sentences

An alternative type of diagram is designed to show how the constituents in sentence structure can be marked off via labeled brackets. The first step is to put brackets (one on each side) around each constituent, and then more brackets around each combination of constituents. For example:



With this procedure, the different constituents of the sentence are shown at the word level- [*the*]: at the phrase level - [*the boy*]: and at the sentence level- [*The dog followed the boy*].

We can, of course, label each constituent with grammatical terms such as 'Art' (= article), 'N' (= noun), 'NP' (= noun phrase), 'V' (= verb), 'VP' (= verb phrase) and S (= sentence). In the following diagram, these labels are placed beside each 'bracket which marks the beginning of a constituent. The result is a labeled and bracketed analysis of the constituent structure of the sentence.



It is not the aim of this type of analysis that we should be able to draw complicated-looking diagrams in order to impress our friends. The aim is to make explicit, via the diagram, what we believe to be the structure of grammatical sentences in a language. It also enables us to describe clearly how English sentences are put together as combinations of phrases which, in turn, are combinations of words. We can then look at similar descriptions of sentences in other languages. Gaelic, French, Spanish, or whatever, and see clearly what structural differences exist. At a very practical level, it may help us understand why a Spanish learner of English produces phrases like "*the wine white*" (instead of *the white wine*); using a structural organization of constituents which is possible in Spanish, but not in English.

3. Transformational Generative Grammar

In 1957 Noam Chomsky, an American, published *Syntactic Structures*, a statement of the principles of transformational generative grammar (TG). This grammar had a profound effect on the study of all languages, including English. TG was a reaction against structuralism and the first model to acknowledge formally the significance of deep structure. We can only offer a very brief survey of the aims and characteristics of TG.

Transformational generative grammarians set themselves the task of creating an explicit model of what an ideal speaker of the language intuitively knows. Their model must assign a structure, therefore, to all the sentences of the language concerned and only to these sentences. As a first step towards this, Chomsky distinguished between 'competence', which he defines as 'the ideal speaker-hearer's knowledge of his language', and 'performance', which is 'the actual use of language in concrete situations'. Competence is, as it were, the perfect storehouse of linguistic knowledge. Performance draws on this knowledge but it can be faulty. The TG model attempts to formulate hypotheses about competence by idealizing performance, that is, by dredging away performance accidents such as hesitations, unnecessary repetition, lack of attention, fatigue, slips of the tongue, false starts. TG is interested in competence and this interest marks the clearest difference between structuralism and TG. Structuralism was text-based and only interested in

language that had actually occurred. TG does not use text since it is more interested in what produced the text than in the text itself.

A TG model has four main characteristics:

- a. It must attempt to make explicit how a finite entity like the brain can operate on a finite set of items (words and structures) and yet generate an infinite set of sentences. The model must parallel the ideal speaker's competence and so it must be capable of generating an infinite set of sentences by the operation of a finite set of rules on a finite set of items. We can give an impression here of how that can be done. Let us suppose, for example, that we have the rules:

S — NP + VP (sentence can be rewritten as noun phrase + verb phrase).

NP — (det) + N (noun phrase can be rewritten as (determiner) + noun

VP — V + NP (verb phrase can be rewritten as verb + noun phrase)

and suppose we have two nouns 'boys' and 'girls', three determiners 'the', 'some' and 'five', and three verbs 'love', 'hate' and 'trust', then we can produce hundreds of sentences such as:

Boys love/hate/trust girls.

Girls love/hate/trust boys.

Some boys love/hate/trust girls.

Boys love/hate/trust some girls.

Five boys love/hate/trust the girls.

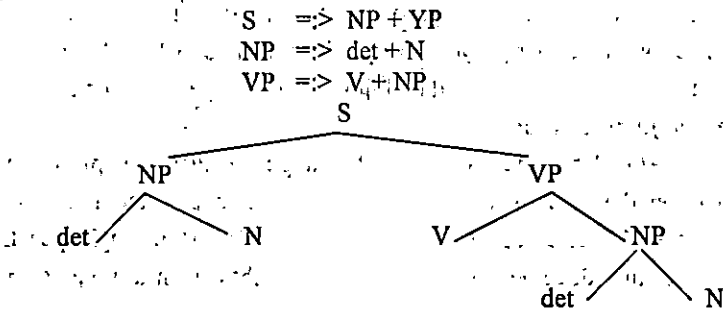
The boys love/hate/trust some/five/the girls.

- b. Since the model attempts to describe the ideal speaker-hearer's linguistic knowledge and intuitions, it must be explicit. It must not fall back on intuition to ask whether a structure is or is not correct. If it used intuition to define intuition, the model would be circular and useless. A TG model must therefore be explicit and self-sufficient. Its rules alone must allow us to decide whether a structure is acceptable.
- c. The model must have three components: a *phonological* component, a *syntactic* component and a *semantic* component so that it parallels the speaker's ability to associate noise and meaning.
- d. Although the model must not rely on the intuition of a native speaker it must be in harmony with such intuition. In other words, it must be able

to assign a structure to all sentences which would be accepted by a native speaker and reject all sentences which would be rejected by a native speaker.

The phonological component deals with phonemes and with the permissible combination of phonemes. The work on phonology is an extension of the work done by structuralists; a refinement rather than a reappraisal, and this is the part of the TG model which has received least criticism. The semantic component deals with meaning and the interpretation of meaning. Much work has been done in this area and many have criticized Chomsky's techniques. It would be true to say, however, that less satisfactory work has been done with regard to semantics than with regard to phonology and syntax.

It is with regard to his treatment of syntax that Chomsky's approach differs most fundamentally from other models. TG is explicit about the fact that native speakers recognize two levels of structure. A speaker realizes that 'John is easy to please' and 'John is eager to please' may look alike but are different at some level in that the first implies that 'Someone pleases John' and the second 'John pleases someone'. Similarly, a native speaker recognizes that although 'John loves Mary' looks very different from 'Mary is loved by John', they are fundamentally very similar. To account for the two levels that a speaker intuitively recognizes, a TG model splits the syntactic component into two parts: a base subcomponent and a transformational subcomponent. The base subcomponent generates (that is, assigns a structure to) the deep underlying pattern so that we can represent it by means of a tree diagram (also called a 'labeled bracketing' and a 'phrase marker'), thus:



The transformational subcomponent works on a phrase marker and so generates a surface structure. Again, a brief example may help. The structure 'Det + N + V + Det + N underlies thousands of transitive sentences such as:

The cat swallowed the mouse.

The transformational subcomponent accounts for the transformation of such a sentence into such variants as:

The mouse was swallowed by the cat.

The mouse was swallowed.

The swallowing of the mouse (by the cat)
and:

The cat's swallowing of the mouse.

Transformation rules allow the grammarian to explain:

- a. deletion, for example $A + B + C \Rightarrow A + B$:
John ran away and Mary ran away \Rightarrow John and Mary ran away
- b. addition/insertion, for example, $A + B \Rightarrow A + B + C$:
Go away \Rightarrow You go away
He has come \Rightarrow He has just come
- c. permutation, for example, $A + B + C \Rightarrow A + C + B$:
Call John up \Rightarrow Call up John
- d. substitution, for example, $A + B + C \Rightarrow A + D + C$:
John arrived and Peter went in \Rightarrow On John's arrival Peter went in

4. Functional-Notional Approach

A functional-notional approach concentrates on the purposes for which language is used. Any act of speech is functionally organized (that is, it is an attempt to do something) for a particular situation in relation to a particular topic. The language that we actually produce changes when these elements change, because we have learned to adjust our language use to be appropriate for the conditions in which we use it.

A functional-notional approach to language learning places major emphasis on the *communicative purpose(s)* of a speech act. It focuses on what people want to do or what they want to accomplish through speech. Do they want to introduce people to each other? Do they want to invite someone

to their home? Do they want to direct someone to do or not to do something? Do they want to talk about a picture, a book, a film, or something in the room they are in? Do they want to give sway to their creative impulses and recite a poem? The above are simple examples of the *functions* of language which all human beings wish to express at one time or other; in other words, to let others know their purpose or aim in speaking in the first place.

For example, inviting (function) using words like "I invite" or "I'd like to invite" might not make the speaker's message clear. In order to do so, a speaker would have to say something like, "What are you doing this weekend?" If the response is, "Nothing much," the first speaker might say, "I'd like to invite you to my house for Friday dinner." (As we will have occasion to note later, there are numerous other ways in which the speaker could have extended the invitation without even using the verb "invite.") But the essential point to clarify at this time is that *functional* language must also incorporate specific *notions*; that is, the vocabulary items that, in the example above, might answer the questions *who*, *when*, *where*, and *why*. Other notions we may examine with other functions might answer the questions *how long*, *how far*, *how much*, etc.

Let us clarify the concept of specific notions, by saying that the words following the functional expression would generally be considered notions. Thus *notions* are meaning elements which may be expressed through nouns, pronouns, verbs, prepositions, conjunctions, adjectives, or adverbs. *Notions* may be substituted by other appropriate words, depending on the topic being discussed, the situation, and the persons involved in the speech act. For example, the invitation above might have been, "I'd like to invite (or ask) your son to come to my club for lunch on Saturday."

The basic *communicative purposes* of the speaker may be expressed in two principal ways, depending on the function: We would use either A. *formulas*, that is, *fixed expressions*; or, B. *communicative* or *functional expressions*.

Examples of formulas

FUNCTION: greeting
(informal, usable at any time): "Hello"

- (time-bound, formal): "Good evening"
- FUNCTION: leave-taking
(informal): "So long" or "Bye"
(formal): "Good-bye"
- FUNCTION: acknowledging an introduction
(formal): "How do you do?"
(informal): "Pleased/Nice/Happy to meet you."
- FUNCTION: expressing and acknowledging gratitude
(formal or informal): "Thank you." "You're welcome."
- FUNCTION: responding to a request, such as:
"Do you mind if I smoke?" "Not at all."

In English, formulas are *fixed*. We could not, for example, say "How does she do?" or "How did you do?" in an introduction. In other languages, fixed formulas also exist but not necessarily in the same social situation. For example in Italian, we use the informal, "*Ciao*," both for greeting and leave-taking; in Turkish, the host or hostess uses one fixed formula and the guest who is leaving uses another.

a. *Communicative (Functional) expressions*

In all languages generally *communicative* (functional) expressions can be changed for gender, number, tense, aspect, emphasis, or other communicative purposes. Note these English examples:

FUNCTION: making a suggestion: "How do you feel about going to the beach?" Here the *do* may become *does* or remain *do* with plural nouns or pronouns and *you* may be substituted by *he, she, they, the boys*, etc.

FUNCTION: expressing anger: In "I'm very angry with you," nearly every word can be changed. *I'm* can be *He's, She's, We're, They're*; *very* can be *pretty* or *quite*; *angry* can be *annoyed, furious*, etc.; *you* can be *him, her, them, the girls*. In a tag question, the utterance may be, "*You're very angry with me/her/us/them, aren't you?*"

FUNCTION: making a request or asking for an opinion: "Would (you) mind not going out today?" could become, "Would you have minded not going out last night?"

Naturally a communicative function can include *both* a formula and a communicative expression, for example, greeting/expression of concern: "Good morning. How does your mother feel today?"

While the basic *functions* to be expressed depend solely on the purpose(s) of the speaker, the specific *notions* depend on three major factors: a. the *functions* b. the elements in the *situation*, and c. the *topic* which is being discussed. We shall have occasion to return to these factors many times, but briefly stated, a situation includes:

- 1) The *persons* who are taking part in the speech act. Are they about the same age? Are they males or females? Which language are they using to speak? (their native tongue? the native language of one of them? a second language for one or both of them?) How many people are there? What are their social roles? etc.
- 2) The *place* where the conversation occurs. Is it in the speaker's native land or is it in a foreign country or region which he is visiting or to which he has moved? Is it in a house, an office, a place of worship, a movie, or a park? Must the speech act be brief and spoken in a whisper or can it be in a normal voice and sustained?
- 3) The *time* it is taking place. Is it a usual daily occurrence? Is it a frequent or infrequent happening? What is the duration—the length—of the conversation? Is it time-bound or time-free, e.g., "Good evening" or "Hello"?
- 4) The *topic* or *activity* which is being discussed. The psychological attitude and the reaction of the listener will differ depending on the type of invitation, for example. Is it a pleasant social invitation or might it be a teacher or a guidance counselor asking (inviting) a student with the words,

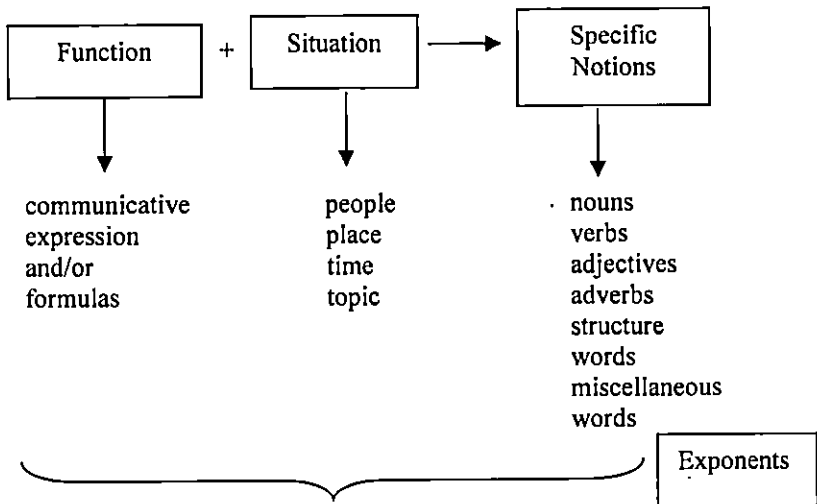
Exponents are the language *utterances* or *statements* which stem from the function, the situation, and the topic. The exponents we select in speaking depend not only on the situational elements mentioned above but on our

personalities and on our level of linguistic competence. Let us look at the possible exponents in one example of a request:

- Please open the window.
- Open the window, please.
- Would you open the window?
- Would you mind opening the window?
- I wonder if you would mind opening the window
- It might be a good idea to open the window.

Naturally, there are indirect ways of making a request to open a window, for example, as in, "It's very stuffy in here, isn't it?" (while remaining in your seat so that the other person will undoubtedly get up to open the window).

Everything said to this point can be diagrammed very simply as follows (this diagram will be expanded below:



But other concepts in linguistics and sociolinguistics will have to be added to our discussion above. We cannot talk about people and places, for example, without mentioning *variations* of language resulting from such factors as *dialects*, the *formality* or *informality* we wish to or are required to maintain in a particular situation, and the *mode* (oral or written) that is being

used to communicate. Moreover, under *notions* we will discuss again very briefly—the universal notions found in all languages which come under the heading of general notions.

b. Reasons for Optimism

The tremendous merit of the functional-notional approach to learning is that it emphasizes the fact that the students and their communicative purposes are, at the very core of the teaching program. The learner's actual and foreseeable academic, social, and vocational needs will underlie all aspects of the program's linguistic and cultural content. While due attention is given to certain aspects of selection and grading of linguistic-cultural content, the primary consideration is those functions that persons of a particular age level, in a particular situation, would wish or need to express.

There are additional cogent reasons for the wide interest engendered by this innovative approach to language learning and teaching.

- 1) It sets realistic learning tasks in which full-class or individualized instruction may be utilized.
- 2) It provides for the teaching of *everyday, real-world* language use in a variety of socio-cultural situations in which features of pronunciation, vocabulary, grammar, and culture are selected and graded according to their priority in actual communication; and intermeshed meaningfully from the first lesson at the beginning level of learning to serve the learner's immediate communicative purpose.
- 3) It leads us to emphasize the need for numerous, varied, receptive activities before rushing learners into premature performance. (*Receptive* is also called *interpretative* by some writers.)
- 4) It recognizes that while the language used in any speech act should be based on the situation or setting in which it occurs and be grammatically and semantically appropriate, the speaker must, above all, have a real purpose for speaking and something to talk about.
- 5) The act of communication, even at elementary levels, will be intrinsically motivating simply because it expresses *basic, universal communicative functions* of language and because it makes use of notions that are

most appropriate to complete the specific function or functions being expressed.

- 6) It enables teachers to exploit sound psycholinguistic, sociolinguistic, linguistic, and educational principles.
- 7) It can develop naturally from existing teaching methodology. Curriculum writers and teachers may, thus, use an eclectic approach, taking what has been found best and most suited to their teaching personalities from direct, audio-lingual, structural, situational, or any other method and integrate relevant features of each into a functional-notional approach.
- 8) It does not insist upon mastery of any body of material when it is presented. A spiral, expandable curriculum is envisaged so that grammatical and topical or cultural materials can be studied in greater depth whenever relevant during the course.
- 9) It makes provision through a unit and module system for admission to certain programs at any time during the year. The F-NI approach is designed for regular long-term school courses, in elementary and secondary schools and university, as well as for intensive courses (during the regular school year, in summer schools, or in evening classes).
- 10) It provides for the widespread promotion of foreign language learning at the very moment when other language learning methods and programs being publicized would restrict the number of persons in a classroom—some even suggesting a one-to-one pupil-teacher ratio.

c. Theoretical Bases

Any language teaching approach generally reflects the principles its proponents consider valid within linguistic, psychological, sociological, and educational theories. The audio-lingual approach, as we have seen, resulted in great part from structuralism in linguistics and behaviorism in psychology. And so it will be with the F-N approach, which combines a "communicative grammar" with cognitivism and humanism.

- 1) Sociolinguistic Considerations. First and foremost, emphasis has shifted from the former overweening preoccupation with structure and setting to the communicative purpose of the speech act. Neither grammar nor situation is excluded or neglected, but these are no longer considered the

primary focus of curriculum writers or teachers. The primary focus is the learner and the function or functions of language—the communicative purpose he wishes to express and to understand.

- 2) Psycholinguistic components: An F-N has taken cognizance of the basic needs of all human beings. It makes provision for teaching the appropriate language needed at the five levels of human needs recognized by most psychologists. The curriculum is self-motivating since it is specifically designed to serve the actual social, cultural, or vocational needs of learners. Finally it has had written into it an awareness that each human being can have different rhythm or pace of learning as well as different mode for acquiring knowledge.
- 3) Linguistics. The F-N approach will help the learner acquire a reasonable, basic knowledge of the phonological, grammatical, and lexical subsystem of the language, as well as the ability to use these in actual communication.

Educational principles. Transfer of learning is not always automatic. Through many examples and learning tasks, students can be helped to recognize the shared elements of communicative expressions and notions. A spiral or cyclic approach is highly recommended. The material studied previously is recalled, reviewed, and integrated with new learning.



EXERCISES

Exercise 1

- 1) Give the traditional terms for the grammatical categories of words used in the following sentence (e.g. *boy* = noun): *The boy rubbed the magic lamp and suddenly a genie appeared beside him.*
- 2) What prescriptive rules for the 'proper' use of English are not obeyed in the following sentences?
 - a. *That's the girl I gave my roller skates to.*
 - b. *He wanted to simply borrow your car for an hour.*
- 3) Present a labeled and bracketed analysis of this sentence:
The policeman chased a robber.

Exercise 2

- 1) Analyze the following sentences by using tree diagrams!
 - The new manager appointed the new secretary
 - I threw a bone to the dog
 - The key opened the door
- 2) Find two other examples of sentences having the same deep structure as the following sentences
 - Mahmood gave a new television to Hasnah
 - I threw the dog a bone
 - Mary made a dress
- 3) Mention the name of transformational rules of the following sentences!
 - I will pick up you => I will pick you up
 - Get out! => You get out!
 - Khaharuddin came to my party and Masyitah came to my party => Kaharuddin and Masyitah came to my party

Exercise 3

- 1) Provide at least one example of the following functions
 - informal greeting
 - formal leave-taking
 - formal acknowledging an introduction
 - expressing and acknowledging gratitude
- 2) Tell at least four reasons of optimism on functional-notional approach!
- 3) Explain four elements that should be paid attention in situation!

KEY TO EXERCISES**Exercise 1**

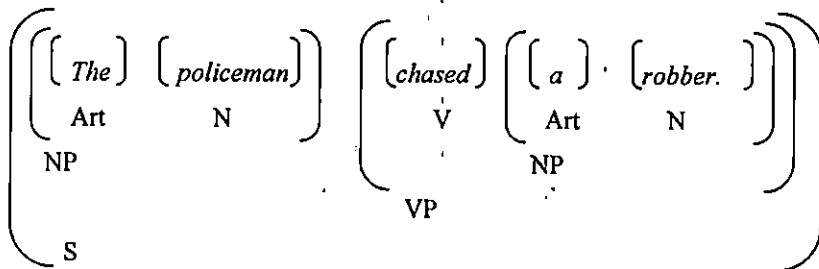
- 1) The traditional terms for the grammatical categories
The boy rubbed the magic lamp and suddenly a genie appeared beside him.

Art N V Art Adj N Conj Adv Art N V Prep Pro

2) Prescriptive rules

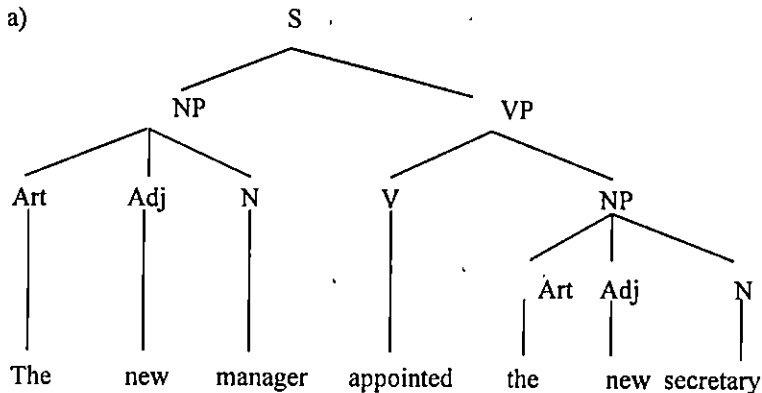
- a. English sentences should not end with a preposition
- b. You must not split an infinitive

3) Present a labeled and bracketed analysis of this sentence:

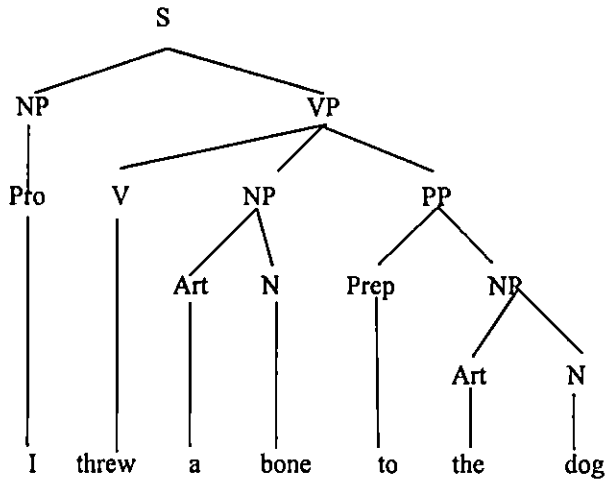


Exercise 2

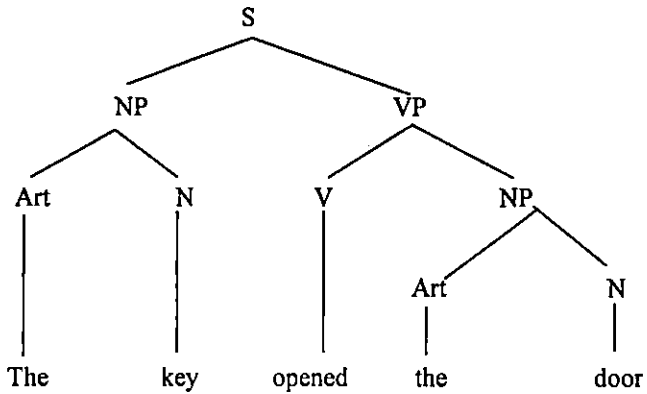
1) Analyze the following sentences by using tree diagrams!



b)



c)



2) Sentences having the same deep structure

- Mahmoed gave a new television to Hasnah
 Mahmoed gave Hasnah a new television
 A new television was given to Hasnah by Mahmoed
 Hasnah was given a new television by Mahmoed
- I threw the dog a bone
 I threw a bone to the dog
 A bone was thrown to the dog

- Mary made a dress
A dress was made by Mary
It was Mary who made a dress

3) Mention the name of transformational rules of the following sentences!

- Permutation
- Insertion/addition
- Deletion

Exercise 3

1) Provide at least one example of the following functions

- informal greeting
(Hi, Hello)
- formal leave-taking
(Good bye)
- formal acknowledging an introduction
(It's nice to meet you, I'm happy to know you)
- expressing and acknowledging gratitude
(You're welcome, thank you)

2) Tell at least four reasons of optimism on functional-notional approach!

- It sets realistic learning tasks in which full-class or individualized instruction may be utilized.
- It provides for the teaching of *everyday, real-world* language use in a variety of socio-cultural situations in which features of pronunciation, vocabulary, grammar, and culture are selected and graded according to their priority in actual communication.
- It leads us to emphasize the need for numerous, varied, receptive activities before rushing learners into premature performance. (*Receptive* is also called *interpretative* by some writers.)
- It recognizes that while the language used in any speech act should be based on the situation or setting in which it occurs and be grammatically and semantically appropriate.

- The act of communication, even at elementary levels, will be intrinsically motivating simply because it expresses *basic, universal communicative functions* of language and because it makes use of notions that are most appropriate to complete the specific function or functions being expressed.
- It enables teachers to exploit sound psycholinguistic, sociolinguistic, linguistic, and educational principles.
- It can develop naturally from existing teaching methodology.
- It does not insist upon mastery of any body of material when it is presented. A spiral, expandable curriculum is envisaged so that grammatical and topical or cultural materials can be studied in greater depth whenever relevant during the course.
- It makes provision through a unit and module system for admission to certain programs at any time during the year.
- It provides for the widespread promotion of foreign language learning at the very moment when other language learning methods and programs being publicized would restrict the number of persons in a classroom—some even suggesting a one-to-one pupil-teacher ratio.

3) Explain four elements that should be paid attention in situation!

- People : Who are taking part in the speech act? Are they about the same age? Are they males or females? Which language are they using to speak? How many people are there? What are their attitudes toward each other? Etc.
- Place : Where does the conversation occur? Is it in the speaker's native land or is it in a foreign country? Is it in the house, an office, a place of worship, a theater, or a park? Etc.
- Time : When does the conversation take place? Is it a usual daily occurrence? Is it a frequent or infrequent happening? What is the duration—the length—of the conversation? Is it time-bound or time-free? Etc.
- Topic : What topic or activity is being discussed? The psychological attitude and the reaction of the listener will

differ depending on the type of topic. Is it an academic or social topic? Is it a general or specific topic? Etc.



SUMMARY

As we look back over the last one hundred years we can see that each new model of grammar is a reaction against the perceived weaknesses of the prevailing traditions. Latin oriented grammars lost favor because they to recognize the uniqueness of each language. Structuralism was pushed aside because it concentrated too much on data and failed to proceed from the known to the unknown because it feared theoretical intangibles. Transformational Generative grammar recognized the value of theory and the significance of what was going on beneath the surface. The weakness is in not paying sufficient attention to surface structure where differences in form and content are most immediately apparent. Functional grammar has learnt much from structuralism and TG but its potential has not yet been fully exploited.



FORMATIVE TEST 1

- 1) Give the traditional terms for the grammatical categories of words used in the following sentence (e.g. *boy* = noun): *The new and kind boss gave a present to a very diligent employee.*
- 2) *What* prescriptive rules for the 'proper' use of English are not obeyed in the following sentences?
 - a. He is the man whom I will go with.
 - b. They wanted to totally finish their work.
 - c. My younger brother is taller than me
- 3) Analyze the following sentences by using tree diagrams!
 - The beautiful girl with the new hat visited our office
 - I bought this book in the new shop

- 4) Find two other examples of sentences having the same deep structure as the following sentences
- Ismael bought me a new novel
 - Marsinah told me a story
 - Mas'ud sent her a letter
- 5) Mention the name of transformational rules of the following sentences!
- I will pick you up => I will not pick you up
 - Mary gave me some money => I was given some money by Mary
 - Jasmil cried and Jamal cried => Jasmil and Jamal cried
- 6) Provide at least one example of the following functions
- A request to open erase the whiteboard
 - Disagreeing with one's opinion
 - Refusing an invitation
 - Expressing condolences

Check your answers with the Key which is provided at the end of this module, and score your right answers. Then use the formula below to know your achievement level of the lesson in this module.

Formula:

$$\text{Level of achievement} = \frac{\text{Scores of the right answers}}{\text{Total score}} \times 100\%$$

Meanings of level of achievement:

- 90% - 100% = very good
- 80% - 89% = good
- 70% - 79% = average
- < 70% = bad

If your level of achievement reaches 80% or more, you can on to the next unit. **Good!** But if your level of mastery is less than 80%, you have to study again this unit, especially parts which you haven't mastered.

UNIT 2

Teaching Materials Based on Three Different Approaches

A. STRUCTURAL APPROACH

So far this study has concentrated on isolated words in the language but now we shall turn to words in combination. British linguists often use the term 'grammar' for the same level of language that is referred to as 'syntax' by many Americans. For the moment the main emphasis will be on the level of language that examines how words combine into larger units. We shall study only three of these units - the phrase, the clause and the sentence - and we shall provide straightforward, traditional definitions. Different linguists, however, often define terms differently. Structuralists, for example, would label 'sheep', 'that lovely sheep' and 'that sheep are unpredictable' as:

- Sheep - word/free morpheme
- that lovely sheep - phrase
- that sheep are unpredictable - clause

whereas transformationalists would call them all noun phrases.

There is value in each approach. The structuralist one concentrates on the formal differences whereas transformationalists concentrate on the functional similarities in that all three can occur in the same slot:

- Sheep can be seen clearly
- That lovely sheep can be seen clearly
- That sheep are unpredictable can be seen clearly

1. The Phrase

For our purpose, we can define a phrase as a group of words which functions as a unit and, with the exception of the verb phrase itself, does not contain a finite verb. Consider this definition by examining a few sentences.

In:

The little boy sat in the corner.

We can replace 'the little boy' by 'He' and 'in the corner' by 'there'. Notice that in both examples we replace a number of words by one. Similarly, if we ask: 'Who sat in the corner?' the answer will be 'The little boy' or if we ask: 'Where did he sit?' we will be told 'In the corner'. It is thus clear that certain groups of words have internal coherence in that they function as a unit. We have also said that a phrase does not contain a finite verb; so now we shall look at what a finite verb is.

A finite verb is one that can take as its subject a pronoun such as 'I', 'we', 'he', 'she', 'it', and 'they'. Thus we can have 'I see, he sees, they saw' but not '*I seeing, *he to see, *we seen, and we can say that the present participle (that is, forms such as 'seeing'), the infinitive (that is, forms such as 'to see') and the past participle (that is, forms such as 'seen') are non-finite verb forms. Only non-finite verb forms can occur in phrases:

Bending low, he walked awkwardly into the small room.

Seen from this angle, the mountains look blue.

There are five commonly occurring types of phrase in English: noun phrases, adjective phrases, verb phrases, adverb phrases and preposition phrases.

- a. A noun phrase is a group of words with a noun as its headword. There can be up to three noun phrases in a simple sentence, as the underlined units in the following simple sentences show:

1 2 3
The young woman threw the little dog a bone.

1 2 3
That rich man will build his youngest child a big house

- b. An adjective phrase is a group of words which modifies a noun. Like adjectives, these words can be either attributive (that is, usually preceding but occasionally following a noun):

The child, laughing happily, ran out of the house.

That utterly fascinating novel has
been banned.

or predicative (that is, following 'a verb):

The letter was unbelievably rude.

He seemed extremely pleasant.

- c. A verb phrase is a group of words with a verb as headword. Verb phrases can be either finite, such as 'He has been singing', or non-finite, such as

to have sung. A simple sentence can have only one finite verb phrase, such as 'He may be following us, but a complex sentence may have several finite verb phrases: When he was invited to give a lecture, he was told that all reasonable expenses would be refunded.'

- d. An adverb phrase is a group of words which functions like an adverb; it often plays the role of telling us when, where, why or how an event occurred:

We are expecting him to
come next year.

He almost always arrives on time.

He ran very quickly.

- e. A preposition phrase is a group of words that begins with a preposition:

He arrived by plane.

Do you know that man with the scar?

We are on very good terms.

A number of modern linguists use the term 'phrase' in a slightly different way to that described above. They compare such sentences 'The young man has arrived' and 'He arrived' as pointing out that 'he' functions in exactly the same way as 'the young man' and 'arrived' in exactly the same way as 'has arrived'. Concentrating on the 'similarity of function, they define a noun phrase, for example, as 'a word or group of words which can function as a subject, object or complement in a sentence. Similarly, a verb phrase is a word or group of words which can function as a predicate in a sentence. For example, the sentences 'He arrived at two' and 'He will arrive at two' both have value. A student must be aware of the different values attached to the same word but must also be consistent in his own use.

2. The Clause

A clause is a group of words which contains a finite verb but which cannot occur in isolation, that is, a clause constitutes only part of a sentence. In each complex sentence, we have at least two clauses: a main clause (that is, a clause that is most like a simple sentence) and at least one subordinate or dependent clause. In the following examples, the main clauses are underlined:

He believed that the earth was round.

He arrived as the clock was striking.

The following types of subordinate clause are found:

- a. A noun clause is a group of words 'containing a finite verb and functioning like a noun:

He said that he was tired.

What you said was not true.

The fact that the earth moves round the sun is well known:

Noun clauses can often be replaced by pronouns;

He said this.

When you are in doubt about how a clause functions in a sentence, you should see what can be substituted for it. All the following possibilities are acceptable:

I. shall always remember

John.

him.

his kindness.

what John has done.

Thus, pronouns, nouns and noun phrases can usually be substituted for noun clauses.

- b. An adjective clause is often called a 'relative clause' because it usually relates back to a noun whose meaning it modifies:

The dog which won the competition is an alsatian.

The man who taught my brother French is now the headmaster.

The girl whom we met on holiday is coming to see us next week.

When an adjective/relative clause begins with 'that/which/whom' and is followed by a subject, the subordinator can be omitted:

The book (that) John bought is missing.

The coat (which) she wore is red.

The man (whom) we met was my uncle.

There is virtually no difference in meaning between 'The book which I bought. . . . and 'The book that I bought . . . , or 'The book I bought' although the third is the least formal and so the most likely to occur in spontaneous speech.

- c. An adverbial clause functions like an adverb in giving information about when, where, why, how or if an action occurred:

When he arrived we were all sleeping.

Put it where we can all see it.

They won the match because they were the best players.

He put it away as quietly as he could.

If you want any more you'll have to get it yourself.

Adverbial Clauses are perhaps the most frequently used clauses in the language and, like adverbs, they are often mobile:

When he arrived we were all sleeping.

We were all sleeping when he arrived.

3. The Sentence

In 1952 C.C. Fries examined over two hundred definitions of 'sentence' in the hope of finding the most useful. He discovered that, as with so many grammatical units, it is easier to show what they look like than to say what they are. Thus the following are sentences:

The man died.

The dog chased the cat.

The girl is a good student.

That child is very tall.

The boy ran up the hill.

They can exist independently, do not rely on any other unit and can be interpreted without reference to any other piece of language. Fries decided that the most workable definition of sentence was the one that had been provided by Bloomfield in 1933 according to which:

Each sentence is an independent linguistic form, not included by virtue of any grammatical construction in any larger linguistic form.

All the above examples fit this definition. 'The man died', for example, is independent in a way that 'when the man died' is not. This clause depends on such a construction as:

They were all very sad (when the man died).

An even simpler categorization of 'sentence' can be applied to the written medium in that we can define a sentence as 'that linguistic unit which begins with a capital letter and ends with a full stop'. Both these definitions of 'sentence' are useful but it will be worth our while to study further both the types of sentences that occur in English and their internal construction.

Sentences can be divided into four sub-types:

a. Declarative sentences make statements or assertions:

I shall arrive at three.

You are not the only applicant.

Peace has its victories.

We must not forget that date.

- b. Imperative sentences give orders, make requests and usually have no overt subject:

Come here.

Don't do that.

Try to help.

Don't walk on the grass.

- c. Interrogative sentences ask questions:

Did you see your brother yesterday?

Can't you hear that awful noise?

When did he arrive?

Why don't they play cricket here?

You will notice that there are two types of interrogative question, those which expect the answer 'yes' or 'no':

Can you sing?

Are you going to the wedding?

and those which begin with the question words *what?*, *where?*, *which?*, *who?*, *whom?*, *why?*, or *how?* and which expect an answer other than *yes* or *no*.

- d. Exclamatory sentences are used to express surprise, alarm, indignation or a strong opinion. They are differentiated from other sentences by taking an exclamation mark:

He's going to win!

You can't be serious!

What a fool I was!

I've never heard such rubbish in all my life!

Sentences can also be classified as being either *major* or *minor*. All the examples above are major in that they contain finite verbs. Minor sentences do not contain finite verbs and they are frequently found in colloquial speech:

Got a match?

Not likely!

Just a minute!

in proverbial utterances:

Out of sight, out of mind.

In for a penny; in for a pound.

and in advertising:

Always ahead of the times.

The cheapest and best.

Apart from the above categorizations of sentences, we often find it useful to distinguish between sentences which are 'simple', 'compound' or 'complex'.

Simple sentences contain only one finite verb:

Water boils at 100° centigrade,

You must not say such things.

The finite verb may be composed of up to four auxiliaries plus a head verb, such as 'He may have been being followed all the time', and may be interrupted by a negative or an adverb, such as 'He was never seen again' and 'We can hardly ask them for any more.

The term 'simple' refers to the fact that the sentence contains only one finite verb. It does *not* imply that the sentence is easy to understand. The following sentence, for example, is simple in structure but semantically it is quite difficult:

Quangos are quasi-autonomous, non-governmental organizations.

Compound sentences consist of two or more simple sentences linked by the coordinating conjunctions *and*, *but*, *so*, *either* . . . *or*, *neither* . . . *nor*, *or* and *then*:

He ran out and (he) fell over the suitcase.

She arrived at nine, went up to her room and did not come down until noon.

He could neither eat nor sleep.

In compound sentences, the shared elements in the conjoined simple sentences can be elided:

You may go in and (you may) talk to him for five minutes.

Complex sentences consist of one simple sentence and one or more subordinate (or dependent) clauses. In the sentence 'She became queen when her father died because she was the eldest child', we have one main clause 'She became queen' and two subordinate clauses: 'when her father died' and 'because she was the eldest child'.

You will notice that each clause has a finite verb, 'became', 'died' and 'was' in the example above, and that each subordinate clause begins with a subordinating conjunction. The commonest subordinating conjunctions in English are *after, although/though, as, because, before, if, since, until, when, where, whether ... or not, which, and while*.

Subordinate clauses are characterized by the fact that they cannot occur alone. They depend on a main clause. In some modern descriptions; subordinate clauses are called 'embedded sentences' because they resemble simple sentences but are modified so as to fit into other constructions.

Compound-complex sentences are, as their name suggests, a combination of complex sentences joined by coordinating conjunctions:

I saw him when he arrived the first time but I didn't see him when he came again.

We have looked at the types of sentences that can occur and will now focus on the internal structure of a sentence. The basic pattern of the simple English sentence is:

(Adjunct) (Subject) Predicate (Object) (Complement) (Adjunct)

usually, given as:

(A) (S) P (O) (C) (A)

where only the predicate is essential and where the adjunct is mobile. A few simple examples will show how the formula works. Such sentences are:

The man disappeared.

S P

The poor young woman died.

S P

John ate his breakfast quickly

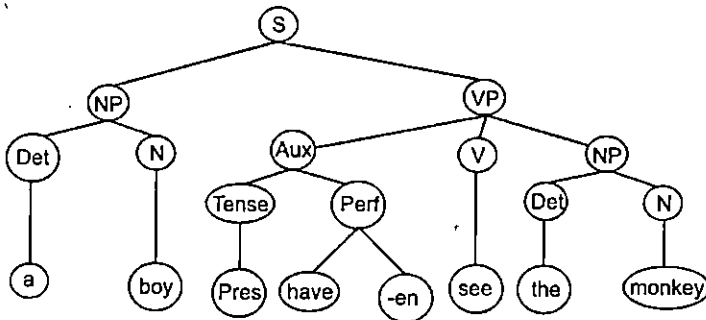
S P O A

B. TRANSFORMATIONAL AND GENERATIVE APPROACH

Transformations are operations that add, delete, or change elements in one structure to produce another structure. According to this definition, the

insertion of a lexical item into a phrase-structure tree might be considered a transformation because it introduces (or adds) a complex element into a structure, whereas the phrase-structure rules simply reanalyze, or break down, sentence structures. Nevertheless, we will refer to the transformational component as all the rules that apply *after* all lexical items have been inserted into trees.

We need transformations for several reasons. For example, the following figure shows the deep structure produced by the phrase-structure grammar and lexicon. It is still not an English sentence: certain other operation must be performed to yield a grammatical English sentence. These other operations are called transformations.



One of the earliest arguments for transformations concerned relations between words in sentences called co-occurrence restrictions; that is restrictions on the relations between words that apply to different types of sentences. For example, in the active sentence *John threw the ball*, the verb *throw* must take a concrete object. In the passive sentence *the ball was thrown by John*, the same restriction holds between *ball* and *throw*, although the surface structure is different. Unless actives and passives are related by a transformation, which we assume does not change the relationship between *ball* and *throw*, this restriction will have to be stated twice in the grammar—once for the active sentence and once for the passive sentence. Therefore, transformations may simplify a grammar and increase its ability to describe language.

More importantly, because they relate deep and surface structures, transformational rules are able to express certain generalizations that are part of the speaker's knowledge about his or her language. The relationship between deep and surface structures is in no way arbitrary. The fact that two levels of structure are posited at all results from the principle that one of the purposes of a grammar is to account for the relationship between sentences and their meanings.

The structuralist had been concerned strictly with the surface characteristics of sentences and had, therefore, worked with only one level of description. The transformational-generative grammarian recognizes that there is no one-to-one relationship between sentences and meanings. In fact, a particular meaning can be represented by several different sentences, or paraphrases; and a particular sentence might be ambiguous, or have several meanings.

An example of several paraphrases of one basic meaning is the following set of sentences:

1. Mary gave an apple to Bob.
2. Mary gave Bob an apple.
3. An apple was given to Bob by Mary.
4. Bob was given an apple by Mary.
5. It was Mary who gave Bob an apple.
6. Bob is the one Mary gave an apple to.

These sentences (among others) all have the same basic meaning and are assumed to derive from one deep structure. This deep structure may be affected by different rules in the transformational component, and the different rules create variations in surface structure, as shown by the different sentences that result. In the standard interpretive theory of transformational-generative grammar, as well as in generative semantics, the application of transformational rules does not change the meaning of a sentence. In general, then, deep structure represents the basis for the meaning of a sentence, although few linguists now believe that deep structure, as presented here, alone can provide the full meaning of a sentence. The surface structure,

which represents what a sentence sounds like, also is relevant for understanding such semantic aspects as the topic and focus of a sentence.

Another possible occurrence in natural languages is that one surface structure may represent several meanings, which are expressed by different deep structures. A sentence of this type is ambiguous, and ambiguity occurs in every language. The ambiguities of one language, however, might not recur in the same form in any other language. One example, from English, of the type of ambiguity we are concerned with is the sentence *Climbing plants can look strange*. This sentence, as we have seen, has two meanings, represented by two deep structures, which are in no way related to each other. In one deep structure, *plants* is the object of *climbing* and the meaning involves a declaration about the possible strangeness of someone's climbing up plants. In the other deep structure, *climbing* modifies the subject noun *plants*, and the declaration involves the possible strangeness of plants that are regarded as "climbing plants." Thus, the level of deep structure also expresses the subject-verb-object relations that may distinguish sentences. To the best of our knowledge, this particular ambiguous sentence cannot be translated into an equivalently ambiguous sentence in any other language. In other words, the ambiguity results from a peculiarity in the transformational rules of English.

Transformations, then, allow us to express the fact that one basic meaning can have several paraphrases expressed in different surface structures and that an ambiguous sentence, represented by one surface structure, has two or more basic meanings that are represented by different deep structures.

One transformation applied to all sentences is the flip-flop (FF) rule, by which certain endings are attached to the verbal forms that follow them. The flip-flop rule may be generalized as

FF Rule: Affix + Verbal \Longrightarrow Verbal + Affix

Condition: Constituents affected by FF may undergo the rule only once.

Affix may be Tense, *-en*, or *-ing*. *Verbal* may be V, M, *be*, or *have*. (Double-stemmed arrows, \Longrightarrow , signify a transformational rule.) For an example of how the rule operates, consider the deep structure presented in the above tree

diagram. FF may operate at two points: at Pres + *have* and at *-en* + *see*, which are in the correct order for application of the rule. Thus,

Deep structure : *a boy Pres have -en see the monkey*

After FF: *a boy have Pres see -en the monkey*

Notice that we imposed the condition that the FF rule can apply to each relevant constituent only once; otherwise, there is nothing to prevent Pres + *see* from being flip-flopped. This condition thus prevents the generating of such an ungrammatical sentence as **A boy have sees -en the monkey*.

As the FF rule illustrates, the statement of a transformation involves two parts: a structural description and a structural change. The structural description specifies the structure that must be present in order for the rule to apply (for example, Affix + Verbal). The structural change indicates how the structure is affected by the rule (for example, \Longrightarrow Verbal + Affix). Conditions on the application of the rule may or may not be present, and linguists have recently been working hard to eliminate conditions wherever possible.

It is also important to note that Affix and Verbal, as stated, are somewhat artificial categories, since they do not appear in the deep structure tree. We use these categories because they allow us to state the rule more easily; nevertheless, their use must be considered a flaw in the theory, which ultimately must be corrected.

After the application of FF, only one other rule need be invoked to transform the deep structure in the above figure. This rule, which may be called the lexical-formation (LF) rule, requires that the lexicon be consulted to determine the final appearance of the nouns and verbs in surface structure. This rule eliminates all terms that are not actually words of the surface structure; it tells us that *have* + Pres is *has* in the third person singular and *have* otherwise and that *see* + *-en* is *seen*, as follows:

By LF: *a boy has seen the monkey*

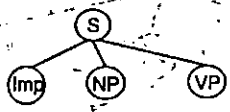
The FF and LF rules are the only transformational rules that must be applied in order to derive *all* surface structures. Of course, many other transformational rules apply under certain conditions. Ideally the conditions of application should be apparent in the deep structure, although it does not always work out that well.

The formation of imperatives, questions, and negations involves operations that are signaled by constituents in the deep structure. The first rule of the phrase-structure grammar must be altered at this point to introduce these constituents:

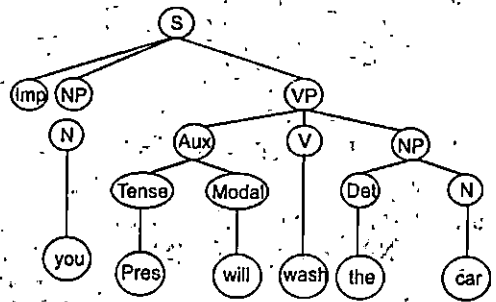
$$S \rightarrow \left\{ \begin{array}{l} \text{Imp} \\ \text{Ques} \end{array} \right\} + (\text{Neg}) + \text{NP} + \text{Aux} + \text{VP}$$

In other words, a sentence still consists of an NP and a VP; but it may also optionally be a question, an imperative, a negative, a negative-question, or a negative-imperative. Because Imp, Ques, and Neg are optional, it is still possible that none is realized, in which case the sentence will be declarative and positive.

Consider how the imperative sentence *Wash the car!* is generated. The underlying, or deep, structure for this sentence must include the constituent Imp, the subject NP *you*, the Modal *will*, and the present tense. This analysis is supported by the existence of a sentence like *Wash the car, won't you?*, in which *you* and *will* "surface." Further evidence for an underlying subject *you* in imperatives is seen in sentences such as *Watch yourself*. The first phrase-structure rule will now produce the structure:



The application of all other relevant phrase-structure and lexical insertion rules will produce the deep structure given in the following figure:



The constituent Imp then triggers the imperative transformation, which has the following effect:

Imperative transformation: Imp + you + will \Rightarrow O

In other words, the constituents Imp, you, and will are deleted. The FF rule then switches the order of the constituents Pres + wash, giving wash + Pres. The LF rule then tells us that wash + Pres is wash, thus generating the sentence *Wash the car!*

The sentences discussed this far have been simple, one-clause sentences, such as the following:

1. The bell rang.
2. A student entered the building.
3. The child likes the horse.
4. The horse roams on the farm.

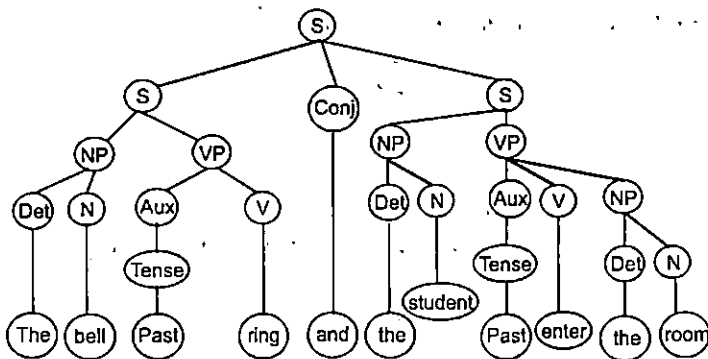
But many sentences contain more than one clause; for example,

5. The bell rang and a student entered the room.

In order to generate sentences like this, we need the modified phrase-structure rule:

$S \rightarrow S + (\text{Conj} + S)$

where *Conj* represents *and*, *or*; and so on. Thus, the deep structure of sentence 5 would appear in the following figure:



6. The child likes the horse that roams on the farm.

phrase-structure rule 2 must be revised as follows:

$NP \rightarrow (\text{Det}) + N + (S)$

In both revised phrase-structure rules, the symbol S appears to the right of the arrow, allowing simple sentences to be contained within more complex sentences. In theory, these rules could be applied infinitely, producing sentences like:

7. John has a cat and Mary has a dog and Phil has a canary and ...
8. The student likes the professor who likes the administrator who likes his mother who.

Such rules that can apply over and over again are called recursive, and they permit an infinite number of sentences of infinite length to be generated in a language.

Some transformational rules, like phonological rules, may be ordered. For example, the imperative transformation must apply before the FF rule, as illustrated in the sentence *Wash the car!*. If the FF rule were to apply first to reverse the order of Pres and *will*, and then the imperative transformation were to apply to delete *will*, we would have Pres + *wash*. Then we could not derive the desired order *wash* + Pres, because flip-flop was already applied to Pres and FF is permitted to apply to each constituent only once.

Furthermore, the syntactic transformations may apply in a cycle, in pretty much the same way as the stress rules in phonology. The principle of the cycle in syntax requires that the transformations be applied in order, beginning with the most deeply embedded sentence. After all relevant transformations have been applied on this first cycle, the transformations may be reapplied, again in order, to the next highest sentence in the tree diagram. This process continues until the final cycle, on which all relevant transformations are applied in order to the main sentence. Transformational-generative grammarians have also considered the possibility that certain transformations are special in that they apply either before or after the cycle.

The transformations that we have presented are only a few of the many that are applied in generating a language like English. The treatment of others is best left to a full course in syntax.

C. FUNCTIONAL NOTIONAL APPROACH

According to F—N Approach, in each unit and at each level the learner is helped—through oral discussion with a teacher or through an introductory paragraph in his *native language*, where feasible—to understand the social roles and psychological attitudes the speakers toward each other, and thus the rationale for the formality or informality and/ or appropriateness of the language in the particular situation.

Since it is patently impossible to teach the whole of language and culture in anyone unit, year, or level, curriculum planners have come to the conclusion that, particularly in regular courses, selection and gradation of language items or notions within the communicative functions is imperative. This selection and gradation is more flexible than, in the past; for example, to *have* or *the simple present* may be deferred until much later in the units but will nonetheless be presented in logical sequence. The selection will depend on such factors as the functions and notions the learners need, the linguistic knowledge they already have, the complexity of the grammatical structure they are about to learn, and the length of the stretch of speech necessary to express their communicative purpose

The teaching materials generally provide for learners in any one unit to be given only a, passive or receptive awareness of alternative forms by which a function may be expressed. The term "receptive" is 'gradually being replaced by "interpretative," which is closer to what the mind does when hearing or reading a new linguistic element or a previously unfamiliar fact. Not only does the mind *receive* the impression but it generally *associates* the new element with related concepts stored in its memory bank. Learners may thus decide to make an alternative form part of their active vocabulary because its expression is more in harmony with their way of speaking.

In addition to having a communicative function rather than a situational topic or structural item as its starting point, the F-N curriculum differs from a structural or situational syllabus in several respects. For one thing, the structures in the various utterances of a dialog may be dissimilar, as they would be in real-world communication. For example, a suggestion such as, "Let's go over the engine," may elicit a reaction of disagreement followed by

an alternative suggestion, such as, "I don't feel like it now. It's late and I'm sure it's too complicated. We can do that tomorrow."

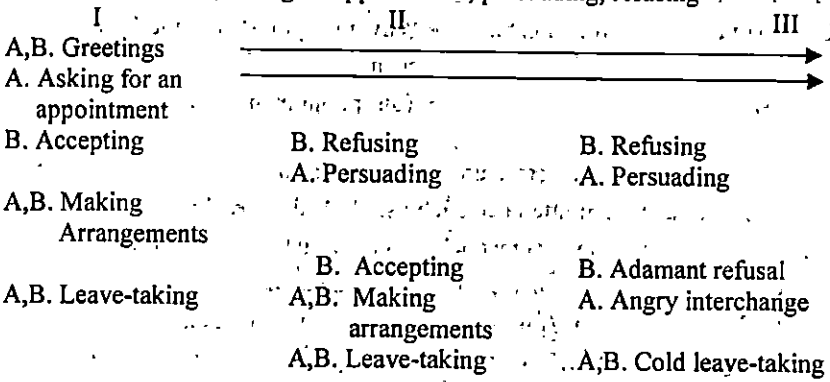
Moreover, in the F-N teaching materials, a number of different functions may be clustered in one unit. For example, an invitation may be extended, accepted gracefully; arrangements made about time, place, and transportation, and thanks extended before conventional parting remarks are made. A refusal of the invitation would force the use of an entirely different range of functions and notions.

Look at the units outlined below. You will note that the three units may be presented separately but that they are all clustered around the interpersonal function of extending an invitation or making an appointment which may be accepted or refused. (The first unit is considered the "core" unit; the others following the core are called "extensions." There can be as many extensions as you and your students wish to devise.)

"Core" and Possible Extensions

(beginning and intermediate levels)

- Motivation : Related to students' lives and perceived needs
- Situation : speakers, (attitudes, roles), place, topic, time when the conversation may be taking place
- Function : Making an appointment; persuading; refusing



At the beginning levels, weeks may elapse between presentations of formats I and III. At more advanced levels, all three created by groups of

learners themselves with teacher help-could be prepared and dramatized in one lesson by pairs of students.

Most important, in the F-N approach grammatical structure and function do *not* overlap. As we have already seen, function may be expressed directly or indirectly through the use of any number of different structures. There is *no obligatory one to-one relationship* between structure and function. For example, a request may be worded as, "May I have a glass of cold water? Could I have...? Would you get me...? I wonder if I might have...?" The same function (requesting something) may be expressed indirectly, but with the same meaning, in a question .such as; "Is there (or Would there be) a glass of cold water?"

By the same token, a *directive* might be expressed as, "Pick up *your* coat and put it away," or (in an angry tone) "Is that *your* coat on the floor?" an interrogative which obviously does not ask for information.

Notice some other negative interrogatives which do not ask for information but which express other emotions.

- | | |
|---|---|
| - Why aren't they here?
(anger, frustration, concern) | - Aren't they a handsome couple?
(admiration) |
| - Aren't you coming to the beach?
(disappointment, surprise) | - Won't you have some of my cake?
(hospitality) |
| - Couldn't you wait a while longer?

(a plea) | - Why don't you stay home for a
change?

(disappointment, plea, anger) |

Conversely, the same structure may be used to express more than one function of language. An utterance such as, "You don't really like. . ." may be used to find out about someone's moral or intellectual attitude, or to persuade someone to change his mind. Utterances can be multifunctional. Notice: "Could you tell me (polite request) how long it will take (information wanted) to get to New York City?" (location).

The materials place emphasis first on making the students *aware* of the functions found within the complex, diversified, sociocultural situations of our daily lives, and *then* on enabling them to express these functions correctly and appropriately in the language they are learning.

Attention is given to ways in which students' knowledge of their native language can be utilized in the presentation of the new material. (This facet of the approach presents some problems which will require teachers' collaboration and further research. For example, will the expression of functions and notions which contrast markedly in L₁ and L₂ be deferred to a higher level? They should *not* be if we are to give the learners' communicative purpose priority.)

Selection and gradation of grammatical structures within the function to be expressed will depend—as in all curriculum planning—on the age of students; their linguistic-cultural needs; the complexity of the grammatical item; the knowledge students already have, not only of their native tongues but also of the target language structures and notions which will clarify the new structure. Nearly all functions can be expressed on a continuum—from very simple terms in brief utterances to longer ones of great complexity. For example:

Informal invitations: accepting

A:	Do you feel like What about How	going to the Peter Pan concert	on Saturday? tonight? tomorrow?
----	---------------------------------------	--------------------------------	---------------------------------------

B:	Oh. Sure, why not OK	That's a	terrific great	idea
----	----------------------------	----------	-------------------	------

Informal invitations: declining

A:	Do you feel like What about How	going to the Peter Pan concert	on Saturday? tonight? tomorrow?
----	---------------------------------------	--------------------------------	---------------------------------------

B:	Gee, I'm really sorry, (I can't) I've got to	I have to	meet a friend
----	---	-----------	---------------

The approach makes provision for the teaching of the notions and expressions needed in other disciplines (curriculum areas in a school situation) both in a second language (where the target language is the one spoken in the community) and in a foreign language situation (where the target language is learned in one's native land). Concepts and language needed in }social studies, geography, mathematics, art, music, and the native language and literature, as well as those needed for professional or vocational use, are interwoven in the curriculum at all appropriate levels.

In programs for adults (who may range from functional illiterates to professionals) units contain linguistic and cultural materials they will need immediately for *sociocultural* or *socio-vocational* purposes.

Finally, although this does not apply more to the F-N curriculum than to other approaches, it is worth emphasizing the role of the teacher, by reference to two quotations. The humane basis for F-N work requires recognition of the central role of human relationships.



EXERCISES

Exercise 1

- 1) Pick out and classify the phrases in the following sentences. (EXAMPLE: 'The young boy will be running very fast'. Here we have three phrases: a noun phrase 'The young boy', a verb phrase 'will be running' and an adverb phrase 'very fast'.)
 - (1) Please send me three boxes of biscuits on the 14th of July.
 - (2) All the children seemed extremely happy.
 - (3) She couldn't go to the theater because of her had cold.
- 2) Pick out the noun clauses in the following sentences and say whether their function as subjects, objects or complements.
 - (1) She supposed that they would have enough money.
 - (2) What we heard was a tissue of lies.
 - (3) When confronted by the facts, he became what one might describe as agitated.

- 3) Write down all the clauses in the following sentences saying (a) whether they are main or subordinate clauses, and (b) what type of subordinate clause has been used.
 - (1) I shall always remember what you said.
 - (2) When we arrived everyone was asleep.
 - (3) It was what everyone had feared.
- 4) Turn the following sentences into (a) imperatives and (b) interrogatives.
 - (1) He will come at eight o'clock.
 - (2) She doesn't do that.
 - (3) He doesn't play cricket.
- 5) Classify each of the following sentences according to whether they are (a) major or minor and (b) simple, complex or compound.
 - (1) Not on your life!
 - (2) What will we do if they don't turn up?
 - (3) One man one vote.
 - (4) He ran into the room, picked up his coat and ran out again.
 - (5) Often it is impossible to say whether they are telling the truth or not.

Exercise 2

- 1) Give a tree diagram for the deep structure of the sentence *The operator has been ringing the number*. How many times must the FF rule apply to yield the surface structure?
- 2) Why can the sentence *The shooting of the hunters was terrible* be accounted for by a transformational-generative grammar but not by a structural or traditional grammar?
- 3) Give a tree diagram for the deep structure of the sentence *Hasn't Jefferson been painting the house?*
- 4) Give a tree diagram for the deep structure of the sentence *A clown who gets a laugh is happy*. What transformations must apply to yield the surface structure?
- 5) How many embedded sentences are permissible in an English sentence?

Exercise 3

- 1) Give five different ways of inviting a person to visit you or to go to a specific place!
- 2) Make a suggestion to various persons using four different levels of formality!
- 3) Provide the English expressions to fulfill the function of *setting the time and the place you will meet someone*.

KEY TO EXERCISES**Exercise 1**

- 1) Pick out and classify the phrases in the following sentences
 - (1) Please send me = a verb phrase, three boxes of biscuits = a noun phrase, on the 14th of July = a prepositional phrase
 - (2) All the children = a noun phrase, seemed extremely happy = a verb phrase.
 - (3) She = a noun phrase, couldn't go = a verb phrase, to the theater = a prepositional phrase, because of her bad cold = adverbial phrase.

- 2) Pick out the noun clauses in the following sentences and say whether they function as subjects, objects or complements.
 - (1) She supposed that they would have enough money = object
 - (2) What we heard was a tissue of lies = subject
 - (3) When confronted by the facts, he became what one might describe as agitated. = complement

- 3) Write down all the clauses in the following sentences saying (a) whether they are main or subordinate clauses, and (b) what type of subordinate clause has been used.
 - (1) I shall always remember = main clause
 what you said. = subordinate clause, noun clause

(2) When we arrived = subordinate clause, adverb clause

everyone was asleep = main clause

(3) It was what everyone had feared = subordinate clause, noun clause

4) Turn the following sentences into (a) imperatives and (b) interrogatives.

(1) He will come at eight o'clock.

Come at eight o'clock!

Will you come at eight o'clock?

(2) She doesn't do that.

Don't do that!

Does she do that?

(3) He doesn't play cricket.

Don't play cricket!

Does he play cricket?

5) Classify each of the following sentences according to whether they are (a) major or minor and (b) simple, complex or compound.

(1) minor

(2) major and complex

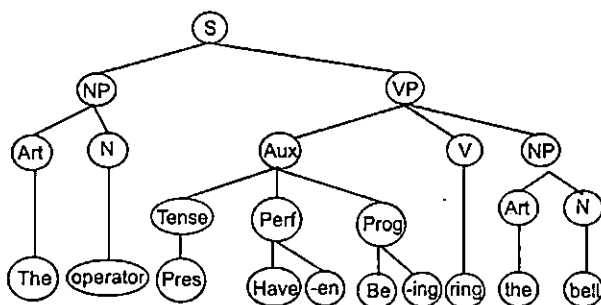
(3) minor

(4) major and compound

(5) major and complex

Exercise 2

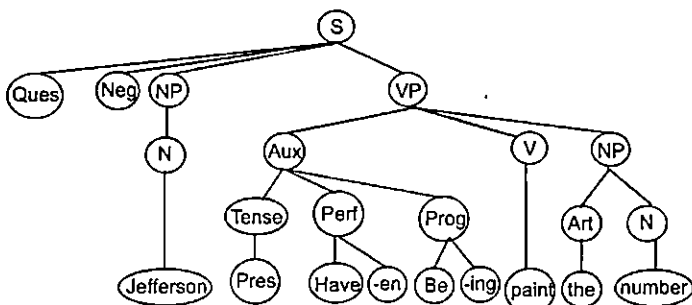
- 1) Give a tree diagram for the deep structure of the sentence *The operator has been ringing the number.* How many times must the FF rule apply to yield the surface structure?



After FF: The operator have Press be –en ring –ing the bell

By LF : The operator has been ringing the bell

- 2) The sentence 'The shooting of hunter was terrible' derives from two different deep structures. The first one is 'The hunter shot something and It was terrible'. The second one is 'Someone shot the hunter and it was terrible'. Because there two different deep structure, this sentence can only be discussed in transformational-generative grammar.
- 3) Give a tree diagram for the deep structure of the, sentence *Hasn't Jefferson been painting the house?*



- 4) Unlimited number of embedded sentences are permissible in an English sentence.

Exercise 3

- 1) Give five different ways of inviting a person to visit you or to go to a specific place!

- Please come to my birthday party!
- Will you come to my birthday party?
- Would mind coming to my birthday party?
- I wonder if you could come to my birthday party
- I'd like to invite you to come to my birthday party

2) Make a suggestion to various persons using four different levels of formality!

- You shouldn't do that!
- I suggest you not to do that!
- I would be better if you don't do that
- If you don't mind, you would rather not do that.

3) The function of *setting the time and the place you will meet someone*

- What time should we meet?
- What about meeting six p.m.?
- Where are going to meet?
- How about meeting in front of the theater?



SUMMARY

We have now looked at the syntax of the language and seen the flexibility that can be exploited by users of English. It is worth remembering that complex structures are not necessarily a feature of good style and also that effective communication relies on a structure being grammatical, acceptable and interpretable.

Transformational rules apply to deep structures to add, delete, or change elements. According to the original standard interpretive theory of transformational-generative grammar and generative semantics, transformational rules do not change the basic meaning of sentences. After all relevant transformations have applied, a surface structure is produced.

During the past fifteen years, the study of constraints has been a major issue in syntax. This study of constraints grew because transformational-generative grammars, as originally conceived, generated many unacceptable sentences. In order to prevent such sentences from

being generated, it is necessary to impose certain constraints on the power of transformations.



FORMATIVE TEST 2 _____

- 1) Pick out and classify the phrases in the following sentences. (EXAMPLE: 'The young boy will be running very fast'. Here we have three phrases: a noun phrase 'The young boy', a verb phrase 'will be running' and an adverb phrase 'very fast'.)
 - (1) To have played football for Manchester United was his greatest achievement.
 - (2) The boy will have arrived in Spain by this time.

- 2) Pick out the noun clauses in the following sentences and say whether they function as subjects, objects or complements.
 - (1) Where he works is a question for me.
 - (2) That is all I can remember.
 - (3) 'Who was she?' was of course the first question that everyone asked.

- 3) Write down all the clauses in the following sentences saying (a) whether they are main or subordinate clauses, and (b) what type of subordinate clause has been used.
 - (1) He arrived on the very day when we were celebrating your birthday.
 - (2) The hat which I bought was the wrong color.

- 4) Turn the following sentences into (a) imperatives and (b) interrogatives.
 - (1) She will do that exercise.
 - (2) She doesn't lie to me.

- 5) Paraphrase each of the following sentences in two different ways to show that you understand the ambiguity involved:
 - (1) The design has big squares and circles
 - (2) The mayor is a dirty street fighter

- (3) Terry loves his wife and so do I
- 6) Because languages have recursive properties, there is no limit to the potential length of sentences, and the set of sentences of any language is infinite. Give at least one example for each of the following recursions:
- (1) NP recursion
 - (2) VP recursion
 - (3) S recursion
- 7) Give a tree diagram for the deep structure of the following sentences:
- (1) *George hasn't been painting the house.*
 - (2) Do the homework!
 - (3) I would have been teaching English for many years
- 8) Give at least three examples of expressions used to realize the following language functions:
- (1) accepting an invitation
 - (2) asking someone to do something
 - (3) apologizing
 - (4) making suggestions

Check your answers with the Key which is provided at the end of this module, and score your right answers. Then use the formula below to know your achievement level of the lesson in this module.

Formula:

$$\text{Level of achievement} = \frac{\text{Scores of the right answers}}{\text{Total score}} \times 100\%$$

Meanings of level of achievement:

- 90% - 100% = very good
- 80% - 89% = good
- 70% - 79% = average
- < 70% = bad

If your level of achievement reaches 80% or more, you can on to the next module. **Good!** But if your level of mastery is less than 80%, you have to study again this unit, especially parts which you haven't mastered.

Key to Formative Test

Formative Test 1

1) The traditional terms for the grammatical categories

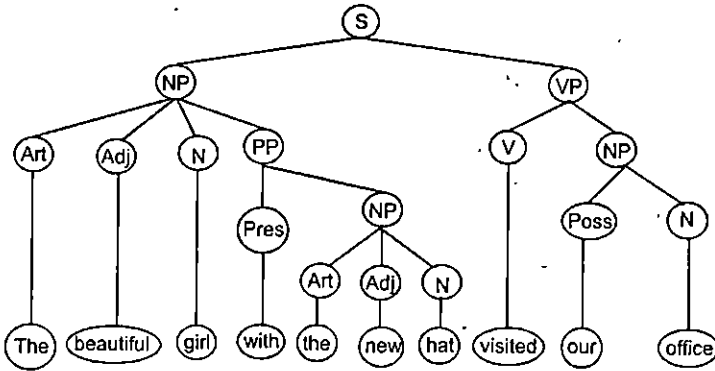
The new and kind boss gave a present to a diligent employee.

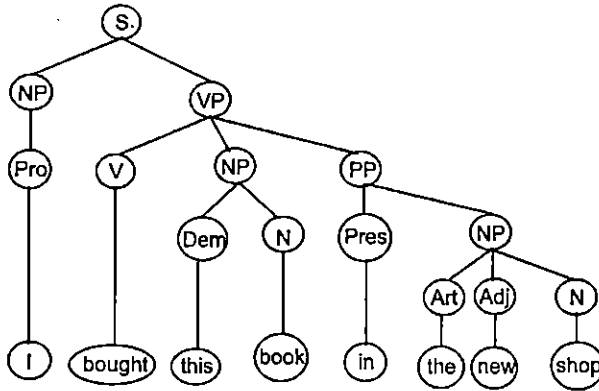
Art Adj Conj Adj N V Art N Prep Art Adj N

2) What prescriptive rules for the 'proper' use of English are not obeyed in the following sentences?

- a. You must not end a sentence with a preposition
- b. You must not split an infinitive
- c. You must not use object pronoun

3) Analyze the following sentences by using tree diagrams!





4) Find two other examples of sentences having the same deep structure as the following sentences

- Ismael bought me a new novel
Ismael bought a new novel for me
I was bought a new novel by Ismael
A new novel was bought for me by Ismael
- Marsinah told me a story
I was told a story by Marsinah
A story was told to me by Marsinah
Marsinah told a story to me
- Mas'ud sent her a letter
Mas'ud sent a letter to her
A letter was sent to her by Mas'ud
She was sent a letter by Mas'ud

5) Mention the name of transformational rules of the following sentences!

- Permutation
- Passive
- Deletion

6) Provide at least one example of the following functions

- A request to open erase the whiteboard
(Please erase the whiteboard, Will you erase the whiteboard?)

- Disagreeing with one's opinion
(I don't think so, I've got the different idea)
- Refusing an invitation
(I'm really sorry I can't)
- Expressing condolences
(I'm really sorry to hear it)

Formative Test 2

- 1) Pick out and classify the phrases in the following sentences.
 - (1) To have played football = Infinitive phrase, for Manchester United = prepositional phrase, was his greatest achievement = verb phrase
 - (2) The boy = noun phrase, will have arrived = verb phrase, in Spain = prepositional phrase, by this time = adverb phrase
- 2) Pick out the noun clauses in the following sentences and say whether they function as subjects, objects or complements.
 - (1) Where he works is a question for me = subject
 - (2) That is all I can remember = complement
 - (3) 'Who was she?' was of course the first question that everyone asked = subject
- 3) Write down all the clauses in the following sentences saying (a) whether they are main or subordinate clauses, and (b) what type of subordinate clause has been used.
 - (1) He arrived on the very day = main clause
when we were celebrating your birthday = subordinate clause, relative clause
 - (2) The hat was the wrong color = main clause which I bought = subordinate clause, relative clause.
- 4) Turn the following sentences into (a) imperatives and (b) interrogatives.
 - (1) She will do that exercise.
Do that exercise!
Will she do that exercise?

(2) She doesn't lie to me.

Don't lie to me!

Does she lie to me?

5) Paraphrase each of the following sentences in two different ways to show that you understand the ambiguity involved:

(1) The design has big squares and circles

The design has big squares and it also has circles

The design has big squares and big circles

(2) The mayor is a dirty street fighter

The mayor is a fighter from a dirty street

The mayor is a street fighter who is dirty

(3) Terry loves his wife and so do I

Terry loves his wife and I love my wife too

Terry loves his wife and I also love his wife

6) Because languages have recursive properties, there is no limit to the potential length of sentences, and the set of sentences of any language is infinite. Give at least one example for each of the following recursions:

(1) NP recursion

The man with the big hat on his head is my uncle

I want to met the person with the large freckle on his cheek

(2) VP recursion

I went to his house, came into his room, and waited for him there

Do you want to go with me or to stay at home?

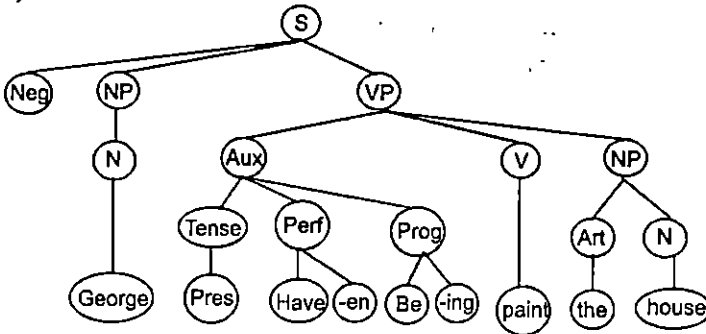
(3) S recursion

I believe that you are right

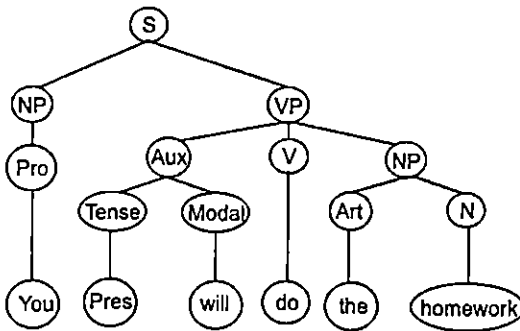
I don't know where he lives

7) Give a tree diagram for the deep structure of the following sentences:

a)



b)



8) Give at least three examples of expression used to realize the following language functions:

(1) accepting an invitation

Oh, that's a terrific idea

Sure, why not. That's a great idea

Oh, yes. That sounds very nice

(2) asking someone to do something

pass me the salt, please!

Will you pass the salt to me, please?

Would you mind passing the salt to me?

(3) apologizing

I'm really sorry for coming late

I'm terribly sorry for coming late

I apologize for my coming late

Bibliography

Bloomfield, Leonard. (1933). *Language*. Holt: Rinehart & Winston

Chomsky, Noam. (1957). *Syntactic Structures*. Mouton

_____. (1965). *Aspects of the Theory of Syntax*. M.I.T Press

Crane, L. Ben et. al. (1981). *In Introduction to Linguistics*. Boston: Little, Brown and Company.

Finocchiaro, Mary and C. Brumfit. (1983). *The Functional-Notional Approach: from theory to practice*. Oxford: Oxford University Press.

Fromkin, Victoria et. al. (1996). *An Introduction to Language*. 3rd edition. Sydney: Harcourt Brace.

O'Grady, William et. al. (1996). *Contemporary Linguistics: An Introduction*. 3rd edition. London: Longman.

Parker, Frank and Kathryn Riley. (2000). *Linguistics for Non-Linguists*. Boston: Allyn and Bacon.

Yule, George. (1985). *The Study of Language*. Cambridge: Cambridge University Press.

Phonetics and Phonology

Refnaldi, M.Litt.



INTRODUCTION

Congratulation! You have passed module 2. Welcome to module 3. The topic of this module is phonetics and phonology. The materials which are to be discussed in this module speech production, place of articulation, manner of articulation, vowels and diphthongs, phonemes and allophones, and phonological processes. After learning this module, you are expected to be able to:

1. understand the production of speech sounds
2. differentiate between consonants and vowels
3. classify consonants based of place of articulation and manner of articulation;
4. classify vowels and diphthongs;
5. identify phonemes and allophones;
6. identify the types of phonological processes;

To achieve these objectives systematically, the materials of this module are presented respectively as follow:

1. Unit 1 : Phonetics
2. Unit 2 : Vowels and Diphthongs
3. Unit 3 : The Sound Patterns of Language

The following activities are really suggested to do in order to learn this module successfully.

1. Read carefully the explanation of each topic.
2. Don't forget to give serious attention to examples given.

3. Do the exercises as well as possible.
4. Look up the meaning of difficult words in your dictionary.
5. Evaluate yourself by checking your answers or your responses with the key answers provided.

Good luck!

UNIT 1

Phonetics

A. INTRODUCTION

The medium through which most of us experience language most of the time is sound; for non deaf language users, the first exposure to language is through sound, and in non-literate, hearing societies it is typically the only medium. Humans have a variety of ways of producing sounds, not all of which are relevant to language (for example, coughing, burping, etc). How sound is used in language, that is, speech sounds, is the focus of this book, and one obvious place to start out is to look at the physical process involved in the production of speech sounds by speakers—the study of articulatory phonetics.

Every day we hear many types of sounds: bells ringing, machinery clunking, dogs barking, leaves rustling, people talking. The science of acoustics studies sounds in general, and phonetics studies the sounds used in human language. Phonetics is part of the wider field of linguistics, which studies language as a whole.

Phonetics is concerned with the sounds we make in speech: how we produce them, how these sounds are transferred from the speaker to the hearer as sound waves, and how we hear and perceive them. The branch of phonetics dealing with the production of sounds is called **articulatory phonetics**. In speech, air passes through a complex passageway consisting of the lungs, the windpipe, the vocal folds, the throat, the mouth, and the nose. In order to describe how sounds are made, we must become familiar with the various parts of our anatomy which are involved in speech production. We will also learn how we change the shape of the vocal organs to make different sounds.

From physics, we know that sound is transmitted by vibrations in the air. **Acoustic phonetics** studies the vibrations of speech sounds. With instruments in the laboratory, we can observe and measure various aspects of

sound. In Chapter 5, we will learn how these measurements and observations can be used to widen our understanding of human speech. **Auditory phonetics** is the study of how sounds are heard and perceived. This area of phonetics generally falls outside the coverage of this book.

B. THE PRODUCTION OF SPEECH SOUNDS

We begin our study of articulatory phonetics with an examination of the vocal organs, the parts of the body used in producing speech (Figure 3.1). The lungs start the process of speech production by pushing air upwards. The vocal folds, which are located in the larynx behind the Adam's apple, may vibrate, causing the air that flows between them to vibrate as well. The vibrating airstream is then modified according to the shape of the vocal tract - the throat, mouth, and nasal cavity. By moving our tongue and lips, we can produce a large number of modifications on the vibrating air stream, and thus, a wide variety of sounds.

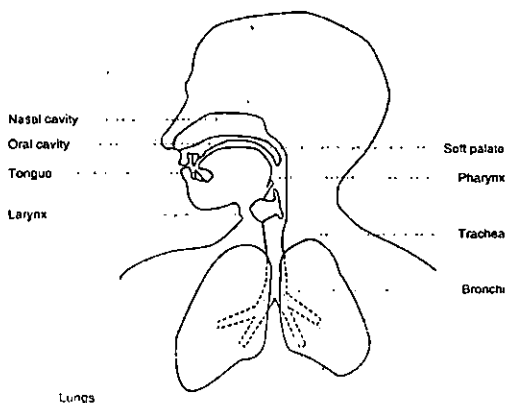


Figure 3.1
The primary vocal organs

We will now look at the various parts of the vocal organs. In a number of cases, the Latin or Greek name is normally used in phonetics. These terms are given as they are needed. We need to become familiar with the anatomy and terminology of the vocal mechanism.

1. The lungs, the Trachea, and the Larynx

The **lungs** are cone-shaped structures in the chest composed of spongy, elastic material. The lungs consist of small air sacs, or **alveoli**, where oxygen from the fresh air is exchanged for carbon dioxide in the blood. When the lungs are expanded, air is drawn in; when they are compressed, 'air is

expelled. We have a considerable amount of control over the rate of breathing. When speaking, we breathe in fairly quickly and then expel the air more slowly. In English, all speech is made as the air flows out of the body; that is, English speakers do not ordinarily talk while breathing in.

The small tubes of the lungs merge with each other, repeatedly forming larger tubes, until they form two large tubes called bronchi, one bronchus coming from the left lung and one from the right lung. The two bronchi merge into a single vertical tube called the **trachea** or windpipe.

The **larynx** is a structure made of several cartilages held together by ligaments and supporting several muscles; it is roughly cylindrical in shape and rests on top of the trachea. The front part of the larynx, known as the Adam's apple, sticks out in the front.

After passing through the bronchi and trachea, the first organ the airstream will meet is the larynx. We can feel the outward part of this organ, and especially in men, can be seen at the front of the neck (the Adam's apple). The larynx is a valve that can be opened and closed by two thickish flaps that run from back to front inside the larynx. These flaps are primarily used to prevent food or saliva from entering the lungs, but because they also have a function in speech they are also known as the **vocal folds** or the **vocal cords**. The aperture between them is called the **glottis**. No air can pass through the glottis when it is closed, while the air can flow quite freely through and open glottis.

Many sounds in speech are made with the vocal folds separated. As air passes through the opening between the separated vocal folds, a slight friction-like noise is heard. If you make a long /h/--/h h h h h h h h h h/, you will hear this noise. This glottal adjustment is called **voiceless**. Many sounds in English are made with the vocal folds in the voiceless position.

There are many consonants that are produced with the glottis held open (far apart) as in figure 3.2, like in ordinary breathing. Such sounds are called **voiceless**, and we hear them because other speech organs, the tongue or the lips, are used to generate sound further up in the vocal tract. Examples of voiceless sounds are [f] in fish and [s] in stay.

The vocal cords are exploited in various ways to create sound which can be used as a basis for speech. This is known as **phonation**. The most

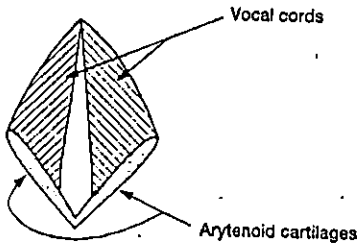


Figure 3.2
Open glottis

when the air pressure between them drops. Consonants like [m], [l] and [j] (sonorant consonants) and vowels are normally voiced. Voiced-obstruent consonants also exist.

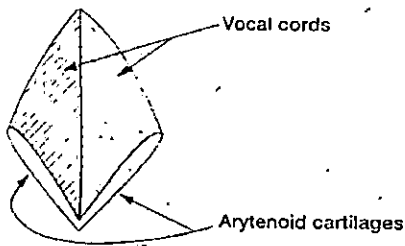


Figure 3.3
Closed glottis

parts of the vocal tract mentioned above.

important type of phonation is **voice**, which is produced when the vocal folds vibrate (Fig. 3.3). Vocal-fold vibration occurs when the closed glottis is subjected to increased subglottal air pressure which is sufficient to blow the vocal folds apart, but not enough to prevent them from falling together again

2. The Vocal Tract

The channel from the larynx onwards is called vocal tract, which extends all the way to the lips. It consists of pharynx and the mouth, to which an extra tube extending to the nostrils may be coupled, the nasal cavity. The following explanation deals with the three

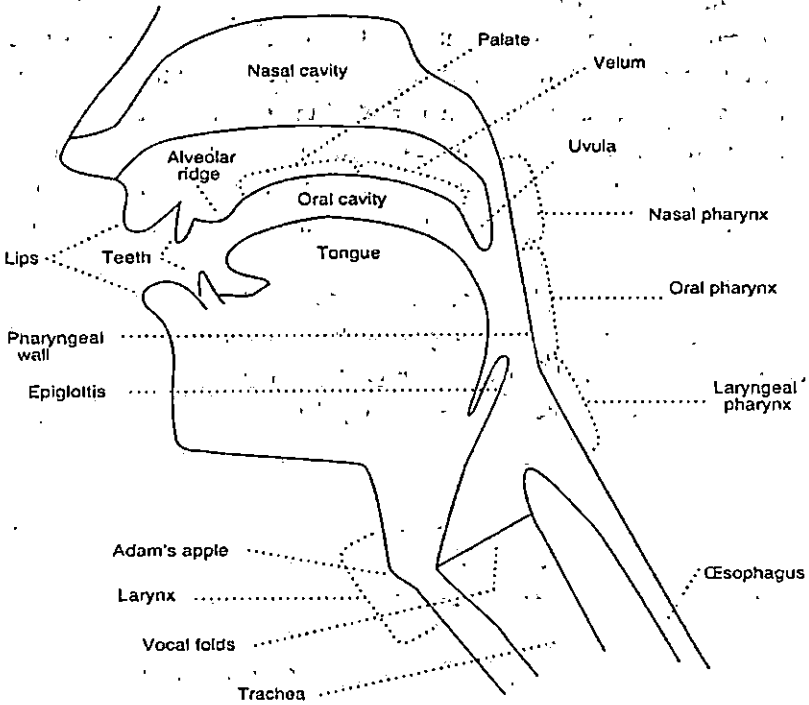


Figure 3.4
The vocal tract

a. The pharynx

The pharynx is the technical name for the throat, a vertical tube leading up from the larynx. From Figure 3.4, you can see that the pharynx goes up from the larynx past the mouth to the nasal cavity. If you look in the mirror, lower your tongue, and say ah, you can see the back of your throat or pharyngeal wall. The pharynx serves primarily as a tube connecting the larynx with the oral and nasal cavities. It can be divided into three parts: the oral pharynx; at the back of the mouth, the nasal pharynx, leading into the nasal cavity, and the laryngeal pharynx, just above the vocal folds. The esophagus is a tube, behind the trachea, which leads to the stomach.

b. *The mouth (oral cavity)*

The mouth is the most important part of the vocal tract because it is here that most drastic modifications of its shape are achieved and the majority of the articulatory contacts are made. The roof of the mouth is formed by soft palate, with the uvula at the extreme end, and the hard palate, which lies to the front of the soft palate. Immediately behind the front teeth is alveolar ridge, which is touched by the tongue during the pronunciation of 'dada'. Then there are the front teeth themselves and the upper lip. Below these parts there are more active speech organs: the lower lip and the tongue. The zone immediately behind the tip of the tongue is called the blade. Together, tip and blade are called crown. The part of the tongue opposite the hard palate is called the front, and the part opposite the soft palate is called the back.

c. *Tongue*

The tongue is a large, muscular organ which is involved in almost every sound we make. The surface of the tongue is, of course, continuous, but phoneticians find it convenient to divide it into five parts (Figure 3.5).

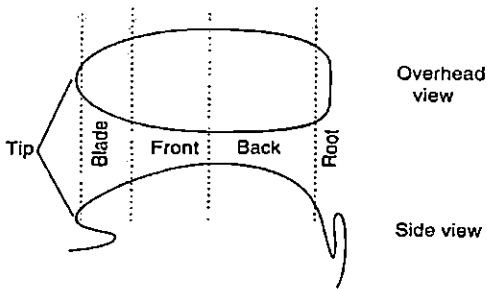


Figure 3.5
Parts of the tongue

The tip, or apex, of the tongue is its foremost part. Sounds made with the tip of the tongue are called apical. Apico-dentals are made with the tip articulating with the upper teeth, as in *thin*, then. Apico-alveolars are made with the tip of the tongue articulating with the alveolar ridge. In English, apico-

alveolars are common, as in *toe*, *dead*, *nun*.

Lying just behind the tip of the tongue is a small surface called the blade, or lamina. Sounds made with the blade are called laminal. In English, the initial sounds in *ship* and *shoe* are usually postalveolars, the blade of the tongue being near the back of the alveolar ridge.

The front of the tongue has a misleading name. It is not at the front of the tongue, but behind the tip and the blade. Fortunately, we do not need to refer to it that often. The front of the tongue articulates against the palate; such sounds are simply called palatal. The initial sound in English of *yes* is palatal, made with the front of the tongue raised towards the palate.

The hindmost part of the horizontal surface of the tongue is called the back or dorsum (the adjective is dorsal). It articulates against the velum to form dorsum-velar sounds. Be careful not to confuse the back of the tongue with the root. In English, the final sounds in the words *tick*, *dog*, and *sang* are all dorsa-velar.

C. PLACE OF ARTICULATION

To describe the place of articulation of most consonant sounds, we can start at the front of the mouth and work back. We can also keep the voiced-voiceless distinction in mind and begin using the symbols of the phonetic alphabet to denote specific sounds. These symbols will be enclosed within square brackets [].



Figure 3.6
Bilabial

1. Bilabial

The outermost articulators are the lips. They commonly articulate with each other to form bilabial sounds (Figure 3.6). The initial sounds in the words *pen*, *bend*, and *mend* are the examples bilabials. They are represented by the symbol [p], which is voiceless, and [b] and [m], which are voiced. The [w] sound found at the beginning of *way*, *wind*, and *wood* is also a bilabial.

2. Labiodentals



Figure 3.7
Labiodental

Another common articulation occurs when the lower lip articulates with the upper teeth to form labiodental sounds (Figure 3.7). The initial sounds of the words *fee* and *vow* and the final sounds in the word *safe* and *save* are labiodentals consonants. They are represented by the symbols [f], which is voiceless, and [v] which is voiced. Notice that the final sounds of *laugh* and *cough*, and the initial sound of *photo*, despite the spelling differences, are all pronounced as [f].

3. Dentals

Sounds which are made with the forward part of the tongue articulating with the upper teeth are called dental (Figure 3.8). The term *interdental* is sometimes used to describe a manner of pronunciation with the tongue tip between the upper teeth and the lower teeth. In English, the initial sound of



Figure 3.8
Dental

thin and the final sound of *path* are both voiceless dentals. The symbol used for this sound is [t]. The initial sound of *then* is voiced dental and it is represented by the symbol [ð].

a. *Alveolars*

Just behind the upper teeth, there is a bumpy area known as the alveolar ridge. Put the tip of your tongue against your upper teeth and pull it slowly back. You will likely feel the alveolar ridge between the teeth and the hard palate although a few people do not have a noticeable ridge. Sounds made here are called alveolar (Figure 3.9). In English, *doe*, *toe*, *no*, *so*, *zoo*, *low* and *row* begin with alveolar consonants. The symbols for alveolar consonants are [t], [d], [s], [z], [n] and [l]. [t] and [s] are voiceless alveolars, while the rest of them are voiced alveolars.



Figure 3.9
Alveolar

b. *Alveo-palatals*

Alveo-palatal sounds (Figure 3.10) are made with the blade of the tongue articulating at the back of the alveolar ridge and the front of the tongue raised towards the palate. In English, the words *she*, *cheese*, and *judge* begin with Alveo-palatal consonants; also, the middle sound in *pleasure* is postalveolar. [ʃ] and [tʃ] are voiceless alveo-palatals, and [ʒ] and [dʒ] are voiced alveo-palatals.



Figure 3.10
Postalveolar

c. *Palatals*

The hard palate is a thinly covered bony structure forming the forward part of the roof of the mouth. In phonetics, the hard palate is normally referred to simply as the palate. It extends from the alveolar ridge to the soft palate (velum). Sounds made in this area with the front of the tongue are called palatal (Figure 3.11). In English, *yes* begins with a palatal sound. The symbol for this sound is [j]. This sound is the voiced palatal.



Figure 3.11
Palatal

d. *Velars*

The soft palate is the rear portion of the roof of the mouth unsupported by bone. If you move your tongue along the hard palate towards the back of your mouth, the texture suddenly becomes soft where the bone ends; this soft area is the soft palate. In phonetics it is normally referred to as the velum. This is short for the longer Latin phrase *velum palati* 'the veil of the palate'. Sounds using the lower surface of the velum as the upper articulator are called *velar* (Figure 3.12). In English, *luck*, *lug*, and *lung* all end in different velar consonants. There is a voiceless velar sound, represented by the symbol [k]. The voiced velar consonants are [g] and [ŋ].



Figure 3.12
Velar

e. *Glottal*

There is another sound which is produced without the active use of the tongue and other parts of the mouth. It is the sound that occurs at the beginning of *hope* and *who*. The symbol for this sound is [ʔ], which is usually described as a voiceless glottal consonant. The glottis is the main place of articulation of this sound. When the glottis is open, as in the production of other voiceless sounds, but there is no manipulation of the air passing out through the mouth.

D. MANNER OF ARTICULATION

So far, we have concentrated on describing consonant sounds in terms of where they are articulated. We can, of course, describe the same sounds in terms of how they are articulated. Such a description is necessary if we wish to be able to differentiate between some sounds which, in the preceding discussion, we have placed in the same category. For example, we can say that [t] and [s] are both voiceless alveolar sounds. How do they differ? They differ in their manner of articulation, that is, in the way they are pronounced.

The [t] sound is *one* of a set of sounds called stops and the [s] sound is *one* of a set called fricatives.

1. Stops

Of the sounds we have already mentioned, the set [p], [b], [t], [d], [k], and [g] are all produced by some *form* of complete 'stopping' of the airstreams (very briefly) and then letting it go abruptly. This type of consonant sound resulting *from* a blocking *or* stopping effect on the airstreams is called a **stop**. A full description of the [t] sound at the beginning of a word like *ten* is as a 'voiceless alveolar stop'. *On* occasion, only the manner of articulation is mentioned, as when it is said that the word *bed*, *for* example, begins and ends with 'voiced stops'.

2. Fricatives

The manner of articulation used in producing the set of sounds [f], [v], [tʃ], [dʒ], [s], [z], [ʃ], [ʒ], and [h] involves almost blocking the airstreams, and having the air push through the narrow opening. As the air is pushed through, a type of friction is produced and the resulting sounds are called **fricatives**. If you put your open hand in front of your mouth when making these sounds, [f] and [s] in particular, you should be able to feel the stream of air being pushed out. A word like *fish* will begin and end with 'voiceless fricatives'. The word *those* will begin and end with the 'voiced fricatives' [v] and [z].

3. Affricates

If you combine a brief stopping of the airstreams with an obstructed release which causes some friction, you will be able to produce the sounds [tʃ] and [dʒ]. These are called **affricates** and occur at the beginning of the words *cheap* and *jeep*. In the first of these, there is a 'voiceless affricate', and in the second a 'voiced affricate'.

4. Nasals

Most sounds are produced orally with the velum raised, preventing airflow from entering the nasal cavity. However, when the velum is lowered and the airflow is allowed to flow out through the nose to produce [μ], [v] and [N], the sounds are described as *nasals*. These three sounds are all voiced. Words like *morning*, *knitting* and *name* begin and end with nasals.

5. Liquids

The initial sounds in the words *led* and *red* are generally described as *liquids*. The [l] sound is formed by letting the airstreams flow around the sides of the tongue as if it makes contact with the alveolar ridge. The [r] sound is formed with the tongue tip raised and curled back behind the alveolar ridge.

6. Glides

The sounds [w] and [ɸ] are produced very much as transition sounds. They are called *glides*, or 'semi-vowels'. In pronunciation, they are usually produced with the tongue moving, or 'gliding', to or from a position associated with a neighboring vowel sound. They are both voiced. Glides occur at the beginning of *we*, *wet*, *you* and *yes*.

Table 3.1
Phonetic Representation of English Consonants

	Bilabial		Labio-dental		Dental		Alveolar		Alveo-palatal		Palatal		Velar		Glottal	
	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+
Stop	π	β					τ	δ					κ	γ		
Fricative			φ	σ	θ	Δ	σ	ζ	Σ	Z					η	
Affricate									τ	δZ						
									Σ							

v	Bilabial		Labio-dental		Dental		Alveolar		Alveo-palatal		Palatal		Velar		Glottal	
Nasal		μ					v						N			
Liqui d							λ									
							ρ									
Glide		ω										φ				



EXERCISES

Exercise 1

Determine whether the following each of the following sounds is voiced or voiceless!

Example: /β/ voiced

- 1) / / _____
- 2) / / _____
- 3) / / _____
- 4) / / _____
- 5) / / _____
- 6) / / _____
- 7) / / _____
- 8) / / _____
- 9) / _____
- 10) / / _____

Exercise 2

Determine the place of articulation on each initial sound of the following words

Example photo /p/ = Labiodental

- 1) chemistry _____
- 2) sure _____
- 3) sheep _____
- 4) genre _____
- 5) chess _____
- 6) wrong _____
- 7) yellow _____
- 8) juice _____
- 9) think _____
- 10) that _____

Exercises 3

Describe the phonetic features of the underlined sounds by using state of glottis, place of articulation, and manner of articulation

Example measure /Z/ [voiced dental fricative]

- 1) photograph _____
- 2) without _____
- 3) writing _____
- 4) bridge _____
- 5) psychology _____
- 6) cheap _____
- 7) wash _____
- 8) mate _____
- 9) thank _____
- 10) climb _____

KEY TO EXERCISES**Exercise 1**

Determine whether the following each of the following sounds is voiced or voiceless!

- 1) / / voiced
- 2) / / voiceless
- 3) / / voiceless
- 4) / / voiced
- 5) / / voiced
- 6) / / voiced
- 7) / / voiced
- 8) / / voiced
- 9) / / voiceless
- 10) / / voiceless

Exercise 2

Determine the place of articulation on each initial sound of the following words.

- 1) chemistry /k/ = velar
- 2) sure / / = alveo-palatal
- 3) sheep / / = alveo-palatal
- 4) genre / / = alveo-palatal
- 5) chess / / = alveo-palatal
- 6) wrong /r/ = alveolar
- 7) yellow / / = palatal
- 8) juice / / = alveo-palatal
- 9) think / / = dental
- 10) that / / = dental

Exercises 3

Describe the phonetic features of the underlined sounds by using state of glottis, place of articulation, and manner of articulation

- | | | |
|--------------------------|-----|-------------------------------------|
| 1) phot <u>o</u> graph | /f/ | [voiceless labio-dental fricative] |
| 2) w <u>it</u> hout | / / | [voiced dental fricative] |
| 3) w <u>ri</u> ting | / / | [voiced velar nasal] |
| 4) b <u>ri</u> dge | / / | [voiced alveo-palatal affricate] |
| 5) p <u>sy</u> chology | /k/ | [voiceless velar stop] |
| 6) <u>ch</u> ea <u>p</u> | / / | [voiceless alveo-palatal affricate] |
| 7) w <u>ash</u> | / / | [voiceless alveo-palatal fricative] |
| 8) m <u>a</u> te | /t/ | [voiceless alveolar stop] |
| 9) <u>th</u> ank | / / | [voiceless dental fricative] |
| 10) <u>cl</u> imb | /k/ | [voiceless velar stop] |



SUMMARY

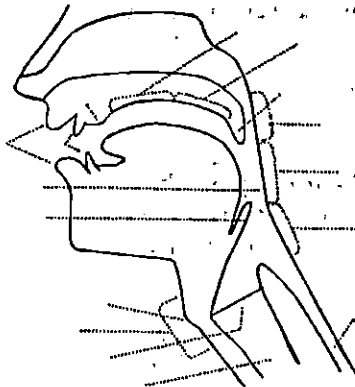
The science of speech sounds is called phonetics. It aims to provide the set of features, or properties that can describe all sounds in human language. To describe these speech sounds we cannot depend on the way words are spelt. Conventionally spellings represent only partially the pronunciation of words. For this reason, a phonetic alphabet such as the International Phonetics Association (IPA) is used, in which each phonetic symbol stand for one and only one sound.

All human speech sounds fall into classes according to their phonetic properties or features, according to how they are produced. Sounds may be either voiced or voiceless; oral or nasal; labial, dental, alveolar, palatal, velar, or glottal. They may also be fricatives or stops and either consonants or vowels. Vowels form the nucleus of syllables and are syllabic. They differ according to length: long or short; and the position of the tongue: high, mid, or low; and the horizontal position of the tongue: front, central and back.



FORMATIVE TEST 1

- 1) Fill in the names of the important parts of the vocal organs. You may want to make several photocopies of this page for practice work.



- 2) In each of the following words a sound is underlined. For each sound state (i) its voicing, (ii) its place of articulation and (iii) its manner of articulation.

a. <u>h</u> ee	c. rea <u>s</u> on	e. <u>h</u> ang	g. ju <u>n</u> gle
b. <u>v</u> ine	d. lee <u>ch</u>	f. li <u>s</u> ten	h. ba <u>g</u> / ga <u>g</u>

- 3) Each of the words below has a sound underlined. For each of the pairs of words state what the difference is between the underlined sounds in term of manner of articulation, place of articulation or voicing.

a. <u>t</u> oe / <u>d</u> oe	b. <u>s</u> ick / <u>t</u> ick	c. <u>l</u> uck / lu <u>g</u>	d. li <u>p</u> / li <u>ck</u>
e. ri <u>f</u> t / wri <u>s</u> t	f. ca <u>d</u> / ca <u>n</u>	g. mea <u>s</u> ure / me <u>s</u> her	h. ba <u>g</u> / ga <u>g</u>

- 4) Circle all the words below that have a nasal as their final sound:

pin tab tame sings sign lamb

- 5) Circle all the words below that begin with an alveolar sound:

fin	just	sin	lest	dumb
church	great	ten	thought	nest

- 6) Write the phonetic symbol for the last sound in each of the following words

fleece	watch	long
rough	rags	civic
judge	thought	learned

- 7) Circle all the words below that have a velar sound:

care	boss	lick	jug
sing	ridge	that	mice

Check your answers with the Key which is provided at the end of this module, and score your right answers. Then use the formula below to know your achievement level of the lesson in this module.

Formula:

$$\text{Level of achievement} = \frac{\text{Scores of the right answers}}{\text{Total score}} \times 100\%$$

Meanings of level of achievement:

90% - 100% = very good
 80% - 89% = good
 70% - 79% = average
 < 70% = bad

If your level of achievement reaches 80% or more, you can on to the next unit. **Good!** But if your level of mastery is less than 80%, you have to study again this unit, especially parts which you haven't mastered.

UNIT 2

Vowels and Diphtongs

A. VOWELS

The key articulatory difference between vowels and consonants resides in the fate of the airflow coming out of the lungs as it passes through the mouth. In consonantal sounds the airstream finds a radical constriction or even total blockage at some point along the central passage in the oral cavity. By contrast, when a vowel sound is made, no such obstacle is present.

We will need to describe vowels using different features than those we use for consonants. Vowels are sounds produced with a relatively open vocal tract, so they do not have a consonant-like point of articulation (place of articulation) or manner of articulation (type and degree of constriction), and they are almost always voiced.

There are several ways in which speakers can change the shape of the vocal tract and thus change vowel quality. They can do by:

1. raising or lowering the body of the tongue
2. advancing or retracting the body of the tongue
3. rounding or not rounding the lips
4. making these movements with a tense or a lax gesture

Based on raising or lowering the body of the tongue (also known as tongue height), vowels can be classified into three subdivisions. They are **high**, **mid** and **low**, with intermediate terms **high-mid** and **low-mid** being available if necessary. The vowels in English 'see', 'set', and 'car' are high, mid, and low respectively. It should also be noted that the terms 'close' and 'open', for 'high' and 'low' respectively, are sometimes found in older texts.

Parallel to consonantal place, vowels are also classified horizontally (based on advancing or retracting the body of the tongue, which is also known as tongue advancement). They are **front**, **central**, and **back**, referring to which part of the tongue is highest, with front being equivalent to palatal

and back equivalent to velar. The vowels in most varieties of English 'sit', 'sir', and 'soon' are front, central, and back respectively.

The third classification has to do with the attitude of the lips, which are either **round** or **unrounded** when making vowel sounds. If we look in the mirror, we are able to see that when we produce the vowel in English 'see' our lips are unrounded (or spread), while for the vowel in 'sue' the lips are rounded.

1. High front Vowels

Most varieties of English have two high front vowels; the long monophthong [i:], as in 'see' and the short monophthong [ɪ] as in 'sit'. As well as the difference in length, the two vowels are also different in quality, with [ɪ] being somewhat lower and more centralized than [i:]. This distinction is often referred to as tense [i:] versus lax [ɪ]. Although [i:] is classified as a long vowel, it is in fact often not a pure monophthong; the highest point of the tongue may well start lower and more centralized, raising and fronting during the articulation, giving something like [i ɪ].

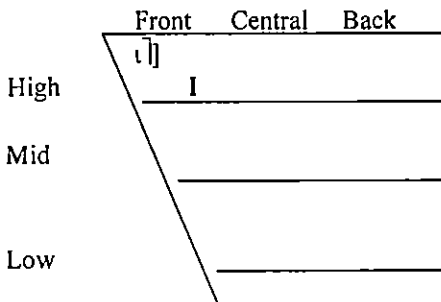


Figure 4.5
High front vowels of English

2. Mid front Vowels

All varieties of English have a short mid front unrounded [E] (sometimes transcribed [e]), as in 'bed'. Many varieties, such as Scottish, Irish and Northern English, have a mid or high-mid front vowel [e:] in words such as 'day'. This vowel is long in all varieties except Scottish English, where length

varies according to context. For other varieties, including RP and Southern English, words like 'day' have a diphthong [eɪ]. In most forms of North American English, the distinction between [eɪ] and [E] is lost before a rhotic; 'Mary' and 'merry' are thus homophones, [μE♦ɪ̃].

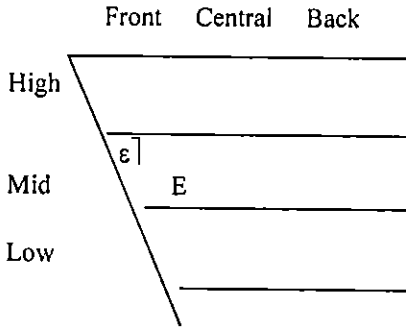


Figure 4.6
Mid front vowels of English

3. Low front Vowels

English has one short low front vowel, found in words like 'rat'. This is represented as [⊙]. Many other kinds of British English, including Welsh, Scottish and Northern English varieties, have a lower vowel, transcribed as [α]: [♦ατ]. This low lower vowel is also heard in some New England varieties of US English (e.g. Boston). On the other hand, Cockney, some RP and Southern Hemisphere varieties have noticeably higher vowel which might be transcribed as [♦Eτ]. In the South West of England and Northern Ireland the vowel is often rather longer than other varieties: [♦α̃τ]. It may also be further back, closer to [A]: [♦Ãτ]. Low vowels are typically longer anyway than other vowels (compare 'rat' and 'writ').

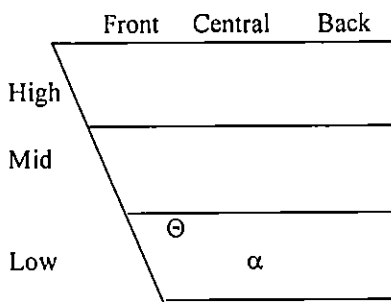


Figure 4.7
Low front vowels of English

4. Low back Vowels

There are two common low back vowels in English: long back unround [A] as in the stressed vowel in 'father', and short low back round [ɒ], as in many British varieties in the vowel in 'dog'. For most kinds of English, words like 'father', 'farm' and 'calm' have the low back vowel [A], either long for all these (in non-rhotic accents) or followed by a rhotic (as in Gen Am) for words like 'farm'. However, a number of varieties have a very much fronted variant in these words, which may or may not contrast with low front vowel in 'rat' in terms of quality and/or quantity. So, Australian English has [ə] or [E] in 'rat' but [ɑ] in 'father'. A similar situation holds in South Western English varieties. In many Scottish and Irish varieties, however, there is no front-back distinction at all with the low vowels, with a single vowel [ɑ] being found in all these words: 'rat' and 'rather' have the same vowel, and 'Pam' and 'palm' are homophones (all with [ɑ]).

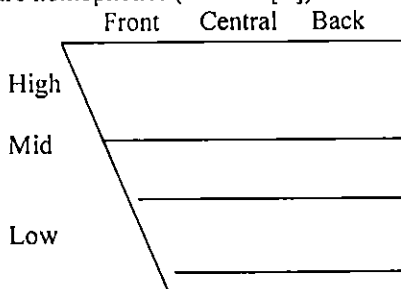


Figure 4.8
Low back vowels of English

Try saying the vowels in *pan* and *palm*. The symbols for these are /ɒ/ and /ɑ/. Be sure to write the back vowel as /ɑ/, and not as /ɒ/. Try to say them alone without any consonants: /ɒɒɒɒɒAAAAA/. Although both of these vowels are low vowels, you will feel your tongue change shape as you go from one vowel to the other (Figure 4.9). The high point of the tongue for /ɑ/ is in the front of the mouth, and the high point for /ɒ/ is in the back of the mouth. Just as we can make high and low vowels, so we also can make front and back vowels.

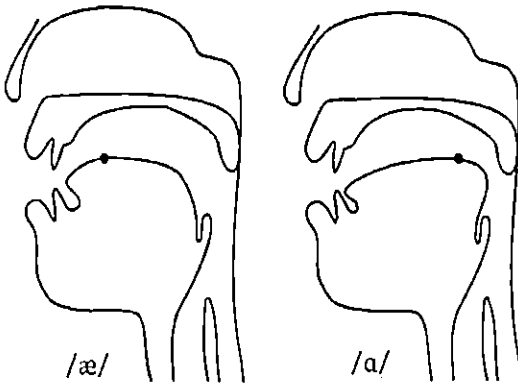


Figure 4.9
Tongue position for /ɒ/ and /ɑ/

5. Mid back Vowels

Most kinds of English have a low mid back round vowel [ɔ] in words like 'bought', 'cause', 'paw' or 'horse'. In many varieties of British English, this is a long vowel [ɔ:], though in North American varieties it is usually shorter. The vowel [ɔ] is also increasingly common in non-rhotic accents for earlier [ɔ↔] in words like 'door', 'shore', 'four'. It is also heard to replace [Y↔] in words like 'poor', 'moor', 'your'. Thus, while some speakers may distinguish between 'paw' [πɔ], 'pour' [πɔ↔], and poor' [πY↔], for others they may be homophones: [πɔ].

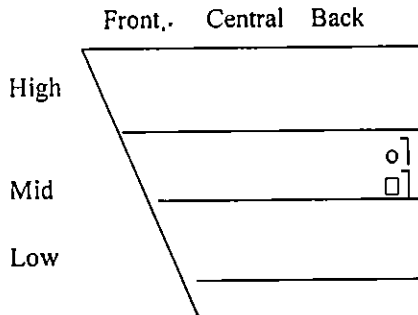


Figure 4.10
Mid back vowels of English

6. High back Vowels

Most kinds of English have two high back vowels: long [ʊ] as in 'shoe' and short [Y] as in 'put'. As with [ɪ] and [I], the difference is in quality and quantity: [Y] is lower and more central, as well as shorter than [ʊ]. Again parallel to high front vowel [ɪ], [ʊ] is often diphthongized, starting out lower and more central; [Yʊ]. For some varieties, such as London and East Anglia, as well as Scottish English, the articulation of this vowel is central: [←].

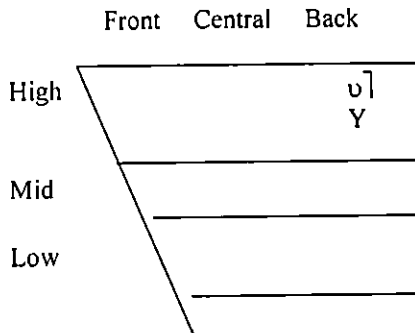


Figure 4.11
High back vowels of English

Height and backness are not the only dimensions for vowels. Try saying /u/ and /ʊ/--the vowels for *key* and *coo*. You will note that your lips are

rounded for /ʊ/, but not for /u/ (Figure 4.12). For each vowel, we specify whether it rounded or unrounded.

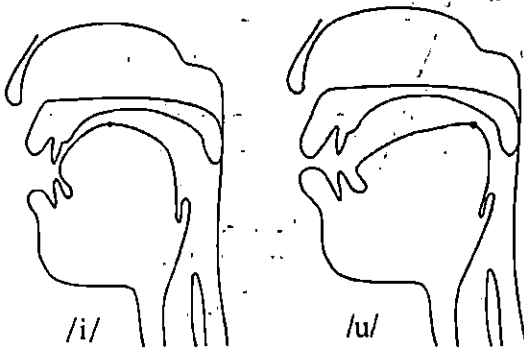


Figure 4.12
Tongue and lip position for /i/ and /u/

7. Central Vowels

For most speakers of English, words like 'cup', 'luck', 'fuss' have a vowel usually represented by the symbol [ɚ]. Although this represents a low mid unround back vowel in the cardinal vowel system, its articulation is typically further forward than back, being at least central for most speakers, and forward of central for many. Older RP speakers may still use a centralized back vowel, however; North American versions tend to be fairly central. In Southern Hemisphere English the vowel in these words is a front vowel [ɒ]. In Welsh English, the vowel in these words is central but higher, being represented by [↔].

Words like 'nurse', 'fir', 'her', and 'worse' have a mid-central unround vowel [ɜ] in non-rhotic accents of English, though there is some variation of realization.

The remaining central vowel is schwa [ə]. This is typically found as the first vowel in 'about' or the last vowel in 'puma'. That is, it is the commonest vowel in syllables that do not carry stress. That is, it is the commonest vowel in syllables which do not carry stress:

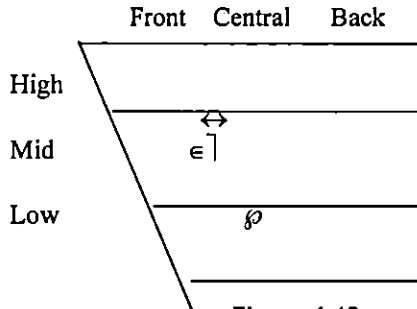


Figure 4.13
Central vowels of English

B. DIPHTHONGS

Diphthongs are two vowels that are pronounced simultaneously. There are generally nine diphthongs in English. They can be classified into two types of diphthongs' raising diphthongs and centring diphthongs. Raising diphthongs are the diphthongs beginning from now high vowels and ending in high vowels. There are five raising diphthongs. The following figure shows the distributions of raising diphthongs:

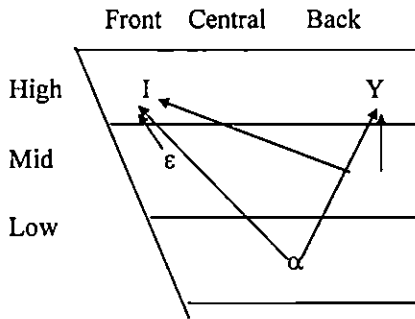


Figure 4.14
Raising diphthongs

The second type is called centering diphthongs. They are called so because the end point of the diphthongs is a central vowel [ə]. There are four

centering diphthongs in English. The following figure shows the distribution of centering diphthongs.

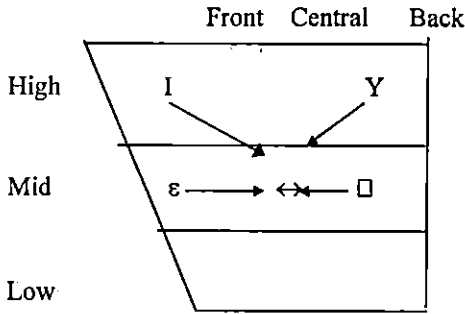


Figure 4.15
Centering diphthongs



EXERCISES

Exercise 1

Write the symbol(s) that correspond(s) to each of the following phonetic description. Then give an English word containing this sound.

Example: high front unround tense /i/ sheep

- a. low front vowel _____
- b. high front lax vowel _____
- c. high back round tense vowel _____
- d. mid central unround lax vowel _____
- e. low back round vowel _____
- f. mid front lax vowel _____
- g. high back round lax vowel _____

Exercise 2

Give at least four words consisting of the following diphthongs

Example: /αI/

buy

tie

like

time

a. /I↔/

b. /□I

c. /αY/

d. /U↔/

e. /εI/

KEY TO EXERCISES**Exercise 1**

Write the symbol(s) that correspond(s) to each of the following phonetic description. Then give an English word containing this sound.

- | | | | |
|----------------------------------|-----|--------|-----|
| a) low front vowel | | / / | bag |
| b) high front lax vowel | / / | ship | |
| c) high back round tense vowel | / / | boot | |
| d) mid central unround lax vowel | / / | middle | |
| e) low back round vowel | / / | hot | |
| f) mid front lax vowel | / / | bed | |
| g) high back round lax vowel | / / | put | |

Exercise 2

Give at least four words consisting of the following diphthongs

- | | | | | |
|--------|------|------|--------|--------|
| a) / / | here | dear | tear | beer |
| b) / / | boy | toy | troy | moist |
| c) / / | now | cow | cousin | ground |
| d) / / | sure | poor | tour | |
| e) / / | lake | mate | date | late |



SUMMARY

Based on raising or lowering the body of the tongue (also known as tongue height), vowels can be classified into three subdivisions. They are **high**, **mid** and **low**, with intermediate terms **high-mid** and **low-mid** being available if necessary. The vowels in English 'see', 'set', and 'car' are high, mid, and low respectively. Vowels are also classified horizontally (based on advancing or retracting the body of the tongue, which is also known as tongue advancement). They are **front**, **central**, and **back**, referring to which part of the tongue is highest, with front being equivalent to palatal and back equivalent to velar. The vowels in most varieties of English 'sit', 'sir', and 'soon' are front, central, and back respectively. The third classification has to do with the attitude of the lips, which are either **round** or **unrounded** when making vowel sounds. If we look in the mirror, we are able to see that when we produce the vowel in English 'see' our lips are unrounded (or spread), while for the vowel in 'sue' the lips are rounded. Diphthongs are two vowels that are pronounced simultaneously. There are generally nine diphthongs in English. They can be classified into two types of diphthongs' raising diphthongs and centering diphthongs.



FORMATIVE TEST 2

- 1) How do the following sets of vowels differ from each other?

A. []	vs.	[]
B. []	vs.	[]
C. []	vs.	[]
D. []	vs.	[]
E. []	vs.	[]

- 2) Assuming the vowels of English, indicate the symbol representing the sound described by each of the following:
 - A. high front short vowel

Meanings of level of achievement:

90% - 100% = very good

80% - 89% = good

70% - 79% = average

< 70% = bad

If your level of achievement reaches 80% or more, you can on to the next Unit. **Good!** But if your level of mastery is less than 80%, you have to study again this unit, especially parts which you haven't mastered.

UNIT 3

The Sound Patterns of Language

A. WHAT IS PHONOLOGY?

In the preceding unit, we investigated "the physical production of speech sounds in terms of the articulatory mechanisms of the human vocal tract. That investigation was possible because of some rather amazing facts about the nature of language. When we considered the human vocal tract, we did not have to specify whether we were talking about a fairly large male, over 10 feet tall, weighing over 200 pounds, or about a rather small female, about 8 feet tall, weighing 100 pounds. Yet those two physically different individuals would inevitably have physically different vocal tracts, in terms of size and shape. In a sense, every individual has a physically different vocal tract. Consequently, in purely physical terms, every individual will pronounce sounds differently. There are, then, potentially thousands of physically different ways of saying the simple word *me*. Moreover, each individual will not pronounce the word *me* in a physically identical manner on every occasion. Obvious differences occur when the individual is shouting, is asking for a sixth martini, or is suffering from a cold. Given this vast range of potential differences in the actual physical production of a speech sound, how do we manage consistently to recognize all those versions of *me* as the phonetic form [mij], and not [nij], or [sij], or [maj], or [moj], or something else entirely? The answer to that question is provided to a large extent by the study of phonology"

Phonology is essentially the description of the systems and patterns of speech sounds in a language. It is, in effect, based on a theory of what every speaker of a language unconsciously knows about the sound patterns of that language. Because of this theoretical status, phonology is concerned with the abstract or mental aspect of the sounds in language rather than with the actual physical articulation of speech sounds. Thus, when we say that the [t] sounds in the pronunciation of *satin* and *eighth* are the same, we are actually saying

that in the phonology of English they would be represented in the same way. In actual speech, these [t] sounds may be very different. In the first word, the influence of a following nasal sound could result in some form of nasal release, while, in the second word, the influence of the following [T] sound would result in a dental articulation of the [t] sound. This distinction between one [t] sound and another [t] sound can be captured in a detailed or narrow, phonetic transcription.

However, in the phonology of English, this distinction is less important than the distinction between the [t] sounds in general and, for example, the [d] sounds or the [b] sounds, because there are meaningful consequences related to the use of one rather than the others. These sounds must be distinct meaningful sounds, regardless of which individual vocal tract is being used to pronounce them, since they are what make the words *tie*, *die* and *buy* meaningfully distinct. Considered from this point of view, we can see that phonology is concerned with the abstract set of sounds in a language which allows us to distinguish meaning in the actual physical sounds we say and hear.

Both phonetics and phonology can be generally described as the study of speech sounds. Phonetics, as we learned in the previous section, is more specifically the study of how speech sounds are produced, their physical properties, and how they are interpreted. Phonology, on the other hand, investigates the organization of speech sounds in a particular language. While we might find the same sounds in two or more languages, no two languages organize their sound inventories in the same way. An example will make this point more clearly.

In both Japanese and English we can hear the sounds [s] and [ʃ]. The Japanese word [imasu], do, contains both phones, as does the English word [σλθΣ] slash. The difference between Japanese and English lies in the way the two sounds contribute to the meaning of a word. In English, the two phones can distinguish meaning, as shown by words like [Σo↔] shore and [σo↔] sore, where alternating between [Σ] and [σ] affects the meaning of the utterance. In this sense, phonologists say that the occurrence of these two sounds is unpredictable, since we cannot look at the rest of the word and guess which sound will occur. If we know that a word ends in [__ɪr], we

cannot predict whether the word will start with [σ] or [Σ] since both *sip* and *ship* are different, but possible, words.

In Japanese, however, these two sounds are predictable from their environment. Sounds are predictable when we expect to see one sound or the other based upon the sounds that precede or follow it. If we know that a Japanese word ends in [-in], we know that it can begin with [Σ] and cannot begin with [s], since the combination [σI] does not occur in Japanese. However, in English we cannot make this prediction: the sound [σ] does appear before the sound [I].

So while both Japanese and English contain the phones [σ] and [Σ], the languages differ in that in Japanese we can predict the occurrence of one versus the other and in English we cannot. If someone learning Japanese were to use [s] before [i] the meaning of the word would not change. Instead, the speaker would sound funny or have an accent to a native speaker of Japanese. If a learner of English were to make the same substitution in English, on the other hand, then the meaning of the word is likely to change. Imagine confusing [s] and [Σ] and saying "I have to [ΣεIϖ] more money each month."

Phonologists ask these kinds of questions: Of all the sounds in a language, which are predictable? What is the phonetic context that allows us to predict the occurrence of these sounds? Which sounds affect the meaning of words? In the following explanation, we will learn how to answer these questions. We will examine English as well as other languages. You will develop the skill to look at languages and determine which sounds are predictable and which affect the meaning of a word.

B. SOUNDS THAT ARE THE SAME BUT DIFFERENT

In every language, certain sounds are considered to be the 'same' sound, even though they may be phonetically distinct. For example, native speakers of English consider [l] in *lay* to be the same sound as that in *play*, even though the former is voiced and the latter voiceless. If we pay much attention we can find that there is something about the t-sound in '*tick*', '*stick*', '*lit*', in the sense that speakers of English group these together as t-sounds. However,

at the same time we, as people who understand phonetics, recognize that phonetically these t-sounds are different. The 't' in 'tick' is likely to be aspirated [H], the 't' in 'stick' unaspirated; and the 't' in 'lit' may be unreleased (indicated by |).

t-sounds tick [τHɪk] stick [στɪk] lit [λɪτ|]

It is also easy for us to identify that there are other groups of sounds that behave in just the same way as t-sounds. In parallel we also find that English has a set of p-sounds (*pin, spin, lip*) and a set of k-sounds (*kin, skin, nick*).

p-sounds pin [πHɪv] spin [σπɪv] lip [λɪπ|]
k-sounds kin [κHɪv] skin [σκɪ] nick [vɪk|]

The fact that native speakers of English often do not realize that [p], [p^h], and [p̚] differ also suggest that there may be some relationship between them. While it is not a crucial piece of evidence that these sets of sounds are groups of related sounds, it does say something about how speakers of English feel about their relatedness. Compare this with the feelings of a Thai speaker towards these sounds. For Thai speakers [p] and [p^h] are felt to be distinct sounds, as in [πα∃α] 'forest' vs. [πHα∃α] 'to split'. Thus, Thai speakers will judge that [p] and [p^h] are different sounds while the speakers of English are to judge that they are the same.

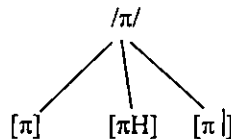
These groupings like English [τ], [τH], and [τ|], with respect to their simultaneous unity and diversity, have traditionally been dealt with in terms of two level of representation, the concrete and abstract levels of representation. At the concrete physical level the members of these groups of sounds are different phonetically because they have different phonetic properties. However, at the abstract level it is useful to group them as being related. In fact, grouping them together this way reflects the intuition of the native speaker that these sounds are 'the same' in some sense.

If we take the above view, we can say that abstractly English has a 'τ' and that concretely the pronunciation of this 'τ' depends on the context in which it occurs. If it appear at the beginning of a syllable it is pronounced as [τH], if it appears as a part of consonant cluster following [s], it is pronounced as [t], and if it appears at the end of a word it may be pronounced as [τ|], [ʔ] or as

[τ]. In the same way, we can also say that English [p] and [k] have also several concrete representatives.

We are helped with the use of convention in linguistics in order to make clear which level of representation we are dealing with. The square brackets [] is used to enclose the symbols for concrete speech sounds as they are pronounced (phonetic materials), and the slashes / / is used to enclose the symbols representing the abstract elements (underlying materials). Thus, regarding the p-sounds of English, we can say that the group is represented abstractly by /p/ which is pronounced concretely as [π], [πH], or [π |], depending on where it occurs in a word.

By understanding this approach we can distinguish between the surface sounds of a language and the underlying organizing system. The abstract underlying units are known as **phonemes** while the predictable surface elements are known as **allophones**. Applying this term, we can say that the phoneme /p/ is realized as the allophone [πH] syllable initially, as allophone [p] in a cluster following [s] and as the allophone [π] at the end of a word. The relationship can be shown as follows:



When we view speech sounds this way, it will enable us to distinguish systematically between underlying representations and sounds actually occurring in a language. This, in turn, allows us to establish the relatively small inventory of underlying phonemes of a language and relate them to the greater number of sounds that speakers of that language actually produce. By looking at the speech sounds of a language in this way, we start to see the underlying system. This is relevant to the statement that phonologists are interested in the patternings, or systematic relationship, of speech sounds in human languages.

C. IDENTIFYING PHONEMES

What we are suggesting is that by representing groupings of speech sounds (allophones) as being related to some single abstract notion (the phoneme) we start to gain an insight into the organization of speech sounds into systems. This raises the question of just what a phoneme is. The answer for this question varies. Now let's see some definitions of the phoneme stated by some linguists.

Trask (1996 : 264) says:

phoneme / $\phi \leftrightarrow Yvr: \mu/n$. In many theories of phonology, a fundamental (often the fundamental) unit of phonological structure, an abstract segment which is one of a set of such segments in the phonological system of a particular language or speech variety, often defined as 'the smallest unit which can make a difference in meaning'....

Hayman (1975: 59) defines the phoneme as 'a minimal unit of sound capable of distinguishing words of different meanings. Thus, both /t/ and /d/ are phonemes in English because they are able to make a meaning difference, as in the word 'ten' and 'den'. Hayman also presents three views of phoneme that were stated by a large number of linguists. The first views the phoneme as a phonetic reality. Daniel Jones and Gleason belong to this group. Jones (1931: 74) defines the phoneme as "a family of sounds in a given language, consisting of an important sound of the language together with other related sounds, which take its place in particular sound-sequences." Then Gleason (1955: 261) defines the phoneme as "a class of sounds which: (1) are phonetically similar and (2) show certain characteristic patterns of distribution in the language or dialect under consideration".

The second group of linguist views the phoneme as a phonological reality. The definition of the phoneme in purely phonological terms is characteristic of the Prague School. Trubetzkoy, Jakobson, and others belong to this group. Trubetzkoy (1939: 36) defines the phoneme as "the sum of the phonological relevant properties of a sound." For him, phonemes are defined in terms of oppositions in a phonological system. The important notion in the Prague School phonology is 'function'. Thus, a phoneme is a minimal unit

that can function to distinguish meanings. It is not a sound or even a group of sounds, but rather an abstraction, a theoretical construct on the phonological level.

The third group views the phoneme as a psychological reality. Bedouin de Courtenay and Twaddell belong to this group. Twaddell (in Hayman, 1975 : 72) defines the phoneme as "a mental reality, as the intention of the speaker or the impression of the hearer, or both. This view was subject to attack by the first and the second groups because such a definition was invalid.

An essential property of a phoneme is that it functions contrastively. We know that there are two phonemes /f/ and /v/ in English because they are the only basis of the contrast in meaning between the forms *fat* and *vat*, or *fine* and *vine*. This contrastive property is the basic operational test for determining the phonemes which exist in a language. If we substitute one sound for another in a word and there is a change of meaning, then the two sounds represent different phonemes. The consonant and vowel charts presented in unit one can now be seen as essentially a mapping out of the phonemes of English.

The terms which were used in creating that chart can be considered 'features' which distinguish each phoneme from the next. Thus, /p/ can be characterized as [-voice, +bilabial, +stop] and /k/ as [-voice, +velar, +stop]. Since these two sounds share some features, they are sometimes described as members of a natural class of sounds. The prediction would be that sounds which have features in common would behave phonologically in some similar ways. A sound which does not share those features would be expected to behave differently. For example, /v/ has the features [+voice, +labiodental, +fricative] and so cannot be in the same 'natural class' as /p/ and /k/. Although other factors will be involved, this feature-analysis could lead us to suspect that there may be a good phonological reason why words beginning with /pl-/ and /kl-/ are common in English, but words beginning /vl-/ are not. Could it be that there are some definite sets of features required in a sound in order for it to occur word-initially before /l/? If so, then we will be on our way to producing a phonological account of permissible sound sequences in the language.

1. Minimal Pairs and Contrastive Distribution

When two words such as *par* and *bat* are identical in form except for a contrast in one phoneme, occurring in the same position, the two words are described as a minimal pair. More accurately, they would be classified as a minimal pair in the phonology of English since Arabic, for example, does not have this contrast between the two sounds. Other examples of English minimal pairs are *fan* – *van*, *bet* – *bat*, *site* – *side*. Such pairs have been used frequently in tests of English as a second language to determine non-native speakers' ability to understand the contrast in meaning resulting from the minimal sound contrast.

When a group of words are differentiated, each one from the others, by changing one phoneme (always in the same position), then we have a minimal set. Thus, a minimal set based on the vowel phonemes of English would include *feat*, *fit*, *fat*, *fate*, *fought*, *foot*; and one based on consonants could have *big*, *pig*, *rig*, *fig*, *dig*, *wig*.

One insight provided by this type of exercise with phonemes is that we can see that there are indeed definite patterns to the types of sound combinations permitted in a language. In English, the minimal set we have just listed does not include forms such as *lig* or *vig*. As far as I know, these are not English words, but they can be viewed as possible English words. That is, your phonological knowledge of the pattern of sounds in English words would allow you to treat these forms as acceptable if, at some future time, they came into use. They represent 'accidental' gaps in the vocabulary of English. It is, however, no accident that forms such as [fsig] or [Nɾɿ] do not exist or are unlikely ever to exist, because they break what must be phonological rules about the sequence or position of English phonemes.

The clearest sort of contrast is a minimal pair, that is, a pair of words which differ by just one sound and which are different lexical items. By 'different lexical items' we mean distinct items of vocabulary, regardless of their meaning. In American English 'car' and 'automobile' are two lexical items, though they mean the same thing; in British English 'football' and 'soccer' are two lexical items, though again their meanings are the same. If we compare 'bat' and 'mat', for example, we know that they are two different lexical items and we can see that they differ from each other by precisely one

sound, the initial [b] versus [m]. Therefore we can say that [b] and [m] contrast. On the basis of that contrast we can suggest that [b] and [m] are allophones of separate phonemes, /b/ and /m/ (remembering that allophones are the actual speech sounds appearing in square brackets). If we then compare the initial sound in *'fat'* we see that there is a contrast with both [b] and [m], since *'fat'*, *'bat'*, and *'mat'* are different lexical items and since each differs from the other by only one sound. Thus, [f] contrasts with [b] and [m]. Therefore we can say that [b], [m] and [f] are each allophones of separate phonemes, /b/, /m/ and /f/ respectively.

Minimal pairs rest on contrastive distribution, as we have just seen with the initial consonants in *'fat'*, *'bat'* and *'mat'* which contrast with each other. We saw this contrast by means of a commutation test, i.e. a substitution of one sound for another yielding a different lexical item. Contrastive distribution can show a contrast anywhere in the word, however, not just initially. This means that *'rub'* and *'rum'*, or *'robed'* and *'roamed'* are just as much minimal pairs as *'bat'* and *'mat'* since in each case the sounds in question appear in identical phonetic environments and constitutes the only phonetic difference between the two lexical items. Compare the following words, in which we see that except for the sounds in question, [b] and [m], the phonetic structures of the words are the same.

	[b]		[m]
rub	[pə ___]	rum	[pə ___]
robed	[pəY__δ]	roamed	[pəY__δ]

Sometimes in a given language there are no minimal pairs to contrast for a specific pair of sounds, yet we can still establish phonemes. Consider the [ʒ] of *'shoe'* and the [Z] of *'leisure'*. Word-initial position does not help us find a contrast since in English [Z] does not occur word-initially (apart from a very few loanwords). Word-finally the occurrence of [Z] is also limited, e.g. *'beige'*. Word-medially both sounds occur: [ʒ] *'fissure'*, *'usher'*, [Z] *'measure'*, *'leisure'*. But even in this position we do not find a true minimal pair; that is we do not find two lexical items differing by only one speech sound. What we can find, however, is a near minimal pair, such as *'mission'*

and 'vision'. Note that with this pair the immediate phonetic environment of the two sounds concerned, [Σ] and [Z], is identical, i.e. between a stressed [I] and a [↔]: [μIΣ↔v] vs. [ωIZ↔v].

So, even though this is not a true minimal pair (because the lexical items differ by more than one speech sound) it is convincing evidence of a contrast, since the sounds we are comparing occur in identical phonetic environments.

2. Complementary Distribution

We have already established that, while a phoneme is an abstract unit of sound, there can be different phonetic realizations of any phoneme. These phonetic units are technically described as phones. It has been noted by phoneticians that, in English, there is a difference in pronunciation of the /i/ sound in words like *seed* and *seen*. In the second word, the effect of the nasal consonant [n] makes the [i] sound nasalized. This nasalization can be represented by a diacritic over the symbol [ɪ̃] in narrow phonetic transcription. So, there are at least two phones, [ɪ] and [ɪ̃], used in English to realize a single phoneme. These phonetic variants are technically known as allophones. The crucial distinction between phonemes and allophones is that substituting one phoneme for another will result in a word with a different meaning (as well as a different pronunciation), but substituting allophones only results in a different pronunciation of the same word.

It is possible, of course, for two languages to have the same phones, or phonetic segments, but to treat them differently. In English, the effect of nasalization on a vowel is treated as allophonic variation because the nasalized version is not meaningfully contrastive. In French, however, the pronunciation [μE] is used for one word *met*, meaning 'dish', and [μẼ] for a different word *main*, meaning 'hand', and [so] for *seau*, meaning 'pail', contrasts with [sõ] for *son*, meaning 'sound'. Clearly, in these cases, the distinction is phonemic.

It should be realized that a minimal pair or commutation test will not help us at all with the kinds of sound groups we discussed above, that is the p-sounds, the k-sounds, the t-sounds. This is because in the environment where we find one of the p-sounds we won't find any of the other p-sounds: we find [πH] at the beginnings of words but not in clusters following [s]; we

find [πH] at the ends of words but not word-initially. This state of affairs, in which two sounds do not occur in the same environment, is referred to as **complementary distribution**. It is precisely because we cannot get the p-sounds to contrast with each other we know that they belong to the same phoneme; that is they are allophones of a single phoneme. Referring to the water analogy, at a temperature at which we find water we do not find ice and at a temperature at which we find ice we do not find steam. The three related manifestations of H₂O, like the three related p-sounds, do not appear in the same environment. Note that we do find contrasts between members of different groups of sounds - [πH] and [κH] contrast as do [p] and [k] and so on - but we find no contrasts among the members of a group.

Above we referred to allophones as being predictable sounds. We can now see what is meant by that. Taking the p-sounds again, we know that we find [πH] word-initially and [p] in clusters following [s]. Therefore, if we know that we are dealing with a p-sound, i.e. one of the set of allophones of /π/, we can predict which p-sound will be pronounced in which context. This is what we mean by allophones being predictable. As an example, take the following word of English which is missing the initial consonant:

[__Eτ]

Without knowing what word it is supposed to be we cannot guess whether the initial consonant should be [m] or [b] or [πH] or [l] or [g] or a number of other consonants. However, if we are told that the blank must be filled in with a p-sound, we know which one it will be: [πH]. The phoneme is unpredictable but the allophone, once we know which phoneme is involved, is predictable.

3. Free Variation

While the distinction between allophones and phonemes is quite clear cut, there are some phenomena which can obscure the identification of phonemes. One of these is so-called free variation. In our discussion of the t-sounds we have indicated in a number of places that a voiceless stop may be unreleased at the end of a word, e.g. [μ⊕τ]. But we have also indicated in passing that /τ/ has other realizations at the end of a word, including unaspirated release [μ⊕τ] and glottal stop [μ⊕ʔ]. Given that these are three

phonetically different speech sounds in the same position one might suggest that they are related to different phonemes. But note that these do not contrast: $[\mu\Theta\tau]$, $[\mu\tau]$ and $[\mu\Theta?]$ are three different pronunciations of the same lexical item. Since they involve the same lexical item, we can say that the three sounds are in free variation, since there are no minimal pairs. We can thus maintain that they are allophones of a single phoneme.

D. PHONOLOGICAL PROCESSES

1. Assimilation

The example of vowel nasalization in English which we have just noted is a good illustration of another regular process involving phonemes. When two phonemes occur in sequence and some aspect of one phoneme is taken or 'copied' by the other, the process is known as assimilation. In terms of the physical production of speech, one might assume that this regular process is occasioned by ease of articulation in everyday speech, in isolation, you would probably pronounce /I/ and /Θ/ without any nasal quality at all. However, in saying words like *pin* and *pan*, the anticipation of forming the final nasal consonant will make it 'easier' to go into the nasalized articulation in advance and consequently the vowel sounds in these words will be, in precise transcription, $[I\textcircled{N}]$ and $[\Theta\textcircled{N}]$. This is a very regular feature of English speakers' pronunciation. So regular, in fact, that a phonological rule can be stated in the following way: 'Any vowel becomes nasal whenever it immediately precedes a nasal.'

This type of assimilation process occurs in a variety of different contexts. It is particularly noticeable in ordinary conversational speech. By itself, you may pronounce the word *can* as $[\kappa\Theta v]$, but if you tell someone *I can go*, the influence of the following velar $[g]$ will almost certainly make the preceding nasal sound come out as $[N]$ (a velar) rather than $[n]$ (an alveolar). The most commonly observed 'conversational' version of the phrase is $[\alpha\kappa\leftrightarrow N\gamma o]$. It should be notice that the vowel in *can* has also changed to $[\leftrightarrow]$ from the isolated-word version $[\Theta]$. The vowel sound $[\leftrightarrow]$, called 'schwa', is very commonly used in conversational speech when a different vowel would occur in words spoken in isolation. In many words spoken carefully, the vowel

receives stress, but in the course of ordinary talk, that vowel may no longer receive any stress. For example, you may pronounce *and* as [ʌvδ] in isolation, but in the casual use of the phrase *you and me*, you almost certainly say [↔v], as in [φυ↔vμ].

2. Dissimilation

It is understandable why assimilation rules are found so many of the world's languages. They permit greater ease of articulation. It might seem strange, then, to learn that we also find **dissimilation** rules in languages, rules in which a segment becomes less similar to another segment rather than more similar.

Such rules do exist. They also have a natural explanation, often from point of view of the hearer rather than the speaker. In listening to speech, if sounds are too similar, we miss the contrast. Many speakers in English dissimilate the sequence of two fricatives /ʃt/ in the word *diphthong* and pronounce it with a labial stop /p/ instead of the labial fricative /f/.

3. Elision

Note that in the last example, in the environment of preceding and following nasals, the [d] sound of *and* has simply disappeared. The [d] sound is also commonly 'omitted' in the pronunciation of a word like *friendship*, [φρΕνΣΙπ]. This 'omission' of a sound segment which would be present in the deliberate pronunciation of a word in isolation is technically described as **elision**. Word-final /t/ is a common casualty in this process, as in the typical pronunciation [ʊσπΕκσ] for *aspects*, or in [ημδσβι] for *he must be*. You can, of course, slowly and deliberately pronounce the phrase *we asked him*, but the process of elision in casual speech is likely to produce [ωιʊστμ]. Vowels also disappear, as in the middle of [IvτρΕστ] for *interest*, or [κʊβvΙτ] for *cabinet*.

These two processes of assimilation and elision occur in everyone's speech and should not be treated as a form of sloppiness or laziness in speaking. In fact, consistently avoiding the regular patterns of assimilation and elision used in a language would result in extremely artificial sounding talk. The point of investigating phonological processes (only a very small

number of which have been explored here) is not to arrive at a set of rules about how a language should be pronounced, but to try to come to an understanding of the regularities and patterns which underlie the actual use of sounds in language.

4. Movement (Metathesis) Rules

Phonological rules may also move phonemes from one place in the string to another. Such rules are called metathesis rules. They are less common, but they do exist. In some dialect of English, for example, the word *ask* is pronounced {aks}, but the word *asking* is pronounced [ɑskɪN]. In these dialects a metathesis rule switches the /s/ and /k/ in certain contexts.



EXERCISES

Exercise 1

Count the number of phonemes available in each of the following words

- Example: knee /vi/ two phonemes
- a) Psychology _____
 - b) Chemistry _____
 - c) Photograph _____
 - d) Thought _____
 - e) Because _____
 - f) Increase _____
 - g) Scream _____

Exercise 2

Give two examples of minimal pairs of the following English sounds

- Example /π/ vs. /β/ pin vs. bin pan vs. ban
- a) /τ/ vs. /δ/ _____
 - b) /κ/ vs. /γ/ _____

- c) /σ/ vs. /ζ/
 d) /μ/ vs. /ν/
 e) /ι/ vs. /Ι/
 f) /Ε/ vs. /Θ/

Exercise 3

Determine the type of phonological processes in the following words!

- | | | | |
|-----------|----------|---------|-------|
| a) Bin | /βΙv/ | [βΙθv] | _____ |
| b) Sixth | /σΙκσT/ | [σΙκστ] | _____ |
| c) Nation | /νεΙΣ↔v/ | [νεΙΣv] | _____ |
| d) Bird | /βρΕδ/ | [βΕρδ] | _____ |
| e) Press | /πρΕσ/ | [πΕρσ] | _____ |
| f) Books | /βΥκζ/ | [βΥκσ] | _____ |
| g) Fifth | /φΙφT/ | [φΙφτ] | _____ |

KEY TO EXERCISES

Exercise 1

Count the number of phonemes available in each of the following words

- | | | |
|---------------|-----|----------------|
| Example: knee | / / | two phonemes |
| a) Psychology | / / | eight phonemes |
| b) Chemistry | / / | eight phonemes |
| c) Photograph | / / | eight phonemes |
| d) Thought | / / | three phonemes |
| e) Because | / / | five phonemes |
| f) Increase | / / | six phonemes |
| g) Scream | / / | five phonemes |

Exercise 2

Give two examples of minimal pairs of the following English sounds

- | | | |
|----------------|---------------|--------------|
| a) / / vs. / / | tie vs die | time vs dime |
| b) / / vs. / / | back vs bag | came vs game |
| c) / / vs. / / | sip vs zip | seal vs zeal |
| d) / / vs. / / | moon vs noon | mine vs nine |
| e) / / vs. / / | ship vs sheep | sit vs seat |
| f) / / vs. / / | pen vs pan | bed vs bad |

Exercise 3

Determine the type of phonological processes in the following words!

- | | | | |
|-----------|-----|-----|---------------|
| a) Bin | / / | [] | assimilation |
| b) Sixth | / / | [] | dissimilation |
| c) Nation | / / | [] | elision |
| d) Bird | / / | [] | metathesis |
| e) Press | / / | [] | metathesis |
| f) Books | / / | [] | assimilation |
| Fifth | / / | [] | dissimilation |



SUMMARY

Part of one's knowledge of a language is knowledge of the phonology or sound system of that language – the inventory of phones, the phonetic segments that occur in the language, and the ways in which they pattern. It is this patterning that determines the inventory of phonemes – the segments that differentiate words. When phones occur in complementary distribution, they are allophones – predictable phonetic variants – of phonemes. A strategy that a linguist can use to discover the phonemes in a language is to look for minimal pairs. Some sounds differ phonetically but are non-phonemic because they are in free variation, which means that either sound may occur in the identical environment without changing the meaning of the words.

Phonological processes in a grammar apply to phonemic strings and alter them in various ways to derive their phonetic pronunciation. Some examples of phonological processes are assimilation, dissimilation, elision, insertion, and metathesis.



FORMATIVE TEST 3

- 1) Broadly speaking, how does phonology differ from phonetics?
- 2) What is the test used for determining phonemes in a language?
- 3) Which of the following words would be treated as minimal pairs?
pat, pen, more, heat, tape, bun, fat, ban, chain, tale, bell, far, meal, vote, bet, pit, heel.
- 4) How does an allophone differ from a phoneme?
- 5) What processes are involved in the relationships between:
 - a. [γρΘνδ] *grand* and [γρΘμπΑ] *grandpa*
 - b. [ποστ] *post* and [ποσμ↔ν] *postman*
- 6) The use of plural-s in English has three different, but very regular, phonemic alternatives. You add:

/s/ to words like *ship, bat, book, and cough*
/z/ to words like *cab, lad, cave, rag, and thing*
/↔ζ/ to words like *bus, bush, judge, church, and maze*

Can you work out the set of sounds which regularly precedes each of these alternatives? What features do each of these sets have in common?
- 7) In the following pairs, the first word was pronounced carefully in isolation and the second was produced in the middle of conversational speech. Identify which sounds have 'changed', what type of change has occurred, and try to offer a possible explanation for the direction of change.

[vɔpT]	[ηΘνδ]	[φαIω]	[ωετ]
[vɔpΔ↔p]	[ηΘNκ↔pτΣιφ]	[φIφT]	[ωεδIN]
- 8) The word-initial sequences of /p/, /b/, /k/, /g/, /s/, /f/ are permissible in English, but other sequences involving /l/ are not. Can you produce a

description of the required features a consonant must have in order to precede /l/.

Check your answers with the Key which is provided at the end of this module, and score your right answers. Then use the formula below to know your achievement level of the lesson in this module.

Formula:

$$\text{Level of achievement} = \frac{\text{Scores of the right answers}}{\text{Total score}} \times 100\%$$

Meanings of level of achievement:

90% - 100% = very good

80% - 89% = good

70% - 79% = average

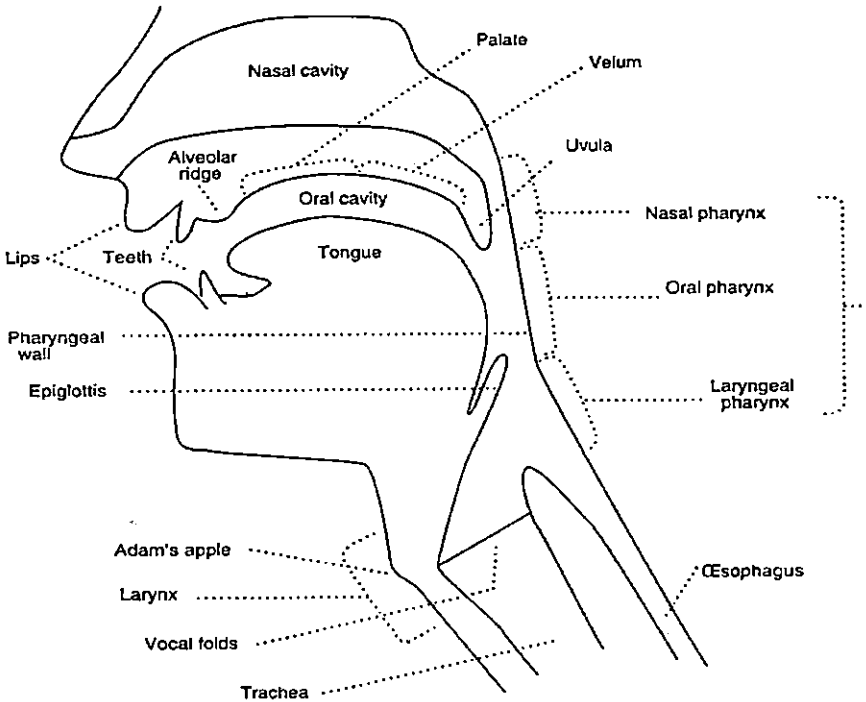
< 70% = bad

If your level of achievement reaches 80% or more, you can on to the next Module. Good! But if your level of mastery is less than 80%, you have to study again this unit, especially parts which you haven't mastered.

Key to Formative Test

Formative Test 1

- 1) Fill in the names of the important parts of the vocal organs. You may want to make several photocopies of this page for practice work.



- 2) In each of the following words a sound is underlined. For each sound state (i) its voicing, (ii) its place of articulation and (iii) its manner of articulation.
- bee [voiced bilabial stop]
 - vine [voiced labio-dental fricative]
 - reason [voiced alveolar fricative]
 - leech [voiceless alveo-palatal affricate]
 - hang [voiced velar nasal]

- f. listen [voiceless alveolar fricative]
- g. jungle [voiced alveo-palatal affricate]
- h. lark [voiced alveolar lateral-liquid]

3) Each of the words below has a sound underlined. For each of the pairs of words state what the difference is between the underlined sounds in term of manner of articulation, place of articulation or voicing.

- a. toe / doe [voiceless/voiced]
- b. sick / tick [fricative/stop]
- c. luck / lug [voiceless/voiced]
- d. lip / lick [bilabial/velar]
- e. rift / wrist [labio-dental/alveolar]
- f. cad / can [stop/nasal/]
- g. measure / mesher [voiced/voiceless]
- h. bag / gag [bilabial/velar]

4) Circle all the words below that have a nasal as their final sound:

pin tame sign

5) Circle all the words below that begin with an alveolar sound:

sin lest dumb
ten nest

6) Write the phonetic symbol for the last sound in each of the following words

fleece	/σ/	watch	/τΣ/	long	/N/
rough	/φ/	rags	/ζ/	civic	/k/
judge	/δ/	thought	/t/	learned	/d/

7) Circle all the words below that have a velar sound:

care lick jug sing

Formative Test 2

1) How do the following sets of vowels differ from each other?

- a. [ɪI] vs. [ʊY] [high front vs. High back]
- b. [YɛE] vs. [ΘA□] [non-low vs. Low]

- 5) Tense and lax. For each of the following words, identify whether the vowel is tense or lax.
- | | | |
|------------------|-----------------|------------------|
| a. sound (tense) | g. out (tense) | m. can (lax) |
| b. drink (lax) | h. cod (lax) | n. move (lax) |
| c. foist (tense) | i. world (lax) | o. fudge (lax) |
| d. air (lax) | j. this (lax) | p. said (lax) |
| e. sung (lax) | k. put (lax) | q. write (tense) |
| f. rang (lax) | l. wipe (tense) | r. bathes (lax) |

Formative Test 3

- 1) Broadly speaking, how does phonology differ from phonetics?

Phonetics is more specifically the study of how speech sounds are produced, their physical properties, and how they are interpreted. Phonology, on the other hand, investigates the organization of speech sounds in a particular language.

- 2) What is the test used for determining phonemes in a language? **Minimal pair test**
- 3) Which of the following words would be treated as minimal pairs?
pat vs. fat *heat vs. heel*
tape vs. tale *bun vs. ban* *pat vs. pit*

- 4) How does an allophone differ from a phoneme?
Phoneme is the abstract underlying units or the smallest unit of the language that can differentiate the meaning. Allophone is the predictable surface elements of one phoneme or the variants of one phoneme. We can say that the phoneme /p/ is realized as the allophone [p^H] syllable initially, as allophone [p] in a cluster following [s] and as the allophone [p^H] at the end of a word.

- 5) What processes are involved in the relationships between:
 (a) [γρΘνδ] *grand* and [γρΘμπΑ] *grandpa* **assimilation**
 (b) [ποστ] *post* and [ποσμεν] *postman* **elision**

- 6) The use of plural-s in English has three different, but very regular, phonemic alternatives.
/s/ sound is preceded by a voiceless consonant. /s/ is voiceless, so

the preceding sound should also be voiceless

/z/ sound is preceded by a voiced consonant. /z/ is voiced, so the preceding sound should also be voiced

/ç/ sounds are preceded by a hissing (sibilant) sound.

- 7) In the following pairs, the first word was pronounced carefully in isolation and the second was produced in the middle of conversational speech. Identify which sounds have 'changed', what type of change has occurred, and try to offer a possible explanation for the direction of change.
- [vɔpT] vs. [vɔpΔ↔pυ]. /T/ changes to /Δ/. The change is from voiceless to become voiced
 - [ηΘvδ] vs. [ηΘNκ↔pτΣιφ]. /v/ changes to /N/. The change is from alveolar nasal to become velar nasal
 - [φαIω] vs. [φIφT]. /αI/ changes to /I/. The change is from diphthong to monophthong
 - [ωετ] vs. [ωεδIN]. /τ/ changes to /δ/. The change is from voiceless alveolar stop to become voiced alveolar stop
- 8) The word-initial sequences of /pI/, /bI/, /kI/, /gI/, /sI/, /fI/ are permissible in English, but other sequences involving /I/ are not. Can you produce a description of the required features a consonant must have in order to precede /I/?
- /I/ consonant should be preceded by a non-alveolar stop consonant, by a voiceless labiodental fricative, or by a voiceless alveolar fricative consonant.**

Bibliography

- Crane, L. Ben *et. al.* (1981). *In Introduction to Linguistics*. Boston: Little, Brown and Company.
- Davenport, Mike and S. J. Hannahs. (1998). *Introducing Phonetics and Phonology*. London: Arnold.
- Fromkin, Victoria *et. al.* (1996). *An Introduction to Language*. 3rd edition. Sydney: Harcourt Brace.
- O'Grady, William *et. al.* (1996). *Contemporary Linguistics: An Introduction* 3rd edition. London: Longman.
- Parker, Frank and Kathryn Riley. (2000). *Linguistics for Non-Linguists*. Boston: Allyn and Bacon.
- Yule, George.(1985). *The Study of Language*. Cambridge: Cambridge University Press.

MODULE 4

Morphology and Syntax

Refnaldi, M.Litt.



INTRODUCTION

Welcome to module 4. The topic of this module is Morphology and Syntax. The materials which are going to be discussed in this module are words, morphemes, types of morpheme, word formation processes, syntax, linear order, constituent structure, ambiguity, phrase structure rules, and transformational rules. After learning this module, you are expected to be able to:

1. understand the words and word structure
2. differentiate between morpheme and allomorphs
3. classify morphemes
4. draw the tree diagram of a word
5. identify ambiguity found in a word;
6. identify the types of morphological processes;

To achieve these objectives systematically, the materials of this module are presented respectively as follow:

1. Unit 1 : Words and Word Structure
2. Unit 2 : Word-Formation Processes
3. Unit 3 : Syntax

The following activities are really suggested to do in order to learn this module successfully.

1. Read carefully the explanation of each topic.
2. Don't forget to give serious attention to the examples given.
3. Do the exercises as well as possible.
4. Look up the meaning of difficult words in your dictionary.

5. Evaluate yourself by checking your answers or your responses with the key answers provided.

Good luck!

UNIT 1

Words and Word Structure

Of all units of linguistic analysis, the word is the most familiar. The most reliable definition of words is that they are the smallest free forms found in language. A free form is an element that can occur in isolation and/or whose position with respect to adjacent element is not entirely fixed. We can consider the first two words in the following sentence.

The cats ran away.

The plural marker *-s* cannot be a word (a free form) because it must always be attached to the end of a noun. Thus, the following construction is ungrammatical:

*The cat *-s* ran away

On the other hand, *cats* is a word because it can occur in isolation. The following exchange shows how the word *cats* is used in isolation:

Mike : What are those things under the table?

Kate : Cats

Some words, such as *the* in the sentence *the cats ran away*, do not normally occur in isolation. However, they are still free form because their position is not entirely fixed. Thus, as shown by the following sentence, *the* does not always have to occur immediately in front of a noun:

The very beautiful girl just kept silence.

Like syllables and sentences, words have an internal structure consisting of smaller units which are organized with respect to each other in a particular

way. This system of categories and rules involved in word formation and interpretation is called morphology.

Morphology is the study of building blocks of meaning in language. How do languages build words and indicate grammatical relationships between words? Very often, the answer lies in their morphology. **Morphology** is the study of word formation. (The word *morphology* itself comes from the Greek work *morphe*, which means 'form.'). Morphology is to words what syntax is to sentences. That is, morphology is concerned with the structure of words, just as syntax is concerned with the structure of sentences. Let's begin by considering some of the observations we can make about the structure of words in English.

1. *Boldest* can be divided into two parts (*bold + est*), each of which has a meaning; *bold* cannot.
2. The word *boy* has a meaning in and of itself, the word *at* does not. Rather, *at* indicates a relationship between two meaningful expressions (e.g., *The boy at the door*).
3. The form *serve* can stand alone as a word; the form *pre-* (as in *preserve*) cannot.
4. *Friendliest* is a word; *friendestly* is not.
5. *TV* and *telly* are both formed from *television*.

Observation (1) illustrates the fact that words are made up of meaningful units (**morphemes**). Observation (2) illustrates the fact that some morphemes, called **lexical morphemes**, have meaning in and of themselves; others, called **grammatical morphemes**, specify the 'relationship between one lexical morpheme and another. Observation (3) illustrates the fact that some morphemes, called **free morphemes**, can stand alone as words; others, called **bound morphemes**, cannot. Observation (4) can be used to argue that bound morphemes can be divided into two types, **inflectional** and **derivational**. Observation (5) illustrates the fact that languages create new words systematically.

All of these phenomena are essentially morphological in nature. That is, they have to do with the internal structure of words. Moreover, we will make our standard assumption that the phenomena in (1-5) are governed by a

system of rules. What we will do now is attempt to construct a set of concepts and principles that will help us account for the phenomena in (1-5).

1. Morphemes

A morpheme can be loosely defined as a minimal unit having more or less *constant meaning* associated with more or less *constant form*. Consider a simple example: the word *buyers* is made up of three morphemes {buy} + {er} + {s}. (Braces are sometimes used to indicate morphemes.) Each of these morphemes has a unique meaning: {buy} = verb 'buy' (however it might be represented semantically); {er} = 'one who performs an action'; {s} = 'more than one.' Together they mean something like 'more than one person who buys things.' The strongest evidence that each of these word parts is a morpheme is the fact that each one can occur with other morphemes without changing its core meaning. For example, {buy} occurs in *buy*, *buying*, and *buys*, as well as in *buyers*. {er} occurs in *fanner*, *driver*, and *mover*, as well as in *buyers*. {s} occurs in *boys*, *girls*, and *dogs*, as well as in *buyers*. The more combinations a morpheme can occur in, the more productive it is said to be; the more productive a morpheme is, the stronger the evidence that it is a separate morpheme.

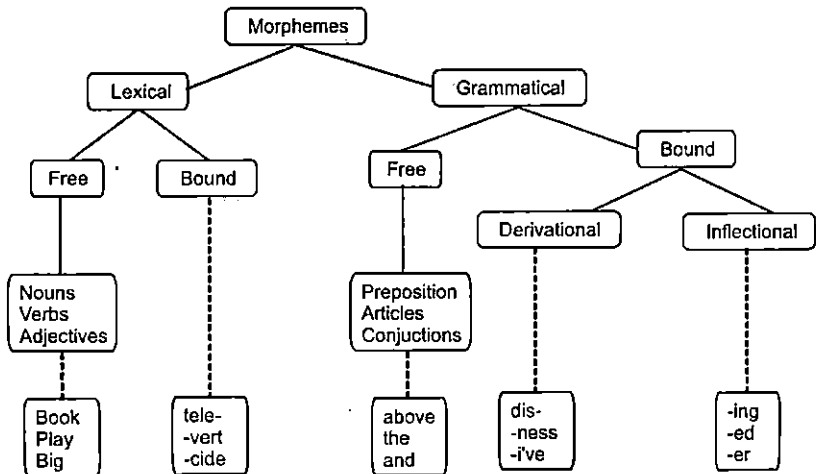
We do not actually have to go to other languages such as Swahili to discover that 'word-forms' may consist of a number of elements. We can recognize that English word-forms such as *talk*, *talker*, *talked* and *talking* must consist of one element *talk*, and a number of other elements such as {-s}, {-er}, {-ed}, {-ing}. All these elements are described as morphemes. The definition of a morpheme is "a minimal unit of meaning or grammatical function". Let's clarify this definition with some examples. We would say that the word *reopened* in the sentence *The police reopened the investigation* consists of three morphemes. One minimal unit of meaning is *open*, another minimal unit of meaning is *re-* (meaning 'again'), and a minimal unit of grammatical function is *-ed* (indicating past tense). The word *tourists* also contains three morphemes. There is one minimal unit of meaning, *tour*, another minimal unit of meaning *-ist* (meaning 'person who does something'), and a minimal unit of grammatical function *-s* (indicating plural).

2. Lexical and Grammatical Morphemes

The distinction between lexical and grammatical morphemes is not well defined, although many linguists seem to agree that it is a useful division to make. **Lexical morphemes** have a sense (i.e. meaning) in and of themselves. Nouns, verbs, and adjectives (e.g., {boy}, {buy}, and {big}) are typical of lexical morphemes. **Grammatical morphemes**, on the other hand, don't really have a sense in and of themselves; instead, they express some sort of relationship *between* lexical morphemes. Prepositions, articles, and conjunctions (e.g., {of}, {the}, and {but}) are typical of grammatical morphemes.

3. Free and Bound Morphemes

In contrast to the division between lexical and grammatical morphemes, the distinction between free and bound morphemes is straightforward. **Free morphemes** are those that can stand alone as words. They may be lexical (e.g., {serve}, {press}) or they may be grammatical (e.g., {ad}, {and}). **Bound morphemes**, on the other hand, cannot stand alone as words. Likewise, they may be lexical (e.g., {elude} as in *exclude*, *include*, and *preclude*) or they may be grammatical (e.g., (PLU) = plural as in *boys*, *girls*, and *cats*).



4. Inflectional and Derivational Morphemes

This distinction applies only to the class of bound, grammatical morphemes. The more familiar term for the class of bound grammatical morphemes is affix. Affixes, in turn, can be subdivided into prefixes and suffixes, depending upon whether they are attached to the beginning of a lexical morpheme, as in *depress* (where {de} is a prefix), or to the end of the lexical morpheme, as in *helpful* (where {full} is a suffix). Note that this division of affixes into prefixes and suffixes appears to present a bit of a problem in cases such as *men* = {man} + {PLU}, which technically has neither a prefix nor a suffix. What we are forced to say here is that the plural morpheme in English *generally appears* as a suffix, never as a prefix.

a. Derivational Morphemes

Unlike the inflectional affixes, which number only eight in English, the set of derivational affixes is open-ended; that is, there are a potentially infinite number of them (although the number is finite at anyone time for a particular speaker). Since it would be impossible to enumerate them exhaustively, let us look at a few representative examples. The suffix {-ize} attaches to a noun and turns it into the corresponding verb, as in *criticize*, *rubberize*, *vulcanize*, *pasteurize*, *mesmerize*, and so on. (This suffix can also be added to adjectives, as in *normalize*, *realize*, *finalize*, *vitalize*, *equalize*, and so on.) The suffix {-full} attaches to a noun and changes it into the corresponding adjective, as in *helpful*, *playful*, *thoughtful*, *careful*, and so on. The suffix {-ly} attaches to an adjective and turns it into the corresponding adverb, as in *quickly*, *carefully*, *swiftly*, *mightily*, and so on. Note that there is another separate derivational affix, also spelled -ly, which attaches to a noun and changes it into the corresponding adjective, as *friendly*, *manly*, *neighborly*, and so on.

In addition to these derivational affixes, English also has derivational prefixes. The following all exhibit some variation on the meaning 'not.' The prefix {un-} appears in forms like *unhappy*, *unwary*, *unassuming*, and *unforgettable*. The prefix {dis-} occurs in words such as *displeasure*,

disproportionate, dislike, and distrust. The prefix {a-} appears in forms such as *asymmetrical, asexual, atheist, and atypical.* Finally, the prefix {anti-} occurs in words like *anti-American, anti-Castro, and anti-aircraft.*

The characteristics of derivational morphemes are as follows:

- 1) In many cases, derivational morphemes change the part of speech or the meaning of a word. For example, the suffix {-ment} which is added a verb forms a noun. The verb *judge* + {-ment} becomes *judgment* (noun). The word {re-} + *activate* means 'activate again.
- 2) Derivational morphemes are not required by syntax. They typically indicate semantic relations within a word, but no syntactic relations outside the word. For example, *un-kind* relates *un-* 'not' to *kind* but has no particular syntactic connections outside the words.
- 3) Derivational morphemes are usually not very productive. They generally are selective about what they will combine with. For instance, the suffix {-hood} occurs with just a few nouns such as *brother, neighbor, and child,* but not with most others, such as *friend, daughter, or candle.*
- 4) Derivational morphemes typically occur before inflectional morphemes. For example, the underlined parts in the words *governments, actions, and teachers* are examples of derivational morphemes.
- 5) Derivational morphemes do not need to close off the word. It means that we can still add one more bound morpheme after a derivational morpheme. For example, the word *act* can become *active, activity, and activities.*

b. *Inflectional Morpheme*

Let's now return to the distinction between inflectional and derivational affixes (i.e., bound, grammatical morphemes). English has eight inflectional affixes; all other affixes are derivational. The eight inflectional affixes are listed in the following table, along with the type of root (i.e., lexical morpheme) that each one attaches to, and a representative example.

Inflectional Affix	Root	Example
{PLU} = plural	Noun	bats
{POSS} = possessive	Noun	boy's
{COMP} = comparative	Adjective	bigger
{SUP} = superlative	Adjective	biggest
{PRES} = present	Verb	stays
{PAST} = past	Verb	talked
{PAST PART} = past participle	Verb	driven
{PRES PART} = present participle	Verb	reading

The characteristics of Inflectional morphemes are as follows:

- 1) Inflectional morphemes do not change meaning or part of speech. For example, *big*, *bigger* and *biggest* are all adjectives.
- 2) Inflectional morphemes are required by the syntax. They typically indicate syntactic or semantic relations between different words in a sentence. For instance, in the sentence *Mary loves apples*, *-s* marks the 3rd person singular present form of the verb, relating it to the 3rd singular subject *Mary*.
- 3) Inflectional morphemes are very productive. They typically occur with all members of some large class of morphemes. For example, the plural morpheme {-s} occurs with almost all countable nouns.
- 4) Inflectional morphemes occur at the margin of a word, after any derivational morphemes.

{PLU}. All plural nouns in English can be represented morphologically as a root + {PLU}, regardless of how the plural morpheme is actually spelled or pronounced. For example, *boys* = {boy} + {PLU}, *men* = {man} + {PLU}, and even the plural of *sheep* (as in *Those sheep have big noses*) = {sheep} + {PLU}

{POSS}. All possessive nouns in English can be represented morphologically as a root + {POSS}. For example, *boy's* = {boy} + {POSS}, and *man's* = {man} + {POSS}. (The reason that {PLU} and {POSS} are both generally spelled with *-s* in Modern English is the result of historical accident. The plural *-s* comes from the Old English

masculine nominative-objective plural suffix *-as*, while the possessive *-s* comes from the Old English masculine possessive singular suffix *-es*.) {COMP} and {SUP}. All comparative and superlative adjectives in English can be represented morphologically as a root + {COMP} or {SUP}. For example, *happier* = {happy} + {COMP}, and *happiest* = {happy} + {SUP}. Note, even *good*, *better*, and *best* can be represented in this fashion: *good* = {good}, *better* = {good} + {COMP}, and *best* = {good} + {SUP}. On the other hand, it isn't clear how best to handle forms like *most beautiful*. Under some circumstances it might be reasonable to treat them as a root plus an affix (e.g., *most beautiful* = {beautiful} + {SUP}), on analogy with regular cases such as *prettiest* = {pretty} + {SUP}. However, *most* in *most beautiful* is clearly not an affix, as is *-est* in *prettiest*; rather, it's a free grammatical morpheme. Since linguists do not always agree on how to handle forms such as *most beautiful*, we will simply leave this as an open question.

{PRES} All present tense verbs in English can be represented morphologically as a root + {PRES}. For example, *hates* as in *John hates Mary* = {hate} + {PRES}. Note, however, that the only time this suffix is spelled out is when there is a third person singular subject (i.e., *he*, *she*, *it*, or an NP for which one of these can substitute—for example, *John*, *Mary*, *the dog*). With all other subjects (e.g., *I*, *you*, *we*, *they*, *John and Mary*, and so on), the present tense verb has no surface affix. Nonetheless, the verb *love* (as in *John and Mary love each other*) can be represented as *love* + {PRES}.

{PAST} All past tense verbs in English can be represented morphologically as a root + {PAST}. For example, *walked* (as in *Jake walked on hot coals*) = {walk} + {PAST}. Thus, any past tense verb, regardless of its spelling, can be represented in this fashion. For example, *drove* = {drive} + {PAST}. Note, moreover, that in English (as in all Germanic languages), the first and only the first verb form in a simple sentence is inflected for tense (i.e., {PRES} or {PAST}); no verb following the first is ever inflected for tense. Thus, for example, in the sentence *I think*, *think* is inflected for tense ({think} + {PRES}); in *I*

have bought, *have* is inflected for tense ({have} + (PRES)); in *I am thinking*, *am* is inflected for tense ({be} + (PRES)); and so on.

{PAST PART}. All past participles in English can be represented morphologically as a root + {PAST PART}. For example, *driven* (as in *John has driven his mother crazy*) = {drive} + {PAST PART}. One potential problem in identifying past participles results from the fact that there is so much variation in their spelling. For example, *gone* = {go} + {PAST PART}, *come* (as in *They've come home*) = {come} + {PAST PART}, *hit* (as in *He's hit three home runs*) = {hit} + {PAST PART}, and *walked* (as in *He's walked three miles*) = {walk} + {PAST PART}. Nonetheless, there is a very simple method for identifying a past participle in a simple active sentence: a past participle always follows a form of the auxiliary verb *have*. Thus, in the sentence *they have walked home*, *walked* is a past participle since it immediately follows a form of *have*. However, in the sentence *They walked home*, *walked* is not a past participle since it does not follow a form of *have*. In fact, it is a tensed form (here past), since it is the first verb form in the sentence.

{PRES PART}. All present participles in English can be represented morphologically as a root + (PRES PART). For example, *drinking* = {drink} + {PRES PART}. Unlike other verb forms in English, present participles always appear in a constant form (i.e. with an *-ing* suffix). In addition, the present participle in a simple active sentence can be identified as the verb form following a form of the auxiliary verb *to be*, as in *They were laughing*.

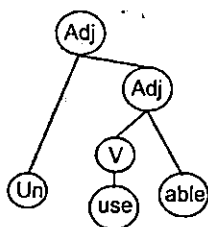
A. THE HIERARCHICAL STRUCTURE OF WORDS

When we examine words composed of only two morphemes, we implicitly know two facts about the ways in which affixes join with their stems. First, the stems with which a given affix may combine normally belong to the same part of speech. For example, the suffix *-able* attaches freely to verbs, but not to adjectives or nouns; thus, we can add this suffix to the verbs *adjust*, *break*, *compare*, and *debate*, but not to the adjectives *asleep*, *lovely*, *happy*, and *strong*, nor to the nouns *anger*, *morning*, *student*, or *success*. Second, the words formed by the addition of a given affix to some

word or morpheme also normally belong to the same part of speech. For example, the expressions resulting from the addition of *-able* to a verb are always adjectives; thus *adjustable*, *breakable*, *comparable*, and *debatable* are all adjectives.

These two facts have an important consequence for determining the way in which words with more than one affix must be formed. What it means is that words are formed in steps, with one affix attaching to a complete word, which can be a free morpheme or a morphologically complex word. Words with more than one affix are not formed in one single step, with the affixes and stem just strung together. For example, consider the word *unusable*, which is composed of a prefix *un-*, a stem *use*, and a suffix *-able*. One possible way this morphologically complex word might be formed is all at once, as in: *un + use + able*, where the prefix and the suffix attach at the same time to the verb stem *use*. However, this cannot be the case knowing what we know about how affixes attach only to certain parts of speech and create words of certain parts of speech. The prefix *un-*, meaning 'not', attaches only to adjectives and creates new words that are also adjectives. (Compare with *unkind*, *unwise*, and *unhappy*.) The suffix *-able*, on the other hand, attaches to verbs and forms words that are adjectives. (Compare with *stoppable*, *doable*, and *washable*.) Therefore, *un-* cannot attach to *use*, since *use* is a verb and not an adjective. However, if *-able* attaches *first* to the stem *use*, then it creates an adjective, *usable*, and the prefix *un-* is allowed to combine with it. Thus, the formation of the word *unusable* is a two-step process whereby *use* and *-able* attach first, then *un-* attaches to the word *usable*.

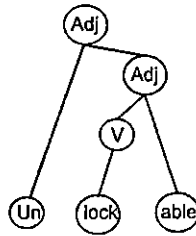
Recall that what we are analyzing is the internal structure of words. Words, since they are formed by steps, have a special type of structure characterized as hierarchical. This hierarchical structure can be schematically represented by "means of a *tree* that indicates the steps involved in the formation of the word, i.e., which morphemes joined together first and so on. The tree for *unusable* is:



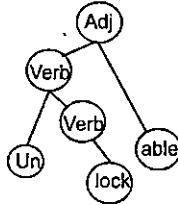
Now consider the word *reusable*. Both the prefix *re-* and the suffix *-able* attach to verbs, but we have already shown that one must attach first. Which is it? Notice that *reusable* cannot be regarded as the result of adding the prefix *re-* to the word *usable*, since *re-* attaches only to verbs (compare with *redo*, *relive*, and *refuel*) and *usable* is an adjective. However, *-able* can attach to the verb *reuse*, since *-able* attaches to verbs. Thus, our understanding of how the affixes *re-* and *-able* combine with other morphemes allows us to conclude that the verb *reuse*, but not the adjective *usable*, is a step in the formation of the adjective *reusable*.

Interestingly, some words are ambiguous in that they have more than one meaning. When we examine their internal structure, we find an explanation for this: their structure may be analyzed in more than one way. Consider, for example, the word *unlockable*. This could mean either 'not able to be locked' or 'able to be unlocked'. If we made a list to determine the parts of speech the affix *un-* attaches to, we would discover that there are not one but two prefixes that sound like *un-*. The first combines with adjectives to form new adjectives and means 'not'. (Compare with *unaware*, *unintelligent*, or *unwise*.) The second prefix *un-* combines with verbs to form new verbs and means 'do the reverse of'. (Compare with *untie*, *undo*, or *undress*.)

Remember that even though these prefixes sound alike, they are entirely different morphemes. Because of these two different sorts of *un-* in English, *unlockable* may be analyzed in two different ways. First, the suffix *-able* may join with the verb *lock* to form the adjective *lockable*; *un-* may then join with this adjective to form the new adjective *un lockable*, with the meaning 'not able to be locked'. This way of forming *unlockable* is schematized in the following tree:



The second way of forming *unlockable* is as follows. The prefix *un-* joins with the verb *lock* to form the verb *unlock*. The suffix *-able* then joins with this verb to form the adjective *unlockable*, with the meaning of 'able to be unlocked'. This manner of forming *unlockable* is represented by the following tree:



B. MORPHEMIC ASSOCIATION TO MULTIPLE PARTS OF SPEECH

There are a few prefixes that do not attach exclusively to one part of speech. For example, consider the prefix *pre-*. *Pre-* attaches to verbs and does not change the part of speech, as the following examples show:

<i>preexist</i>	<i>predetermine</i>
<i>premeditate</i>	<i>predecide</i>
<i>predefine</i>	

However, there are examples of words with the prefix *pre-* that do not follow the same pattern as those cited above:

<i>Preseason</i>	<i>prewar</i>
<i>predawn</i>	<i>pregame</i>

In these words *pre-* attaches to a noun and forms an adjective (*the preseason game, the prewar propaganda, the pregame warm-up*). However,

the "meaning" of the prefix is the same as in *preexist*, *predecide*, etc. (although its function is different). In addition, there are sets such as:

Prefrontal → *preinvasive*

Predental → *prehistoric*

In these words, *pre-* is attaching to an adjective, forming adjectives, and has the same "meaning" as in *preexist*, *predecide*, etc. So this is a bit problematic. We don't want to throw out the idea that a given affix attaches only to one part of speech, since the overwhelming majority of affixes adhere to this pattern. Apparently, some morphemes become so productive that their combinatorial possibilities can be extended. Such must be the case with *pre-*. Note, however, that its combinations are nevertheless rule-governed. When *pre-* attaches to verbs, it forms only verbs. When it attaches to nouns, it forms only adjectives, and when it attaches to adjectives, it forms only adjectives. So, it is advisable to consider many examples when attempting to determine the rules by which a given affix combines.



EXERCISES

Exercise 1

- 1) What is the meaning of the morpheme {er} as in *bigger*, *taller*, *smarter*, and *larger*?
- 2) What is the meaning of the morpheme {oholic} as in *workoholic*, *chocoholic*, and *foodoholic*?
- 3) What kind of evidence could be used to argue that *action* and *package* each contain two morphemes: {act} + {ion} and {pack} + {age}? (Hint: A morpheme can appear independently in other words.)
- 4) Mark the following statements true or false.
 - a. T F Every English word ending in *-ly* is an adverb.
 - b. T F Anyone-syllable English word will also be a one-morpheme word.
 - c. T F Any English word with more than one syllable will contain more than one morpheme.

A morpheme can be characterized as follows:

- a. A morpheme is a word or a part of the word that has meaning. The word *cat* is a morpheme because it is a word and has a meaning. The suffix *-s* in *cats* is a morpheme because it is a part of a word that has a meaning. The meaning of *-s* in the word *cats* is 'more than one' or as a plural marker.
- b. A morpheme cannot be divided into smaller units without violation of its meaning or meaningless remainder. For example, the word *strip* is a morpheme because when we divide it into *s-* and *trip*, we produce meaningless remainder (*-s* does not have meaning).
- c. A morpheme can recur in differing environment with a relatively stable meaning. For example the suffix *{-er}* in the words, *teacher*, *driver*, *reader*, and *player* has the same meaning, i.e. the person who does the action.

Let's summarize the main point of this section. A morpheme is a linguistic unit that is defined by a (more or less) constant core meaning associated with a (more or less) constant form.

Exercise 2

Complete the following table by filling in words consisting of one or more morphemes!

No	One Morpheme	Two Morphemes	Three Morphemes	More Than Three Morphemes
1	Act		activity	activities
2		gentleman		gentlemanliness
3				activated
4	place			
5			unbreakable	
6	create			
7			Fertilizer	
8	form			

Exercise 3

Divide the following words into morphemes. For each morpheme, state whether it is lexical or grammatical.

- a) Restating
- b) Strongest
- c) Actively
- d) Precede
- e) Disentangled
- f) ran
- g) women

Exercise 4

- 1) Analyze the following morphemes as lexical or grammatical and as free or bound.
 - a. The morpheme {er}, as in teachers
 - b. The morpheme {cur}, as in recur, incur, and occur
 - c. {at}, {to}, and other prepositions
 - d. The morpheme {pel}, as in repel, compel, impel
- 2) List at least five different words that contain the bound, lexical morpheme {mit} 'send, go.' (Consult a dictionary if needed.) What structural pattern is shared by all the words?
- 3) Is *mitten* a possible answer to Exercise (2)? Why or why not?

Exercise 5

- 1) The following words are made up of either one or two morphemes. Isolate them and decide for each if it is free or bound, what kind of affix is involved, and (where applicable) if it is inflectional or derivational

a. Cats	d. catsup
b. Unhappy	e. greedy
c. Rejoin.	f. hateful

- 2) Divide the word below into their component morphemes and give the information about the morphemes as you did in 1.
 - a. comfortable
 - b. environmentally
 - c. unidirectional
 - d. thickeners
 - e. rationalization

- 3) In each group of words that follows, identify the parts of speech of the stems and the parts of speech of the whole words.
 - a. Government, speaker, contemplation
 - b. Fictional, childish, colorful
 - c. Calmest, lovelier, sillier

Exercises 6

Draw tree diagrams for each of the following words:

- a. Reconstruction
- b. Unaffordable
- c. Manliness
- d. Irreplaceability
- e. Unrespectable
- f. Restatement
- g. mismanagement

KEY TO EXERCISES

Exercise 1

- 1) {er} indicates the comparative degree
- 2) {oholic}the person who addicts to _____.
- 3) The prominent evidence is we find the word *act* and *pack* that can stand independently and have meanings. They are called free morphemes. While -ion and -age are bound morphemes can be added to free morphemes

- 4) a. F
- b. F
- c. F

Exercise 2

No	One Morpheme	Two Morphemes	Three Morphemes	More Than Three Morphemes
1	Act	active	-activity	activities
2	gentle	gentleman	gentlemanly	gentlemanliness
3	act	active	activate	activated
4	place	replace	replaceable	irreplaceable
5	break	breakable	unbreakable	unbreakability
6	create	creative	creativity	creativities
7	fertile	fertilize	Fertilizer	fertilizers
8	form	formulate	reformulate	reformulation

Exercise 3

a) re- state -ing
 G L G

b) strong -est
 L G

c) act -ive -ly
 L G G

d) pre- -cede
 G L

e) dis- en- tangle -ed
 G G L G

f) ran
 L

g. woman {PLU}
 L G

Exercise 4

- 1) here is the answer:
 - a. Grammatical and bound
 - b. Lexical and bound
 - c. Grammatical and free
 - d. Lexical and bound
- 2) permit, transmit, submit, admit, commit. 'mit' is a bound morpheme that should be preceded by a prefix in order to form a verb.
- 3) the word mitten is not the possible answer to Exercise (2), because it has different meaning and pattern.

Exercise 5

- 1) here is the explanation:

a. Cats	cat	+	-s	
	F		I	
b. Unhappy	un-	+	happy	
	D		F	
c. Rejoin	re-	+	join	
	D		F	
d. Catsup				
e. Greedy	greed	+	-y	
	F		D	
f. Hateful	hate	+	-ful	
	F		D	

Note: F = Free morpheme, D = Derivation, I = Inflection

- 2) Here is the explanation:

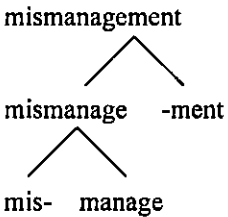
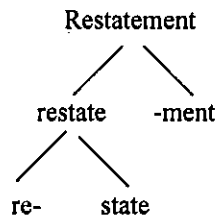
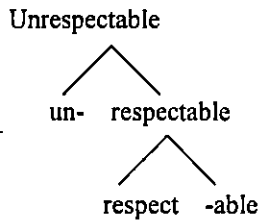
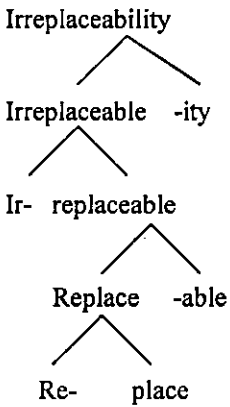
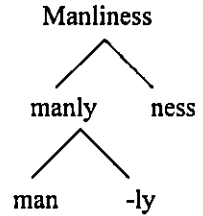
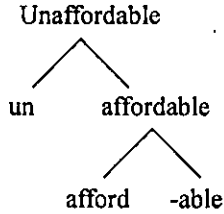
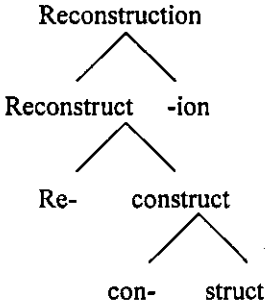
a. Comfortable	comfort	+	able	
b. Environmentally	environment	+	-al	+ -ly
c. Unidirectional	uni-	+	direct	+ -ion + -al
d. Thickeners	thick	+	-en	+ -er + -s
e. Rationalization	ratio	+	-al	+ -ize + -ation

3) Identify the parts of speech of the stems and the parts of speech of the whole words.

a.	Government	Govern	= V	government	= N
	Speaker	Speak	= V	speaker	= N
	Contemplation	contemplate	= V	contemplation	= N
b.	Fictional	fiction	= N	fictional	= Adj
	Childish	child	= N	childish	= Adj
	Colorful	color	= N	colorful	= Adj
	Calmer	calm	= Adj	calmer	= Adj
	Lovelier	lovely	= Adj	lovelier	= Adj
	Sillier	silly	= Adj	sillier	= Adj

Exercises 6

Draw tree diagrams for each of the following words:





SUMMARY

Central to this theory of morphology is the concept of morpheme, as well as the distributions between lexical and grammatical morphemes, bound and free morphemes, and inflectional and derivational morphemes. Within inflectional morphology, regularities within the English auxiliary verb system allow us to predict which inflected forms will follow which auxiliary verbs. Finally, word-formation processes provide an account of how new words are introduced into the lexicon.



FORMATIVE TEST 1

1) Divide these words by placing a + between their separate morphemes.

Example: replaces re + place + s

- retroactive
- befriended
- televise
- margin
- unpalatable
- morphemic
- cursive

2) Match each expression under A with the one statement under B that characterizes it.

A

- a. noisy crow
- b. eat crow
- c. scarecrow
- d. the crow
- e. crowlike
- f. crows

B

- (i) compound noun
- (ii) root morpheme plus derivational prefix
- (iii) phrases consisting of adjective plus noun
- (iv) root morpheme plus inflectional affix
- (v) root morpheme plus derivational suffix
- (vi) grammatical morpheme followed by lexical morpheme
- (vii) idiom

- 3) Write the one proper description from the list under B for the italicized part of each word in A

A	B
(a) Terrorized	(i) free root
(b) Uncivilized	(ii) bound root
(c) Terrorize	(iii) inflectional suffix
(d) Lukewarm	(iv) derivational suffix
	(v) inflectional prefix
	(vi) derivational prefix
	(vii) inflectional infix
	(viii) derivational infix

- 4) Draw the tree diagram for each of the following words!
- unhappiness
 - incomprehensible
 - irreplaceabilities
 - enlargement
 - reactivation
 - unbreakable
 - miscalled

Check your answers with the Key which is provided at the end of this module, and score your right answers. Then use the formula below to know your achievement level of the lesson in this module.

Formula:

$$\text{Level of achievement} = \frac{\text{Scores of the right answers}}{\text{Total score}} \times 100\%$$

Meanings of level of achievement:

- 90% - 100% = very good
- 80% - 89% = good
- 70% - 79% = average
- < 70% = bad

If your level of achievement reaches 80% or more, you can on to the next Unit. **Good!** But if your level of mastery is less than 80%, you have to study again this unit, especially parts which you haven't mastered.

UNIT 2

Word-formation Processes

A. INTRODUCTION

In the previous unit of this module, we have been looking at how words are put together out of smaller parts. We have seen that English makes use of derivational morphemes to create more words than would exist with only free morphemes, and of course, English is not the only language that enlarges its vocabulary in this way. When linguists observe a language which uses the combining of bound and free morphemes to form additional words, they note that the occurring combinations are systematic, i.e., rule-governed, as we have certainly seen is the case in English. To illustrate, we can recall that the prefix *un-*, meaning 'not', attaches only to adjectives, the prefix *re-* attaches only to verbs, and the suffix *-ful* attaches only to nouns. Because these combinations are rule-governed, we can say that a *process* is at work, namely, a word formation process, since new words are being formed. What we will consider in this unit are the ways in which languages create new words from bound and free morphemes. There are other ways in which new words come into use in a language.

Before describing some of the word formation processes found in the world's languages, we must first address the question: in what sense is it meant that new words are being "formed"? Do we mean that every time a speaker uses a morphologically complex word that the brain reconstructs it? Some linguists would maintain that this is the case. They would claim that in a speaker's mental dictionary, called the lexicon, each morpheme is listed individually, along with other information such as what it means, its part of speech (if a free morpheme), and possibly a rule naming what it can combine with, if it is a bound morpheme. Thus, each time a word is used, it is re-formed from the separate entries in the lexicon. However, there is evidence that indicates this is not actually the case; even morphologically complex words apparently have a separate entry in the adult lexicon.

There are other reasons, though, to consider *derivation* a process of word formation. A linguist analyzing a language uses the term *formation* to mean that the lexicon of a language includes many items that are systematically related to one another. Speakers of a given language, however, are also often aware of these relationships. We see evidence of this when new words are formed based on patterns that exist in the lexicon. For example, a speaker of English may never have heard words such as *unsmelly*, *smellness*, or *smellful* before, but he or she would certainly understand what they mean. The word *stick-to-it-ive-ness* causes some prescriptivists to wail; why create this new word when a perfectly good word, *perseverance*, already exists? This word illustrates that speakers of a language have no problem accessing the patterns in their lexicons and applying them for new creations. Thus, the term *formation* is applicable. Rules that speakers actually apply to form words that are not currently in use in a language are termed productive. English has examples of nonproductive morphemes as well; for example, the suffix *-lion* is not used by speakers to form new nouns, whereas the suffix *-ness* is.

Imagine that a new word came into use as a general term to refer to anyone who worked as a technical assistant on projects. Say that the new word was *somp*, and that, if you asked a friend what she was doing these days, she might say *Oh, I'm a somp at a local radio station*. You might even hear variations of the term in conversation: *Are somps well paid? Oh, it's not bad. Bill I can't imagine somping for the rest of my life*. The term may turn up in headlines or advertisements such as *The Sompist Role in Broadcasting* or *Sompism as a Vocation*.

The point of considering these examples is that, although you had never heard the term *somp* before, you probably had no difficulty understanding the meaning of the other new words, *somps*, *sompillg*, *sompist* and *sompism*. That is, you can very quickly understand a new word in your language and cope with the use of different forms of that new word. This ability must derive in part from the fact that there is a lot of regularity in the word-formation processes in your language. In this unit, we shall explore some of those basic processes by which new terms are created.

In some respects, the study of the processes whereby new words come into being in a language like English seems relatively straightforward. This

apparent simplicity, however, masks a number of controversial issues. Despite the disagreements among scholars in this area, there do seem to be some regular processes involved and, in the following sections, we shall cover the technical terms used to describe these processes and identify examples currently in use which are the result of those processes. It should be remembered that these processes have been at work in the language for some time and many words in daily use today were, at one time, considered barbaric misuses of the language. It is difficult now to understand the views expressed in the early nineteenth century over the "tasteless innovation" of a word like *handbook*, or the horror expressed by a London newspaper in 1909 over the use of the newly coined word *aviation*. Yet many terms of recent currency cause similar outcries. Rather than heed such protests that the language is being debased, we might prefer to view the constant evolution of new terms and new uses of old terms as a reassuring sign of vitality and creativeness in the way a language is shaped by the needs of its users. Let us consider the ways.

B. COINAGE

One of the least common processes of word-formation in English is coinage, that is, the invention of totally new terms. Our fanciful creation of *somp* would be one example. Words like *aspirin* and *nylon*, originally invented trade names, are others. Familiar recent examples are *kleenex* and *Xerox*, which also began as invented trade names, and which have quickly become everyday words in the language.

C. BORROWING

One of the most common sources of new words in English is the process simply labeled borrowing, that is, the taking over of words from other languages. Throughout its history, the English language has adopted a vast number of loan-words from other languages, including *alcohol* (Arabic), *boss* (Dutch), *croissant* (French), *lilac* (Persian), *piano* (Italian), *pretzel* (German), *robot* (Czech), *tycoon* (Japanese), *yogurt* (Turkish) and *zebra* (Bantu). Other languages, of course, borrow terms from English, as can be observed in the

Japanese use of *suupaamaaketto* ('supermarket') and *rajio* ('radio'), or Hungarians talking about *sport*, *klub* and *futbal*, or the French discussing problems of *le parking*, over a glass of *le whisky*, during *le weekend*.

A special type of borrowing is described as loan-translation, or calque. In this process, there is a direct translation of the elements of a word into the borrowing language. An interesting example is the French term *un gratte-ciel*, which literally translates as 'a scrape-sky', and is used for what, in English, is normally referred to as a *skyscraper*. The English word *superman* is thought to be a loan-translation of the German *Übermensch*, and the term *loan-word* itself is believed to have come from the German *Lehnwort*. Nowadays, some Spanish speakers eat *perros calientes* (literally 'dogs hot') or *hot dogs*.

D. COMPOUNDING

In some of those examples we have just considered, there is a joining of two separate words to produce a single form. Thus, *Lehn* and *Wort* are combined to produce *Lehnwort* in German. This combining process, technically known as compounding, is very common in languages like German and English, but much less common in languages like French and Spanish. Obvious English examples would be *bookcase*, *fingerprint*, *sunburn*, *wallpaper*, *doorknob*, *textbook*, *wastebasket* and *waterbed*.

This very productive source of new terms has been well-documented in English and German, but can also be found in totally unrelated languages, such as Hmong, in South East Asia, which combines *hwj* ('pot') and *kais* ('spout') to produce *hwjkais* ('kettle'). The forms *pajkws* ('flower' + 'corn' = 'popcorn') and *hnab looj tes* ('bag' + 'cover' + 'hand' = 'glove') are recent creations.

E. BLENDING

This combining of two separate forms to produce a single new term is also present in the process called blending. However, blending is typically accomplished by taking only the beginning of one word and joining it to the end of the other word. In some parts of the United States, there's a product

which is used like *gasoline*, but is made from *alcohol*, so the 'blended' term for referring to this product is *gasohol*. If you wish to refer to the combined effects of *smoke* and *fog*, there's the term *smog*. Some other commonly used examples of blending are *brunch* (breakfast/lunch), *motel* (motor/hotel) and *telecast* (television/ broadcast). The British have, for a number of years, considered the feasibility of constructing a tunnel under the English Channel to France, and newspapers inevitably refer to this project by using the blended expression *Chunnel*. A fairly recent invention, based on the blending process, was President Reagan's version of economic policy, that is. *Reaganomics*.

F. CLIPPING

The element of reduction which is noticeable in blending is even more apparent in the process described as clipping. This occurs when a word of more than one syllable is reduced to a shorter form, often in casual speech. The term *gasoline* is still in use, but occurs much less frequently than *gas*, the clipped form. Common examples are *ad* ('advertisement'), *fan* ('fanatic'), *bus*, *plane*, *prof*, *lab* and *flu*.

G. BACKFORMATION

A very specialized type of reduction process is known as backformation. Typically, a word of one type (usually a noun) is reduced to form another word of a different type (usually a verb). A good example of backformation is the process whereby the noun *television* first came into use and then the verb *televise* was created from it. Other examples of words created by this process are: *edit* (from 'editor'), *donate* (from 'donation'), *opt* (from 'option'), *emote* (from 'emotion') and *enthuse* (from 'enthusiasm').

H. CONVERSION

A change in the function of a word, as for example, when a noun comes to be used as a verb (without any reduction) is generally known as *conversion*. Other labels for this very common process are 'category change'

and 'functional shift'. A number of nouns, such as *paper*, *butter*, *bottle*, *vacation*, can, via the process of conversion, come to be used as verbs, as in the following sentences: *He's papering the bedroom walls. Have you buttered the toast? We bottled the home-brew last night. They're vacationing in France.*

This process is particularly productive in modern English, with new uses occurring frequently. The conversion can involve verbs becoming nouns, with *guess*, *must* and *spy* as the sources of a *guess*, a *must* and a *spy*, or adjectives, such as *dirty*, *empty*, *total*, *crazy* and *nasty*, can become the verbs *to dirty*, *to empty*, *to total*, or the nouns *a crazy* and *a nasty*. Other forms, such as *up* and *down*, can also become verbs, as in *They up the prices* or *We down a few beers.*

I. ACRONYMS

Some new words are formed from the initial letters of a set of other words. These acronyms often consist of capital letters, as in *NATO*, *NASA* or *UNESCO*, but can lose their capitals to become everyday terms such as *laser* ('light amplification by stimulated emission of radiation'), *radar* ('radio detecting and ranging') and *scuba* ('self contained underwater breathing apparatus'). You might even hear talk of a *snafu* which is reputed to have its origins in 'situation normal, all fouled up'.

J. DERIVATION

In our list so far, we have not dealt with what is by far the most common word-formation process to be found in the production of new English words. This process is called derivation, and it is accomplished by means of a large number of small 'bits' of the English language which are not usually given separate listings in dictionaries. These small 'bits' are called affixes and a few examples are the elements *un-*, *mis-*, *pre-*, *-ful*, *-less*, *-ish*, *-ism*, *-ness* which appear in words like *unhappy*, *misrepresent*, *prejudge*, *joyful*, *careless*, *boyish*, *terrorism* and *sadness*.

1. Prefixes and suffixes

In the preceding group of words, it should be obvious that some affixes have to be added to the beginning of a word (e.g. un-). These are called prefixes. The other affix forms are added to the end of the word (e.g. -ish) and are called suffixes. All English words formed by this derivational process use either prefixes or suffixes, or both. Thus, *mislead* has a prefix, *disrespectful* has both a prefix and a suffix, and *foolishness* has two suffixes.

2. Infixes

There is a third type of affix, not normally to be found in English, but fairly common in some other languages. This is called an infix and, as the term suggests, it is an affix which is incorporated inside another word. It is possible to see the general principle at work in certain expressions, occasionally used in fortuitous or aggravating circumstances by emotionally aroused English speakers: *Hallebloodylujah!*, *Absogoddamlutely*, and *Unfuckinbelievable*. We could view these 'inserted' forms as a special version of infixing. However, a much better set of examples can be provided from Kamhmu, a language spoken in South East Asia. These examples are taken from Merrifield *et al.* (1962):

('to drill')	<i>see - smee</i>	('a drill')
('to chisel')	<i>toh - (moh.</i>	('a chisel')
('to eat with a spoon')	<i>hiip - hmiip</i>	('a spoon')
('to tie')	<i>hoolll - hmoolll</i>	('a thing with which to tie')

It can be seen that there is a regular pattern whereby the infix *-m-* is added to verbs to form corresponding nouns. If this pattern is generally found in the language and you know that the form *kmap* is the Kamhmu word for 'tongs', then you should be able to work out what the corresponding verb 'to grasp with tongs' would be. It is *kap*.

K. MULTIPLE PROCESSES

Although we have concentrated on each of these word-formations, processes in isolation, it is possible to trace the operation of more than one

process at work in the creation of a particular word. For example, the term *deli* seems to have become a common American English expression via a process of first 'borrowing' *delicatessen* (from German) and then 'clipping' that borrowed form. If you hear someone complain that *problems with the project have snowballed*, the final term can be noted as an example of 'compounding', whereby *snow* and *ball* have been combined to form the noun *snowball*, which has then undergone 'conversion' to be used as a verb. Forms which begin as 'acronyms' can also undergo other processes, as in the use of *lase* as a verb, the result of 'backformation' from *laser*. In the expression, *waspish attitudes*, the form *WASP* ('white Anglo-Saxon Protestant') has lost its capital letters and gained a suffix in the 'derivation' process.

Many such forms can, of course, have a very brief life-span. Perhaps the generally accepted test of the 'arrival' of recently formed words in a language is their published appearance in a dictionary. However, even this may not occur without protests from some, as Noah Webster found when his first dictionary, published in 1806, was criticized for citing words like *advocate* and *test* as verbs, and for including such 'vulgar' words as *advisory* and *presidential*. It would seem that Noah had a keener sense than his critics of which new word-forms in the language were going to last.



EXERCISES

Exercise 1

Give at least three examples of:

- blending
- compounding
- coinage
- borrowing

Exercise 2

Give at least four examples of:

- clipping
- backformation
- conversion

Exercise 3

Provide at least four examples of:

- Acronym
- Derivation
- Inflection
- Multiple processes

KEY TO EXERCISES**Exercise 1**

Give at least three examples of:

- Blending: motel, smog, brunch
- Compounding: skyline, blackboard, bookstore
- Coinage: Xerox, Kleenex, nylon
- Borrowing: alcohol, boss, piano

Exercise 2

Give at least four examples of:

- Clipping: ad (advertisement), gas (gasoline), lab (laboratory), Prof. (professor)
- Backformation: *televise* is derived from *television*, *edit* is from *editor*, *donate* is from *donation*, and *opt* is from *option*
- Conversion: I *watered* the flower, He's *papering* the windows, I didn't *butter* the toast, and they *beached* the boat this morning.

Exercise 3

Provide at least four examples of:

- Acronym: NATO, NASA, UNESCO, radar, scuba
- Derivation: un- in *undo*, re- in *replace*, -ful in *useful*, and -less in *careless*
- Inflection: -s in *cats*, -er in *bigger*, -ing in *playing*, and -ed in *studied*
- Multiple processes: *deli* is the process of borrowing and clipping (*delicatessen*), *lase* is the verb derived from *laser* which is an acronym, the word *watering* in *She is watering the flowers* is the process of conversion and inflection, and *snowballed* in *problems with the projects have snowballed* in the process of compounding, conversion, and inflection.

**SUMMARY**

Central to this theory of morphology is the concept of morpheme, as well as the distinctions between lexical and grammatical morphemes, bound and free morphemes, and inflectional and derivational morphemes. Within inflectional morphology, regularities within the English auxiliary verb system allow us to predict which inflected forms will follow which auxiliary verbs. Finally, word-formation processes provide an account of how new words are introduced into the lexicon.

**FORMATIVE TEST 2**

- 1) Which of the following expressions is an example of 'calque'? How would you describe the others?
 - (a) *luna de miel* (Spanish) - *honeymoon* (English)
 - (b) *mishin* (Japanese) - *machine* (English)
 - (c) *trening* (Hungarian) - *training* (English)

- 2) The term *vaseline* was originally a trade name for a product, but has become an ordinary English word. What is the technical term used to describe this process?
- 3) Identify the affixes used in the words *unfaithful*, *Carelessness*, *refillable* and *disagree*, and decide whether they are prefixes or suffixes.
- 4) Can you identify the word-formation processes involved in producing the italicized forms in these sentences?
 - (a) Laura *parties* every Saturday night.
 - (b) Tom was worried that he might have *AIDS*.
 - (c) Zee described the new toy *asfantabulous*.
 - (d) Eliza exclaimed. "*Absobloominglutely!*"
- 5) More than one process was involved in the creation of each of the indicated forms below. Can you identify them?
 - (a) I just got a new *car-phone*.
 - (b) Syamsir wants to be a *footballer*.
 - (c) The negotiators *blueprinted* a new peace proposal.
 - (d) Another *skyjacking* has just been reported.
- 6) The compound word *birdcage* is formed from a noun *bird* plus another noun *cage*, while the word *widespread* is formed from an adjective *wide* and a verb *spread*. So, compounds differ in terms of the types of elements which are combined. Can you identify the different elements involved in each of the following compounds'
bedroom. blackbird. brainwash. catfish. clean-shaven. crybaby. haircut. heartbeat. hothouse. hovercraft. leadfree. madman. ready-made. seasick. sunflower. sunrise. telltale. threadbare. watchdog. well-dressed.

Check your answers with the key which is provided at the end of this module, and score your right answers. Then use the formula below to know your achievement level of the lesson in this module.

Formula:

$$\text{Level of achievement} = \frac{\text{Scores of the right answers}}{\text{Total score}} \times 100\%$$

Meanings of level of achievement:

90% - 100% = very good

80% - 89% = good

70% - 79% = average

< 70% = bad

If your level of achievement reaches 80% or more, you can on to the next unit. Good! But if your level of mastery is less than 80%, you have to study again this unit, especially parts which you haven't mastered.

UNIT 3

Syntax

A. INTRODUCTION

In the course of the preceding explanation, we moved from a consideration of general grammatical categories and relations to specific methods of describing the structure of phrases and sentences. If we concentrate on the structure and ordering of components within a sentence, we are studying what is technically known as the syntax of a language. Words in a sentence are more than a simple concatenation of items—there are patterns and regularities that can be discovered. Syntax studies the organization of words into phrases and phrases into sentences. The word *syntax* came originally from Greek and literally meant 'a setting out together' or 'arrangement'. In earlier approaches to the description of syntax, there was an attempt to produce an accurate analysis of the sequence or the ordering 'arrangement' of elements in the linear structure of the sentence. While this remains a major goal of syntactic description, more recent work in syntax has taken a rather different approach in accounting for the 'arrangements' we observe in the structure of sentences.

Since the 1950s, particularly developing from the work of the American linguist Noam Chomsky, there have been a particular type of grammar which would have a very explicit system of rules specifying what combinations of basic elements would result in well-formed sentences. (Let us emphasize the word "attempts" here, since no fully worked-out grammar of this or any other type yet exists.) This explicit system of rules, it was proposed, would have much in common with the types of rules found in mathematics. Indeed, a definitive early statement in Chomsky's first major work betrays this essentially mathematical view of language: "I will consider a language to be a set (finite or infinite) of sentences" (Chomsky, 1957: 13).

This mathematical point of view helps to explain the meaning of the term generative, which is used to describe this type of grammar. If you have an

algebraic expression like $3x + 2y$, and you can give x and y the value of any whole number, then that simple algebraic expression can generate an endless set of values, by following the simple rules of arithmetic. When $x = 5$ and $y = 10$, the result is 35. When $x = 2$ and $y = 1$, the result is 8. These results will follow directly from applying the explicit rules. The endless set of such results is 'generated' by the operation of the explicitly formalized rules. If the sentences of a language can be seen as a comparable set, then there must be a set of explicit rules which yield those sentences. Such a set of explicit rules is a generative grammar.

B. SOME PROPERTIES OF THE GRAMMAR

A grammar of this type must have a number of properties, which can be described in the following terms. The grammar will generate all the well-formed syntactic structures (e.g. sentences) of the language and fail to generate any ill-formed structures. This grammar will have a finite (i.e. limited) number of rules, but will be capable of generating an infinite number of well-formed structures. In this way, the productivity of language (i.e. the creation of totally novel yet grammatical sentences) would be captured within the grammar.

The rules of this grammar will also need the crucial property of recursiveness, that is, the capacity to be applied more than once in generating a structure. For example, whatever rule yields the component *that chased the cat* in the sentence *this is the dog that chased the cat*, will have to be applied again to get *that killed the rat* and any other similar structure which could continue the sentence *This is the dog that chased the cat that killed the rat*. There is, in principle, no end to the recursion which would yield ever-longer versions of this sentence and the grammar must provide for this fact. Recursiveness is not only to be found in descriptions of sentence structure. It is an essential part of the little old lady's view of the role of turtles in cosmic structure.

This grammar should also be capable of revealing the basis of two other phenomena: first, how some superficially distinct sentences are closely

related, and second, how some superficially similar sentences are in fact distinct. We need some exemplification for these points.

1. Linear Order

The most obvious principle of sentence organization is linear order; the words in a sentence must occur in a particular sequence if the sentence is to convey the desired meaning. Consider, for example, the following sentence of English.

- a. Mahmood saw Khadijah
- b. If we rearrange the words in this sentence, we come up either with nonsense, as in (2):
- c. *Khadijah Mahmood saw
- d. or with a sentence whose meaning is distinctly different from that of (1)
- e. Khadijah saw Mahmood

Clearly, the ordering of the words in sentences determines, in part, whether a sentence is grammatical or not and what the sentence means.

One of the many rules of English requires that grammatical subject of a sentence normally precedes the main verb, which in turn normally precedes its direct object. Thus, *Joan resembles Ali* is English, but *resembles Joan Ali* and *Joan Ali resembles* are not. However, an important fact about rules of word order is that they are language specific—that is, languages vary in the ways in which they order words.

2. Hierarchical Structure

Although linear order is an important principle of sentence organization, sentences are more than just ordered sequences of words; they have internal hierarchical structure as well. That is, the individual words in a sentence are organized into natural, semantically coherent groupings, which are themselves organized into larger groupings. These groupings within a sentence are called constituents of that sentence. The relationship between constituent in a sentence form the constituent structure of the sentence. For example, consider the sentence in (4):

(4) Many executives eat at really fancy restaurants

We can easily distinguish a number of meaningful groups of words in this sentence: *many executives* and *eat at really fancy restaurants*, for instance, clearly have meanings of their own, and each makes a coherent contribution to the meaning of (4) as a whole. For these reasons, they are constituents of this sentence. On the other hand, some groups of words in sentence (4) do not naturally form meaningful units; *executives eat at* and *eat at really*, for instance, don't clearly have meanings of their own. Thus, these groups of words are not constituents of (4).

3. Deep and Surface Structure

Two superficially distinct sentence structures would be, for example, *Charlie broke the window* and *The window was broken by Charlie*. In traditional terminology, the first is an active sentence and the second is passive. The distinction between them, it can be claimed, is a difference in their surface structure, that is, the syntactic form they take as actual English sentences. However, this difference in superficial form disguises the fact that the two sentences are very closely related, even identical, at some less 'superficial' level. This other 'underlying' level, where the basic components shared by the two sentences would be represented, has been called their deep structure. The deep structure is an abstract level of structural organization in which all the elements determining structural interpretation are represented. So, the grammar must be capable of showing how a single underlying abstract representation can become different surface structures.

4. Structural Ambiguity

On the second point noted above, let us say that we had two distinct deep structures expressing, on the one hand, the fact that 'Annie had an umbrella and she whacked a man with it': and, on the other hand, that 'Annie whacked a man and the man happened to be carrying an umbrella.' Now, these two different concepts can, in fact, be expressed in the same surface structure form: *Annie whacked a man with an umbrella*. This sentence is structurally ambiguous. It has two different underlying interpretations which would be represented differently in the deep structure.

Phrases can also be structurally ambiguous, as in expressions like *the hatred of the killers*. Now, either 'someone hated the killers', or 'the killers hated someone' could be the underlying interpretation. The grammar will have to be capable of showing the structural distinction between these underlying representations.

Often, an expression is ambiguous because it has more than one possible constituent structure. Consider, for example, the expression *old men and women*; it can have either of the following constituent structures



C. DIFFERENT APPROACHES

We have considered some of the requirements that would have to be met by a complete syntactic description of a language. However, this area of linguistic investigation is notorious for giving rise to very different approaches to producing that description. For some, the only relevant issues are syntactic ones, that is, how to describe structure, independently of 'meaning' considerations. For others, the 'meaning component' is primary. In some later versions of generative grammar, the level of deep structure is essentially taken over by a 'meaning' or semantic interpretation which is assigned a structural or syntactic form in its surface realization. Unfortunately, almost everything involved in the analysis of generative grammar remains controversial. There continue to be many different approaches among those who claim to analyze language in terms of generative grammar, and many more among those who are critical of the whole system. Rather than explore controversies, let us look at some of the really basic features of the original analytic approach and see how it is all supposed to work. First, we need to get the symbols straightened out.

1. Symbols used in syntactic description

We have already introduced some symbols that are quite easily understood as abbreviations for the grammatical categories involved. Examples are 'S' (= sentence), 'N' (= noun), 'Art' (= article) and so on. We need to introduce three more symbols which are commonly used.

The first of these is in the form of an arrow, and it can be interpreted as 'consists of'. It will typically occur in the following format:

$$\text{NP} \longrightarrow \text{Art} \quad \text{N}$$

This is simply a shorthand way of saying that a noun phrase (e.g. *the book*) consists of an article (e.g. *the*) and a noun (e.g. *book*).

The second symbol used is in the form of parentheses or round brackets (). Whatever occurs inside these brackets will be treated as an Optional constituent. Perhaps an example will make this clear. You can describe an object as *the book*, or as *the green book*. We can say that both *the book* and *the green book* are examples of the category noun phrase. In order for a noun phrase to occur in English, you may require an article (*the*) and a noun (*book*), but the inclusion of an adjective (*green*) is optional. You can include an adjective, but it isn't obligatory. We can capture this aspect of English syntax in the following way:

$$\text{NP} \longrightarrow \text{Art} \quad (\text{Adj}) \quad \text{N}$$

This shorthand notation expresses the idea that a noun phrase consists of an obligatory article and an obligatory noun, but may also include an adjective in a specific position. The adjective is optional.

The third symbol used is in the form of braces, or curly brackets - { }. These indicate that only one of the elements enclosed within the brackets must be selected. They are used when there is a choice from two or more constituents. For example, we have already noted that a noun phrase can consist of an expression like *the woman* (Art N) or *she* (pronoun) or *Kathy* (proper noun). We can, of course, write three single rules, as shown on the left below, but it is more succinct to write one rule, as shown on the right below, which incorporates exactly the same information:



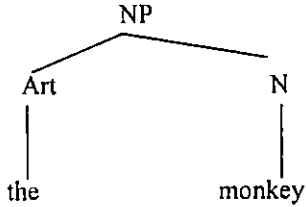
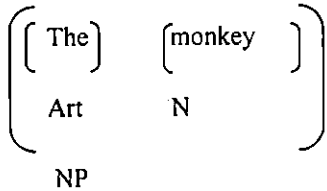
It is important to remember that, although there are three constituents in these curly brackets, only one of them can be selected on any occasion. We can now present a list of symbols and abbreviations commonly found in syntactic descriptions:

S	sentence	N	noun	PN	proper noun
V	verb	Art	article	Adv	adverb
NP	noun phrase	VP	verb phrase	Pro	pronoun
Adj	adjective	Prep	preposition	PP	prepositional phrase

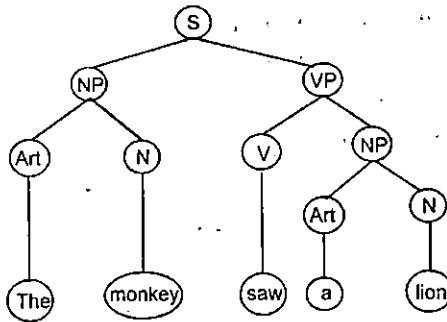
- * = 'ungrammatical sequence'
- = 'consists of'
- () = 'optional constituent'
- { } = 'one and only one of these constituents must be selected'

2. Labeled Tree Diagrams

We considered ways of describing the structure of sentences that (basically) concentrated on the linear sequence of constituents. It is, of course, possible to show the same sequence as, in a more explicit way, 'hierarchically' organized. So, instead of labeling and bracketing the constituents as shown on the left below, we can show the same information in the form of a tree diagram. Tree diagrams are one way of graphically representing the structure of a sentence. For example, consider the phrase on the right below:



This type of tree diagram representation contains all the grammatical information found in the other analyses, but also shows more explicitly the fact that there are different levels in the analysis. That is, there is a level of analysis at which a constituent such as NP is represented and a different, lower level at which a constituent such as N is represented. Here's how a whole sentence would look in a tree diagram:

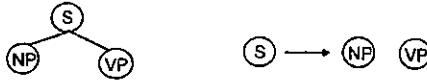


If we start at the top of this tree diagram, we are starting with a sentence (S) and then dividing the sentence into two constituents (NP and VP). In turn, the NP constituent is divided into two constituents (Art and N). Finally, one word is selected which fits the label Art (*the*), and another which fits N (*monkey*).

3. Phrase Structure Rules

We can view this tree diagram format in two different ways. In one way, we can simply treat it as a static representation of the structure of the sentence at the bottom of the diagram. We could propose that, for every single sentence in English, a tree diagram of this type could be drawn. The alternative view is to treat the diagram as a 'dynamic' format, in the sense that it represents a way of 'generating' not only that one sentence, but a very large number of sentences with similar structures. This alternative view is very appealing since it should enable us to generate a large number of sentences with only a small number of rules. These 'rules' are usually called phrase structure rules, and they present the information of the tree diagram in an

alternative format. So, instead of the diagram form on the left below, we can use the notation shown on the right below:



The rule is then read as - "a sentence consists of a noun phrase followed by a verb phrase". In addition to rules of this type which generate structures, we can also have lexical rules which indicate the words to be used for constituents such as N. For example:

N → {*boy, girl, dog ...*}

This means that N is rewritten as *boy*, or *girl*, or *dog*. We can create a set of extremely simple (and necessarily incomplete) phrase structure rules which can be used to generate a large number of English sentences:

- S -----> NP VP
- NP -----> { Art (Adj) N }
 { PN }
- VP -----> V NP (PP) (Adv)
- PP -----> Prep NP
- N -----> {*boy, girl, horse*}
- PN -----> {*Ahmed, Sheila*}
- V -----> {*saw, followed, helped*}
- Prep -----> {*with, near*}
- Art -----> {*a, the*}
- Adj -----> {*small, crazy*}
- Adv -----> {*yesterday, recently*}

These rules will generate the grammatical sentences shown below:

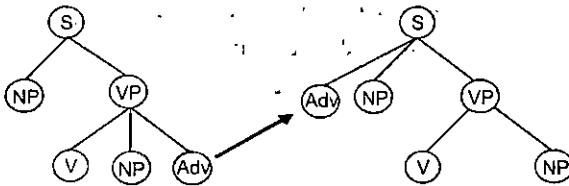
- The boy saw a girl yesterday
- Ahmed helped a boy recently
- A small horse followed a girl

4. Transformational Rules

One problem with these phrase structure rules is that they will generate all sentences with fairly fixed word order to the constituents. For example, adverbs will always come at the end of their sentences, if we follow the rules we have just illustrated. That is fine for generating the first sentence below, but how would we get the second sentence?

- a. George helped Myrna yesterday.
- b. Yesterday George helped Myrna.

In order to accomplish this 'movement' of constituents, we need a set of rules which will change or move constituents in the structures which derive from the phrase structure rules. These are called transformational rules. Essentially what they do is take a 'branch' of the 'tree' away from one part of the tree diagram, and attach it to a different part. Here is an example of a movement transformation:



(George helped Myrna yesterday) (Yesterday George helped Myrna)

We would, of course, specify which constituents can be moved, from where and to where.

One of the best arguments for having transformational rules involves what seems to be the movement of a very small element in English sentence structure. We recognize that the following two sentences have a great deal in common:

- a. Doris picked up the magazine.
- b. Doris picked the magazine up.

These sentences contain a verb-particle construction (verb - *pick*: particle-up), and it is clear that the particle can be separated from the verb. A constituent structure analysis would have some difficulty accommodating this type of structure. A phrase structure analysis would have to create two

different tree diagrams. Yet, we intuitively recognize that these two sentences must come from a single underlying source.

Let us propose a single tree diagram source which produces a string of elements like: *NP V Particle NP*. Under circumstances like these, let us then propose the optional transformation called 'Particle Movement', which takes that structural description and yields the structural change to: *NP V NP Particle*. By using this simple transformational rule, we have provided the means for explicitly relating the two structures in sentences (i) and (ii) above as surface variations of a single underlying structure. It may not seem much, but this type of transformational analysis solved a number of tricky problems for previous syntactic descriptions.

There is, of course, much more involved in transformational grammar and other methods of syntactic description. (We have barely scratched the surface structures.) However, having explored some of the basic issues in the syntactic description of language, we must move on, as historically the generative grammarians had to do, to come to terms with the place of 'meaning' in linguistic description. This leads us to a consideration of the role of semantics.



EXERCISES

Exercise 1

Apply the constituent tests to determine if the underlined expressions in the following sentence are constituents

- 1) The clouds rolled across the sky
- 2) My uncle crashed our new car
- 3) Some students hate computers
- 4) Too many noisy birds are nesting on campus
- 5) The tired teachers had a party
- 6) We drank too much coffee last night

Exercise 2

Discuss the ambiguity of the following sentences!

- 1) The little boy hit the child with the toy
- 2) She is an American history teacher
- 3) Chocolate cakes and pies are my favorite desserts
- 4) I saw my brother's photographs
- 5) Flying plane can be dangerous

Exercise 3

Write more grammatical sentences based on the above rules and lexicon.

Exercise 4

Provide 'superficially distinct' sentences which would each have the same underlying structure as one of the following sentences!

- 1) I will send you the letter
- 2) My money was saved in a bank
- 3) Last Sunday I visited my grand mother
- 4) My father bought a new bike for me
- 5) The dog saw the lion
- 6) The manager changed the old rules

KEY TO EXERCISES**Exercise 1**

Apply the constituent tests to determine if the underlined expressions in the following sentence are constituents.

- 1) The clouds rolled across the sky (constituent: it is PP)
- 2) My uncle crashed our new car (constituent: it is an NP)
- 3) Some students hate computers (not constituent)
- 4) Too many noisy birds are nesting on campus (not constituent)
- 5) The tired teachers had a party (constituent; it is an NP)

- 6) We drank too much coffee last night (not constituent)

Exercise 2

Discuss the ambiguity of the following sentences!

- 1) The little boy hit the child with the toy; the little boy hit the child by using the toy and the little boy hit the child who had the toy
- 2) She is an American history teacher: she is a history teacher who is an American and she is a teacher who teaches American history.
- 3) Chocolate cakes and pies are my favorite desserts: Chocolate [cakes and pies] are my favorite desserts and [chocolate cakes] and [pies] are my favorite desserts.
- 4) I saw my brother's photographs; I saw the photographs that belongs to my brother and I saw the photographs of my brother
- 5) Flying plane can be dangerous; to fly a plane can be dangerous and the plane which is flying can be dangerous.

Exercise 3

Write more grammatical sentences based on the above rules and lexicon.

- 1) Ahmed followed a girl yesterday
- 2) The boy helped Ahmed recently
- 3) A crazy boy followed a small horse
- 4) The girls saw a crazy horse recently
- 5) A small horse followed a crazy boy
- 6) Etc

Exercise 4

Provide 'superficially distinct' sentences which would each have the same underlying structure as one of the following sentences!

- 1) I will send you the letter; I will send the letter to you
- 2) My money was saved in a bank: I saved my money in the bank

- 3) Last Sunday I visited my grand mother; I visited my grand mother last Sunday
- 4) My father bought a new bike for me: a new car was bought by my father for me
- 5) The dog saw the lion: the lion was seen by the dog
- 6) The manager changed the old rules: the old rules was changed by the manager



SUMMARY

Sentences have structure that can be represented by phrase structure trees containing syntactic categories. Such a representation reveals the linear order of words, and the constituency of each syntactic category. Syntactic categories are either phrasal categories, such as NP and VP, which can be broken down into other syntactic categories, or lexical categories, such as N and V, which correspond to the words of the language.

The theory of syntax makes use of five crucial concepts: category, left to right ordering, constituent structure, transformation, and constraints on transformation. These theoretical constructs are postulated to help us account for phenomena that otherwise would go unexplained.



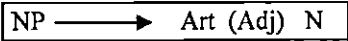
FORMATIVE TEST 3

- 1) In what ways are these expressions 'structurally ambiguous'?
 - (a) *An American history teacher.*
 - (b) *Visiting relatives can be boring.*
 - (c) *The parents of the bride and the groom were waiting.*
 - (d) abnormal psychology professor
 - (e) *second language teacher*

- 2) Can you provide four 'superficially distinct' sentences which would each have the same 'underlying' structure as one of the following sentences')
 - (a) *Lara was arrested by the police.*

- (b) *She took her coat off.*
- (c) *Someone stole my bicycle.*
- (d) *I told him to turn down the volume*

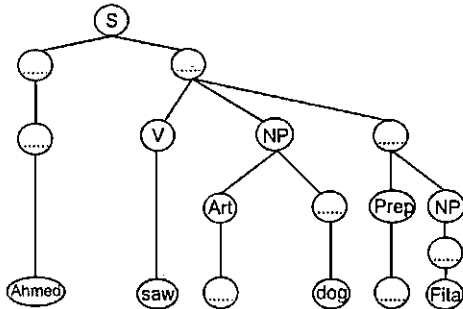
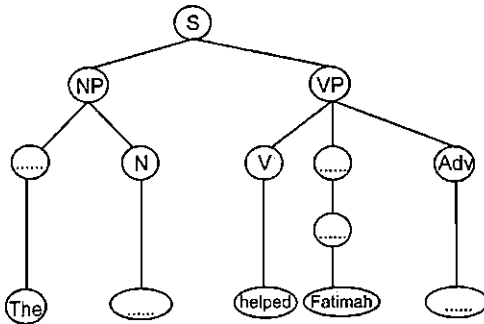
3) Which of the following expressions would be generated by this phrase structure rule:



- (a) *a radio*
- (c) *a new student*
- (b) *the rusty car*
- (d) *the screwdriver*

4) Why are transformational rules considered necessary in syntactic descriptions?

5) Using the phrase structure rules presented in this chapter, you should be able to complete these labeled tree diagrams.



Check your answers with the Key which is provided at the end of this module, and score your right answers. Then use the formula below to know your achievement level of the lesson in this module.

Formula:

$$\text{Level of achievement} = \frac{\text{Scores of the right answers}}{\text{Total score}} \times 100\%$$

Meanings of level of achievement:

90% - 100% = very good

80% - 89% = good

70% - 79% = average

< 70% = bad

If your level of achievement reaches 80% or more, you can on to the next unit. **Good!** But if your level of mastery is less than 80%, you have to study again this unit, especially parts which you haven't mastered.

Key to Formative Test

Formative Test 1

1) Here is the answer:

- a) Retro + act + ive
- b) Be + friend + ed
- c) Tele + vise
- d) margin
- e) un + palate + able
- f) morph + em + ic
- g) cur + s + ive

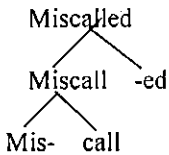
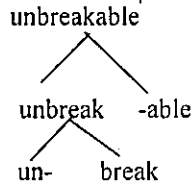
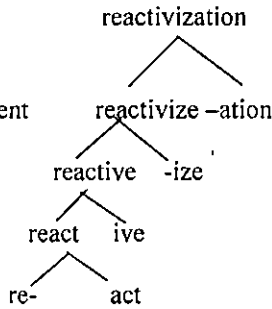
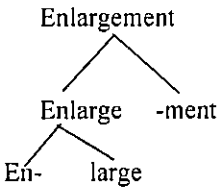
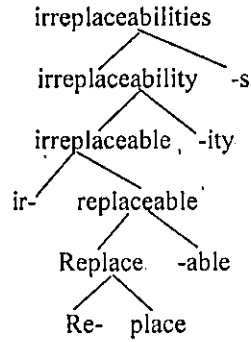
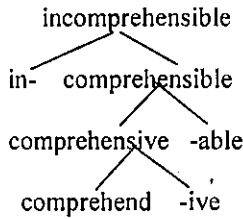
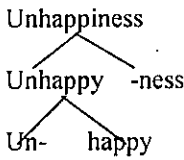
2) Match each expression under A with the one statement under B that characterizes it.

- a) noisy crow (iii)
- b) eat crow (vii)
- c) scarecrow (i)
- d) the crow (vi)
- e) crowlike (v)
- f) crows (iv)

3) Write the one proper description from the list under B for the italicized part of each word in A.

- Terrorized* (iii)
- Uncivilized* (i)
- Terrorize* (iv)
- Lukewarm* (ii)

4) Draw the tree diagram for each of the following words!



Formative Test 2

- 1) Which of the following expressions is an example of 'calque'? How would you describe the others?
 - a) *luna de miel* (Spanish) - *honeymoon* (English) is the example of calque
 - b) *mishin* (Japanese) - *machine* (English) is the example of borrowing

c) *trening* (Hungarian) - *training* (English) is the example of borrowing

2) coinage

3) *unfaithful* prefix *un-* faith suffix *-ful*
Carelessness care suffix *-less* suffix *-ful*
refillable prefix *re-* fill suffix *-able*
disagree prefix *dis-* agree

4) a) functional shift.

b) acronym

c) derivation.

d) insertion

5) More than one process was involved in the creation of each of the indicated forms below. Can you identify them?

a) I just got a new *car-phone*. (clipping and compounding)

b) Syamsir wants to be a *footballer*. (compounding and derivation)

c) The negotiators *blueprinted* a new peace proposal. (compounding and inflection)

d) Another *skyjacking* has just been reported. (calque, derivation)

6) Can you identify the different elements involved in each of the following compounds'

bedroom *bed(N)* + *room(N)*

blackbird *black (Adj.)* + *bird (N)*

brainwash *Brain (N)* + *wash (V)*

catfish *Cat (N)* + *fish (N)*

clean-shaven *Clean (Adj.)* + *shaven (V)*

crybaby. *Cry (N)* + *baby (N)*

haircut *hair (N)* + *cut (V)*

heartbeat *heart (N)* + *beat (V)*

hothouse *hot (Adj.)* + *house (N)*

- hovercraft* *hover* (V) + *craft* (N)
- leadfree* *lead* (V) + *free* (Adj.)
- madman* *Mad* (Adj.) + *man* (N)
- ready-made* *ready* (Adj.) + *made* (V)
- seasick* *sea* (N) + *sick* (Adj.)
- sunflower* *sun* (N) + *flower* (N)
- sunrise* *sun* (N) + *rise* (V)
- telltale* *Tell* (V) + *tale* (N)
- threadbare* *thread* (V) + *bare* (Adj.)
- watchdog* *watch* (V) + *dog* (N)
- well-dressed* *well* (Adv) + *dressed* (V)

Formative Test 3

- 1) In what ways are these expressions 'structurally ambiguous'?
 - a) – a teacher who teaches American history
– a history teacher who is American
 - b) – we visit the relatives, and it is boring
– the relatives visit us, and it is boring
 - c) – *The parents of the bride, as well as the groom, were waiting.*
– The parents of both the bride and the groom were waiting
 - d) – a psychology professor who is abnormal
– a professor who teaches abnormal psychology
 - e) – a teacher who teaches a second
– a language teacher who replaces the first teacher

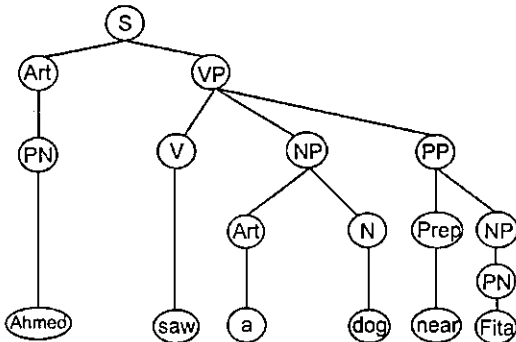
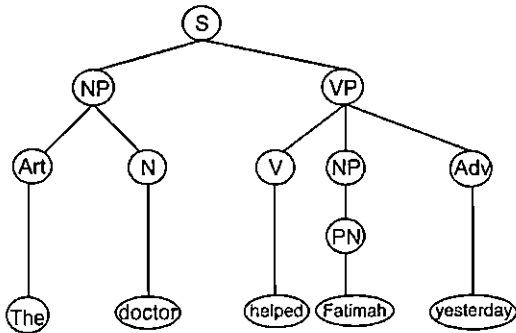
- 2) (a) The police arrested Lara.
(b) She took off her coat.
(c) My bicycle was stolen by someone.
(d) He was told to turn down the volume

- 3) b and c

- 4) Transformational rules involve the movement of a very small element in English sentence structure. Through transformational rules, it possible

for us to analyze two or more sentences having the same underlying structure.

- 5) Using the phrase structure rules presented in this chapter, you should be able to complete these labeled tree diagrams.



Bibliography

- Crane, L. Ben *et. al.* (1981). *In Introduction to Linguistics*. Boston: Little, Brown and Company.
- Bauer, Laurie. (1983). *English Word-Formation*. Cambridge: Cambridge University Press.
- Fromkin, Victoria *et. al.* (1996). *An Introduction to Language*. 3rd edition. Sydney: Harcourt Brace
- Matthews, P. H. (1976). *Morphology: An Introduction to the Theory of Word structure*. Cambridge: Cambridge University Press.
- O'Grady, William *et. al.* (1996). *Contemporary Linguistics: An Introduction*. 3rd edition. London: Longman.
- Parker, Frank and Kathryn Riley. (2000). *Linguistics for Non-Linguists*. Boston: Allyn and Bacon.
- Yule, George.(1985). *The Study of Language*. Cambridge: Cambridge University Press.

Semantics and Psycholinguistics

Refnaldi, M.Litt.



INTRODUCTION

Welcome to module 5. In module 4, you have successfully learned morphology and syntax. In this module (module 5), you are going to learn semantics, the study of meanings, and psycholinguistics, the study of language comprehension, language production, and language acquisition. The materials to be discussed in this module include the concept of meaning, sense relations, first language acquisition, and second language acquisition/learning. After learning this module, you are expected to be able to:

1. understand the concept of semantics
2. differentiate several types of sense relationship
3. differentiate several types of truth conditions
4. understand some stages of first language acquisition
5. identify some issues in second language acquisition/learning
6. identify some influential factors in second language acquisition/learning

To achieve these objectives systematically, the materials of this module are presented respectively as follow:

1. Unit 1 : Semantics
2. Unit 2 : First Language Acquisition
3. Unit 3 : Second Language Acquisition

The following activities are really suggested to do in order to learn this module successfully.

1. Read carefully the explanation of each topic.

2. Don't forget to give serious attention to examples given.
3. Do the exercises as well as possible.
4. Look up the meaning of difficult words in your dictionary.
5. Evaluate yourself by checking your answers or your responses with the key answers provided.

Good luck!

UNIT 1

Semantics

Semantics is the study of linguistic meaning; that is, the meaning of words, phrases and sentences. Unlike Pragmatics, semantics is part of grammar proper, the study of the internal structure of language. Unfortunately, because semantics is the most poorly understood component of grammar, it can be one of the most difficult areas of linguistics to study. The fact is that no one has yet developed a comprehensive, authoritative theory of linguistic meaning. Nonetheless, we can discuss some of the phenomena that have been studied within the domain of semantics and some of the theories that have been developed to explain them. It is important to keep in mind, however, that much of what follows is tentative and subject to debate.

Contributions to semantics have come essentially from two sources—linguistics and philosophy. Linguists have contributed primarily to the study of the core meaning or sense of individual words. One method that they have used to characterize the sense of words is called lexical decomposition. This method represents the sense of a word in terms of the semantic features that comprise it. Consider the words *man*, *woman*, *boy* and *girl*. The sense of each word can be characterized by specifying a value (+ or -) for the features **adult** and **male**, as follows:

	<i>man</i>	<i>woman</i>	<i>boy</i>	<i>girl</i>
[adult]	+	+	-	-
[male]	+	-	+	-

Lexical decomposition has several advantages. First, it explains our intuitions as speakers of English that the meanings of *man* and *boy* are more closely related than the meaning of *man* and *girl*. Second, it is easy to characterize the sense of additional words by adding features. For example, we can account for part of the meanings of *stallion*, *mare*, *colt* and *filly* simply by adding the feature of [human], as follows:

	<i>man</i>	<i>woman</i>	<i>boy</i>	<i>girl</i>	<i>stallion</i>	<i>mare</i>	<i>colt</i>	<i>filly</i>
[adult]	+	+	-	-	+	+	-	-
[male]	+	-	+	-	+	-	+	-
[human]	+	+	+	+	-	-	-	-

Finally, this method allows us to characterize the senses of a potentially infinite set of words with a finite number of semantic features. In general, the fewer the number of statements required by a theory to account for a given set of observations, the more highly valued the theory.

On the other hand, lexical decomposition has several practical limitations. First, linguists have been unable to agree on exactly how many and which features constitute the universal set of semantic properties, especially once we go beyond the handful features already mentioned. Moreover, nouns, especially concrete nouns, seem to lend themselves to lexical decomposition more readily than do other parts of speech. For example, what features could be used to characterize the sense of *carefully*, *belligerent*, and *assassinate*, not to mention *the*, *of*, and *however*? In short, lexical decomposition in terms of semantic features provides a useful, if somewhat limited, account of the meaning of words.

Philosophers, on the other hand, have contributed primarily to the study of the meaning of sentences. Rather than trying to characterize the core meaning or sense of sentences directly, they have approached the semantics of sentences from two other directions: the study of reference and the study of truth conditions. Reference is the study of what objects linguistic expressions refer to. For example, in the sentence *Jakarta is the capital of The Republic of Indonesia*, the expression *Jakarta* and the expression *the capital of The Republic of Indonesia* refer to the same entity, namely Jakarta. Truth conditional semantics, on the other hand, is the study of the conditions under which a statement can be judged true or false. In actuality, much of what goes under the name of truth conditions involves truth relations that hold between sentences. For example, if the sentence *Mahmud is 60 years old* is true, then the sentence *Mahmud is over 50 years old* is necessarily true.

Like lexical decomposition, both the study of reference and the study of truth conditions have advantages as well as limitations. The major advantage of both avenues of inquiry is that they have very restricted domains, which

can be probed in a reasonable amount of detail. The drawback, of course, is that both of them overlook a great deal of what might fall within the domain of 'meaning'.

Sense. The study of sense (or meaning) can be divided into two areas: speaker-sense and linguistic-sense. Speaker-sense is the speaker's intention in producing some linguistic expression. For example, if someone utters the sentence *Marwoto is a real genius* sarcastically, then the speaker-sense of the sentence might be *Marwoto is below average in intelligence*. Speaker-sense, because it has to do with non-literal meaning, is outside the domain of semantics; rather, it is part of pragmatics. Linguistic sense is the meaning of a linguistic expression as part of a language. For example, if the sentence *Marwoto is a real genius* means literally something like "Marwoto has a truly superior intellect," then the linguistic sense is within the domain of semantics, because it deals solely with literal meaning and is independent of speaker, hearer, and situational context.

Now let's consider some sense properties and relations that any descriptively adequate theory of semantics should account for

Lexical ambiguity. A word is lexically ambiguous if it has more than one sense. For example, the English noun *fly* is ambiguous because it has more than one sense: an insect, a zipper on a pair of pants, or a baseball hit into the air with a bat. Thus, the sentence *Sumartomo saw a fly* is three ways ambiguous. One way a semantic theory might account for this fact is to list the word *fly* in the lexicon of English, once with each sense of the word. It is not clear exactly what form each of these lexical entries should take. For the time being, we will assume that each one takes the form of a paraphrase, for example, *fly*: (i) an insect having following characteristics...; (ii) a zipper...; (iii) a ball...

However, not all cases of ambiguity are lexical. Consider the phrase *American history teacher*, which can mean either 'a teacher of American history' or 'a history teacher who is American'. The ambiguity here does not derive from the ambiguity of a particular word, as in the case of *fly*. Neither *American*, nor *history*, nor *teacher* has more than one sense. Instead, the ambiguity of *American history teacher* is syntactic, in that we can assign two different structures or bracketings to the phrase: such as [[American history]

teacher] = 'a teacher of American history,' and [American [history teacher]] = 'a history teacher who is American.'

Synonymy. Two or more forms, with very closely related meanings, which are often, but not always, intersubstitutable in the sentences can be called synonyms. For example, the pairs *broad* and *wide*, *stubborn* and *obstinate*, and *almost* and *nearly* seem to be synonymous in English. Presumably, the meaning of each pair consists of the same set of features marked for the same values. It should be noted that the idea of sameness of meaning used in discussing synonymy is not necessarily total sameness. There are many occasions when one word is appropriate in a sentence, but its synonym would be odd. For example, whereas the word '*answer*' fits in this sentence: *Firman had only one correct answer on the test*, its near-synonym *reply*, would be odd. The other example, even though *big* and *large* are (near) synonyms, the phrases *my big sister* and *my large sister* certainly do not have the same meaning.

Hyponymy. A hyponym is a word that contains the meaning of another word; the contained word is known as the superordinate. For example, *oak* contains the meaning of *tree*; therefore, *oak* is a hyponym of the superordinate *tree*. In other words, a hyponym is a word whose meaning contains all the same feature values of another word, plus some additional feature values. For instance, the meaning of the word *sow* has exactly the same feature values as the word *pig* (e.g., [-human]) plus some additional ones (e.g., [+adult], [-male]). This relationship is represented in the following figure:

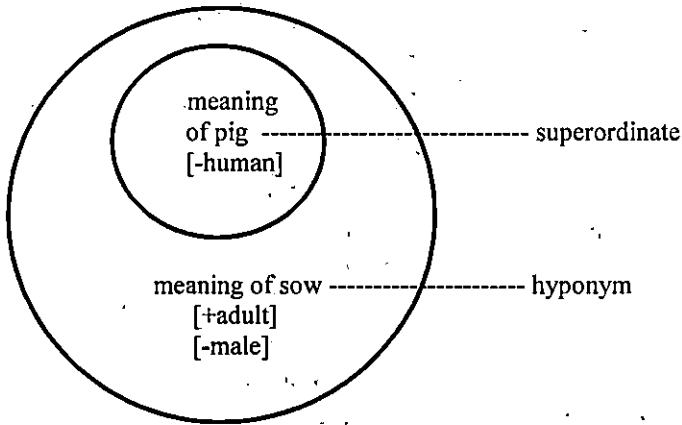


Figure 5.1
Representation of hyponymy

In general, there are a number of hyponyms for each superordinate. For example, *boar* and *piglet* are also hyponyms of the superordinate *pig*, since the meaning of each of the three words *sow*, *boar*, and *piglet* "contain" the meaning of the word *pig*. Thus, it is not surprising that hyponymy is sometimes referred to as inclusion. The superordinate is the included word and the hyponym is the including one.

Overlap. Two words overlap in meaning if they have the same value for some (but not all) of the semantic features that constitute their meaning. For example, the words *sister*, *niece*, *aunt*, and *mother* overlap in meaning. This relationship can be captured by stating that part of the meaning of each of these words is [+human/-male/+kin].

If we were to add the words *nun* and *mistress* to the list above, then this set of words would overlap because they are all marked [+human/-male]. If we were to further add *mare* and *sow* to this list, then the meanings of this set would overlap by being marked [-male]. And so on. This relationship is displayed in the following diagram.

	<i>sister</i>	<i>niece</i>	<i>aunt</i>	<i>mother</i>	<i>nun</i>	<i>mistress</i>	<i>mare</i>	<i>sow</i>
[human]	+	+	+	+	+	+	-	-
[male]	-	-	-	-	-	-	-	-
[kin]	+	+	+	+	-	-	-	-

It is important to distinguish overlap from hyponymy. With hyponymy, the meaning of one word is entirely included in the meaning of another. (The meaning of *pig* is entirely included in the meaning of *sow*; i.e., all sows are pigs, but not all pigs are sows.) With overlap, on the other hand, the meanings of two words intersect, but neither one includes the other. The meanings of *sister* and *niece* intersect, but neither includes the other: not all sisters are nieces, and not all nieces are sisters. Overlap is represented in the following figure:

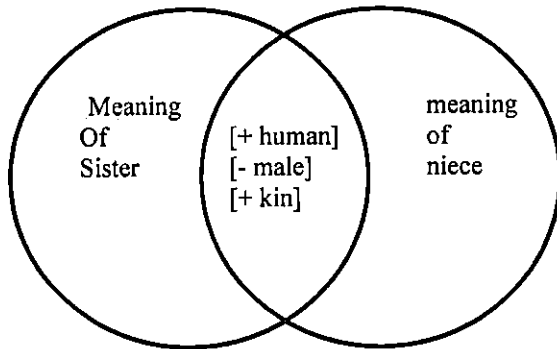
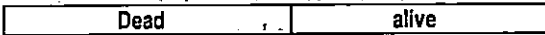


Figure 5.2
Illustration of Overlap

Antonymy. Two words are antonyms if their meanings differ only in the value for a single semantic feature. The following pairs are all antonyms: *dead* and *alive*, *hot* and *cold*, and *above* and *below*. The meanings of the members of each pair are presumably identical, except for opposite values of some semantic feature. The meanings of *dead* and *alive*, for instance, are identical except that *dead* is marked [-living] and *alive* is marked [+living]. Once again, however, note the difficulty in determining the relevant semantic feature that distinguishes the members of each pair. Antonyms, moreover, fall into at least three groups.

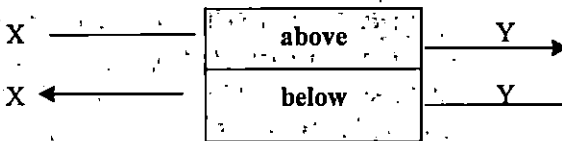
Binary antonyms are pairs that exhaust all possibilities along some dimensions. *Dead* and *alive* are examples of binary antonyms. Everything that can be dead or alive is, in fact, either dead or alive: there is no middle ground between the two. All people, for example, are either dead or alive.



Gradable antonyms, on the other hand, are pairs that describe opposite ends of a continuous dimension. *Hot* and *cold* are examples of gradable antonyms. Not everything that can be hot or cold is, in fact, either hot or cold. A liquid, for example, may be neither hot nor cold; it can be in between, say, warm or cool.

hot (warm)(tepid)(cool) cold

Converse antonyms are pairs that describe a single relationship between two items from opposite perspectives. *Above* and *below* are examples of converse antonyms. If a picture, for example, is above a sofa, then the sofa is necessarily below the picture.



It is not always easy to decide if a pair of antonyms is binary, gradable, or converse. There are, however, several useful tests. First, test the pair to see if they are converse antonyms. This can be done by putting them into the following form: if X is _____ Y, then Y is _____ X. For example, if X is *above* Y, then Y is *below* X. If the pair fits this form, they are converse antonyms. If they don't, then test them to see if they are binary. This can be done by putting the pair in the following form: *If X is not _____, then X must be _____*. For example, *If john is not dead, then he must be alive*. If the pair fits this form, they are binary antonyms. If they don't, then test them to see if they are gradable. This can be done by putting each member of the

pair in the following form: *X is very _____*!. For example, *This soup is very hot/cold*.

It is also worth pointing out that some pairs which have traditionally been treated as antonyms might be better handled as hyponyms of the same superordinate. For example, *liquid* and *solid* are not converse antonyms (**If X is liquid Y, then Y is solid X*); they are not binary antonyms (**If X is not a liquid, then it must be solid*—it could be neither; it could be a gas); and they are not gradable antonyms (**This is very liquid/solid-neither* is literally true). Instead, *liquid* and *solid* (along with *gas*) seem to be hyponyms of *matter*.

Reference. The study of reference, like the study of sense, can be divided into two areas: speaker-reference and linguistic-reference. Speaker-reference is what the speaker is referring to by using some linguistic expression. For example, if someone utters the sentence *Here comes Queen Elizabeth* facetiously, to refer to a snobbish acquaintance, then the speaker-reference of the expression *Queen Elizabeth* is the acquaintance. Speaker-reference, because it varies according to the speaker and context, is outside the domain of semantics; instead it is part of pragmatics. Linguistic-reference, on the other hand, is the systematic denotation of some linguistic expression as part of a language. For example, the linguistic expression *Queen Elizabeth* in the sentence *Here comes Queen Elizabeth* refers in fact to the public figure Queen Elizabeth. Linguistic-reference, in contrast to speaker-reference, is within the domain of semantics, since it deals with reference that is a systematic function of the language itself, rather than of the speaker and context.

Let's now consider some concepts that seem useful in thinking and talking about reference (referent, extension, prototype, and stereotype); then we will take a look at some different types of linguistic reference (coreference, anaphora, and deixis).

Referent. The entity identified by the use of a referring expression such as a noun or noun phrase is the referent of that expression. If, for example, you are standing in your back yard and point to a particular yellow-bellied sapsucker and say *That bird looks sick*, then the referent for the referring expression *That bird* is the particular yellow-bellied sapsucker you are pointing at.

Extension. Extension refers to the set of all potential referents for a referring expression. For example, the extension of *bird* is the set of all entities (past, present, and future) that could systematically be referred to by the expression *bird*. In other words, the extension of *bird* is the set of all birds.

Prototype. A typical member of the extension of a referring expression is a prototype of that expression. For example, a robin or a bluebird might be a prototype of *bird*; a pelican or an ostrich, since each is somewhat atypical, would not be.

Stereotype. A list of characteristics describing a prototype is said to be a stereotype. For example, the stereotype of *bird* might be something like the following: has two legs and two wings, has feathers, is about six to eight inches from head to tail, makes a chirping noise, lays eggs, builds nests, and so on.

Coreference. Two linguistic expressions that have the same extralinguistic referent are said to be coreferential. Consider, for example, the sentence *Jay Leno is the host of the "Tonight Show"*. The expressions *Jay Leno* and *The host of the "Tonight Show"* are coreferential because they both refer to the same extralinguistic object, namely the person Jay Leno. Note, however, the coreferential expressions do not "mean" the same thing; that is, they are not synonymous. For example, before Jay Leno hosted the "Tonight Show," Johnny Carson held that position; thus, there was a period of time when *Johnny Carson* was coreferential with *host of the "Tonight Show"*. However, we cannot describe *Johnny Carson* and *Jay Leno* as "meaning" the same thing. The fact that they are not synonymous is illustrated by the unacceptability of the sentence *Jay Leno used to be Johnny Carson*.

Anaphora. A linguistic expression that refers to another linguistic expression is said to be anaphoric or an anaphor. Consider the sentence *Mary wants to play whoever thinks himself capable of beating her*. In this sentence the linguistic expression *himself* necessarily refers to *whoever*; thus *himself* is being used anaphorically in this case. Note, moreover, that it would be inaccurate to claim that *whoever* and *himself* are coreferential (i.e., that they have the same extralinguistic referent). This is because there may in fact not

be anyone who thinks himself capable of beating Mary; that is, there may not be any extralinguistic referent for *whoever* and *himself*.

It is common, however, for coreference and anaphora to coincide. Consider, for example, the sentence *The media reported that Congress voted themselves a raise*. The expressions *Congress* and *themselves* are coreferential since they refer to the same extralinguistic body, namely the legislative branch of the federal government. At the same time, *themselves* is an anaphor since it necessarily refers to the expression *Congress*. Note that there is no reading of this sentence such that *themselves* can be construed as referring to the expression *the media*. In sum, coreference deals with the relation of a linguistic expression to some entity in the real world, past, present, or future; anaphora deals with the relation between two linguistic expressions.

Deixis (pronounced DIXE-sis). An expression that has one meaning but can refer to different entities within the same context of utterance is said to be deictic. Deictic terms crucially depend on the speaker's point of reference. Obvious examples are expressions such as *You* and *I*, *here* and *there*, and *right* and *left*. Assume, for instance, that Jack and Jill are speaking to each other face to face. Note that *I* refers to Jack and *you* refers to Jill, when Jack is speaking. The referents for these expressions reverse when Jill speaks. Likewise, *here* refers to a position near Jack and *there* refers to a position near Jill, when Jack is speaking; the referents for these expressions reverse when Jill speaks. Similarly, *right* and *left* can refer to the same location, depending upon whether Jack or Jill is speaking: his left is her right and vice versa.

Note, moreover, that deixis can intersect with anaphora. Consider, for example, the sentence *Members of Congress believe they deserve a raise*. The expression *they* can refer either to the expression *members of Congress* or to some other plural entity in the context of the utterance. When, as in the first case, a pronoun refers to another linguistic expression, it is used anaphorically; when, as in the second case, it refers to some entity in the extralinguistic context, it is used deictically.

Truth. The study of truth or truth conditions in semantics falls into two basic categories: the study of different types of truth embodied in individual

sentences (analytic, contradictory, and synthetic) and the study of different types of truth relations that hold between sentences (entailment and presupposition).

Analytic Sentences. An analytic sentence is one that is necessarily true as a result of the words in it. For example, the sentence *A bachelor is an unmarried man* is true not because the world is the way it is, but because the English language is the way it is. Part of our knowledge of ordinary English is that *bachelor* "means" *an unmarried man*, thus to say that one is the other must necessarily be true. We do not need to check on the outside world to verify the truth of this sentence. We might say that analytic sentences are "true by definition." Analytic sentences are sometimes referred to as linguistic truths, because they are true by virtue of the language itself.

Contradictory Sentences. Contradictory sentences are just the opposite of analytic sentences. While analytic sentences are necessarily true as a result of the words in them, contradictory sentences are necessarily false for the same reason. The following sentences are all contradictory: *A bachelor is a married man*, *A blue gas is colorless*, *A square has five equal sides*. In each case, we know the sentence is false because we know the meaning of the words in it: part of the meaning of *bachelor* is 'unmarried'; part of the meaning of *blue* is 'has color'; part of the meaning of *square* is 'four-sided.' It is not necessary to refer to the outside world in order to judge each of these sentences false. Consequently, contradictory sentences are sometimes referred to as linguistic falsities, because they are false by virtue of the language itself.

Synthetic Sentences. Sentences that may be true or false depending upon how the world is are called synthetic. In contrast to analytic and contradictory sentences, synthetic sentences are not true or false because of the words that comprise them, but rather because they do or do not accurately describe some state of affairs in the world. For example, the sentence *My next door neighbor, Bud Brown, is married* is a synthetic sentence. Note that you cannot judge its truth or falsity by inspecting the words in the sentence. Rather, you must verify the truth or falsity of this sentence empirically, for example by checking the marriage records at the courthouse. Other examples of synthetic sentences include *Nitrous oxide is blue*, *Nitrous oxide is not blue*,

Bud Brown's house has five sides, and *Bud Brown's house does not have five sides*. In each case, the truth or falsity of the sentence can be verified only by consulting the state of affairs that holds in the world. Thus, synthetic sentences are sometimes referred to as empirical truths or falsities, because they are true or false by virtue of the state of the extralinguistic world.

The examples that we have considered so far seem fairly straightforward. Analytic and contradictory sentences are true and false, respectively, by definition. Synthetic sentences, however, are not—they must be verified or falsified empirically. Nevertheless, some sentences do not seem to fall neatly into one of these two groups. Consider, for example, the sentence *Oxygen is not blue*. It is true. But is it analytic-true by virtue of the words that make it up (i.e., part of the meaning of *oxygen* is 'without color')? Or is it synthetic-true because it coincides with the state of the world (i.e., because it just so happens that oxygen has no color)? This can get to be a thorny issue and the experts don't always have a uniform answer to such questions. However, it would probably be reasonable to treat such cases as synthetic truths rather than analytic truths. This is because it is easy to imagine conditions under which the sentence *Oxygen is not blue* would be false. For example, suppose scientists froze oxygen and found that solid oxygen is in fact blue. Such a finding would not cause a change in the meaning of the word *oxygen*, but rather a change in our understanding of the substance oxygen. In contrast, consider the sentence *A colorless gas is not blue*. It is impossible, at least for us, to imagine a situation in which this sentence would be false. If a gas is colorless, it cannot be blue; if it is blue, it cannot be colorless. Thus it seems reasonable, at least until more light can be shed on the subject, to consider sentences like *Oxygen is not blue* as synthetically true.

Entailment. An entailment is a proposition (expressed in a sentence) that follows *necessarily* from another sentence. For example, *John fried fish* entails *John cooked fish*, because fish cannot be fried without being cooked. The test for entailment is as follows: sentence (a) entails sentence (b) if the truth of sentence (a) insures the truth of sentence (b) and if the falsity of sentence (b) insures the falsity of sentence (a). Consider the following sentences: (a) *The Duke of New York suffered a fatal heart attack* and (b) *The Duke of New York is dead*. In this case, sentence (a) entails sentence (b)

because the truth of (a) insures the truth of (b) (if the Duke of New York suffered a fatal heart attack, he necessarily is dead), and the falsity of (b) insures the falsity of (a) (if the Duke of New York is not dead, he necessarily didn't suffer a fatal heart attack).

Note, however, that the relation of entailment is unidirectional. For instance, consider our example sentences again, but in the opposite order: (b) *The Duke of New York is dead* and (a) *The Duke of New York suffered a fatal heart attack*. In this case, sentence (b) does not entail (a) (if the Duke of New York is dead, he did not necessarily die of a heart attack—he may have died of kidney failure or he may have been hit by a bolt of lightning); and the falsity of (a) does not insure the falsity of (b) (if the Duke of New York did not suffer a fatal heart attack, it is not necessarily the case that he is not dead—he may, once again, have died of kidney failure or he may have been hit by a bolt of lightning). In short, then, it should be clear that the relation of entailment is unidirectional.

This is not to say, however, that there cannot be a pair of sentences such that each entails the other. Rather, when such a relation holds, it is called paraphrase. For example, the sentences *Biff and Tammy are good scouts* and *Tammy and Biff are good scouts* are paraphrases of each other. Likewise, *Tammy was driven home by Biff* is a paraphrase of *Biff drove Tammy home*.

Presupposition. A presupposition is a proposition (expressed in a sentence) that is *assumed* to be true in order to judge the truth or falsity of another sentence. For example, *john didn't pass chemistry* presupposes that *john took chemistry*, because not passing chemistry assumes the person in question actually took chemistry. The test for presupposition is as follows: sentence (a) presupposes sentence (b) if the falsity of (b) renders (a) without a truth value. A sentence without a truth value is one that cannot be judged true or false. Questions, for example, are typical of sentences without truth values. What sense would it make to say that a sentence like *Do you have blue eyes?* is true or false? Likewise, imperatives have no truth value. It wouldn't make any sense to say that a sentence like *Shut up!* is either true or false.

Now, let's consider an example of presupposition and examine how this concept relies on the notion of "sentence without a truth value." As stated

before, one sentence presupposes another if the falsity of the second renders the first without a truth value. Consider the following sentences: (a) *The Duke of New York is dead* and (b) *There is a Duke of New York*. Sentence (a) presupposes (b) because if (b) is false, then (a) has no truth value. Note that if (b) is false—that is, if there is no Duke of New York—then it doesn't make sense to say that (a) *The Duke of New York is dead* is true or false. For (a) to be true, there would have to be such a thing as the Duke of New York and he would have to be dead. On the other hand, for (a) to be false, there would have to be such a thing as the Duke of New York and he would have to *not* be dead.

Another property of presupposition is that a sentence and its denial (i.e., the negative version of the sentence) have the same set of presuppositions. Thus if sentence (a) *The Duke of New York is dead* presupposes sentence (b) *There is a Duke of New York*, then the denial of sentence (a) *The Duke of New York is not dead* also presupposes sentence (b). If there is no Duke of New York, then *The Duke of New York is not dead* cannot be judged true or false.



EXERCISES

Exercise 1

What semantic feature or property differentiates the following sets of nouns? (Hint: Start by figuring out what the two subsets have in common.)

- a) niece, daughter, sister vs. nun, woman, girl
- b) mailman, nephew, priest vs. gander, stag, bull
- c) hen, ewe, cow vs. rooster, ram, bull
- d) table, chair, pencil vs. love, thought, idea
- e) table, chair, pencil vs. water, dirt, cream

Exercise2

Classify the following antonyms as binary (B), gradable (G), or converse (C).

- a) B G C wide/narrow
- b) B G C smoking/nonsmoking
- c) B G C near/far
- d) B G C wife/husband
- e) B G C cheap/expensive
- f) B G C man/woman
- g) B G C teacher/student
- h) B G C true/false

Exercise 3

- 1) Which of the following deals with a particular entity in the real world?
 - a. stereotype
 - b. prototype
 - c. sense
 - d. all of the above
 - e. none of the above

- 2) The men John F. Kennedy and Ronald Reagan are related to the term *President of the United States* as follows:
 - a. Kennedy and Reagan are hyponyms of *President of the United States*.
 - b. Kennedy and Reagan are part of the extension of *President of the United States*.
 - c. Kennedy and Reagan are stereotypes of *President of the United States*.
 - d. Kennedy and Reagan are superordinates of *President of the United States*.
 - e. none of the above

- 3) The word *robin* and the word *bird* are related as follows:
- Robin* is a prototype of *bird*.
 - Robin* is a stereotype of *bird*.
 - Robin* is a hyponym of *bird*.
 - Robin* and *bird* overlap.
 - none of the above
- 4) Consider the following description: chases cars, barks, is about two feet long, is covered with fur, wags its tail when happy. This is a
- prototype of *dog*
 - stereotype of *dog*
 - referent of *dog*
 - extension of *dog*

Exercise 4

- 1) What reference relation holds between the italicized expressions in each of the following sentences?
- George* won't give *himself* an injection.
 - Maxine has been named secretary of the Student Government Association.
- 2) In the sentence *Mary gave me all his money*, *his* can be interpreted
- anaphorically
 - prototypically
 - coreferentially
 - none of the above
 - (a) and (b) only
- 3) What reference relation holds between *who* and *anyone* in the following sentence: *Anyone who parks illegally will be towed?*

Exercise 5

- 1) Consider the following interchange:
- FRED: It's the one on the right.
 ETHEL: My right or yours?
- The area of semantics that accounts for Ethel's confusion is
- overlap
 - entailment
 - synonymy
 - deixis
 - none of the above

- 2) Consider the following data.
- A. *Come* to me. C. *Come* to him.
B. Go to him. D. Go to me.
- a. Which of these sentences is absolutely unacceptable?
b. *Come* and *go* both have a deictic component to their meaning. That is, they both depend on the speaker's point of reference. What is the deictic component of each?
c. Explain the deviance of the absolutely unacceptable sentence.
- 3) Which of the verbs in the following set of sentences does not have a deictic component? Explain.
- A. Fred *went* to New York last night.
B. Fred *came* to New York last night.
C. Fred *arrived* in New York last night.
- 4) In the sentence *John gave me all his money*, *me* can be interpreted (either deictically or anaphorically, anaphorically only, deictically only).

Exercise 6

- 1) What kind of truth is illustrated by each of the following sentences?
- a. Waldo's living room has four right angles.
b. A square has four right angles.
- 2) The sentence *Siblings are not relatives* is
- a. analytic
b. contradictory
c. synthetic
d. both (a) and (b)
e. none of the above

- 3) *Boys will be boys* is an example of a(n) _____ sentence or linguistic truth.
- 4) *A widow is a man whose wife has died* is an example of a(n) _____ sentence or linguistic falsity.
- 5) *My mother is a widow* is an example of a(n) _____ sentence or empirical truth/falsity.
- 6) Identify each sentence as analytic (A), synthetic (S), or contradictory (C).
- | | | | | |
|----|---|---|---|---------------------------------------|
| a. | A | S | C | This pentagon is six-sided. |
| b. | A | S | C | A horse is a horse. |
| c. | A | S | C | A triangle is a three-sided figure. |
| d. | A | S | C | My cat is not a mammal. |
| e. | A | S | C | Young Juan's pet is not a mammal. |
| f. | A | S | C | Young Juan's s'lake is not a reptile. |

Exercise 7

- 1) What truth relation holds between each pair of sentences? How can it be demonstrated?
- A. Fred is mortal.
B. Fred is a man.
- A. Fred's wife is six feet tall.
B. Fred is married.
- 2) Which of the following pairs illustrates entailment?
- a. George Washington chopped down a cherry tree entails George Washington chopped down a tree.
- b. George Washington chopped down a/l the cherry trees entails George Washington chopped down all the trees.
- c. George Washington did not chop down a tree entails George Washington did not chop down a cherry tree.

- d. both (a) and (b)
 e. both (a) and (c).
- 3) The sentences *Wally gave Beaver a dog biscuit* and *Wally gave a dog biscuit to Beaver*
- are paraphrases of each other
 - are contradictory
 - entail each other
 - are analytic
 - both (a) and (c)
- 4) Consider the following sentences.
- Fester has children.
 - Fester's middle son is a dentist.
- Which of the following best describes the relation between A and B?
- A presupposes B.
 - A entails B.
 - B presupposes A.
 - B entails A.
 - both (c) and (d)

KEY TO EXERCISES

Exercise 1

	a. niece, daughter, sister	nun, woman, girl
[human]	+ + +	+ + +
[male]	- - -	- - -
[kin]	+ + +	- - -

	b. mailman, nephew, priest	gander, stag, bull
[human]	+ + +	- - -

	c. hen, ewe, cow	rooster, ram, bull
[human]	- - -	- - -
[male]	- - -	+ + +

	a.	table, chair, pencil		love, thought, idea
[human]	-	-	-	-
[concrete]	+	+	+	-
	b.	table, chair, pencil		water, dirt, cream
[human]	-	-	-	-
[liquid]	-	-	-	+

Exercise 2

- a) G wide/narrow
- b) B smoking/nonsmoking
- c) G near/far
- d) C wife/husband
- e) G cheap/expensive
- f) B man/woman
- g) C teacher/student
- h) B true/false

Exercise 3

- 1) b
- 2) b
- 3) a
- 4) b

Exercise 4

- 1) a anaphora
- b coreference
- 2) a
- 3) anaphora

Exercise 5

- 1) d.
- 2) a. d
 b. *Come is closer to the speaker
 go is farther from the speaker*
 c. Go to me in unacceptable because it moves closer to the speaker.
- 3) c
- 4) deitically

Exercise 6

- 1) a. synthetic.
 b. analytic
- 2) b
- 3) analytic
- 4) contradictory
- 5) synthetic
- 6) a. C This pentagon is six-sided.
 b. A A horse is a horse.
 c. A A triangle is a three-sided figure.
 d. C My cat is not a mammal.
 e. S Young Juan's pet is not a mammal.
 f. C Young Juan's snake is not a reptile.

Exercise 7

- 1) In the first pair, (B) entails (A). If *Fred is a man* is true, then *Fred is mortal* must be true. In the second pair, (A) presupposes (B). If *Fred's wife is six feet tall* is true, then *Fred is married* must be true; like wise, if *Fred is married* is false, then *Fred's wife is six feet tall* has no truth value.
- 2) e
- 3) e
- 4) c



SUMMARY

Contributions to the theory of semantics have come from two main sources: from linguists who have traditionally been interested in the core meaning or sense of linguistic expressions (especially words) and from philosophers who have traditionally been concerned with the reference of linguistic expressions and the truth of sentences. The study of sense makes use of such concepts as lexical decomposition, semantic features, lexical ambiguity, synonymy, hyponymy, overlap, and antonyms. The study of reference utilizes concepts such as referent, extension, prototype, stereotype, co reference, anaphora, and deixis. Finally, the study of truth conditions relies on the notions of analytic, contradictory, and synthetic sentences, as well as entailment and presupposition.



FORMATIVE TEST 1

- 1) Mark the following statements **TRUE** or **FALSE**
 - a. Philosophers' most important contributions to the study of semantics have been in the area of sense.
 - b. *Fat* and *skinny* are binary antonyms.
 - c. The meaning relation illustrated by *hen*, *cow*, *mare*, and *vixen* is overlap.
 - d. The phrase *French literature teacher* constitutes a case of lexical ambiguity.
 - e. The sentence *John killed Bill* presupposes the sentence *Bill died*.
 - f. The following sentence is analytic: *If George killed the deer, then the deer died*.
 - g. Two words overlap in meaning if they share the same specifications for at least one semantic feature.
 - h. The pronoun in the following sentence is deictic: *Sam is extremely pleased with himself*.
 - i. The sentence *Buckaroo Bonzai loves his wife* entails the sentence *Buckaroo Bonzai is married*.

- j. The pronouns in the following sentence are anaphoric: *I like you a lot.*
- k. *Smart* and *stupid* are gradable antonyms
- l. The sense relation illustrated by *rooster*, *bull*, *stallion*, and *buck* is hyponymy.
- 2) What is the lexical relation between the following pairs of words?
- | | | | |
|------------|-----------|-----------|---------|
| a. shallow | deep | d. single | married |
| b. mature | ripe | e. buy | sell |
| c. table | furniture | | |
- 3) You go to see one of your professors and find a note on the office door that says, in its entirety, *Back in 20 minutes*. You are not sure when the professor will return. What area of semantics accounts for the confusing nature of this note? Explain. (Hint: Consider the speaker's point of reference.)
- 4) The sentence *We saw three stars tonight* is _____
- lexically ambiguous
 - structurally ambiguous
 - a synthetic sentence
 - both (a) and (c)
 - both (b) and (c)
- 5) Circle the deictic expressions in the following statements!
- "I'm busy now so you can't do that here"
 - We saw her standing there
 - The treasure chest is on the right
 - The Magna Charta was signed last year
- 6) What is one obvious presupposition of a speaker who says:
- "Where did he buy a beer?"
 - "Your watch is broken"

- c. "Please take me out to the football game again"
- d. "Who became Prime Minister in 1972?"
- 7) Explain the semantic ambiguity of the following sentences by providing two sentences that paraphrase the two meanings: Example: *She can't bear children* can mean *She can't give birth to children* or *She can't tolerate children*.
- a. He waited by the bank
- b. I saw my friend's photographs
- c. The long drill was boring

Check your answers with the key which is provided at the end of this module, and score your right answers. Then use the formula below to know your achievement level of the lesson in this module.

Formula:

$$\text{Level of achievement} = \frac{\text{Scores of the right answers}}{\text{Total score}} \times 100\%$$

Meanings of level of achievement:

90% - 100% = very good

80% - 89% = good

70% - 79% = average

< 70% = bad

If your level of achievement reaches 80% or more, you can on to the next unit. **Good!** But if your level of mastery is less than 80%, you have to study again this unit, especially parts which you haven't mastered.

UNIT 2

First Language Acquisition

A. PSYCHOLINGUISTICS

This branch deals with the relationship between language and the mind, focusing mainly on how language is learned, stored, and occasionally lost. The relationship between language and mind has two aspects, acquisition and performance, and the two are intimately linked. What we acquire is the ability to perform, that is, to use language with appropriateness, and performance is essentially to complete and successful acquisition. Knowledge of this interlocking relationship underlies most successful language teaching.

In *Language and Mind*, Noam Chomsky (1968) proposed that linguistics might best be considered a branch of cognitive psychology. This suggestion might seem rather startling at first; linguists and psychologists, after all, have worked together closely for only the past twenty years. Nevertheless, linguistics is ultimately dependent on psychology. Language is a learned ability, and only through a study of psycholinguistics can we ever hope to understand it.

As a preliminary oversimplification, we may say that psycholinguistics is concerned with the acquisition, perception, and production of language. Although psycholinguistic research has been increasing at a rapid pace, many language processes are still not understood well: if at all. If we are to have a thorough understanding of language, psycholinguists must develop (1) a verifiable theory of the mental processes and strategies involved in understanding speech; (2) a specification of how these processes and strategies relate to the formal theory of grammar; and (3) a theory of language acquisition - one that will be consistent with what we know about the universal aspects of language. In addition, like linguists, psycholinguists are searching for a better understanding of what semantic representations are like.

First language acquisition is remarkable for the speed with which it takes place. By the time a child enters elementary school, he or she is an extremely sophisticated language-user, operating a communicative system which no other creature, or computer, comes close to matching. The speed of acquisition and the fact that it generally occurs, without overt instruction, for all children, regardless of great differences in a range of social and cultural factors, have led to the belief that there is some 'innate' predisposition in the human infant to acquire language. We can think of this as the 'language-faculty' of the human with which each newborn child is endowed. By itself, however, this faculty is not enough.

1. Basic Requirements

A child growing up in the first two or three years requires interaction with other language-users in order to bring the 'language-faculty' into operation with a particular language, such as English. It should be noted that a child who does not hear, or is not allowed to use language will learn no language. It should also be stressed the importance of 'cultural transmission', whereby the language a child learns is not genetically inherited, but is acquired in a particular language-using environment. The child must also be physically capable of sending and receiving sound signals in a language. All infants make 'cooing' and 'babbling' noises during the first *few* months, but congenitally deaf infants stop after six months. So, in *order* to speak a language, a child must be able to hear that language being used. By itself, however, hearing language sounds is not enough. *One* reported case has demonstrated that with deaf parents who gave their normal-hearing son ample exposure to T. V. and radio programs, the child did not acquire an ability to speak *or* understand English. What he did learn very effectively, by the age of three, was the use of American Sign Language - the language he used *to* interact with his parents. The crucial requirement appears to be the opportunity to interact with others via language.

2. The Acquisition Schedule

All normal children, regardless of culture, develop language at roughly the same time, along much the same schedule. Since we could say the same

thing for sitting up, standing, walking, using the hands and many other physical activities, it has been suggested that the language acquisition schedule has the same basis as the biologically-determined development of motor skills. This biological schedule is tied very much to the maturation of the infant's brain and the lateralization process. If there is some general biological program underlying language acquisition, it is certainly dependent on an interplay with many social factors in the child's environment. We could think of the child as having the biological capacity to cope with distinguishing certain aspects of linguistic input at different stages during the early years of life. What this acquisition 'capacity' then requires is a sufficiently constant input from which the regularities of the particular language can be worked out. In this view, the child is seen as actively acquiring the language by working out the regularities in what is heard and then applying those regularities in what he or she says.

3: Some Controversies

In our consideration of the basic requirements and the schedule involved in first language acquisition, we have already touched on a number of issues which are the subject of debate among those who study child language. For example, there are studies which show that the early environment of a child differs considerably from one culture to the next. Consequently, the findings of research into the process of acquisition in middle class English-speaking cultures may not be replicated in studies of other cultures. There is also substantial controversy over the issue of 'innateness'. Noam Chomsky (1983) has proposed that language development should be described as "language growth", because the "language organ" simply grows like any other body organ. This view seems to underestimate what others consider the importance of environment and experience in the child's development of language. At issue is the extent to which the process of language acquisition is genetically predetermined in the human species.

Another matter of some debate has arisen over how we should view the linguistic production of young children. The linguist's view tends to concentrate on describing the child's speech in terms of the known units of phonology and syntax, for example. However, the child's view of what is

being heard and uttered at different stages may be based on quite different units. For example, a child's utterance of [δυ ∃ κ↔δΘτ] may be a single unit for the child, yet maybe treated as having three units, *look at that*, by an investigator interested in the child's acquisition of different types of verbs.

It is worth keeping these issues in mind throughout this chapter because some of the standard concepts and analyses which are presented here as basic aspects of child language are likely to be challenged, and possibly amended, as continuing research reveals more about this complex subject.

4. Caretaker Speech

Under normal circumstances, in Western cultures, the human infant is certainly helped in his or her language acquisition by the typical behavior of the adults in the home environment. Adults such as mom, dad, granny and grandpa tend not to address the little gurgler before them as if they are involved in normal adult-to-adult conversation. There is not much of this: *Well, John Junior, shall we invest in the blue chip industrials, or would grain futures offer better short-term prospects?* However, there does seem to be a lot of this: *Oh, goody, now' Daddy push choo-choo?* The characteristically simplified speech style adopted by someone who spends a lot of time interacting with a young child is called **caretaker speech**. Some of the features of this type of speech are frequent questions, often using exaggerated intonation. In the early stages, this type of speech also incorporates a lot of forms associated with 'baby-talk'. These are either simplified words (e.g. *mummy, nana*) or alternative forms, with repeated simple sounds, for objects in the child's environment (e.g. *chao-chao, poo-poo, wawa*).

Built into a lot of caretaker speech is a type of conversational structure which seems to assign an interactive role to the young child even before he or she becomes a speaking participant. If we look at an extract from the speech of one mother to her 2-year-old child as if it were a two-party conversation, then this type of structuring becomes apparent.

Mother: *There's your cup of tea.*

Child: (takes cup)

Mother: *You drink it nicely.*

Child: (pretends to drink)

Mother: *oh - is that nice?*

Child: (assents)

Mother: *will Mummy drink her tea?*

Child: (assents)

Mother: *I'll drink my tea.*

Caretaker speech is also characterized by simple sentence structures and a lot of repetition. If the child is indeed in the process of working out a system of putting sounds and words together, then these simplified models produced by the interacting adult may serve as good clues to the basic structural organization involved. Moreover, it has generally been observed that the speech of those regularly interacting with children changes and becomes more elaborate as the child begins using more and more language. Several stages in the acquisition process have been identified.

5. Pre-language Stages

The pre-linguistic sounds of the very early stages of child language acquisition are simply called 'cooing' and 'babbling'. The period from about 3 months to 10 months is usually characterized by three stages of sound production in the infant's developing repertoire. The first recognizable sounds are described as cooing, with velar consonants such as [k] and [g] usually present, as well as high vowels such as [i] and [u]. These can normally be heard by the time the child is 3 months old, although many of the child's vocal sounds are very different from those which occur in the speech of mom and dad.

By 6 months, the child is usually able to sit up and can produce a number of different vowels and consonants such as fricatives and nasals. The sound production at this stage is described as **babbling** and may contain syllable-type sounds such as *mu* and *da*. In the later babbling stage, around 9 months, there are recognizable intonation patterns to the consonant and vowel combinations being produced. As children begin to pull themselves into a standing position through the tenth and eleventh months, they are capable of using their vocalizations to express emotions and emphasis. This late babbling stage is characterized by a lot of 'sound-play' and attempted imitations. Some psychologists have suggested that this 'pre-language' vocalization gives children some experience of the social role of speech

because parents tend to react to the babbling, however incoherent, as if it is, in fact, their child's contribution to social interaction.

One note of caution should be sounded at this point. Child language researchers certainly report very carefully on the age of any child whose language they study. However, they are also very careful to point out that there is substantial variation among children in terms of the age at which particular features of linguistic development occur. So, we should always treat statements concerning development stages such as "by six months" or ""by the age of two" as approximate and subject to variation in individual children. We are, after all, investigating a highly individualized experience while attempting to come up with some general statements about approximate stages of development.

6. The One-Word or Holophrastic Stage

Between 12 and 18 months, children begin to produce a variety of recognizable single unit utterances. This period, traditionally called the 'one-word stage', is characterized by speech in which single terms are uttered for everyday objects such as 'milk', 'cookie', 'cat' and 'cup'. Other forms such as [] may occur in circumstances which suggest that the child is producing a version of *what's that*, so the label 'one-word' for this stage may be misleading. Terms such as 'single-unit' or 'single-form' may be more accurate, or we could use the term **holophrastic** (a single form functioning as a phrase or sentence), if we believe that the child is actually using these forms as phrases or sentences.

While many of these single forms are used for naming objects, they may also be produced in circumstances that suggest the child is already extending their use. An empty bed may elicit the name of a sister who normally sleeps in the bed, even in the absence of the person named. During this stage, then, the child may be capable of referring to *Karen* and *bed*, but is not yet ready to put the forms together to produce a more complex phrase. Well, it is a lot to expect from someone who can only walk with a stagger and has to come down stairs backwards.

7. The Two-Word Stage

Depending on what one counts as an occurrence of two separate words, this stage can begin around 18-20 months. By the time the child is 2 years old, a variety of combinations, *baby chair*, *mommy eat*, *cat bad*, will be appearing. The adult interpretation of such combinations is, of course, very much tied to the context of their utterance. The phrase *baby chair* may be taken as an expression of possession (= this is baby's chair), or as a request (= put baby in chair), or as a statement (= baby is in the chair), depending on different contexts. Whatever it is that the child actually intends to communicate via such expressions, the significant functional consequences are that the adult behaves as if communication is taking place, that is, the child not only produces speech, but receives feedback which usually confirms that the utterance 'worked'. By the age of 2, the child will have a vocabulary of more than 50 words and will typically be treated as an entertaining conversational partner by the principal caretaker.

8. Telegraphic Speech

Between 2 and 3 years old, the child will begin producing a large number of utterances which could be classified as multiple-word utterances. The salient feature of these utterances ceases to be the number of words, but the variation in word-forms that begins to appear. Of particular interest is the sequence of inflectional morphemes which occurs. Before we consider this development, however, we should note that there is a stage which is described as **telegraphic speech**. This is characterized by strings of lexical morphemes in phrases such as *Andrew want ball*, *cat drink milk*, and *this shoe all wet*. The child has clearly developed some sentence-building capacity by this stage and can order the forms correctly. While this type of telegram-format speech is being produced, a number of grammatical inflections begin to appear in some of the words, and the simple prepositions (in, on) also turn up.

By the age of two and a half, the child's vocabulary is expanding rapidly and the child is actually initiating more talk. Of course, increased physical activity such as running and jumping is taking place during this period too. By three, the vocabulary has grown to hundreds of words and pronunciation

has become closer to the form *of* the adult language so that even visitors have to admit that the little creature really can talk.

9. Morphology

By the time the child is 3 years old, he or she is going beyond telegraphic speech forms and incorporating some of the inflectional morphemes that indicate the grammatical function of the nouns and verbs used. The first to appear is usually the *-ing* form in expressions such as *cat sitting* and *mommy reading book*. Then comes the marking of regular plurals with the *-s* form, as in *boys* and *cats*. The acquisition of this form is often accompanied by a process of overgeneralization. The child over generalizes the apparent rule of adding *-s* to form plurals and will talk about *foots* and *mans*. When the alternative pronunciation of the plural morpheme used in *houses* (i.e. ending [-↔ζ]) comes into use, it too is given an over generalized application and forms such as *boyses* or *footses* can appear. At the same time as this overgeneralization is taking place, some children also begin using irregular plurals such as *men* quite appropriately for a while, but then tryout the general rule on the forms, producing expressions like *some mens* and *two feets*, or even *two feetses*.

The use of the possessive inflection *'s* occurs in expressions such as *girl's dog* and *Mummy's book* and the different forms of the verb 'to be', such as *are* and *was*, turn up. The appearance of forms such as *went* and, at about the same time, *went* and *came* should be noted. These are irregular past tense forms, which one would not expect to appear before the more regular forms. However, they do typically precede the appearance of the *-ed* inflection. Once the regular past tense forms begin appearing in the child's speech (e.g. *walked*, *played*), then, interestingly, the irregular forms disappear for a while and are replaced by overgeneralized versions such as *goed* and *comed*. For a period, there is often minor chaos as the *-ed* inflection is added to everything, producing *such* oddities as *walkeded* and *wented*. As with the plural forms, however, the child works out, usually after the age of 4, which forms are regular and which are not. Finally, the regular *-s* marker on third person singular present tense verbs appears. It occurs initially with full verbs (*comes*, *looks*) and then with auxiliaries (*does*, *has*).

Throughout this sequence there is, of course, a great deal of variability. Individual children may produce 'good' forms one day and 'odd' forms the next. It is important to remember that the child is working out how we use the linguistic system while actually using it as a means of communication. For the child, the use of forms such as *goed* and *foots* is simply a means of trying to say what he or she means during a particular stage of development. The embarrassed parents who insist that the child didn't hear such things at home are implicitly recognizing that 'imitation' is not the primary force in child language acquisition.

10. Syntax

Similar evidence against 'imitation' as the basis of a child's speech production has been found in studies of the syntactic structures used by children. One 2-year-old child, specifically asked to repeat what she heard, would listen to an adult say forms such as *the owl who eats candy runs fast*, and then repeat them in the form *owl eat candy and he run fast*. It is clear that the child understands what the adult is saying. She just has her own way of expressing it.

There have been numerous studies of the development of syntax in children's speech. We shall restrict our consideration to two features which have been well-documented and which seem to be acquired in a regular way. In the formation of questions and the use of negatives, there appear to be three identifiable stages. The ages of children going through these stages can vary quite a lot, but the general pattern seems to be that Stage 1 occurs between 18 and 26 months, Stage 2 between 22 and 30 months, and Stage 3 between 24 and 40 months. (It must be emphasized that no precise ages can ever really be assigned to these developmental stages. Different children proceed at different paces.)

11. Questions

In forming questions, the first stage has two procedures. Simply add a *wh-* form (*where, who*) to the beginning of the expression or utter the expression with a rise in intonation towards the end. Here are some examples:

Where kitty?
Where horse go?
Sit chair?
See hole?

In the second stage, more complex expressions can be formed, but the rising intonation strategy continues to be used. It is noticeable that more *wh*-forms come into use, as in these examples:

What book name?
You want eat?
Why you smiling?
See my doggie?

In the third stage, the required inversion of subject and verb in English questions has appeared, but the *wh*- forms do not always undergo the required inversion. In fact, children entering school may still prefer to form *wh*- questions (especially in negatives) without the type of inversion found in adult speech. Examples are:

Can I have a piece?
How that opened?
Did I caught it?
What did you do?
Will you help me?
Why kitty can't stand up?

12. Negatives

In the case of negatives, Stage 1 seems to have a simple strategy which says that *no* or *not* should be stuck on the beginning of any expression. Examples are:

no mitten
not a teddy bear
no fall
no sit there

In the second stage, the additional negative forms *don't* and *can't* are used, and with *no* and *not*, begin to be placed in front of the verb rather than at the beginning of the sentence. Some examples are:

*He no bite you
There no squirrels
You can't dance
I don't know*

The third stage sees the incorporation of other auxiliary forms such as *didn't* and *won't*, and the disappearance of the Stage 1 forms. A very late acquisition is the form *isn't*, so that some Stage 2 forms continue to be used for quite a long time. Examples are:

*I didn't Caught it
He not taking it
She won't let go
This not ice cream*

13. Semantics

Most of those anecdotes which parents retell (to the intense embarrassment of the grown-up child) about their child's early speech center on examples of the strange use of words. Having been warned that flies bring germs into the house, one child was asked what "germs" were and the answer was, "something the flies play with". It is not always possible to determine so precisely the meanings which children attach to the words they use.

It seems that during the holophrastic stage many children use their limited vocabulary to refer to a large number of unrelated objects. One child first used *bow-wow* to refer to a dog and then to a fur piece with glass eyes, a set of cufflinks and even a bath thermometer. The word *bow-wow* seemed to have a meaning like 'object with shiny bits'. Other children often extend *bow-wow* to refer to cats, horses and cows. This process is called overextension and the most common pattern is for the child to overextend the meaning of a word on the basis of similarities of shape, sound and size, and, to a lesser extent, of movement and texture. Thus, a *tick-tock* is initially a watch, but can also be used for a bathroom scale with a round dial. On the basis of size, presumably, the word *fly* was first used for the insect, and then came to be used for specks of dirt and even crumbs of bread. Apparently due to similarities of texture, the expression *sizo* was first used by one child for scissors, and then came to be used for all metal objects. The semantic development in a child's use of words is usually a process of overextension initially, followed

by a gradual process of narrowing down the application of each term as more words are learned.

Although overextension has been well-documented in children's speech production, it isn't necessarily used in speech comprehension. One 2-year-old child, in speaking, used *apple* to refer to a number of other round objects like tomatoes and balls, but had no difficulty picking out *the apple*, when asked, from a set of such round objects.

One interesting feature of the young child's semantics is the way certain lexical relations are treated, in terms of hyponymy, the child will almost always use the 'middle' level term in a hyponymous set such as *animal*: *dog*: *poodle*. It would seem more logical to learn the most general term (*animal*), but all evidence suggests that children first use *dog* with an overextended meaning close to the meaning of *animal*. This may be connected with a similar tendency in adults, when talking to young children, to refer to *flowers* (not the general *plants*, or the specific *tulips*). It also seems that antonymous relations are acquired fairly late (after the age of 5). A large number of kindergarten children in one study pointed to the same heavily laden apple tree when asked *Which tree has more apples?*, and also when asked *Which tree has less?* The conclusion seems to be that *more* and *less* were not treated as antonyms, but as synonyms. The distinctions between a number of other pairs such as *before* and *after*, *buy* and *sell*, also seem to be later acquisitions. Despite the fact that the child is still acquiring aspects of his or her native language through the later years of childhood, it is normally assumed that by the age of 5 with an operating vocabulary of more than 2,000 words, the child has completed the greater part of the basic language acquisition process. According to some, the child is then in a good position to start learning a second (or foreign) language. However, most educational systems do not introduce foreign language instruction until much later. The question which always arises is: if first language acquisition was so straightforward, why is learning a second language so difficult? We shall consider this question in the next unit.



EXERCISES

Exercise 1

- 1) For each set of structures, which construction would children exposed to English be most likely to acquire first?
 - a. /l/ /ɑ/ /θ/
 - b. /k/ /χð/ /π/
 - c. /τ/ /σ/ /ρ/
 - d. VC CV CVC

- 2) Assume a child is acquiring English. Which of the following representations of *stick* would be most likely to appear: [tik] or [sti]? Why?

- 3) Consider the forms /titi/, /pupu/, and /kaka/. These forms illustrate _____
 - a. reduplication
 - b. the three earliest vowels acquired by children
 - c. blending
 - d. all of the above
 - e. a and b only

Exercise 2

- 1) For each set of structures (a-c), which construction would children exposed to English most likely to acquire first?

a. {POSS}	{PRESS}	{PLU}
b. I-Movement	wh-Movement	Intonation
c. not	don't	do not

- 2) Consider the following interchange between 4-year-old Muffin and her mother.

Muffin : Why you don't eat?

Mother : What?

Muffin : Why don't you eat?

These data illustrate that Muffin is in the process of acquiring a particular syntactic rule of English. Which one?

- 3) Which of the following forms would a child acquiring English be expected to produce first? Second? Third?
 - a. Why he's crying
 - b. Why he crying
 - c. Why's he crying

Exercise 3

- 1) A child uses *car* to refer to cars, trucks, and buses, but not to bicycles or airplanes. What semantic property does the child appear to associate with car at this stage?
- 2) For each pair of sentences, determine the one that a child acquiring English would typically interpret correctly at an earlier stage.
 - A. Tommy kicked Mary
 - B. Mary was kicked by Tommy
 - C. Which tree is taller?
 - D. Which tree is shorter?
 - E. We'll go to the movie as soon as we go to the store
 - F. As soon as we go to the store, we'll go to the store

KEY TO EXERCISES

Exercise 1

- 1) a. /α/ b. /π/ c. /τ/ d. CV
- 2) [tik], because the acquisition of CVC is before CCV.
- 3) e

Exercise 2

- 1) a. {PLU} b. Intonation c. not
- 2) Wh-movement and I-movement
- 3) Why he crying, Why he's crying, Why's he crying

Exercise 3

- 1) A car has four wheels or more. It moves in the street, and it has an engine.
- 2) Tommy kicked Mary, Which tree is taller? and We'll go to the movie as soon as we go to the store

**SUMMARY**

The theory of language acquisition makes use of such concepts as pre-linguistic and linguistic stages, the latter of which constitutes grammars that more and more closely correspond to the adult's. The acquisition of language can be analyzed from the perspective of phonology, morphology, syntax, and semantics. We have also looked of the fundamental philosophical issues surrounding language acquisition. These issues reflect two positions regarding the initial mental state of the human organism: nativism (more innate structure) and empiricism (less innate structure).

**FORMATIVE TEST 2**

- 1) Can you describe the noticeable features of caretaker speech?
- 2) What size of vocabulary would you expect an average 24-month-old child to have and which 'stage' would that child already have reached?
- 3) In a normal child acquisition schedule, what would be the order of regular appearance of the following inflections: *-ed*: *-ing*: *-'s*: *-s* (plural)?

- 4) The following two sentences were produced by children of different ages. Which would you expect from the older child and on which features did you base 'your answer'?
- (a) *I not hurt him* (b) *No the sun shining*
- 5) What is the term used to describe the process whereby a child uses one word like *ball* to refer to an apple, an egg, a grape and a ball?)
- 6) Below are samples of speech from children at three different stages in the acquisition process, Identify the most likely order (from least to most advanced) of these three samples, Describe the features in each child's utterances which you would use as evidence to support your ordering.

Child X

You want eat?

I can't see my book

Why you are waking me up? Does lions walk?

Child Y

Where those dogs goed?

You didn't ear supper

Child Z

No picture in there

Where momma boot?

Have some?

Check your answers with the key which is provided at the end of this module, and score your right answers. Then use the formula below to know your achievement level of the lesson in this module.

Formula:

$$\text{Level of achievement} = \frac{\text{Scores of the right answers}}{\text{Total score}} \times 100\%$$

Meanings of level of achievement:

90% - 100% = very good

80% - 89% = good

70% - 79% = average

< 70% = bad

If your level of achievement reaches 80% or more, you can on to the next unit. Good! But if your level of mastery is less than 80%, you have to study again this unit, especially parts which you haven't mastered.

UNIT 3

Second Language Acquisition

While it is true that many young children whose parents speak different languages can acquire a second language in circumstances similar to those of first language acquisition, the vast majority of people are not exposed to a second language until much later. Moreover, for most people, the ability to use their first language is rarely matched, even after years of study, by a comparable ability in the second language. There is something of an enigma here, since there is apparently no other system of 'knowledge' which one can 'learn' better at 2 or 3 years old than at 15 or 25. A number of reasons have been put forward to account for this enigma, and a number of proposals have been made which might enable learners to become as proficient in a second language (L2) as they are in their first language (L1).

A. ACQUISITION BARRIERS

Some obvious reasons for the problems experienced in L2 acquisition are related to the fact that most people attempt to learn another language during their teenage or adult years, in a few hours each week of school time (rather than via the constant interaction experienced by a child), with a lot of other occupation (the child has little else to do), and with an already known language available for most of their daily communicative requirements. Some less likely reasons include the suggestion that adults' tongues 'get stiff from pronouncing one type of language (e.g. English) and just cannot cope with the new sounds of another language (e.g. French or Japanese). It's a cute idea, but there is no physical evidence to support it.

Perhaps the primary difficulty for most people can be captured in terms of a distinction between **acquisition** and **learning**. The term 'acquisition', when used of language, refers to the gradual development of ability in a language by using it naturally in communicative situations. The term 'learning', however, applies to a conscious process of accumulating

knowledge of the vocabulary and grammar of a language. (Mathematics, for example, is learned, not acquired.) Activities associated with learning have traditionally been used in language teaching in school, and tend, when successful, to result in knowledge 'about' the language studied. Activities associated with acquisition are those experienced by the young child and, analogously, by those who 'pick up' another language from long periods spent in social interaction (daily use of the language) in another country. Those whose L2 experience is primarily a learning one tend not to develop the proficiency of those who have had an acquiring experience.

However, even in ideal acquisition situations, very few adults seem to reach native-like proficiency in using a second language. There are individuals who can achieve great expertise in writing, but not in speaking. One example is the author Joseph Conrad, whose novels have become classics of English literature, but whose English speech is reported to have retained the strong Polish accent of his first language. This might suggest that some features (e.g. vocabulary, grammar) of a second language are easier to acquire than others (e.g. phonology). Although it continues to be a matter of some debate, this type of observation is sometimes taken as evidence that, after the critical period has passed (around puberty), it becomes very difficult to acquire another language fully. In support of this view, the process of lateralization of the brain is cited as a crucial factor. We might think of this process in terms of the 'language faculty' being strongly taken over by the features of the L1, with a resulting loss of flexibility or openness to receive the features of another language.

Against this view, it has been demonstrated that students in their early teens are quicker and more effective L2 learners than, for example, 7-year-olds. It may be, of course, that the acquisition of an L2 requires a combination of factors. The optimum age may be during the years 11-16 when the 'flexibility' of the language acquisition faculty has not been completely lost, and the maturation of cognitive skills' allows a more effective 'working out' of the regular features of the L2 encountered.

Yet even during this 'optimum age', there may exist an acquisition barrier of quite a different sort. Teenagers are typically much more self-conscious than young children. If there is a strong element of unwillingness or

embarrassment in attempting to produce the 'different' sounds of other languages, then, it may override whatever physical and cognitive abilities there are. If this self-consciousness is combined with a lack of empathy with the foreign culture (e.g. no identification with its speakers or their customs), then the subtle effects of not wanting to sound like a Russian or an American may strongly inhibit the acquisition process. The literature on child L2 acquisition is full of instances where such inhibitions have been overcome by young children acquiring a second language. In one intriguing study, a group of adult L2 learners had their 'self-consciousness' levels reduced by having their alcohol levels gradually increased. Up to a certain point, the pronunciation of the L2 noticeably improved, but after a number of drinks, as you might expect, pronunciations deteriorated rapidly.

B. ISSUES IN SECOND-LANGUAGE ACQUISITION

To learn a second language is more than just to unlearn by trial and error the habits of one's native language. Between L1 and L2 the learner constructs a rule-governed interlanguage, arising from several different influences besides language transfer, that is, forms from the native language imposed on the second language. These include language universals, markedness relationships between L1 and L2, and developmental processes typical of first- (i.e., child) language acquisition. This section discusses each of these basic concepts needed to understand current issues in second-language acquisition.

1. Interlanguage Theory

The term *interlanguage*, first used by Larry Selinker, refers to an intermediate grammar (i.e., linguistic system) that evolves as a learner acquires an L2. The interlanguage is characteristically distinct from both the L1 and the L2. A procedure known as error analysis attempts to identify regularities in interlanguage forms. These forms are viewed as reflecting the learner's hypotheses about the L2 and are believed to be rule-governed, just as the L1 and L2 are. For example, the learner may go through a stage of producing English negatives of the type *He not wrote the book*. Even though this is not a pattern found in the L1 or L2, the learner is forming negatives in

a systematic way, by putting *not* before the main verb. At the same time, more recent studies of interlanguage have acknowledged that it has variation, just as variation exists in any natural language. For example, a learner may exhibit more native-like pronunciation of an L2 when reading a word list than when engaged in casual conversation. An English speaker learning Russian, for instance, might pronounce *czar* [tsar] as [dzar] in a word list, but as [zar] in conversation.

2. Language Transfer

The degree to which the L1 influences interlanguage is still subject to debate. During the 1950s and 1960s, an approach known as contrastive analysis attempted to account for learner errors by examining similarities and differences (i.e., contrasts) between the L1 and L2. These contrasts were used to construct hierarchies of difficulty, predictions about the ease with which a particular L2 structure could be acquired, given facts about the L1. The most difficult type of contrast was predicted to be one in which the learner has to acquire a form that is nonexistent in the L1, as for example when a speaker of Indonesian must learn English consonant /T/ (a voiceless dental fricative), he/she tend to pronounce it as /s/. At the other end of the hierarchy, the contrastive analysis hypothesis predicted that the least difficulty would be encountered when a form or structure could be transferred with no change from L1 to L2; for example, both Indonesian and English have the consonant /z/.

At the same time, the influence of L1 on L2 acquisition cannot be ignored. The language learner may exhibit either negative transfer (also known as interference), in which some property of the L1 impedes acquisition of the L2, or positive transfer, in which some property of the L1 promotes the acquisition of the L2. An example of negative transfer would be a native speaker of English who, while acquiring French as an L2, transfers English subject-verb-pronominal object word order to French, as in *Il veut les* (he-wants-them) for *Il les veut* (he-them-wants). An example of positive transfer would be a native speaker of French who, while acquiring English as an L2, transfers French subject-verb-nominal object word order to English, as in *He wants the books*. The degree of L1 influence may also vary according

to linguistic domain. For example, it is much easier to identify a nonnative speaker from pronunciation errors than from syntactic errors. That is, negative transfer from the L1 may be more apparent in phonology than in syntax: when we think of a "foreign accent," it is phonological interference that we are typically responding to.

3. Other Linguistic Factors

Other factors that cannot be attributed to language transfer from the L1 also affect second-language acquisition and the form of the interlanguage.

Language Universals. Language universals are those properties (i.e., categories and rules) that (nearly) all human languages have in common. The theory of language universals is intended primarily to explain first-language acquisition: universal properties of language are attributed to the child's initial state, thus relieving the child from having to learn these properties as idiosyncratic facts about the particular language to which he or she is exposed. Not surprisingly, researchers in second-language acquisition have also become interested in language universals. For one thing, L2 learners apparently face a projection problem similar to that faced by L1 learners: namely, they must acquire grammatical knowledge that cannot be inferred solely from the data they are exposed to. Language universals provide an explanation for this ability. In addition, controversy exists over the critical period hypothesis (i.e., the notion that language-acquisition abilities atrophy with age). This leaves open the possibility that adults may have access to language universals when acquiring an L2.

Universals can be classified as implicational or nonimplicational. An implicational universal is a property whose presence implies some other property. A commonly cited example concerns the distribution of voiced and voiceless stops among the world's languages. Some languages have only voiceless stops (e.g., Paiute and many other Native American languages); other languages have both voiced and voiceless stops (e.g., English and most western European languages); but no languages have only voiced stops. Based on this distribution, we can state that the presence of voiced stops in a language implies the presence of voiceless stops, but not vice versa. On the other hand, some universals are nonimplicational. For example, all languages

have stop consonants, but this property alone does not imply the presence or absence of any other property.

Likewise, language universals can be classified as absolute or statistical. Universals are absolute if they are without exception. For example, all languages have syllables of the form CV, all languages have pronominal categories that include three persons and two numbers, and *wh-movement* always moves the *wh-item* leftward to clause-initial position. On the other hand, statistical universals, or tendencies, are properties that occur frequently but that do have exceptions. For example, verb-initial languages *generally* have prepositions (e.g., *in there*), while verb-final languages generally have postpositions (e.g., *therein*).

Markedness. The concept of **markedness** follows naturally from the concept of universals. Structures that are consistent with universals are considered **unmarked**, and those that are inconsistent with universals are considered **marked**. Marked structures are thought to be more difficult to acquire than are unmarked structures. Markedness can be viewed in an implicational sense: since voiced stops imply the presence of voiceless stops, but not vice versa, voiced stops are considered marked and voiceless stops are considered unmarked. Markedness may also be viewed in a statistical sense: property X is more marked than property Y if X is rarer than Y. Under this definition, the interdental fricative /ʈ/ is more marked than the alveolar fricative /s/, since /ʈ/ occurs in fewer of the world's languages. Markedness can also be viewed in a parametric sense: for example, heads of phrases (N is the head of NP, V the head of VP, etc.) tend to come at either the beginning or the end of each phrase in a given language. Thus, a language containing a VP made up of V-NP and a PP made up of P-NP is unmarked since both phrases are head-initial. In contrast, a language containing a VP made up of NP-V and a PP made up of P-NP is marked since one phrase is head-final and the other is head-initial.

Developmental Processes. It appears that an L2 learner may go through stages similar to those that speakers go through when acquiring their native language. For example, children acquiring English as an L1 break up or simplify consonant clusters (e.g., *tay* for *stay*); they acquire lexical morphemes before grammatical ones (e.g., *dog* before *the*) and inflectional

affixes before derivational ones (e.g., taller before *singer*); in forming questions, they acquire *wh*-Movement before I-Movement (e.g., *Why I can't go?*); and they employ overgeneralization in the acquisition of lexical items (e.g., *Daddy* for all men). Speakers acquiring English as an L2 appear to go through these same stages and employ these same processes.

C. PATTERNS IN SECOND-LANGUAGE ACQUISITION

This section looks at three areas of linguistic theory—phonology, morphology, and syntax—and examines some specific L2 acquisition patterns within each area. It is important to emphasize that each of these areas has a different pattern of influence on interlanguage forms. In particular, interlanguage phonology shows perhaps the strongest L1 transfer influence. On the other hand, interlanguage morphology shows strong developmental influence, with clear resistance to transfer. Interlanguage syntax demonstrates a complex interaction of transfer (affected by universals and markedness) and developmental influences.

1. Phonology

Speakers may transfer the segmental structure of L1 to L2. One situation in particular in which L1 interference is noticeable is when the L2 makes a phonemic distinction that does not exist in the L1. For example, Japanese has one phoneme /r/ with allophones [l] and [r]; thus, there is no phonemic distinction between [l] and [r]. In contrast, English maintains a phonemic distinction between /l/ and /r/. Therefore, the native speaker of Japanese learning English as an L2 would be expected to experience greater difficulty than an English speaker learning Japanese. The Japanese speaker has to learn to make a phonemic distinction not found in his or her native language. On the other hand, the English speaker's distinction between [l] and [r] will go unnoticed by Japanese listeners.

Speakers may also transfer phonological rules from L1 to L2. One example that we have already looked at is the rule of Final Devoicing in German, which states that word-final obstruents must be voiceless. Obstruents may display a voicing contrast in medial position (e.g., [p] in [λυμπ↔v] 'rascals' but [b] in [λδτερβ↔v] 'to die'), but this contrast is

neutralized in word-final position (e.g., [p] in [lump] 'rascal' and [p] in [λθταρπ] 'died'). Consequently, it is common *for* native speakers of German to devoice final obstruents when they are learning English, pronouncing both *back* and *bag*, for example, as [βθκ].

Speakers may also transfer phonotactic constraints (i.e., conditions on permissible sequences of segments) *from* their L1 to the L2. For example, English permits syllable-initial clusters of up to three consonants, as long as the first consonant is /s/, the second is a voiceless stop, and the third is a liquid (e.g., *street*, *splash*). A speaker whose native language does not permit such initial clusters may insert a vowel that breaks up the cluster, making it conform to a syllable structure acceptable in the speaker's L1. For example, native speakers of Egyptian Arabic and Iraqi Arabic produced the following *forms*:

English Target		Egyptian Arabic	Iraqi Arabic
floor	[φλoρ]	[φiλoρ]	[iφλoρ]
three	[Tρi]	[Tiρi]	[iTρi]
Fred	[φρEδ]	[φiρδ]	[iφρEδ]
children	[χθIλδρEv]	[χθIλδiρEv]	[χθIλiδρEv]

Note that native speakers of the two Arabic dialects employ different strategies *for* breaking up the unacceptable clusters. Egyptian Arabic speakers insert [i] between members of a consonant-liquid cluster, while Iraqi Arabic speakers insert [i] before a consonant-liquid cluster, allowing resyllabification. Both of these strategies, however, achieve a similar end: they allow the consonant and liquid to be analyzed as members of *different* syllables. The resultant *forms* thus reflect an acceptable syllable structure in the L1.

2. Morphology

Developmental processes play a major role in the acquisition of L2 morphology. For example, several studies have found similarities among both child and adult learners of English as an L2, in the order in which certain grammatical morphemes are acquired. For example, the {PLU} morpheme is acquired by both groups relatively early, whereas the {PRES}

and the {POSS} morphemes are acquired later. The point to note is that these morphemes seem to be acquired in much the same way that they are acquired by native speakers. First, they are acquired in the same order—{PLU} first, then {POSS} and {PRES}. Second, they are acquired according to their morphological function rather than their phonological form. If they were acquired according to form, they would all be acquired at the same time.

Other research also indicates that L2 learners may exhibit developmental processes in expressing temporality, in the absence of verb morphology. Among these devices are temporal markers such as *yesterday* and *last night*, locatives such as *in Vietnam* and *at work*, calendar expressions such as *January* and *Tuesday*, and clause sequencing as in *I go to school Vietnam. [Then] I come U.S.* Once again, children acquiring English as an L1 go through similar stages.

3. Syntax

Along with phonology, syntax is one of the domains that has been studied the most by researchers in second-language acquisition, largely because of the concurrent interest in syntax that Chomsky generated within linguistics in general. Researchers have found transfer, markedness, and developmental processes to play a role in interlanguage syntax.

One area in which transfer commonly occurs is subcategorization—that is, restrictions on the syntactic categories that can co-occur with a particular lexical item. Consider the example of English speakers learning French as an L2. In English, the verb *listen* is subcategorized for a preposition (*listen to NP*); however, the equivalent French verb is not (*écouter NP*). Conversely, the English verb *obey* is not subcategorized for a preposition (*obey NP*); however, the equivalent French verb is (*obéir à NP*).

Negative transfer errors may also result when the L1 and L2 share a rule, but apply the rule under different circumstances. For example, Dulay and Burt (1983) report the following productions by Norwegian speakers learning English as an L2:

Like you me not, Reidun?
Like you ice cream?
Drive you car yesterday?

They account for these data by observing that English inverts the subject and first *auxiliary verb* in questions, whereas Norwegian inverts the subject and the first *verb*, whether auxiliary or main verb.

Sometimes transfer and developmental processes appear to interact. For example, Anderson (1983) reports a study of two children learning English: one a native speaker of Spanish, the other a native speaker of Japanese. The native speaker of Spanish acquired English articles quite quickly, which can be attributed to positive transfer from Spanish, which also has articles. In contrast, the Japanese child went through a stage where articles were omitted, a stage which is also found among children acquiring English as their native language. However, this stage was prolonged for the Japanese child, since Japanese does not have articles. Thus negative transfer from the L1 may prolong an interlanguage feature associated with a developmental process.

D. NONLINGUISTIC INFLUENCES ON SECOND-LANGUAGE ACQUISITION

While this chapter has focused on the role of linguistic variables in second-language acquisition, other forces are believed to play a role as well. A few of these are treated briefly here.

Age. The traditional view of the role of age in second-language acquisition has been that acquiring an L2 is more difficult for an older (i.e., post-pubescent) learner than for a younger one. This view derives largely from the Critical Period Hypothesis, developed by the neurobiologist Eric Lenneberg. According to Lenneberg (1964), the critical period for language acquisition is between years 2 and 12, after which plasticity of the brain's left hemisphere declines. However, the Critical Period Hypothesis in general and its implications for second-language acquisition in particular are not universally agreed upon by researchers. For example, Hatch (1983) reviews findings which suggest that adult L2 learners actually achieve higher levels of proficiency than younger learners, at least initially, and learn more efficiently than younger learners (i.e., with relatively less exposure). It is generally agreed, however, that phonology is the one domain where adult

learners lag behind younger learners, in that a native-like accent is difficult to acquire if L2 acquisition begins beyond the age of puberty.

The role of age is a complex issue because age interacts with other nonlinguistic variables that may also affect second-language acquisition. For example, length of exposure has been shown to correlate positively with proficiency. Thus, if two learners started studying an L2 at different ages, the learner who started at an earlier age may display superior proficiency simply because of having studied the L2 for a longer period of time, not necessarily because of having begun at an earlier age. Also, younger learners may be less self-conscious about learning an L2, which can promote acquisition. On the other hand, older learners bring to the acquisition process more mature cognitive skills in analysis and problem-solving-skills which, though not strictly linguistic, may be profitably applied to the task of language acquisition.

Cognitive Style. Cognitive style reflects the learner's approach to problem-solving and to conceptualizing and organizing information. There are two types of cognitive style. Field independence is a relatively analytical style in which the learner imposes structure on individual parts, distinguishing the irrelevant from the essential. Field dependence is a relatively global or holistic style in which the learner does not differentiate individual parts. Field independence has been found to correlate somewhat with success in second-language acquisition (although this may reflect the fact that most teaching techniques emphasize analysis).

Personality Traits. Traits found to correlate with success in second-language acquisition include extroversion and a willingness to take risks. Extroversion has been found to be more of an advantage in naturalistic settings than in formal learning settings. Risk-taking may be both social (e.g., a willingness to engage in conversations) and linguistic (e.g., a willingness to try new vocabulary).

Social-Psychological Forces. Factors such as the learner's motivation and attitude toward the L2 have also been hypothesized to play a role in second-language acquisition. Two types of motivation have been identified. Integrative motivation reflects the language learner's desire to become part of the community or culture represented by the L2. Instrumental motivation

reflects the language learner's desire to learn the language for practical purposes, such as getting a job. Integrative motivation is seen as the more important component in second language acquisition.



EXERCISES

Exercise 1

- 1) Languages with front round vowels, like French, also have front unround vowels; but languages with front unround vowels, like English, don't necessarily have front round vowels. According to markedness theory, would the vowel system of French or English be harder for a speaker of the *other* language to learn? Explain.
- 2) There is a tendency for speakers acquiring English as an L2 to produce forms such as [pe] or [pele] for play /ple/, even when attempting clusters that appear in their L1. Is this phenomenon an example of:
 - a. positive transfer
 - b. negative transfer
 - c. developmental process
 - d. a statistical universal
 - e. none of the above
- 3) Assume that languages with affricates also have stops and fricatives, but that not all languages with stops and fricatives have affricates. Which type(s) of consonants should be easiest to learn, according to markedness theory?
- 4) Assume that languages with nasalized vowels also have non nasalized ones, but that not all languages with non nasalized vowels have nasalized ones. Which type of vowel should be easier to learn, according to markedness theory?

Exercise 2

- 1) The cluster [ts] is not permitted in word-initial position in English. Thus, the form [tsitsi] *tsetse* may be modified to [titsi] or [sitsi]. What developmental process(es) is involved?
- 2) A native speaker of English learning German as an L2 may produce [κ↔ν□φ] for German /κν□πφ/. What developmental process(es) is involved?
- 3) Consider the following error produced by a native speaker of Arabic acquiring English as an L2: *Did you sail your boat?* for *Did you sell your boat?* What can be inferred about the phonology of Arabic from this error?
- 4) Consider the following error produced by a native speaker of Vietnamese acquiring English as an L2: *Did you forget your code?* for *Did you forget your coat?* What can be inferred about the phonology of Vietnamese from this error?
- 5) Consider the following pronunciations by native speakers of Japanese acquiring English as an L2.

bus	[basu]	baby [bebi]
bath	[basu]	gum [gamu]

- a. What can be inferred about the basic syllable structure of Japanese?
- b. What English consonant phoneme(s) does Japanese lack?
- c. What English vowel phoneme(s) does Japanese lack?

KEY TO EXERCISES**Exercise 1**

- 1) The vowel system of French should be harder for a speaker of the *other* language to learn. This because the front round vowels available in French is difficult to acquire according to markedness theory.
- 2) c
- 3) Stops should be easiest to learn
- 4) Nasalized vowels should be easier to learn.

Exercise 2

- 1) consonant cluster simplification
- 2) The transfer of a phonotactic constraint from the L1
- 3) Arabic does not distinguish between tense and lax vowels
- 4) Vietnamese does not distinguish between voiced and voiceless alveolar stop consonants.
- 5) a. Japanese has CV syllable structure but does not have CVC syllable structure
b. Japanese lacks consonant /T/
c. Japanese lacks vowel /ə/

**SUMMARY**

The theory of second-language acquisition makes use of such concepts as interlanguage, language transfer (both positive and negative), language universals, markedness, and developmental processes. Second-language acquisition can be viewed from the perspective of phonology, morphology, syntax, and semantics. We have also looked briefly at some of the nonlinguistic influences on second-language acquisition, including age, cognitive style, personality, and other social-psychological forces such as motivation and attitude.



FORMATIVE TEST 3

- 1) Consider the following forms produced by nonnative speakers acquiring English as an L2. Classify the errors by domain of linguistics (i.e., phonology, morphology, or syntax).
 - a. Why you gave him your paper?
 - b. She caught two fishes.
 - c. Hand me the pincers (i.e., pliers).
 - d. Do you play any [esports] (i.e., sports)?

- 2) In English, [p] and [p^h] are allophones of one phoneme, /p/. In contrast, Hindi maintains a phonemic distinction between /p/ and /p^h/: [p] is an allophone of /p/, while [p^h] is an allophone of /p^h/. Who will have more difficulty—a native English speaker learning Hindi, or a native Hindi speaker learning English? Explain.

- 3) Broselow (1987:14) reports that the following forms were produced by Arabic students learning English. Construct a phonological rule that describes where the students insert vowels.

<i>floor</i>	[φλoρ]	study	[ισταδι]
<i>plane</i>	[ιβλεν]	Fred	[ιφρEδ]
<i>snow</i>	[ισvo]	children	[χoιλιδpEv]
<i>three</i>	[ιTρι]		

- 4) Dulay and Burt (1983) report forms like *I finished to watch TV when it was four o'clock* instead of *I finished watching TV when it was four o'clock*. What can be inferred about Spanish from this error?

- 5) Speakers acquiring English as an L2 often make subject-verb agreement errors such as *Where does the spiders go?* for *Where do the spiders go?* These same speakers, however, typically produce correct forms such as

The spiders go and *The spider goes*. How might the incorrect forms be explained?

Check your answers with the key which is provided at the end of this module, and score your right answers. Then use the formula below to know your achievement level of the lesson in this module.

Formula:

$$\text{Level of achievement} = \frac{\text{Scores of the right answers}}{\text{Total score}} \times 100\%$$

Meanings of level of achievement:

90% - 100% = very good

80% - 89% = good

70% - 79% = average

< 70% = bad

If your level of achievement reaches 80% or more, you can on to the next unit. **Good!** But if your level of mastery is less than 80%, you have to study again this unit, especially parts which you haven't mastered.

Key to Formative Test

Formative Test 1

- 1) write True (T) or False (F)
 T b. F c. T d. F e. F f. T g. T h. F i. F
 j. F k. T l. F
- 2) a. gradable antonym d. binary antonym
 b. synonym e. converse
 c. hyponym
- 3) Back in 20 minutes has deitic expression because it should understood the time when the professor leaves in order to know what time the professor returns.
- 4) c
- 5) Circle the deitic expressions in the following statements!
 - a. "I'm busy now so you can't do that here"
 - b. We saw her standing there
 - c. The treasure chest is on the right
 - d. The Magna Charta was signed last year
- 5) a. He bought a beer.
 b. You have a watch
 c. You have taken me out the football once
 d. There was a Prime Minister in 1972
- 6) a. He waited by the finance institution, or he waited by the edge of the river.
 b. I saw the photographs belonging to my friend, or I saw the photographs of my friend.
 c. The long drill was digging the hole, or the long exercise is boring

Formative Test 2

- 1) The first feature of caretaker speech is the use of questions frequently followed by exaggerated intonation. The second feature is the use of simple structures and a lot of repetition.
- 2) A 24-month-old child has more than 50 words. He has reached the two-word stage.

- 3) *-ing: -s (plural): -'s: -ed:*
- 4) *I not hurt him.* This is based place of the word *not* between Subject and Predicate.
- 5) overextension
- 6) The first stage is child Z. This stage is characterized by simply adding a *wh*-form at the beginning and adding *not* at the beginning of the expression. The second stage is child X. This stage is characterized by the use of additional negative forms *don't* and *can't*. The third stage is child Y. This stage is characterized by the use of inversion form, and the use of *didn't*.

Formative Test 3

- 1) Consider the following forms produced by nonnative speakers acquiring English as an L2. Classify the errors by domain of linguistics (i.e., phonology, morphology, or syntax).
 - a. syntax
 - b. morphology.
 - c. morphology
 - d. phonology
- 2) A native English speaker learning Hindi, because Hindi speakers distinguish between unaspirated and aspirated voiceless stop consonants. This condition is not found in English.
- 3) Arabic does not recognize consonant cluster. Because of that Arabic speakers add high front vowel / / before the consonant cluster which result in CVCV(C)
- 4) Spanish speakers do not recognize the construction of Verb + gerund. When they learn English they change this construction into Verb + infinitive.
- 5) The incorrect forms might be caused by overgeneralization of the use of auxiliary does in interrogative and negative forms.

Bibliography

- Crane, L. Ben *et. al.* (1981). *In Introduction to Linguistics*. Boston: Little, Brown and Company.
- Fromkin, Victoria *et. al.* (1996). *An Introduction to Language*. 3rd edition. Sydney: Harcourt Brace.
- O'Grady, William *et. al.* (1996). *Contemporary Linguistics: An Introduction* 3rd edition. London: Longman.
- Parker, Frank and Kathryn Riley. (2000). *Linguistics for Non-Linguists*. Boston: Allyn and Bacon.
- Steinberg, Danny D. (1993). *An Introduction to Psycholinguistics*. London: Longman.
- Yule, George.(1985). *The Study of Language*. Cambridge: Cambridge University Press

Sociolinguistics

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INTRODUCTION

Welcome to module 6. This module aims at presenting some important and central issues in sociolinguistics. As a branch of linguistics, sociolinguistics is simply defined as a scientific study of the relationship between language and its society. The main concern of sociolinguistics is to explain and analyze the diversity of language use by the speakers. It concentrates on analyzing the various social functions of language in a society and the way the language is used to convey meaning. There are several different headings mainly discussed by authors and experts of this field. Some of them are the changes of a language over geographical areas, variations of dialects of a language, language choices such as code switching and code mixing, and specific forms of language such as lingua franca, pidgin, and creole. However, sociolinguistics is not only concerned with the description of such diversity, it also analyzes how linguistic differences are related to sociological differences among individual. This module will particularly focus on sociolinguistics itself, discourse analysis, and bilingualism.

To achieve the above objectives systematically, the materials of this module are presented respectively as follow:

1. Unit 1 : Sociolinguistics
2. Unit 2 : Discourse Analysis
3. Unit 3 : Bilingualism

The following activities are really suggested to do in order to learn this module successfully.

1. Read carefully the explanation of each topic.
2. Don't forget to give serious attention to examples given.
3. Do the exercises as well as possible.
4. Look up the meaning of difficult words in your dictionary.
5. Evaluate yourself by checking your answers or your responses with the key answers provided.

Good luck!

UNIT 1

Sociolinguistics

A. BASIC CONCEPTIONS OF SOCIOLINGUISTICS

Ever since people began to analyze their surroundings, they could not help but notice ways in which language and other human activities are interrelated. Scholars have recorded their observations on the relationship between language and society, language and world view, and the influence of social structure on cultural configurations, including language. They realize that language has enormous significant roles for the survival of human societies. The scholars call the study of the relationship between the language and the community using it as sociolinguistics.

In its development, different sociolinguists explain the definition of sociolinguistics in different manners for the same purposes. Labov (1970) and Fishman (1972) who are interested in the sociology of language, for example, states that sociolinguistics examines the interaction between language and social organization of behavior. It focuses upon topics related to language behavior and attitude toward language of the language users.

Furthermore, Penalosa (1981) explains that sociolinguistics is the study of the distribution of specific features of linguistic structure by identifiable social categories. This definition clarifies that the emphasis has been placed on the fact that the variability of linguistic forms reflects human social diversity. Whenever we find different kinds of people, we find different kinds of language.

Wardhaugh (1986), in addition, simply defines that sociolinguistics is the study of the relationship between language and society. It discusses the various functions of language in society. In this definition, according to Wardhaugh, before further comprehending the concepts of sociolinguistics, there are two terms that should be explained in advance: *language* and *society*. *Language* is what the members of a particular society speak to communicate. When two or more people communicate with each other in a

speech, we can call the system of the communication that they employ a language (a code). *Society* is any group of people who are drawn together for a certain purpose or purposes. Communication among the people of the society is possible because the knowledge of the language is shared one another, although how it is shared or acquired is not well understood, language is a communal possession.

She also clarifies the differences between the focus of *sociolinguistics* and *sociology of language*. In this distinction, *sociolinguistics* concerns with investigating the relationships between language and society with the goal of a better understanding of the structure of language and how languages function in communication. The in the sociology of language the focus will be to discover how social structure can be better understood through the study of language, e.g., how certain linguistic features serve to characterize particular social arrangements. To support her opinion, she also quotes Hudson's distinction: sociolinguistics is the study of language in relation to society, whereas the sociology of language is the study of society in relation to language. In sociolinguistics we study society in order to find out as much as we can about what kind of things language is, and in the sociology of language we reverse the direction of our interest.

At last, according to Holmes (1992), sociolinguistics explains why people speak differently in different social context. It concerns with the identifications of the social functions of language and the ways it is used to convey social meaning. The way people use their language in different social contexts can provide a wealth of information about the way the language works and about the social relationships in a community. Sociolinguists aim to describe sociolinguistic variation and, if possible, explain why it happens.

B. LANGUAGE VARIETIES

Some basic questions in sociolinguistic analysis are, for example: Why should a student describes her English teacher differently when talking to her mother and when answering the school principal? Why do different young people call their friends by different names? Why should a formal grammatical construction with formal vocabulary choices sound sarcastic

when used by your mother? The answers to those questions are the focus of study in language variation.

Factors such as occupations, place of residence, education, income, racial, ethnic origin, cultural background, caste, religion, and some other social classes are mainly the causes of language varieties. In India, for example, caste quite often determines which variety of a language a speaker uses. In a city like Baghdad the Christian, Jewish, and Moslem inhabitants speak different variety of Arabic. Ethnic variation can be seen in the United States where one variety of English has become so identified with an ethnic group (Black English). Labov's work in New York City showed that Jewish and Italian ethnicity differentiated themselves from speakers of either the standard variety or Black English.

There are seven criteria that may be useful in discussing different kinds of language varieties: standardization, vitality, historicity, autonomy, reduction, mixture, and *de facto* norms. *Standardization* refers to the process by which a language has been codified in some way. *Vitality* refers to the existence of a living community of speakers. *Historicity* refers to the fact that a particular group of people finds a sense of identity through using a particular language. *Autonomy* is an interesting concept because it is really one of feeling of the speakers to realize that his language is different from others. *Reduction* refers to the fact that a particular variety may be regarded as a sub-variety rather than as an independent entity. *Mixture* refers to feelings speakers have about the 'purity' of the variety they speak. Finally, *de facto norms* refers to the feeling that many speakers have that there are both 'good and poor' speaker and the good one represent the norm of proper usage.

In language variation, there are some topics of interest that can be discussed. Some of them are dialect, pidgin, *creole*, register, style, and idiolect. Dialect, style, and register differences are largely independent: you can talk casually about something in a local variety of a language or you write in a very formal style. You may also be judged to speak better or worst than other speakers who have much the same background. Dialect, pidgin and creole will be further discussed below. Other topics will not become the focus of the discussion.

The underlying belief of language variation is that the way people talk is influenced by the social context in which they are talking. The same message may be expressed very differently to different people. We use different styles in different social contexts. Consequently, people should realize that the language serves a range of functions. People use language to ask for and give other people information. Language is used to express indignation, annoyance, respect, and admiration. Often one utterance will simultaneously convey both information and express feelings. Languages provide a variety of ways of saying the same thing - addressing and greeting others, describing things, and paying complements. The choice of the function reflects factors such as the relationship between the people in the particular situation and how the speaker feels about the person addressed.

In some cultures parents may call their children by a variety of names depending on how they feel towards them. A mother may call her son Roby in most circumstances, but when she is annoyed with him she calls him Romeo. Friends often have a range of names for each other too. They may call Rob for Roby most of the time, but Jack when they want to tease or annoy him. In some other cultures people have one name which is used only in the family and another for use outside. In some other cultures people have a ceremonial name used only on a very formal occasions. In Indonesia, young generations may have different names for their friends when they are addressing their friends directly, as opposed to when they are referring to them in different contexts. In general, there are several relevant factors in selecting appropriate terms of address: family norms of address between children and parents at different stages; audience who is listening; social context, such as formal, private, or personal.

Word choice, sounds, word-structure, vocabulary, and grammar, for example, are some areas of linguistic variation. Within each of these linguistic levels, there is variation which offers the speakers a choice of ways of expression. They provide different linguistic styles for use in different social contexts. Choices may even involve different dialects of a language or different languages as well.

Sociolinguists use the term *variety* (or sometimes *code*) to refer to any set of linguistic forms which patterns according to social factors. Variety is a

broad term which includes different accents, different linguistic styles, different dialects and even different languages which contrast with each other for social reasons. A variety is a sociolinguistic term referring to a language in context. Variety is a set of linguistic forms used under specific social circumstance. People may use different pronunciations, vocabularies, grammar, or styles of a language for different purposes. They may use different dialects of a language for different purposes and contexts. In some communities they will select different languages according to the situation in which they are communicating. In the community, the distinguishable varieties which are available for use in different social contexts form a kind of repertoire available options. The members of each community have their distinctive *linguistic repertoire*.

In other words in every community there is a range of varieties from which people select according to the context in which they are speaking. In monolingual communities these take the form of different styles and dialects. People acquire their knowledge of varieties and how to use the appropriately in the same way that they acquire their knowledge of most other aspects of language.

Certain social factors are relevant to the uses of particular language variety. Some relate to the users of the language (participants), others relate to its uses (the social setting and function of the interaction. Who is talking to whom is an important factor. The setting or social context are relevant factors too. The aim of the interaction and topics of the interaction is important factors that influence the language choice. In any situation, linguistic choices will generally reflect the influence of one or more of the following components:

1. The participants (*who* is speaking and *who* is she speaking to?)
2. The setting or social context of the interaction: *where* are they speaking?
3. The topic: *what* they are speaking about?
4. The function: *why* are they speaking?

Throughout this chapter, these social factors will prove important in describing and analyzing all kinds of interaction. They are basic components

in sociolinguistic explanations of why people do not all speak the same way, and why people do not all speak in the same way all of the time.

In addition to the four components it is also useful to take into account of five different dimensions for analysis which relate to the factors above and which have been only implicit in the discussion so far. These are:

1. A *social distance* scale concerned with participant relationship (intimate, high solidarity, distant, low solidarity)
2. A *status* scale concerned with participants relationships (superior/ high status– subordinate/ low status)
3. A *formality* scale relating to the setting or type of interaction (formal/ high formality– informal/ low formality)
4. Two *functional* scales relating to the purposes or topic of interaction
5. The *referential and affective function* scales (High/low information content–low/high affective content)

One important conclusion from all we have said is that many varieties of languages exist and each language exists in a number of guises. However, languages do not vary in every possible way. It is still possible to listen to an individual speaker and infer very specific things about that speaker after hearing relatively little of his speech.

C. DIALECTS

Many speakers do experience difficulty in deciding whether what they speak should be called a *language* or a *dialect* of a language. Before discussing what dialect is, it is better to clarify the concept of language and dialect. Haugen (in Wardhaugh, 1986) has pointed out that *language* and *dialect* are ambiguous terms. Ordinary people use them quite freely to speak about various linguistic situations, but scholars often get difficulty in deciding that one term should be used rather than the other in certain situations. He points out that the confusion happens in the Ancient Greeks. The Greek language was actually a group of distinct local varieties (Ionic, Doric, and Attic). He points out that the Greek situation has provided the model for all usages of the two terms and the resulting ambiguity. *Language* can be used to refer either to a single linguistic norm or to a group of related

norms, and *dialect* to refer to one of the norms, but the norms themselves are not static.

In general, there are different kinds of languages, which clearly differ from one another and that what we call a *language* rather than *dialect*. It might be possible to define a dialect as some sub-variety of one or more languages. Speakers of different dialect can communicate with each other, whereas different languages cannot. Every people speak different dialect. No even two people speak exactly alike. Dialect is a variety of language that may differ from other varieties of the language in terms of its vocabulary, grammar, and pronunciation. Dialect can be a variety of language used by one group or one social class.

It is quite apparent that no two individuals are exactly alike in their linguistic capabilities, just as no two social situations are exactly alike. Any individual has a speech repertoire; that is, he or she controls a number of varieties of a language or of two or more languages. Platt (in Wardhaugh, 1983) clarifies that "a speech repertoire is the range of linguistic varieties which the speaker has at his disposal and which he may appropriately use as a member of his speech community". The concept of the 'speech repertoire' may be most useful when applied to individuals rather than to groups, since it is the communicative competence of individual speakers. Each person will have a distinctive speech repertoire.

English may be used differently by its native speakers in terms of its pronunciation, vocabulary, and grammar. In its pronunciation, for example, Labov found out that people from higher social class tend to pronounce 'r' at the final position, like in *floor*, *four*, and *flower*, clearer if compared to those who came from lower social class. People from the lower social class even did not pronounce the sound 'r' at all. British and American English, furthermore, are different. They are separated by over two centuries of political independence and by the Atlantic Ocean.

Another example is that, in the use of Indonesian language, the native of Indonesia who come from different cultural backgrounds use the language differently. The pronunciation of people from Java will be different from the ones from Batak, Minangkabau, and Madura. They are different not only by regional influences, but also by cultural and local linguistic differences.

Wardhaugh (1986) acknowledges that dialect can be classified into regional and social dialects. *Regional dialect* is a variation of language caused by region or geographical areas where the speakers live. One basic assumption in regional dialect is that regional dialects are really quite easy to sample: just find one or two people in the particular location you wish to investigate, interview them, and ask them how they pronounce particular words. Dialect geographers are commonly attempted to produce their findings on maps in what they call *dialect atlas*. They try to show the geographical boundaries of the distribution of a particular linguistic feature.

Dialect can also be used to describe differences in speech associated with various social groups or classes. This dialect is commonly called as *social dialect*. Factors such as occupation, level of education, social and ethnic origin, place of residence, cultural background, caste, and religion are some factors affecting the use of language varieties, how people speak. There is a British 'public-school' dialect, and there is 'Black' dialect found in cities such as New York, Detroit, and Buffalo. Many people also have stereotypical notions of how different social types speak, and there is evidence that the social dialect can indeed be described systematically.

Another term related to the social linguistic varieties is *register*. Registers are sets of vocabulary items associated with discrete occupational or social groups. Wardhaugh (1963) exemplifies that surgeons, airline pilots, bank managers, sales clerk are different vernacular. Of course, one person may control a variety of registers.

Dialect, style, and register differences are largely independent. You can talk casually about mountain climbing in a local variety of a language, or you can write a very formal letter of application.

One important conclusion from all we have said is that varieties of languages exist and each language exists in a number of appearances. By definition, regional dialects are geographically based and social dialects originate from social group and depend upon a variety of factors: social class, religion, and ethnicity. The study of dialect is, however, further complicated by the fact that speakers can adopt different *styles* of speaking. You can speak very formally or informally, your choice being governed by circumstances. Ceremonial occasions require very formal speech, public

lectures somewhat less formal, casual conversation quite informal, and conversation between intimate friends may be extremely informal. Variation can happen in pronunciation, choices and forms of words, and in syntactic level.

D. LINGUA FRANCA, PIDGIN, AND CREOLE

In its socialization, people sometimes face a situation where they have to speak different languages as a means for communication, since they come from different groups of community. In this situation, they have to adopt commonly agreed language for their communication. This language is called a *lingua franca*. UNESCO defines *lingua franca* as a language which is used habitually by people whose mother tongues are different in order to facilitate communication between them (Wardhaugh, 1986). A variety of terms are used to refer to this phenomenon: *trade language* (e.g., Swahili in East Africa), *contact language* (e.g., Greek koine in the Ancient World), *international language* (e.g., English in the world), and *auxiliary language* (e.g., Esperanto or basic English).

The word '*lingua franca*' is borrowed from the name given to a language used along the Mediterranean coast in medieval times which combined elements of Greek, Arabic, and the Romance languages for the purpose of trade. Today, the term has extended to refer to any language that is mutually agreed on to facilitate trade, diplomacy, or other social functions. In its current concept, *lingua franca* can be a fully developed language commonly used by many speakers. English, for example, is nowadays a *lingua franca* of trade around the world.

In its basic concepts, *lingua franca* is a rudimentary language. When speakers of two different languages who do not understand one another need to communicate, they resort to hybridized or watered down language that has a small vocabulary and a simple grammar. This type of language is called *pidgin*. Many vocabulary items and grammatical structures borrowed from a dominant or source language are combined with some grammatical elements and vocabulary items from local (minor) language to form pidgin. The pidgin is a language with no native speakers; it is no one's first language, but is a contact language. It is a product of multilingual situation in which those who

wish to communicate must improvise a simple code to enable them to do so. Pidgin sometimes regarded as a reduced variety of a normal language with simplification of the grammar and vocabulary of that language, considerable phonological variation, and mixture of local vocabulary to meet the special needs of the contact groups. Pidgin is considered a minimal language because of its limited linguistic capacity. This kind of language is often developed as a result of colonization and transmigration.

When pidgin becomes the native language of a new generation of the society, the language is called *creole*. In contrast to pidgin, a creole is a 'normal language' in just about every sense. Creole has its native speakers. But like a pidgin, a creole has no simple relationship to the usually standardized language with which it is associated. Creole develops easily when parents communicate with each other mostly through the pidgin for which that kind of language becomes the first language of their children. As the pidgin develops into creole, it is later expanded with more lexical items and greater grammatical complexity. At that time, it becomes an independent and fully developed language.

However, until recently, pidgins and creoles have generally been viewed as uninteresting linguistic phenomena, and those who speak them often been treated with contempt. Hymes (1971) has pointed out that before the 1930s pidgin and creoles were largely ignored by linguists who regard them as marginal languages. In other sides, in recent years, such attitudes have changed and serious attention has been given to pidgins and creoles. Pidgin and creoles are of central importance to our understanding of language, and central too in the lives of some millions of people. The study of pidgin and creoles has become an important part of sociolinguistic study.

In conclusion, if we look at the actual processes involved in pidginization and creolization we can see that they are almost diametrically opposed to each other in certain ways. Pidginization generally involves the simplification of a language, e.g., reduction in morphology and syntax, tolerance of considerable phonological variation, reduction in the number of functions for which the pidgin is used, and extensive borrowing of words from local mother tongue. Creolization, on the other hand, involves expansion of the morphology and syntax, regularization of the phonology, deliberate increase

in the number of functions in which the language is used, and development of a rational and stable system for increasing vocabulary.

E. CODE CHOICES

As mention earlier, we may also refer to a language or a variety of a language as a *code*. As a neutral term, code can be used to refer any kinds of system that two or more people employ for communication. What interesting is the factors that govern the choice of a particular code on a particular occasion. Why do people choose to use one code rather than another, what brings about shifts from one code to another, and why do they occasionally prefer to use a code formed from two other codes by mixing the two?

These questions imply that people are, except very young children or beginner learners of a new language, always faced with code choices when they speak. In general when you open your mouth, you must choose a particular language, dialect, style, register, or variety – that is a particular code. In this part, we are going to look at the phenomena of code choice, code-mixing, and code-switching in bilingual and multilingual contexts. The issues that we are going to see will also sub-varieties of a single language, e.g., dialect, styles, and register. In other words, we will, in particular, examine the so-called *diglossic situation*, a situation exists in a society when it has two distinct codes which shows clear functional separation; that is, one is employed in one set of circumstance and the other in an entirely different set (Wardhaugh, 1986).

In multilingual countries like Indonesia, the ability to shift from one language to another is accepted as a quite normal. The same situation also happens in Singapore where there are four official languages: English, Mandarin, Tamil, and Malay considered also as national language. However, the majority of the Singaporeans are native speakers of Hokkien, a variety of Chinese. National policy promotes English as a trade language, Mandarin as the international 'Chinese' language, Malay as the language of the region, and Tamil as the language of one of the important minor ethnic groups in the nation. In its national contexts, Singapore English is the language of education. The language of government employment is also Singapore English.

What happens when people from a multilingual society meet in a 'foreign' setting, what language do they use? Indonesian graduate students and their families living in the United States, for example, tend to discuss their academic works in English but used Indonesian for most other activities.

In the context of choosing a code, according to Wardhaugh (1986), we must ask what brings a speaker to *choose* variety X of a language A rather than variety Y, or even language A rather than language B. What might cause a speaker to *switch* from a variety X to variety Y or from language A to language B? The answers may include solidarity with listeners, choice of topic, and perceived social and cultural distance. The motivation of the speaker is an important consideration in the choice. However, such motivation need not be at all conscious, for apparently many speakers are not aware that they have used one particular variety of a language rather than another or sometimes even that they have switched languages, i.e., have code-switched (code-switching) or that they have mixed languages, i.e., have code-mixed (code-mixing).

Code-switching occurs when conversants use a particular code suddenly move to another code they are familiar to. There are two kinds of code-switching: situational and metaphorical. *Situational code-switching* occurs when the languages used change according to the situation in which the conversants find themselves: they speak one language in one situation and another in different one. No topic change is involved. When a change of topic requires a change in the language used we have *metaphorical code-switching*. As the term suggests, metaphorical code-switching has an affective dimension to it: you change the code as you redefine the situation – formal to informal, official to personal, serious to humorous, and politeness to solidarity.

Code-mixing occurs when conversants use both languages together to the extent that they change from one language to the other in the course of a single utterance. A particular group of people may employ different kinds of code-switching and code-mixing for different purposes. Code-switching and code-mixing themselves are not uniform phenomena, i.e., the norms vary from group to group, even within what might be regarded as a single community.

F. CONCLUSION AND SUGGESTED READINGS

Understanding sociolinguistics conceptions and phenomena are not an easy task since the study of social aspects of language has a very wide scope. The topics presented in this chapter are not representative discussion of the whole aspects of sociolinguistics. There are many other topics out of the discussion in this part need to consider in sociolinguistics, such as phenomena of multilingualism and bilingualism, language change, networks and repertoire, and language policy and conflict. To have more information, you are suggested to read some other books on sociolinguistics, some of them are Crane (1981), Fromkin *at al* (1990), Holmes (1992), and Wardhough (1986) as listed in bibliography of this module.



EXERCISES

Exercise 1

- 1) After reading some concepts of sociolinguistics, in your own words, please define what do you mean by sociolinguistics?
- 2) What is the difference between sociolinguistics and the sociology of language?

Exercise 2

- 1) What do you think the most important reasons and causes for varieties of language use?
- 2) State some aspects of language which may be variously used by its speaker?

Exercise 3

- 1) Give two examples of a dialect of bahasa Indonesia!

- 2) What are the differences between regional and social dialect? Give your own example!

Exercise 4

- 1) Reading part 6.4 above, what do you understand about lingua franca, pidgin, and creole?
- 2) Please write a sample of situation of pidgin based on your experience or one that is in your imaginative example.

Exercise 5

- 1) Please differentiate between code-switching and code-mixing
- 2) What motivates and in what conditions code-switching takes place?

KEY TO EXERCISES

Exercise 1

- 1) Sociolinguistics is a scientific study of the relationship between the language and its speech community's social values and norms.
- 2) Sociolinguistics studies language in its relationship with the society. Sociology of language studies social values and norms from the community use of language.

Exercise 2

- 1) Varieties of language happen because of some reasons: individual style, social norms and values, regional differences. These are the most important reasons for language varieties.
- 2) Language can be used differently at any levels such as intonation, diction, syntactic forms, and other styles of language use. The different

use of language may be caused by several factors: the participants, setting, topic, and function of the discourse.

Exercise 3

- 1) Bahasa Indonesia is used differently by peoples from different ethnic groups in the level of dialect such as:
 - a. People from Batak ethnic will say: 'Mau kemana kau?' For the same questions Javanese will say: 'Sampeyan mau kemana?' The standard Indonesian language will be 'Anda mau kemana?'
 - b. In the lexical level of bahasa Minangkabau people from Bukittinggi use 'biyai' but people from Pariaman use 'one' for 'Amak' (mother).
- 2) Regional variation is varieties of language use of a community which is different from others in the same language caused by the region where they live. Social variation is, however, a variation of language use caused by social differences of the speakers.

Exercise 4

- 1) Lingua franca is a language which is used habitually by people whose mother tongues are different in order to facilitate communication between them. This phenomenon may also be regarded as a trade language, contact language, or international language. Pidgin is a language used by two people from different languages who do not understand one another, but they need to communicate. They use one dominant (source) language which is combined with the minor language. When pidgin becomes the native language of a new generation of the society, the language is called *creole*.
- 2) Transmigration program in Indonesia can be a situation in which pidgin and creole might happen. People from Javanese who speak only Javanese are transmigrated to Siting in West Sumatera whose people mostly only speak Minangkabau. The transmigrants and the native should communicate one another. They will use pidgin.

- 3) Code-switching happens in a situation in which conversants using a particular language suddenly move to another language in which both conversants are familiar to. This situation happens mostly in multilingual or bilingual context. *Code-mixing* occurs when conversants use both languages together to the extent that they change from one language to the other in the course of a single utterance.
- 4) Mostly code-switching happens in the context in which the conversants are both away from their mother tongue. In the beginning of a conversation they use a certain language, say for example Indonesian. Realizing then that they come from the same ethnic, Javanese for example, they switch into Javanese, their mother tongue. The choices might be influenced by pridefulness, close relationship, and intimacy.



SUMMARY

Different sociolinguists explain the definition of sociolinguistics in different manners for the same purpose. There are seven criteria that may be useful in discussing different kinds of language varieties: standardization, vitality, historicity, autonomy, reduction, mixture, and de facto norms.

Beside language varieties, sociolinguistics also discusses dialects, Lingua Franca, Pidgin, Creole, and Code Choices.



FORMATIVE TEST 1

Answer the following question as clearly as possible!

- 1) What are the relationships between language and society?
- 2) Why do you think speakers use their language different from context to context?
- 3) What are the differences between pidgin and creole? Explain your answer by giving an example of each?
- 4) What are the kinds of dialect? Give your example.

- 5) What are the differences between code-switching and code-mixing?
What factors motivating their uses?

Check your answers with the key which is provided at the end of this module, and score your right answers. Then use the formula below to know your achievement level of the lesson in this module.

Formula:

$$\text{Level of achievement} = \frac{\text{Scores of the right answers}}{\text{Total score}} \times 100\%$$

Meanings of level of achievement:

- 90% - 100% = very good
- 80% - 89% = good
- 70% - 79% = average
- < 70% = bad

If your level of achievement reaches 80% or more, you can on to the next unit. Good! But if your level of mastery is less than 80%, you have to study again this unit, especially parts which you haven't mastered.

UNIT 2

Discourse Analysis

In its general concept, discourse analysis is the study of spoken and written interaction. Discourse analysis is the discipline devoted to the investigation of the relationship between form and function in verbal communication (spoken and written). The short but broad definition is the point of departure for this 'Module 6'. It is broad because discourse analysis covers an extremely wide range of activities, from the narrowest focused investigation of how words such as 'well' or 'oh' are used in casual talk, to the study of the dominant ideology in a culture as represented, for example, in its educational or political practices. When it is restricted to linguistic issues, it focuses on the recorded (spoken and written) process by which language is used to express intention. As a brief introduction to the analysis of discourse, this module will only discuss shortly some general important issues, including the historical overview, the interest of discourse analysis: the linguistic function and form, the data of discourse analysis, the role of context in discourse analysis, topic and the representation of discourse content, and conversation analysis.

A. HISTORICAL OVERVIEW

The field of discourse analysis, which investigates the relationship between form and function in verbal communication, is a branch of pragmatics, the study of the use of sign. Pragmatics, literally 'the study of act', is derived from a philosophical approach to the phenomenon 'sign', specifically the question of how sign, and therefore also linguistic signs function. Two names associated with the study of signs, which is known as *semiotics*, are Charles Peirce and Charles Morris (the American philosophers). The study of discourse is motivated by Firth (1935) who urged linguists to study conversation, for there we shall find the key to a better understanding of what language is and how it works. His ideas did not gain

prominence until the 1960s when they were elaborated by Morris who distinguished three areas within the field of semiotics: 1. *Syntax*, the study of relationship between signs within a sign system; 2. *Semantics*, the relationship between signs and the objects they refer to; 3. *Pragmatics*, the relationship between signs and the people who use them. Applied to discourse analysis, the pragmatic approach deals with the question of how discourse is produced and interpreted in a specific context. A proper understanding of 'verbal' in 'verbal communication' requires the understanding of certain characteristic features of language. Plato's *Cratylus* (a dialogue on the origin of language), one of the earliest works on language, describes speech as a form of action and words as instrument with which action can be performed. Karl Buhler, the German philosopher and psychologist, was referring to this work when he described language as a tool, '*organon*,' which people use to communicate with one another. Buhler's organon model (1934) has had a major impact on the way language is dealt with in discourse studies.

When the time linguistics was largely concerned with the analysis of single sentences, Harris (1952) published a paper with the title 'Discourse Analysis' in which he stated his interest in the distribution of linguistic elements in extended texts and the links between the text and its social situation. The current concept of discourse analysis has been developed away from Harris's idea.

In its development, British discourse analysis was greatly influenced by MAK Halliday's (1973) functional approach to language, which in turn has connection with Prague School of linguistics. Also important in Britain were Sinclair and Coulthard (1975) who developed a model for the description of teacher-pupil talk based on the hierarchy of discourse units. Other similar work has dealt with doctor-patient interactions, service encounters, interviews, debates, and business negotiations, as well as monologues.

In America, discourse analysis has been greatly dominated by work within the ethnomethodological tradition, which emphasizes the research method of close observation of groups of people communicating in natural settings. It examines types of speech events such as storytelling, greeting, and ritual in different cultural and social settings (e.g., Gumperz and Hymes,

1972). What is often called *conversational analysis* within American tradition can also be included under the general heading of discourse analysis.

Also relevant to the development of discourse analysis as a whole is the work of text grammarians, working mostly with written language. They see texts as language elements strung together in relationships with one another that can be defined. Linguists such as Van Dijk (1972), De Beaugrande (1980), Halliday and Hasan (1976) have made a significant impact in this area. The Prague School of linguists, with their interest in the structuring of information in discourse, has also been influential. Its most important contribution has been to show the links between grammar and discourse.

Inferred from this historical background, discourse analysis is concerned with the study of the relationship between language and the contexts in which it is used. It grew out of work in different disciplines in the 1960s and early 1970s, including linguistics, semiotics, psychology, anthropology, and sociology. Discourse analysts study language in use, written text of all kinds, and spoken data, from conversation to highly institutionalized forms of talk. Discourse analysis has grown into a wide-ranging and heterogeneous discipline which finds its unity in the description of language above the sentence and an interest in the contexts and cultural influences which affect language in use. It concerns with wider context, analyzing language which address involvement of language, ideology, and power, discourse in sociocultural change, analysis of discourse in different field of sciences, and critical language awareness. The latest development is under the influence of Norman Fairclough's (1995) *Critical Discourse Analysis: The Critical Study of Language*.

B. THE INTEREST OF DISCOURSE ANALYSIS: THE LINGUISTIC FUNCTION AND FORM

1. The Function of Language

As stated earlier, the analysis of discourse is, necessarily, the analysis of language in use. The function of language is as a means of communication. In language, function goes hand in hand with structure. While some linguists

may concentrate on determining the formal properties (structure) of a language, the discourse analyst is committed to an investigating of what that language is used for. Brown and Yule (1983) use two terms to describe the major function of language, and they emphasize that this division is an analytic convenience. The function which a language serves in the expression of 'content' they call as *transactional*, and that function involved in expressing social relations and personal attitudes they describe as *interact ional*. This distinction stands in general correspondence to the functional dichotomies 'representative/ expressive (Buhler, 1934), referential/ emotive (Jakobson, 1960), ideational/ interpersonal (Halliday 1970), and descriptive/ social expressive (Lyons, 1977).

The linguists, generally, acknowledges that language is used to perform many communicative functions, most important function, is the communication of information. The language which is used to convey 'factual or propositional' information is called primarily *transactional language*. The assumption of this transactional view is that what the speaker (or writer) has primarily in mind is the efficient transference of information. It is important that the recipient gets the informative detail correct, it is unfortunate if the message is not properly understood by the recipient.

Whereas linguists, philosophers of language and psycholinguists have paid particular attention to the use of language for *transmission* of 'factual or propositional information, sociolinguists have been particularly concerned with the use of language to establish and maintain social relationship (*interact ional view*). Written language is, in general, used for primarily transactional purposes. However, it is possible to find written genres whose purpose is not primarily to inform but to maintain social relationship.

2. Linguistic Forms: Spoken and Written

From the point of view of production, it is clear that spoken and written language make somewhat different demands on language-producers. The speaker has available to her the full range of 'voice quality' effects as well as facial expression, postural and gestural systems. These paralinguistic cues are denied to the writer. Not only is the speaker controlling the production of communicative systems which are different from those controlled by writer,

she is also processing that production under circumstances which are considerable more demanding. The writer may look over what she has already written, pause between each works with no fear of his interlocutor interpreting her, take her time in choosing a particular word, even looking it up in the dictionary if necessary, check her progress with her notes, reorder what she has written, and even change her mind about what she wants to say. A speaker, on the other hand, has no permanent record of what she has said earlier, and only under unusual circumstances does she have notes which remind her what she wants to say next. There are, of course, advantages for speaker, She can observe his interlocutor and, if she wishes to, modify what she is saying to make it more accessible or acceptable to her listener. The writer has no access to immediate feedback and simply has to imagine the reader's reaction.

We shall use text as a technical term to refer to the verbal record of a communicative act. A text is traditionally understood to be a piece of written language. A rather broader conception has become common within discourse analysis where a text may be either written or spoken discourse. In cultural analysis, by contrast, text does not need to be language at all: any cultural artifact – picture, a building, music – can be seen as a text. A text in contemporary society is increasingly multi-semiotic; text whose primary semiotic form is language increasingly combines language with other semiotic form.

a. *Spoken texts*

The problems encountered with the notion of text as the verbal record of a communicative act become a good deal more complex when we consider what is meant by spoken text. The simplest view to assume is that a tape-recording of a communicative act will preserve the 'text' as well as the extraneous to the text (coughing, chairs creaking, buses going past, lighting a cigarette). In general, discourse analyst works with a tape recording of an event from which she then makes a written transcription, annotated according to her interest on a particular occasion. She has to determine what constitutes the verbal event, and what form will transcribe it in. However, it must be further noticed that, however objective the notion of 'text' may appear as we

have defined it, the perception and interpretation of each text is essentially subjective. Different individuals pay attention to different aspects of text. However, in discussing texts we idealize away from this variability of the experiencing of the text and assume that readers of a text or listener to a text share the same experience. A text frequently has a much wider variety of interpretations imposed upon it by analysts studying it. Once the analyst has created a written transcription from a recorded spoken version, the written text is available to her in just the way the literary text is available to the literary critic. When we discuss spoken text, it is important to remember the transitoriness of the original.

It must be clear that our simple definition of 'text' as 'the verbal record of communicative act' requires at least two hedges: the representation of a text which is presented for discussion may in part consists of a prior analysis or interpretation of a fragment of discourse and features of the original production of the language.

b. Written Texts

A text may be differently presented in different editions, with different type-face, on different sizes of paper, in one or two columns. It is important to consider just what it is that is 'the same'. Minimally the words should be the same words, presented in the same order.

Goody (in Brown and Yule, 1983) suggests that written language has two main functions: the first is storage function which permits communication over time and space, and the second is that which 'shift language from the oral to the visual domain' and permits words and sentences to be examined out of their original.

3. The Relationship Between Speech and Writing

Speech and writing are different in the manner of production how language is used to communicate. It is reasonable that in daily life we use speech largely for the establishment and maintenance of human relationship compared to writing (primarily interactional use). We use written language largely for working out of and transference of information (primarily transactional use). However, there are occasions when speech is used for the detailed transmission of factual information. The recipients often write down

the details that they are told since people will not remember detailed facts correctly if they are only spoken. The major differences between speech and writing derive from the fact that one is essentially transitory and the other is designed to be permanent.

The differences between spoken and written text:

- a. The syntax of spoken language is typically much less structured than that of written language: spoken language contains many incomplete sentences, often simply sequences of phrases, spoken language typically contains rather little subordination, in conversational speech, active declarative forms are normally found.
- b. In written language, an extensive set of metalingual markers exists to mark relationships between clauses (logical connectors). The speaker is less explicit than a writer.
- c. In written language, rather heavily premodified noun phrases are quite common – it is rare in spoken language
- d. Whereas written language sentences are generally structured in subject-predicate form, in spoken language it is quite common to find topic-comment structure
- e. In informal speech, the occurrence of passive construction is relatively infrequent.
- f. In chat about the immediate environment, the speaker may rely on gaze direction to supply a referent.
- g. The speaker may replace or refine expression as she goes along
- h. The speaker typically uses a good deal of rather generalized vocabulary
- i. The speaker frequently repeats the same syntactic form several times.
- j. The speaker may produce a large number of prefabricated filler: *well, erm, I think, you know, if you see what I mean, of course, and so on.*

The features of spoken language are considered as features of utterances, and those features typical of written language are characteristic of sentence. In other words, we can say in a fairly non-technical way, that utterances are spoken and sentences are written

Furthermore, some important fields of research within the spoken and written discourses which have received attention all along are information

structure, cohesion, coherence, and grounding. One starting point for introducing the concepts of discourse analysis into linguistics was the need to explain variations in word order, the use of the passive and active construction and other synonymous syntactic construction. An early interest in the kind of structuring of information brought textual aspects into sentence. Europeans usually speak of 'theme' and 'rhyme'. Another set of terms include, on the one hand, 'given, old or known' and, on the other hand, 'new or unknown information.

Another early interest in discourse analysis concerns the question of how sentences or proposition are explicitly linked together in a text by different kinds of overt ties. Such cohesion devices include repetition of items, coreference, synonymy, comparison, conjunction, and structural iconicity. Besides, coherence and grounding are also the fields of research in discourse analysis.

C. THE DATA OF DISCOURSE ANALYSIS

Discourse analysis supports its own view of data. The study of discourse calls for the analysis of real texts in actual environments and rejects fabricated data. The data of the analysis of discourse is typically based on the linguistic output of someone other than the analyst. The discourse analyst's data are taken from written texts or tape-recordings, rarely of form of a single sentence. This type of linguistic material is sometimes described as *performative data* and may contain features such as hesitations, slips, and non-standard forms which are not accounted for in the grammar of a language. Although these two views of data differ substantially, they are not incompatible, unless in their extreme form. A discourse analyst may regularly work with extended extracts of conversational speech, but she does not

her data in isolation from the descriptions of sentence-grammarians. Texts are critically important because they constitute the evidence for studying the function of linguistic devices. As they, the study of discourse is a study of contexts and situated use. Data can be relied upon in studying important aspects of the stance of discourse participants towards the texts which main interest in discourse studies is not to make a point of

theory: texts, instead, are both the starting and end point of analysis. In consequence, discourse analysis subscribes to the principle of the empiricist tradition that 'language should be studied in actual, attested, authentic instance of use.

It is important to point out that, following the above point of views, the most spontaneous type of data is recorded oral language in natural contexts, mostly in conversational settings. It is possible that the data of discourse analysis is also the data for sociolinguistics, but the departure point of analysis will be far different. Interview, for example, is a distinct speech event following its own rules, and convention that are very different from everyday conversation.

In contrast to other disciplines in the humanities, discourse analysis does not privilege a certain type of text. Contrary to literary studies, it does not work with the concept of a canon, a body of works that share an assumed cultural value. Discourse analysis in its everyday practice deals with texts as heterogeneous as advertisements, biological research articles, police interviews, newspaper editorials, and life stories.

Furthermore, size is not principle in excluding texts from analysis since text may have varies in length. There are, of course, theoretical and practical considerations related to size. First of all, there is the issue of limits of text as a unit, discourse analysis is based on analyzing a text as an entity, a unit from beginning to an end. The increasing spreads of computer technology is also bound to influence conception of text and redefine its limit. From a practical point of view, there are difficulties in the analysis and presentation of results related to very large texts. As a result, most applications have been limited to rather small text – although there is a whole range of very small text that have not been studied: answering-machine talk, e-mail messages, headlines and captions, small ads, etc.

Data for discourse analysis deals with regularities not rules. Rules are data for grammarians. The discourse analyst with her ordinary language data is committed to quite a different view of the rule-governed aspects of language. Indeed, she may wish to discuss, not rules but categories, since because her data constantly exemplifies non categorical phenomena.

The regularities which the discourse analyst describes will normally be expressed in dynamic, not static, terms. Since the data investigated is the results of ordinary language behavior, it is likely to contain evidence of the behavior element

Any analytic approach in linguistics which involves contextual considerations necessarily belongs to the area of *pragmatics*. Doing discourse analysis certainly involves doing syntax and semantics, but it primarily consists of doing pragmatics. In discourse analysis, as in pragmatics, we are concerned with what people using language are doing, and accounting for the linguistic features in the discourse as the means employed in what they are doing.

In summary, the discourse analyst treats her data as the record text of a dynamic process in which language was used as an instrument of communication in a context by a speaker/ writer to express meanings and achieve intentions (discourse). Working from this data, the analyst seeks to describe regularities in the linguistic realizations used by people to communicate those meanings and intentions.

D. THE ROLE OF CONTEXT IN DISCOURSE ANALYSIS

1. Pragmatic and Discourse Content

Discourse analysis has to take into account of the context in which a discourse occurs. Some of the most obvious linguistic elements which require contextual information for their interpretation are the deictic forms such as *here, now, I, you, this, and that*. In order to interpret these elements in a discourse, it is necessary to know who the speaker and hearer are and time and place of production of the discourse.

There are, however, other ways in which the discourse analyst's approaches to linguistic data differ from that of the formal linguists. Because the analyst is investigating the use of language in context, she is more concerned with the relationship between the speaker and the utterance, than with the relationship of one sentence to another, regardless of their use. Here, the discourse analysis uses the terms such as **reference, presupposition, implicature, and inference**. The discourse analyst is describing what

speakers and hearers are doing, and not the relationship which exists between one sentence or proposition and another.

a. *Reference*

The relationship which holds between words and things is the relationship of *reference* (Lyons in Brown and Yule, 1983). This traditional view later develops and the concept of *reference* becomes 'It is the speaker who refers (by using some appropriate expression). She invests the expression with reference by the act of referring. It is exactly this latter view of the nature of reference which the discourse analyst has to appeal to. Reference is not something an expression does; it is something that someone can use an expression to do. Thus, in discourse analysis, reference is treated as an action on the part of the speakers/ hearers.

Brown and Yule (1983) give an example of conversational fragment. Speaker A uses the expressions *my uncle* and *he* to refer to one individual and *my uncle mother's sister* and *she* to refer to another. We will not say, for example, that *he* refers to *my uncle*

A: my uncle's coming home from Canada on Sunday + he's due in +

B: how long has he been away for or has he just been away?

A: Oh no, they lived in Canada eh he was married to my mother's sister + + well she's been dead for a number of years now +

b. *Presupposition*

In addition to conversational implicature as a special kind of pragmatic inference, we turn into another kind of pragmatic inference, namely **presupposition** that does seem at least to be based more closely on the actual linguistic structure of sentences. Stalnaker (in Brown and Yule (1983) stated that presupposition is what is taken by the speaker to be the common ground of the participants in the conversation. The notion of presupposition required in discourse analysis is pragmatic presupposition that is assumptions the speaker makes about what the hearer is likely to accept without challenges.

c. *Implicatures*

The term 'implicature' is used by Grice (in Brown and Yule, 1983) to account for what a speaker can imply, suggest, or mean, as distinct from what

the speakers literally says. There are conversational implicatures which are determined by the conversational meaning of the word used. The discourse analyst has much greater interest to the notion of conversational implicature which is derived from a general principle of conversation plus a number of maxims which speakers will normally obey. The general principle is called the *cooperative principle*. The conversational conventions, or maxim, which support this principle are as follows:

- Maxim of Quantity* : Make your contribution as informative as required (for the current purpose of the exchange. Do not make your contribution more informative than is required)
- Maxim of Quality* : Do not say what you believe to be false. Do not say that for which you lack adequate evidence.
- Maxim of Relation* : Be relevant
- Maxim of Manner* : Be perspicuous, avoid ambiguity, be brief, be orderly, and avoid obscurity of expression.

Implicatures are pragmatic aspects of meaning and have certain identifiable characteristics. They are partly derived from the conventional or literal meaning of an utterance, produced in a specific context, and depend on a recognition by the speaker and the hearer of the cooperative principle and its maxim.

d. Inference

Since the discourse analyst has no direct access to speakers intended meaning in producing an utterance, he often has to rely on a process of inference to arrive at an interpretation for utterances or for the connections between utterances. Such inferences appear to be of different kinds.

As conclusion, we simply present a view which claims that the terms *reference*, *presupposition*, *implicature*, and *inference* must be treated as pragmatic concepts in the analysis of discourse. These terms will be used to indicate relationship between discourse participants and elements in the discourse.

2. The Context of Situation

a. *Features of context*

There are some elements involved in a communication. Formerly, linguists classified them into speaker, listener, and signaling system (language). Currently, these elements developed into several other components.

- 1) *Addressor* (the speaker or the writer who produces the utterance) and *addressee/ audience* (the hearer or reader who is the recipient of the utterance)
- 2) *Topic* (what is being talked)
- 3) *Setting* (both in terms of where the event is situated in place and time, and in terms of the physical relations of the interactants with respect to posture and gesture and facial expression)
- 4) *Channel* (how is contact between the participants in the event being maintained- by speech, writing, singing, smoke signals)
- 5) *Code* (what language, or dialect, or style of language is being used.)
- 6) *Message form* (what form is intended – chat, debate, sermon, fairy-tale, sonnet, love letter, etc.)
- 7) *Event* (the nature of the communicative event within which a genre may be embedded)
- 8) *Key* (which involves evaluation)
- 9) *Purpose* (what did the participants intend should come about as a result of the communicative event).

The more the analyst knows about the features of context, the more likely she is to be able to predict what is likely to be said.

b. *Co-text*

In understanding discourse, a listener or reader is much influenced by physical context of a discourse which includes previous discourse co-ordinate, sentences which include specific reference to what has been mentioned before. Interpretation of sentences being uttered or written, other than the first sentence, constrained by the preceding text. So, the words

which occur in discourse are constrained by what, following Halliday, we call their *co-text*.

Just as the interpretation of individual lexical items is constrained by co-text, so is the interpretation of utterances within a discourse. A reader must interpret a statement or a pronoun, for example, in accordance with its reference already mentioned. Within the co-text, a further context may be constructed which has its own index of coordinates. Indeed within that constructed context, further contexts may be nested. An example given by Brown and Yule (1983) is interesting:

A man and a woman are sitting in a living room. The woman is reading quite happily. The man looks out the window and gets himself ready and goes out.

Brown and Yule (1983) explain that the reader must interpret *the woman is reading quite happily* as the 'woman' already mentioned, hence must construct an interpretation which has her 'sitting quite happily' *in the living room*. The 'window' must be interpreted as 'the window of the living room'.

In our discussion so far, we have been concerned to analytic structure of the co-text and communicative contexts in general to arrive at a set of features which are relevant to the identification of a speech event or discourse. A problem for the discourse analyst must be to decide when a particular feature is relevant to the specification of a particular context and what degree of specification is required. We must assume that the problem for the discourse analyst is identical to the problem of hearer. There must be principles of interpretation available to the hearer which enables him to determine, for instance, a relevant interpretation of an expression. This is what commonly called principle of local interpretation. The principle instructs the hearer not to construct a context any larger than he needs to arrive at an interpretation. Thus if he hears someone say: "Shut the door" he will look towards the nearest door available for being shut.

This analysis is mostly discussed in pragmatics under the heading of reference and deixis. Under the heading of reference we encounter one of the most fundamental and vital aspects of language use. There are various type

and modes of reference in a discourse, such as: definite reference, indefinite reference, and generic reference.

Of course, if the discourse analyst experiences a great deal of data, he will feel more confident in his description and interpretation. He is constrained in his interpretation by past similar experience, by interpreting in the light of principle of analogy. This principle will provide a reasonable secure framework for interpretation for the hearer and for the analyst most of the time. The principle of analogy is one of the fundamental heuristics which hearers and analysts adopt in determining interpretation in context.

In part of the relevance of experience of previous similar texts in the interpretation, it is believed that discourse is interpreted in the light of past experience of similar discourse, by analogy with previous similar texts. Relevant previous experience together with the principle of local interpretation will impel hearers or readers to try to interpret sequential utterances as relating to the same topic.

E. TOPIC AND THE REPRESENTATION OF DISCOURSE CONTENT

In this part, we shall examine some of the uses of the term *topic* in the study of discourse. We are going to explore some recent attempts to construct a theoretical notion of 'topic, a notion which seems to be essential to concepts such as *relevance* and *coherence*. We shall attempt to identify topics framework and topic-shift which may be identified in spoken and written discourse. We shall then go on to consider how the notion of 'topic' relates to representations of discourse content from the point of view of hierarchical organization and representation of discourse content.

1. Discourse Fragments and the Notion 'Topic'

The data used in discourse analysis will reflect the analyst's particular interests. The piece of data chosen for study can, moreover, only be partially analyzed, depending on the level of investigation involved. If the investigation is undertaken by someone primarily interested in intonation, for example, the data selected has to meet certain requirements: spoken discourse, audible, clear enough to allow instrumental analysis, and

accompanied by additional information on the age, sex, and linguistic background of the speaker. When the data have been selected, the investigators will study features such as the pitch, rhythm, and loudness of syllables in the data. The results of the investigation may then be used to make empirical claims about the intonation.

The data studied in discourse analysis is always a fragment of discourse, and the discourse analyst always has to decide where the fragment begins and ends. There are some ways of identifying the boundaries of discourse, which set one chunk of discourse off from the rest. In discourse of joke and anecdote, for example, various forms can be used to mark their beginning. Formulaic expression such as 'Once upon a time ... have you heard the one about ...', 'Did I tell you about ...', are some of them. These markers can help the analyst decide where the beginning of a coherent fragment of discourse occurs. However, speakers often do not provide such explicit guidelines to help the analyst select chunk of discourse for study.

In order to divide up a conversational data into chunks, the analyst is often forced to depend on intuitive notions about where one part of a conversation ends and another begins. There are, of course, points where one speaker stops and another start speaking; but every speaker change does not necessarily terminate a particular coherent fragment of conversation. A chunk of conversational discourse can be treated as a unit of some kind because it is on a particular topic. The notion of topic is clearly an intuitively satisfactory way of describing the unifying principle. The basis for the identification of 'topic' is rarely made explicit. 'Topic' could be described as the most frequently used and unexpected term in discourse analysis.

2. Sentential Topic.

The term 'topic', as found in description of sentence structure, is essentially a term which identifies a particular sentential constituent. The use of the term 'topic' can be associated with descriptions of sentence structure. A distinction can be made between topic and comment in a sentence, in that the speaker announces a topic and then says something about it. Topics are

usually subject of the sentence, and comments are predicates. However, for discourse analysis, 'topic' is what is being talked about' on a conversation.

3. Discourse Topic

In order to distinguish their notion of topic from the grammarians' essential topic, Keenan and Schiefelin (in Brown and Yule (1983) use the term **discourse topic**. For them discourse topic is not a simple NP (noun phrase), but a proposition about which some claim is made or elicited. Brown and Yule strengthen that topic is 'what is being talked/ written about' in any discourses' that can be judged differently at different points and the participants themselves may not have identified identical views of what each is talking about.

The discourse analyst is faced with several problems when she wishes to use the notion 'topic' as what is being talked/ written about. The notion is attractive because it seems to be the central organizing principle for a lot of discourse. If there are numbers of different ways of expressing the topic of a text, how does the analyst determine which is the one correct expression of the topic of the text? There will always be a set of possible expression of the topic, no one best answer. It will be one possible paraphrase of a sequence of utterances. What is required is a characterization of 'topic'. Brown and Yule (1983) suggest that such a characterization can be developed in terms of a **topic framework**. As a way of characterizing the type of feature which will be required in a topic framework, a fragment of conversational discourse can be examined to try to determine what is being talked about. The topic framework consists of elements which are relevant to the interpretation of what is said/ written derivable from the physical context and from the discourse domain of any discourse fragments.

The expression of 'topic of a discourse' is referring to a discourse subject on which the attention of the participants of the discourse is concentrated. Such concentration of attention is usually, though not always, brought about by an immediately preceding textual mentioning of the discourse subject.

Furthermore, there is also a **presupposition pool** in a discourse which contains information 'constituted from general knowledge, from the situative context of the discourse, and from the completed part of the discourse itself'

(Brown and Yule, 1983). In this approach, each participant as a presupposition pool and his pool is added to as the discourse proceeds. Within the pool, there is a set of *discourse subjects* and each discourse is about its discourse subjects. The number of discourse subjects in a presupposition pool shared by participants in a discourse, particularly participants who know each other well, is potentially very large. It would be extremely difficult for the analyst to predetermine the complete set of discourse subject which participant share prior to a particular discourse fragment. The most he could hope to provide would be a partial set. The most important principle involved in this selection of discourse subjects must have to do with their relevance to the particular discourse fragment under consideration.

4. Conversation Analysis

Coulthard (1985) stresses that until very recently most of the advances in conversational analysis had been made by three sociologists, Sacks, Schegloff, and Jefferson, who originally stressed that they worked with conversational materials 'not because of a special interest in language' but because they saw conversational analysis as a first step towards achieving a naturalistic observational discipline' to deal with details of social interaction in a rigorous empirical and formal way'. However, they and those who follow in this tradition have seen their main concern as the analysis of conversational structure and organization, and their findings are useful to and usable by anyone interested in the structure of conversation. But later, those who have looked at conversation examine not only its structure and form, but factors affecting the choice of code and style.

Research in conversational analysis contribute alongside work related fields within pragmatics, particularly discourse analysis and sociolinguistics, to the development of a naturalistic, observation-based empirical science of actual verbal behavior. Recordings of naturally-occurring conversations are analyzed in order to discover how participants understand and respond to one another in their turns at talk, with a principal focus being on how sequences of activities are generated. The main objective of conversational analysis is to uncover the sociolinguistic competences underlying the production and

interpretation of talk in organized sequences of interaction. Conversation analysis thereby represents a major bridge between linguistic analyses in the field of discourse analysis.

a. Turn-Taking: Overlap and Pause

Most of the time, conversation consists of two or more participants taking turns, and only one participants speaking at any time. Smooth transitions from one speaker to the next seem to be valued. Transitions with a long silence between turns or with substantial overlap (both speakers trying to speak at the same time) are felt to be awkward. When two people attempt to have a conversation and discover that there is no 'flow', or smooth rhythm to their transitions, it is much more being communicated than is said. There is a sense of distance, an absence of familiarity or ease, as in the interaction shown below (between a student and his friend's father during their first meeting:

Father	: What's your major, Kun
Kun	: English—well I haven't really decided it yet (3 second)
Father	: So—You want to be a teacher?
Kun	: No—not really—well not if I can help it (2 second)
Father	: Oh, mm—where do you—go ahead.
Kun	: --- I mean it s a – oh sorry – I em—

As shown in the above conversation, short pauses (marked with dash) are simply hesitation, but longer pauses become silences. It is an attributable silence. The type of overlap is simply part of a difficult first conversation with an unfamiliar person. Many of the features which characterize the turn-taking system of conversation are inverted with meaning by their users. *Conversation style* may differ from person or context to other person and other context. Some individuals expect that participation in a conversation will be very active, that speaking rate will be very relatively fast, with almost no pausing between turns.

Adjacency pair is also a common term in conversational analysis. Most speakers seem to find a way to cope with the everyday business in social interaction. There are many automatic patters in the structure of conversation. These automatic sequences are called *adjacency pairs*.

Coulthard (1985) states that one of the basic facts of conversation is that the roles of speaker and listener change, and this occurs with remarkably little overlapping speech and remarkably few silences. Sacks (in Coulthard, 1985) suggests that there is an underlying rule in American English conversation – 'at least and not more than one party talks at a time'. This is not an empirical fact, because there are obviously many instances of short pauses and short overlaps, but rather a normative or observably oriented to feature of conversation – in other words, it is a rule used by conversationalists themselves! If more than one party is talking and participants set out to remedy the situation and return to the state of one and only one speaker. If the problem is more than one speaker one of the participants usually yields the floor quickly. If the problem is silence other speakers begin speaking, or indicate their intention to speak by noises like 'hmm', or 'oo'. Turn to speak typically occur successively without overlaps or gaps between them. Overlapping is dealt with by one speaker ending his turn quickly, gaps between turns by another speaker beginning his turn.

The second feature of conversation is, according to Coulthard (1985), that speaker change recurs, and this presents problems for participants – how can they achieve change of speaker while maintaining a situation in which at least, but not more than, one speaker speaks at a time? The current speaker can exercise three degrees of control over the next turn. Firstly, he can select which participants will speak next, either by naming him or by alluding to him with a descriptive phrase. If the current speaker selects the next speaker, he usually also selects the type of next utterance by producing the first part of an *adjacency pair*, for example a question or a greeting which constrain the selected speaker to produce answer or return greeting. Secondly, the option for the current speaker is simply to constrain the next utterance, but not select the next speaker. The third option is to select neither and leave it to one of the other participants to continue the conversation by selecting themselves. Sack (in Coulthard, 1985) emphasizes that these options are in an ordered relationship.

b. *Conversational structure*

A Conversation is a string of at least two turns. Some turns are more closely related than others. A class of sequences of turns called *adjacency pair* which has the following features: they are two utterances long; the utterances are produced successively by different speakers; the utterances are ordered; the utterances are related; the first pair part often selects next speaker and always select next action.

Conversation analysis focuses its attention on recording of actual spates of talk-in-interaction. These are transcribed using a system which is intended to capture in fine detail the characteristics of the *sequencing* of turns, including gaps, pauses and overlaps, and elements of *speech delivery* such as audible breath and laughter, stress, intonation, and pitch. The extract of the conversation being recorded can be, for example, a phone call, discussion, dialogue between friends, and interview.

c. *Preference organization*

Several works of experts has developed the notion of adjacency pair into a very powerful concept. Some first pair parts allowed for alternative seconds; however, we can demonstrate that some options are *preferred* and some *dispreferred* – a distinction which may have psychological basis and explanation but also has linguistic realizations: preferred seconds are *unmarked* – they occur as structurally simpler turn; in contrast dispreferred seconds are marked by various kinds of structural complexity (Levinson, 1983). Invitations naturally prefer acceptance and we can see the differences in realization between the preferred acceptance and the dispreferred rejection in the following examples:

A : Why don't you come up and see me this afternoon

B : I would like to

C : Uh, if you don't care to come and visit a little while this morning
I'll give you a cup of coffee

D : hehh Well that's awfully sweet of you.
(DELAY) (MARKER) (APRECIATION)

I Don't think I can make it this morning hh uhm I am running
(REFUSAL OR DECLINATION)

an ad. in the paper and uh I have to stay near the phone (ACCOUNT)

Levinson (1983) observes that dispreferred seconds are distinguished by incorporating a substantial number of the following:

- 1) *delay*: by pause before delivery, by the use of preface, or by displacement over a number of turns via the use of *repair initiation* or insertion sequences
- 2) *prefaces*: the use of markers or announcers of dispreferred like *Uh* and *Well*, the production of token agreements before disagreements, the use of appreciation if relevant (for offer, invitation, suggestions, advice), the use of apologies if relevant (for request, invitation, etc.), the use of qualifiers (e.g., *I don't know for sure, but...*), hesitation in various forms, including self-editing
- 3) *accounts*: carefully formulated explanations for why the dispreferred act is being done.
- 4) *Declination component*: a form suited to the nature of the first part of the pair, but characteristically indirect:

We have stressed two principal areas of analytic concerns in conversation analysis: the relationship between turns at talk in specific sequences and the design features of individual turns within sequences. Central to the originality of conversation analysis is the fact that it is not primarily interested in one or other of these elements but specifically in the interrelationships between them.

5. Recent Trends in Discourse Analysis

In addition to a continuing interest in the field of information structure, cohesion, coherence, and discourse type and genre, certain trends have particularly stood out in the last few years. Discourse analysis covers a great numbers of sub-areas, and the overlap with other field is enormous. It is no wonder that research in discourse analysis touches almost every field in linguistics.

One issue that has received extensive attention in discourse analysis studies is its more focus on spoken discourse than that of written discourse. Discourse annalists have just as often studied spoken interaction so much that for some linguists 'discourse' refers to spoken language..

Isomorphism and the discursual impact of the *iconicity* of structures also need to be given attention in any analysis of discourse. On all level of language, we can find tendencies toward iconic relationships. The obvious case in a prototypical narrative is that events are displayed in a sequential order—mirroring the order in which these events might have been experienced or interpreted as having taken place in real time. Fairy tales, for example, are very often presented in this manner.

Although critical discourse analysis has developed into a method in its own right, the attribute 'critical' is indicative of the similarity in its goals with those of critical linguistics. Both attempt to describe the persuasive and manipulative function of language and the linguistic manifestations of these, e.g. in news texts and advertisements. The sphere of interest of critical discourse analysis is close to that of sociolinguistics and social psychology, where the impact of factors like age, race, sex, class, and the attitude of speakers/writers is in focus. However, 'critical' approaches are not just concerned with the impact of social factors, but also of language on society.

Recently, *computational* applications have also had a major impact on discourse analysis, notably through work associated with *corpus studies*. Some corpora have also been planned in view of the study of discourse phenomena, both for spoken discourse, like the *London-lund corpus* for British English and the *Santa Barbara Corpus* for American English, and for the specific fields of research, like the *Helsinki Corpus* of diachronic texts, the *CHILDES corpus* of acquisitional data, and *ICLE*, the international corpus of learner English.

Contrastive studies have a long history in linguistics-- both for the purpose of setting up language universals and typologies and for language teaching purposes. In pragmatics, we speak about cross-cultural studies. One of the first influential studies in this area, with a direct influence on research in discourse analysis is Kaplan (1966), attempting to show how people from different cultures construct paragraphs differently. The most persistent challenge for cross-cultural discourse analysis is no doubt to find a workable met language. Today, the field of cross-cultural studies is variably referred to as contrastive text linguistics, contrastive pragmatics, or contrastive rhetoric, depending on the particular perspective of the analysts.

A recent trend in discourse analysis and pragmatics addresses the ontology of culture as such, arguing that *culture does not exist without discourse*. Discourse gives structure and contents to what we understand by culture. In this view, discourse analysis becomes an umbrella concept not only for text studies, but for language and interaction studies in general. The impacts of addressing questions of ontology have far-reaching consequences. For example, everybody will agree that 'context' is one of the most crucial concepts in pragmatics. However, in contextualization itself is to be seen in term of discourse, the status of any presumed common denominator for understanding will be questionable. Further research in this field will no doubt give us a better understanding of notions like variability, indeterminacy and ambivalence.



EXERCISES

Exercise 1

- 1) What are the objects of discourse analysis?
- 2) What are the differences between spoken and written discourses?
- 3) There are, at least, four interesting fields of research in spoken and written discourses. What are they? Explain your answer!
- 4) After reading this part comprehensively, what is your understanding of data in the discourse analysis?
- 5) In what aspects pragmatics and discourse analysis are similar?

Exercise 2

- 1) Discourse analysis has to take into account of the context in which a discourse occurs. What are the basic elements of discourse context to help better interpretation of the discourses?
- 2) Discourse analysts are interested in investigating the use of language in context. The discourse analysis uses several terms such as reference, presupposition, implicature, and inference. What do you know about these terms?

- 3) Presupposition and implicature are both determinant factors in discourse analysis. Give an example of statement which needs similar presupposition among the participants of the discourse!
- 4) Please explain in your own words the four maxims in conversational analysis?
- 5) There are some elements involved in a communication. What are the components currently believed by analysts?

Exercise 3

- 1) The data of discourse analysis is always related to the fragments of discourses. The analyst should be able to decide where the fragment begins and ends. An important fragment is the topic in a sentence and in the discourse. What is the relationship between sentential topic and discourse topic?
- 2) There are several aspects being the concerns of the analysts in conversation analysis. List, at least three aspects of interest in conversation analysis?
- 3) What do you understand by adjacency pairs in a conversation? Give your own example.
- 4) Critical discourse analysis is one of the current trends in discourse analysis, what do you understand of the term 'critical' in the critical discourse analysis?

KEY TO EXERCISES

Exercise 1

- 1) The main objects of discourse analysis are the analysis of natural language uses: linguistic forms as well as the language functions.
- 2) The differences between spoken and written text:
 - a. The syntax of spoken language is typically much less structured than that of written language: spoken language contains many incomplete sentences, often simply sequences of phrases, spoken language

- typically contains rather little subordination, in conversational speech, active declarative forms are normally found.
- b. In written language an extensive set of metalingual markers exists to mark relationships between clauses (logical connectors). The speaker is less explicit than a writer.
 - c. In written language, rather heavily premodified noun phrases are quite common – it is rare in spoken language
 - d. Whereas written language sentences are generally structured in subject-predicate form, in spoken language it is quite common to find topic-comment structure.
 - e. In informal speech, the occurrence of passive construction is relatively infrequent.
 - f. In chat about the immediate environment, the speaker may rely on gaze direction to supply a referent.
 - g. The speaker may replace or refine expression as she goes along.
 - h. The speaker typically uses a good deal of rather generalized vocabulary
 - i. The speaker frequently repeats the same syntactic form several times.
 - j. The speaker may produce a large number of prefabricated filler: well, erm, I think, you know, if you see what I mean, of course, and so on.
- 3) There are, at least, four interesting fields of research in spoken and written discourses. They are: information structure, cohesion, coherence, and grounding. Variations in word order, the use of the passive and active construction and other synonymous syntactic construction are some textual aspects. 'Theme' and 'rhyme' are also interesting objects. Another set of terms: 'given, old or known' and, 'new' information are also the object of the analysis. In other words, discourse analysis concerns with the question of how sentences or proposition are explicitly linked together in a text by different kinds of overt ties. Such cohesion devices include repetition of items, coreference, synonymy, comparison, conjunction, and structural iconicity. Besides, coherence and grounding are also the fields of research in discourse analysis.

- 4) The data of discourse analysis are performative data, the real texts in actual environments. They are typically based on the linguistic outputs of someone other than the analyst. The discourse analyst's data are taken from written texts or tape-recordings, rarely of form of a single sentence. The data may contain features such as hesitations, slips, and non-standard forms which are not accounted for in the grammar of a language.
- 5) Pragmatics and discourse analysis are similar for which their objects of analyses are language uses in its context. In discourse analysis, as in pragmatics, we are concerned with what people using language are doing, and accounting for the linguistic features in the discourse as the means employed in what they are doing.

Exercise 2

- 1) In order to interpret the elements in a discourse, it is necessary to know who the speaker and hearer are and time and place of production of the discourse as well.
- 2) Reference is the relationship which holds between words and things. It is the speaker who refers by using some appropriate expression. She invests the expression with reference by the act of referring.
 Presupposition is what is taken by the speaker to be the common ground of the participants in the conversation. It is assumptions the speaker makes about what the hearer is likely to accept without challenges.
 Implicature is what a speaker can imply, suggest, or mean, as distinct from what the speakers literally says.
 Inference is any conclusion drawn from a set of proposition from something someone has said in a discourse.
- 3) Presupposition and implicature are very significant in understanding discourse. Both influence understanding of discourse. The statement 'I apologize for calling you a monkey', for example, should have been presupposed by the speaker and listener that by calling somebody with the word 'monkey' is bad.
- 4) By Maxim of quantity, speakers are not expected to give either less or more information than is needed. Maxim of quality requires that speakers

are not expected to say anything they believe to be false. Do not say what you believe to be false. By a maxim of relation, they are not expected to say things that are irrelevant. Be relevant. At last, by maxim of manner, they are expected to be brief and orderly, and avoid ambiguity.

- 5) Currently, the analysts believe that the components are addressor (the speaker or the writer who produces the utterance), addressee/ audience (the hearer or reader who is the recipient of the utterance, topic (what is being talked), setting (both in terms of where the event is situated in place and time, and in terms of the physical relations of the interactants with respect to posture and gesture and facial expression), channel (how is contact between the participants in the event being maintained- by speech, writing, singing, smoke signals), code (what language, or dialect, or style of language is being used), message form (what form is intended - chat, debate, sermon, fairy-tale, sonnet, love letter, etc.), event (the nature of the communicative event within which a genre may be embedded), key (which involves evaluation), and purpose (what did the participants intend should come about as a result of the communicative event).

Exercise 3

- 1) Topic is the central issue both in a sentence and in a discourse. Topic of a sentence structure is the sentence constituent in its distinction between topic and comment. Topic in a sentence is commonly the subject of the sentence, while comment is the predicate. For discourse analysis, 'topic' is what is being talked about on a conversation. The expression of 'topic of a discourse' is referring to a discourse subject on which the attention of the participants of the discourse is concentrated.
- 2) Three aspects of interest in conversation analysis are: the structure of conversation, organization of conversation, and factors affecting the choice of code and style in a conversation.
- 3) Adjacency pair is logical and automatic patterns and sequences in the structure of conversation. Sequence 'of question-answer', 'greeting-greeting', and action-reaction in conversation are considered as adjacency

pair. Speaker A questions: 'What date is today?' The response given by speaker B will be an answer 'March 2nd, 2006. This is the adjacency pair in the conversation.

- 4) The word 'critical' in the critical discourse analysis means that this field does not just study of discourse in its previous nature. The interest of the critical discourse analysis is not only on the patterns and structure of discourse, but involving the study of the function of the discourse which is close to the sphere of sociolinguistics. In this analysis the impact of factors like age, sex, social status, and the attitude of speakers is in focus.



SUMMARY

Discourse analysis is not a simple field of study. It covers the use of language, spoken and written, in the real communication. It is impossible to discuss 'everything' in this short introduction and overview of discourse analysis. This module has presented some headings on discourse analysis: historical overview, the interest of discourse analysis: the linguistic function and form, the data of discourse analysis, the role of context in discourse analysis, topic and the representation of discourse content, and conversation analysis. These headings are considered to be the most important topics to discuss in this module.

Recently, there seems to have arisen a competition between discourse analysts and pragmatics about which one is more general. Schiffin (1994), for instance, includes her view of what pragmatics is as one subfield of her *Approaches to Discourse*. Although we have indicated the possibility of seeing discourse analysis as a very general term, on the same level of abstraction as, or even more general than 'pragmatics', we have here retained a view of pragmatics as the most general term.



FORMATIVE TEST 2

- 1) What language aspects are considered to be the most interesting object of discourse analysis?

- 2) What are the differences between spoken and written texts in their process of analysis?
 - 3) What are considered to be the data in discourse analysis?
 - 4) What do you know about performative data?
 - 5) What are the four terms used in the analysis of discourse in its relations to the roles of context to indicate the relationship between discourse participants and elements in the discourse?
 - 6) What do you mean by maxims?
 - 7) What are the aspects of conversation under the interest of discourse analysis?
 - 8) Turn-taking in a conversation is the main object of conversational analysis. List some possible aspects that can be analyzed from the turn-taking?
- Check your answers with the key which is provided at the end of this module, and score your right answers. Then use the formula below to know your achievement level of the lesson in this module.

Formula:

Scores of the right answers

$$\text{Level of achievement} = \frac{\text{Total score}}{\text{Total score}} \times 100\%$$

Meanings of level of achievement:

- 90% - 100% = very good
- 80% - 89% = good
- 70% - 79% = average
- < 70% = bad

If your level of achievement reaches 80% or more, you can on to the next unit. Good! But if your level of mastery is less than 80%, you have to study again this unit, especially parts which you haven't mastered.

UNIT 3

Bilingualism

A. THE DESCRIPTION OF BILINGUALISM

The most salient feature of bilingualism is that it is a multi-faceted phenomenon. Whether one is considering it at a societal or an individual level, one has to accept that there can be no clear cut-off points. As bilingualism defies delimitation, it is open to a variety of descriptions, interpretations and definitions. We can consider some examples. In Britain people do not usually think of Wales as a bilingual part of the state, yet one does happily use the label 'bilingual' when referring to certain types of schools found in the principality. Many people would readily call 'bilingual' the two-year-old child of a French-English couple, and the fact that the toddler's vocabulary may consist of some 200 French and English items in all does not seem to be of importance. Similarly, size of vocabulary may not carry much weight in the case of a graduate in French, who may have spent a considerable amount of time in France and studying the language, and whose total lexicon will be several hundred times larger than the child's. This person is not, however, often thought of as a 'bilingual', and would not normally claim the label for himself or herself. 'Multi-cultural' and 'multi-ethnic' are adjectives freely used by many people in the English-speaking world, and the children who start school in the UK with little knowledge of English may be referred to as 'minority children' or 'ESL (English as a second language) pupils', but not as 'bilinguals'. Why should all this be so?

While it is the case that even speakers of a single language control various styles and levels of that language, it is very common that many people develop some knowledge and ability in a second language and so become bilingual. The simplest definition of a bilingual is a person who has some functional ability in a second language. This may vary from a limited ability in one or more domains, to very strong command of both languages, which is sometimes called balanced bilingualism.

The notion of bilingualism is firmly established in the mind of the lay person. It may be tinged with bias, and it frequently carries either positive or negative connotations. In the specialist's mind the concept is also well established. However, the latter is expected to apply objective criteria and to aim for precise delineations. Yet some of the definitions of bilingualism that have been put forward are surprisingly vague, and even contradictory.

Uriel Weinreich, one of the founding fathers of bilingual studies and a bilingual himself, offers one of the shortest definitions in his well-known book *Languages in Contact*: 'The practice of alternately using two languages will be called bilingualism, and the person involved, bilingual.' (Weinreich 1968: 1).

An oft-quoted definition is found in one of the early books on modern linguistics, Leonard Bloomfield's *Language*, first published in the USA in 1933. When mentioning that foreign language learning among immigrants may result in language shift, Bloomfield pays special attention to users who become so proficient in the new language that they are indistinguishable from the native speakers around them. He says:

In the cases where this perfect foreign-language learning is not accompanied by loss of the native language, it results in 'bilingualism', native-like... control of two languages. After early childhood few people have enough muscular and nervous freedom or enough opportunity and leisure to reach perfection in a foreign language; yet bilingualism of this kind is commoner than one might suppose, both in cases like those of our immigrants and as a result of travel, foreign study, or similar association. Of course, one cannot define a degree of perfection at which a good foreign speaker becomes a bilingual: the distinction is relative.

(Bloomfield 1933: 55-6)

No doubt Bloomfield had a clear notion of bilingualism, but his definition and subsequent qualifying remarks are not without some degree of contradiction: if one cannot define 'a degree of perfection' in bilingualism, how can we talk of 'perfect foreign-language learning'?

In his article 'The description of bilingualism', William Mackey offers a definition that incorporates Weinreich's alternate use of two languages and is preceded by Bloomfield's reservation with respect to the degree of proficiency:

It seems obvious that if we are to study the phenomenon of bilingualism we are forced to consider it as something entirely relative. We must moreover include the use not only of two languages, but of any number of languages. We shall therefore consider bilingualism as the alternate use of two or more languages by the same individual.

(Mackey, 1970: 555)

Spolsky (1998) states that the assumption that there must be a single definition leads to confusion, such as when one person is talking about the highly skilled multiple-domain balanced bilingualism of an expert translator and interpreter, and the other the uneven skills of a recent immigrant. Additional confusion is caused by the common use of the term bilingual to refer to a socially disfavored minority group: in Texas, for example, it is restricted to Mexican-Americans.

Rather than worrying about definition, it is more useful to consider what is needed to describe the nature of an individual's bilingualism. Clearly, the first element is to identify each of the languages. We will often need to clarify which variety is involved: to distinguish between Cantonese and Putonghua, or between Egyptian and Moroccan Arabic, or between High German and Swiss German.

A second important feature is the way each language was acquired. It is useful to distinguish between mother (or native) tongue learning, second (or informal) language learning, and foreign (or additional) language learning. Each of these suggests different possible kinds of proficiency. It is useful also to note the age of learning and the time spent using the language. We can describe two bilinguals in this way: 'X is a native speaker of Cantonese and learn English in school.' 'Y grew up speaking Moroccan Arabic, but was educated in French and has lived in Paris since the age of 15.'

Another set of distinctions is that of skill - reading, writing, speaking, and listening. It is not uncommon for people to speak one language but read and write with another. Many Navajos use their own language in conversation, but read in English. Until the literacy campaigns of recent times, Ethiopians who spoke Amharic were more likely to read G'iz than Amharic. The receptive skills of reading and listening are often stronger in a learned language than the productive skills of speaking and writing. Many people obtain reading knowledge of a language at school, but cannot speak it.

In describing the bilingualism of an individual, another set of differences is often evident in the performance of certain internal functions. Bilinguals usually prefer one language for functions such as counting, doing arithmetic, dreaming (some people dream in language, others don't), cursing or praying silently.

Another useful way to describe bilinguals is by describing the external functions they can perform in each language. These might be expressed as 'can-do' statements: X can read a daily newspaper, can carry on an informal conversation, and can give a lecture. One special ability (not true in the case of all bilinguals) is the skill of translation from one language to the other. Another useful approach to describe a bilingual's language use is by domains rather than by functions.

A domain (based on Fishman, 1972), as we have discussed in the previous section, is an empirically determined cluster consisting of a location, a set of role-relationship, and a set of topics. For each of the domains, a bilingual is likely to have a preferred language. Some examples of domains are shown in the following table:

Table 6.1
Domains of Language Use

Location	Role-relationship	Topics
Home	Mother, father, son, daughter, etc.	Domestic, personal, etc.
Neighborhood	Neighbor, shopkeeper, street-cleaner, etc.	Weather, shopping, social greetings
School	Teacher, student, principal, etc.	Social greeting, educational
Church	Priest, parishioner, etc.	Sermons, prayers, confession, social, etc.

Spolsky (1998, 47) says that bilinguals have a repertoire of domain-related rules of language choice. The home-school or the home-work switch is probably the most common, with one language learned at home from parents and the second learned at school and used at work. When there is a language shift in progress, certain traditional domains may remain favored for the use of one language. For the Maori people, before the recent language revival activities began, the marae where traditional ceremonies and meetings

took place remained the strongest bastion of Maori language use. The bilingualism mentioned earlier in Swiss adults is domain-related, with High German used in the work domain and Swiss German in the home and neighborhood.

Because domains are composite concepts, there is the possibility of conflict and therefore marked choice between languages. Thus, two people who normally speak the standard language at work might use their home language there to signal either a change of role-relation (family member or friend rather than coworker) or topic (a home or neighborhood topic) while still being in the same location. This issue has been discussed under the term of code-switching.

B. BILINGUAL COMPETENCE

The issue that has been discussed so far is related to language use or performance of a bilingual. The description makes clear why it is that it is rare to find equal ability in both languages. Assume a bilingual immigrant who grew up speaking language A, but was educated formally in Language B. Such a person might well have all the conversational skills in Language A, but be quite weak at dealing with academic matters in it. Misunderstanding of this possible difference in competence often leads to educational problems: teachers might assume, for example, that a child who has reasonable conversational ability also has the full basis for academic work in the language.

Beardsmore (1982) classifies bilingual competence into two categories, receptive bilingualism and productive bilingualism. Receptive bilingualism refers to the description that fits the person who understands a second language, in either its spoken or written form, or both, but does not necessarily speak or write it. An alternative term for this case is passive bilingualism. A receptive ability, particularly of the comprehension type, however, often accompanies a more limited productive ability and in circumstances where language loyalty is not involved or where great precision is less important, especially for the people in a cross-language communication.

The counterpart to receptive bilingualism is the situation where speakers not only understand but also speak and possibly write in two or more languages, i.e. productive bilingualism. Most foreign language teaching programs are designed potentially to lead to productive bilingualism though whether they do so or not depends to a large extent on the point at which one considers a person can handle the second language with enough facility to be classified as a bilingual. Moreover, Productive bilingualism does not necessarily imply that the individual is capable of both writing and speaking two languages to the same level of proficiency. Certain productive bilinguals may be able to write relatively easy in two languages but not speak with equal fluency in two. The following table shows patterns of individual bilingualism:

Table 6.2.
Description of Productive and Receptive Bilingualism

Language Skills	Productive Bilingualism				
Listening	L1 L2	L1 L2	L1 L2	L1 L2	L1
Comprehension	L1 L2	L1 L2	L1 L2		L2
Reading	L1 L2	L1 L2	L1 L2	L1 L2	L1
Comprehension	L1 L2	L1			L2
Oral Production					
Written Production					

Language Skills	Receptive Bilingualism				
Listening	L1 L2	L1 L2	L1	L1 L2	L1
Comprehension	L1 L2	L1	L1 L2		L2
Reading	L1	L1	L1	L1	L1
Comprehension	L1	L1	L1		
Oral Production					
Written Production					

(Baerdsmore, 1982, 17)

The nature of bilingual competence is a topic of considerable interest and importance for the psycholinguist as well as sociolinguist. How are two languages organized in the bilingual brain? For a number of years, there was an attempt to distinguish between compound bilinguals whose two languages were assumed to be closely connected, because one language had been

learned after (and so through) the other, and co-ordinate bilinguals who had learned each language in separate contexts, and so kept them distinct (Weinrich in Spolsky, 1998, 48). Over-simplifying, co-ordinate bilinguals were assumed to have two meaning system each with its own set of words, while compound had a single system with two sets of words.

Co-ordinate

English concept 'table'	Indonesian concept 'table'
English word 'table'	Indonesian word 'meja'

Compound

Mixed concept 'table'	
English word 'table'	Indonesian word 'meja'

Spolsky (1998) says that the problem that a compound bilingual would face is that the two words in fact refer to a different set of concept. Underlying the question of whether for the bilingual the knowledge of the two languages develops independently or together. The notion of domain difference suggests the different kinds of experiences most bilinguals have in each of their languages, implying a common core of knowledge with subsequent differentiation. Recent neurolinguistic research suggests that paired words are stored in the same place in the brains of those who are bilingual from infancy, but in non-overlapping places in those who develop bilingualism later.

What is the relationship between diglossia and bilingualism? Their relationship becomes apparent when we think of the relationship between dialects of one language and bilingualism in terms of the cline. Fishman in Beardsmore (1982, 33) has stated, "Bilingualism is essentially a characteristic of individual linguistic behavior whereas diglossia is a characterization of linguistic organization at the socio-cultural level." He also has drawn up a theoretical framework for analyzing situations where either or both may co-occur in a particular socio-cultural context. thus one can have situations of bilingualism with and without diglossia and diglossia with and without bilingualism as illustrated in his schematic representation:

Table 6.3.
The Relationship Between Bilingualism and Diglossia

	Diglossia	
	+	-
Bilingualism	+	Both diglossia and bilingualism
	-	Diglossia without bilingualism
		Bilingualism without diglossia
		No diglossia No bilingualism

To illustrate the possibility represented in the above table we can look at the case of a complex urban setting such as Brussels where two standard languages are present, French and Dutch; together with dialects variants of each, some indigenous to the city and some brought in by Walloon and Flemish immigrants (Beardmore, 1982, 34). The linguistic forces in the city can be broken down as in the following table:

Table 6.4.
Linguistic Forces in Brussels

	Category of Speaker	Diglossia	Bilingualism
1.	Indigenous upper-level French monoglot	-	+
2.	Indigenous lower-level French monoglot	(+)	-
3.	Indigenous bilingual	+	+
4.	Indigenous Dutch monoglot	-	-
5.	Flemish immigrant	+	(+)
6.	Walloon immigrant	(+)	-



EXERCISES

Exercise 1

- 1) Explain the concept of bilingualism according to Blommfield, Mackey, and Weinrich!
- 2) What is the different between compound bilingualism and coordinate bilingualism? Give examples!



SUMMARY

Bilingualism might simply be defined as a person having some functional ability in a second language, varying from a limited ability on one code to very strong command of both languages. There are some ways to describe bilingualism: identifying each language, finding the way it was acquired, observing skills acquisition, and discussing domains of language use.

Bilingual competence can be classified into two categories, receptive bilingualism and productive bilingualism. Receptive bilingualism refers to the situation where a person understands a second language but does not necessarily speak or write it. Productive bilingualism refers to the condition where a person can both understand and produce a second language.



FORMATIVE TEST 3

- 1) What is multilingualism?
- 2) What is the weakness of Bloomfield's definition of bilingualism?
- 3) Mention the features stated by Spolsky to discuss bilingualism!
- 4) Complete the following table about domains of language use in bilingual situation!

Location	Role-relationship	Topics
	Mother, father, son, daughter, etc.	Domestic, personal, etc.
Neighborhood	Neighbor, shopkeeper, street-cleaner,	
School		Social greeting, educational
Church	Priest, parishioner, etc.	

Label the following description as productive bilingualism or receptive bilingualism!

Language Skills	Productive	...a....	...b....	...c....	.....d...
Listening Comprehension	L1 L2	L1 L2	L1	L1 L2	L1
Reading Comprehension	L1 L2	L1	L1 L2		
Oral Production	L1 L2	L1	L1	L1 L2	L2
Written Production	L1	L1	L1		L1

Check your answers with the Key which is provided at the end of this module, and score your right answers. Then use the formula below to know your achievement level of the lesson in this module.

Formula:

$$\text{Level of achievement} = \frac{\text{Scores of the right answers}}{\text{Total score}} \times 100\%$$

Meanings of level of achievement:

90% - 100% = very good

80% - 89% = good

70% - 79% = average

< 70% = bad

If your level of mastery is less than 80%, you have to study again this unit, especially parts which you haven't mastered. But if your level of achievement reaches 80% or more, good luck for the final test!

Key to Formative Test

Formative Test 1

- 1) Language and society are inseparable. Society needs to communicate their feeling and opinion through certain language they understand each other. In other words, language is a means for the society to communicate. The existence of the society is characterized by the language they use since the language is the identity of the community.
- 2) Because language uses are very dependent on their context. Speakers of a particular language have an inner capability to differentiate their language in certain context. Speaking about the same thing for the same purposes requires different language variations if the listeners' social status, age, and position are different.
- 3) Pidgin and creole languages are different in their nature. Pidgin is a language being used by two people from different languages who do not understand one another, but they need to communicate. They will use their own language to communicate as a contact language or as a trade language. In this situation, one language might be a dominant language. They use one dominant (source) language which is combined with the minor language. When pidgin becomes the native language of a new generation of the society, the language is called *creole*. This situation happens, for example, in a transmigration program. People from Java who speak only Javanese are transmigrated to Sitiung in West Sumatera whose people mostly only speak Minangkabau. The transmigrants and the native should communicate one another. They will use pidgin.
- 4) Dialect can be social or regional dialect. Regional variation is varieties of language use of a community which is caused by the region where the group of the community live. Javanese of the people from East Java is different from that of Central Java. Social variation is, however, a variation of language use caused by social differences of the speakers. Language used to higher social level of a community is different from the language used to lower level status of a community.
- 5) In a bilingual or multilingual community, code-switching and code-

mixing are common. Code-switching happens when a speaker suddenly changes his language into another language in a particular communication context, mostly in oral discourse. *Code-mixing* occurs when the people using the language for communication use a mixture of both languages together to the extent that they change from one language to the other in the course of a single utterance. Both, code-switching and mixing, are situational and influenced by some factors such as to show higher social status of the speaker, to show intimacy of the social relationship, and to keep the meaning of a particular term clear.

Formative Test 2

- 1) The analysis of discourse is the analysis of language in use. The most important object of the discourse analysts is the function of language as a means of communication. The discourse analyst is committed to an investigating of what that language is used for. The functions can be *transactional* and *interactional*, representative and expressive, referential and emotive, ideational and interpersonal, and descriptive and social expressive.
- 2) The differences between spoken and written text:
 - a. The syntax of spoken language is typically much less structured than that of written language: Spoken language contains many incomplete sentences, often simply sequences of phrases, spoken language typically contains rather little subordination, in conversational speech, active declarative forms are normally found.
 - b. In written language an extensive set of metalingual markers exists to mark relationships between clauses (logical connectors). The speaker is less explicit than a writer.
 - c. In written language, rather heavily premodified noun phrases are quite common – it is rare in spoken language
 - d. Whereas written language sentences are generally structured in subject-predicate form, in spoken language it is quite common to find topic-comment structure
 - e. In informal speech, the occurrence of passive construction is relatively infrequent.

- f. In chat about the immediate environment, the speaker may relay on gaze direction to supply a referent.
 - g. The speaker may replace or refine expression as she goes along
 - h. The speaker typically uses a good deal of rather generalized vocabulary
 - i. The speaker frequently repeats the same syntactic form several times.
 - j. The speaker may produce a large number of prefabricated filler: *well, erm, I think, you know, if you see what I mean, of course, and so on.*
- 3) The study of discourse calls for the analysis of real texts in actual environments and rejects fabricated data. The data of the analysis of discourse is typically based on the linguistic output of someone other than the analyst. The discourse analyst's data are taken from written texts or tape-recordings, rarely of form of a single sentence. This type of linguistic material is sometimes described as *performative data* and may contain features such as hesitations, slips, and non-standard forms. It is important to point out that the most spontaneous type of data is recorded oral language in natural contexts, mostly in conversational settings. Data for discourse analysis deals with regularities not rules. The regularities which the discourse analyst describes will normally be expressed in dynamic, not static, terms.
- 4) The data of discourse analysis are written texts or tape-recordings, rarely of form of a single sentence. This type of linguistic data is sometimes described as *performative data*. The data are the real language use which may contain features such as hesitations, slips, and non-standard forms. In discourse analysis, we are concerned with what people using language are doing, and accounting for the linguistic features in the discourse as the means employed in what they are doing. The discourse analyst treats her data as the record text of a dynamic process in which language was used as an instrument of communication in a context by a speaker/ writer to express meanings and achieve intentions (discourse).
- 5) The four terms used in the analysis of discourse in its relations to the roles of context in discourse analysis are: *reference, presupposition,*

implicature, and *inference*. They must be treated as pragmatic concepts in the analysis of discourse. These terms are used to indicate relationship between discourse participants and elements in the discourse. The discourse analyst is describing what speakers and hearers are doing, and not the relationship which exists between one sentence and another.

- 6) Maxim is a set of conversational principles and conventions. The discourse analyst has much greater interest to the notion of conversational implicature which is derived from a general principle of conversation plus a number of maxims which speakers will normally obey. The general principle is called the *cooperative principle*. The maxim can be classified into: *maxim of quantity*, *maxim of quality*, *maxim of relation*, and *maxim of manner*.
- 7) The aspects of conversation under the most interest of the discourse analysis have stressed two principal areas of analytic concerns: the relationship between turns at talk in specific sequences and the design features of individual turns within sequences. Central to the originality of conversation analysis is the fact that it is not primarily interested in one or other of these elements but specifically in the interrelationships between them.
- 8) One of the basic facts of conversation is that the roles of speaker and listener change, turn-taking. Some aspects that mainly become the objects of analysis in this turn-taking are overlap, gaps, silence, pauses, adjacency pairs, the use of fillers and any elements of *speech delivery* such as audible breath and laughter, stress, intonation, and pitch. The extract of the conversation being recorded can be, for example, a phone call, discussion, dialogue between friends, and interview.

Formative Test 3

- 1) Multilingualism is the condition where a person has functional ability in more than two languages.
- 2) There is the contradiction in his definition between the first sentence and the last sentence.
- 3) Identify each language, the way each language is acquired, the balance among the mastery of language skills, performance on certain functions,

and external functions that can be performed in each language.

4) Here is the possible answer:

<i>Location</i>	<i>Role-relationship</i>	<i>Topics</i>
<i>Home</i>	<i>Mother, father, son, daughter, etc.</i>	<i>Domestic, personal, etc.</i>
<i>Neighborhood</i>	<i>Neighbor, shopkeeper, street-cleaner,</i>	<i>Weather, shopping</i>
<i>School</i>	<i>Teacher, student</i>	<i>Social greeting, educational</i>
<i>Church</i>	<i>Priest, parishioner, etc.</i>	<i>Sermons, prayers</i>

A. Receptive

C. Productive

B. Receptive

D. Productive

Bibliography

- Beardsmore, H. Baetens. (1982). *Bilingualism: basic Principles*. Clevedon: Tieto Ltd.
- Chaer, Abdul and Leone Agustina. (1995). *Sosiolinguistik suatu Pengantar*. Jakarta: Rineka Cipta.
- Fasold, Ralph. (1984). *The Sociolinguistics of society*. Oxford: Blackwell.
- Ferguson, Charles A. (1959). *Diglossia*. *Word* 15: 153-72.
- Fishman, Joshua A. (1972). *The Relationship Between Micro- and Macro-Sociolinguistics in the Study of who Speaks what Language to Whom and When*. In John B. Pride and Janet Holmes (eds.) *Sociolinguistics*. Harmondworth: Penguin, Pp. 15-32.
- Gumperz, John J. (1982). *Discourse Strategies*. Cambridge: Cambridge University Press.
- Haugen, Einar. (1966). *Dialect Language and Nation*. *American Anthropologist* 68. 922-35.
- Holmes, Janet. (1992). *An Introduction to Sociolinguistics*. London: Longman.
- Hudson, Richard. (1980). *Sociolinguistics*. Cambridge: Cambridge University Press.
- Myers-Scotton, Carol. (1993). *Duelling Languages: Grammatical Structure in Codeswitching*. Oxford: Clarendon Press.
- Spolsky, Bernard. (1998). *Sociolinguistics*. Oxford: Oxford University Press.

Trudgill, Peter. (1995). *Sociolinguistics: An Introduction to Language and Society*. Revised edition. London: Penguin Group.

Wardhaugh, Ronald. (1998). *An Introduction to Sociolinguistics* 3rd edition. Oxford: Blackwell.