
M.A. English

SEMESTER I

COURSE II

**INTRODUCTION
TO LINGUISTICS**

BLOCK

I

**PHONOLOGY AND
MORPHOLOGY**



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INTRODUCTION TO LINGUISTICS

BLOCK I

PHONOLOGY AND MORPHOLOGY

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INTRODUCTION TO THE COURSE

The M.A Course in **Introduction to Linguistics** will introduce you to the scope of the linguistics course, vis-a-vis the other two courses – **Modern English Grammar and Usage and Phonetics and Spoken English** --- which together come under the overall cover term of what has today come to be designated as *linguistics* or *linguistic science* an often used paraphrase.

Based on your past knowledge and experience you probably have some understanding and expectations regarding this course. Would you like to first search your mind and find out for yourself what **your** expectations are? Having done this you would be in a better position to understand what **our** objectives and claims are for this course.

Activity What do I expect from this course?

Tick from the following list the objectives/expectations that you regard as appropriate and add your own (if any) and then contrast them with our claims for this course:

- a. to understand what constitutes language and what we as teachers of English, should know about language,
- b. to understand how we **acquire** our mother tongue and how we **learn** English,
- c. to understand how we can utilise our knowledge of different aspects of language, pedagogically,
- d. to understand the basic concepts in the area of linguistics, and
- e. any other.

Well, most of the claims in the above list are valid claims. A course in linguistics will help you to get an insight into how languages are **organised** and how they *function*. (These are key terms which you will learn later in this course). This course will also help you understand better the two other courses in grammar and phonetics which will be of direct use in the classroom. This course also aims at developing your intuitions about language and at making you a better researcher of various aspects of language. You may, then, if you find it interesting, wish to go on to do a research degree in one of the areas which fall under the cover term linguistics.

Aims

Perhaps it would be appropriate at this stage to state the aims of this course:

- a. to enhance your *language awareness*,
- b. to equip you with tools for *observation*, *description* and *explanation* of language data, and
- c. to enable you to help your learners enhance their language awareness.

These are the general aims of the course. The specific objectives of each unit will be spelt out at the beginning of each block and unit.

How to use these blocks

This course is divided into three blocks:

Block I	:	Phonology & Morphology
Block II	:	Syntax
Block III	:	Semantic, Social, Psychological and Applied Perspectives

Each block covers one specific area of linguistics. Within each block, there will be several units discussing issues in a specific area.

You can begin reading this course by choosing any block. There is no need for you to read the blocks in the order in which we have

presented them, though the order is reasonably logical, and some of you might be content to start at the beginning and work your way through to the end.

So, quickly skim through the course to see what is dealt with where, before you move on to the next section.

Here's wishing you happy reading!

INTRODUCTION TO THE BLOCK

The first question that people often ask me after hearing that I teach linguistics is: how many languages I know? I have to tell them that a person who knows many languages is a polyglot and may not be a linguist! The next question, then, is: what is linguistics? And believe me, I find it extremely difficult to answer this question; more so because my every sentence makes them ask more questions. And here I am, at it, once more!

Well, the first definition of linguistics that we always give is that linguistics is a scientific study of language. And you can very well imagine what would be the next question if one were to listen to this definition. And yes, you're right, the next series of questions are: what do you actually do? How do you study a language? How do you scientifically analyse a language? How do you define a language? And so on and so forth.

There are in all seven units in this block. Their titles are given below:

Unit 1	:	Linguistics
Unit 2	:	Linguistics in a historical context
Unit 3	:	Phonetics and phonology
Unit 4	:	Principles of phonemic analysis
Unit 5	:	Phonological rules and representations
Unit 6	:	The morphological structure of words
Unit 7	:	Morphological analysis

The first two units of this course deal with the discussion of different aspects of what goes into linguistics. Unit 1 will focus on the definition of linguistics, and in Unit 2, I will trace the historical development of linguistics so that you are in a better position to appreciate what modern linguistics is all about. Apart from this, by the end of these two units you will also be able to distinguish and discuss different *branches* of linguistics and the different *levels* at which a linguistic analysis can be carried out.

In the remaining Units we will discuss in some detail two areas of linguistics: phonology and morphology. Units 3-5 deal exclusively with phonology and Units 6-7 deal with morphology.

Phonology is the study of the *selection* and *organization* of sounds within a language, while morphology is the study of the *process of word-formation* in a language.

With Units 3-7 we plan to introduce you to the notion of “doing” linguistics instead of simply reading about phonology and morphology. So lots of data have been presented from different languages and you are told how to do their phonological and morphological analyses. Several morphological and phonological problems have also been given for you to do on your own.

The main idea is to teach you the principles involved in these analyses so that you can apply these principles to any given data and learn to look at any language data as an abstract entity to be analysed by you as a phonologist or a morphologist.

One of the by-products of doing such analyses is that you learn not only about linguistic analysis of data but also about the way one should argue in favour of or against a given analysis. I hope you enjoy solving phonological and morphological problems as much as I do.

There are several activities and review questions given in these units. The estimated study time for each of these is also given. (The longer an activity takes the more important it is.) The main purpose of the activities is to enable you to apply your knowledge to the given problem and to check for yourself whether or not you have understood the issues discussed within a particular section. Review questions on the other hand, help you to recapitulate what you have studied. The review questions are provided with model answers, whereas activities – as they are more open ended in nature – are not provided with model answers.

Unit 1
LINGUISTICS

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Unit 1

LINGUISTICS

1.0 Introduction

Language, as you know, is many things – a system of communication, a medium for thought, a vehicle for literary expression, a social institution, a matter for political controversy, a factor in nation building, etc. And we find that every man is interested in language to some extent. I, therefore, feel that each of us has a stake in understanding how language is organized and how it is used. In other words, we should find out: what is the nature of language? What is the function of language? How is language related to linguistics? Why do we need a discipline called linguistics? And why do linguists spend such a lot of time trying to develop theories which could explain the workings of (human) language?

This unit aims to provide a modern (later in Unit 2 we will trace the historical development as well) context for asking and answering these questions. Ensuing units in this course – as we have already stated in the **Introduction to the Course** will provide views of language as it has come to be understood – in linguistics – towards the end of the twentieth century. To be more specific, by the end of this unit you should be able to explain:

- what linguistics is,
- how linguistics is a scientific study of language, and
- the difference between the animal communication system and the human language.

1.1 Linguistics

The word linguistics originates from the Latin word *Lingua* which means “tongue”. Linguistics must, therefore, certainly deal with language.

You may be wondering as to what there is to study about language. After all, speaking or writing one's native language is the most natural and effortless task. We do it all the time. Language is in and around us. Therefore, apart from a few rules of grammar and pronunciation, what else is there to explain about (human) language? But it turns out that there is a great deal to explain if we actually "step outside" language and look at it as an object to be *consciously studied* and not merely used.

At this point, I would like you to pause for 10-15 minutes and think about *when* we need language and *why* we need language.

Answers to such questions, I think, will (a) serve as an appropriate introduction to the course in linguistics, and (b) make you aware of problems and issues with regard to linguistics, which you had not been aware of before.

Activity A Why do we need language? When do we need language? Write down your ideas in the space provided below. You do not need to read any book to do this activity. You may need 10 to 15 minutes to do this activity.

Discussion

Perhaps you could list out the different functions you perform with the help of a language.

In the following section some of the common functions of language are given which may be similar to what you may have written here.

1.1.1 What linguistics isn't

Before we actually begin to define linguistics let us first **understand what** is NOT linguistics.

You read earlier in the introduction that everybody is interested in language to some extent. Most people are only concerned with language when they have a difficulty with it – they cannot find the right words for what they want to say or they cannot remember how to spell a word. They often have trouble with punctuation. They may even find it hard to learn a new language. This, however, does not imply that linguistics is a collection of methods to help people with language problems. ***Linguistics is not a way to solve the problems of language users.***

A few people are fascinated by language – they learn lots of languages, play scrabble, do crosswords, like looking at dictionaries, and admire beautiful and elegant language. This again does not mean that these people are doing linguistics. ***Linguistics is not an informal interest in language, however strong that interest may be.***

Some people work with language all the time. Authors and journalists write books and articles, politicians make speeches. Translators take ideas from one language and recreate them in another language. Advertisers choose the best words to sell a product. ***But using a language is not linguistics.*** Because, using a language is not the same as ***studying*** a language. Linguistics is the ***objective study*** of language and not the use of language.

Many people discuss language: literary critics analyse a writer's language, lexicographers look carefully at how words are used. Philologists look at how languages change over time and philosophers have written about language and its relation to thought and knowledge. Logicians, psychologists, sociologists, communications engineers, all these and many other find specific points of interest in the structure and function of natural language. ***But linguistics is not an interest in language for some other purpose.*** It is an interest in language for studying language itself.

Linguistics differs from all these other disciplines in having no necessary external motivation (doesn't this remind you of the pre-raphalite period when art was studied for the sake of art)? The

linguistic study of language is unique in approaching these phenomena from *within*, in order to study language itself, rather than studying something else through the medium of language. Most linguists would reply that they study language because language interests them. They derive the same pleasure that a mathematician derives while struggling with theories or the poet writing poems.

And I think, most linguists would accept this distinction, despite the influential recent claim of “generative grammar” (about which you will read later) that it is the business of linguistics to study the human mind.

1.1.2 What linguistics is

Having seen what linguistics is NOT you are probably wondering by now what this leaves. Let us, then, begin to look more positively at linguistics by looking at some questions about language. Two such questions are: how many languages are there in the world? and what are the main differences and similarities between them? These are not simple questions. If we want to know how many languages there are in the world, we have to first agree on what counts as language. That is, should we count Danish and Norwegian as two distinct languages where people can *understand* each other or count the three types of English – Northern British English, Broad West Country English and New Zealand English as three varieties of one language when people *cannot understand* each other? (You will read about this, in detail, in Block III, in the unit dealing with sociolinguistics but let me clarify this point here itself. In linguistics, a distinction is made between a dialect and a language. If there are two varieties and the speakers of one variety do not *understand the other variety* then they are called two different *languages*, and if the speakers of one variety *understand* the other variety then they are two different *dialects* of the same language).

Looking at similarities and differences between is also not straightforward. People who have learned a foreign language can easily point out one or two *sounds* which are different from English. For example, the sound at the beginning of the German word *Zahn* “tooth”. Similarly the **word-order** (that is, in a sentence should the article follow the noun or precede it? Should

the verb follow the object or precede it, etc.) of German is different from that of English: *Haute habe das Buck gelesen*, translated word for word comes out as *Today have I the book read*. Then there are words, which are difficult to translate into English: for example *praktikantenansweis* in German. Again, what counts as *polite* also varies from language to language. English softens the blow by using *Will you ...* or *Would you mind* etc., whereas in German, Telugu and several other languages the politeness markers are not the modal auxiliaries. These languages have different degrees of politeness expressed with the help of pronouns. That is, the markers for politeness also vary from language to language.

Activity B Can you think of similar differences between English and your mother-tongue? Or between any two languages?

You may need 15-20 minutes to do this activity.

<i>Language A</i>	<i>Language B</i>
-------------------	-------------------

Sounds: _____

Words: _____

Word-order: _____

Politeness based on the relationship between speakers:

Discussion

If at first you find it difficult to do this activity do not lose heart. It is a difficult activity. And one has to think a lot/search a lot in order to find such differences between two languages. If however, you are a translator, you will find it easy to do this. Translators have to grapple with this problem every day. May be you could come back to this activity after going through the unit.

If we want to study these matters in more depth we have to look at four types of differences between languages: *pronunciation, vocabulary, grammar* and *relationships between speakers*. What we, therefore, need to agree on is the basic terminology which we can use to talk about language.

Linguistics, then, is a field which classifies the pronunciation, grammar, meaning and use of language and hence provides *terminology* to talk about these matters. However, this way of thinking makes the field sound as if its role is purely to serve other fields of knowledge. If linguistics merely provides terminology which can be used by lexicographers, translators, speech therapists, language teachers, scrabble enthusiasts, etc. then the field is no doubt useful, but not very exciting or high-powered from the point of view of *theoretical linguists* who are interested in finding out how we *learn* languages, what is in the mind of human beings which facilitates language learning, how this knowledge is encoded in the mind/brain or how this knowledge arises in the mind/brain, etc. (You will read more about this in Block III).

We began this unit by asking what is linguistics, and we ended up learning what isn't linguistics. This was done deliberately. I thought it would be better if we first explain a layman's understanding of the term linguistics and then tell you about the meaning of linguistics, when understood as a science/as a technical term. If you have read the previous section carefully you would have noticed how the entire discussion revolved round the word *language*. So, one immediate guess that we can make about linguistics is that it has something to do with language.

One of the simplest definitions of linguistics is that, it is a scientific study of language. David Crystal (1987:412) in his encyclopaedia defines linguistics as the "science of language". It has also been defined as:

the scientific inquiry into human language – into its structures and uses and into the relationship between them (Finegan & Besnier 1989:8), a scientific study of the systems/principles underlying human languages (Verma and Krishnaswamy 1989:26)

I'm sure you have noticed that almost all definitions of linguistics emphasise three key words:

Scientific, Study, and Language.

In the following sections, you will read in detail how these words are crucially related to linguistics.

1.2 What is scientific?

Linguistics is a *scientific* study of language.

In this section, I shall concentrate on what is understood by the term *scientific*. Let us first understand what science is.

Many people think that the key thing about science is its subject matter, the things that scientists study. For such people, science is the study of the physical world ---- of what it is made of (chemistry), the forces and energy that operate in it (physics), living things (biology), stars and planets (astronomy), and so on. For them things that are not physical (the mind, emotions, human behaviour, art and literature, etc.) cannot be part of science.

The other definition of science is that it seeks to explain *why* things are the way they are. It is the search for explanations, an attempt to answer the question *why*, which is the essence of science. Science is about solving puzzles. And to solve a puzzle you have to **observe** the facts closely, decide which facts are relevant and which are not; make imaginative **guesses**, and then check your guesses using rigorous **logical thinking**. A scientist, therefore,

- a. believes that **explanation** is more important than just describing and classifying a wide range of data,
- b. is willing to **narrow the data** and even put off for the time being problems which could not be solved at the time,
- c. uses **abstraction** and **idealization**, and **concepts** and **principles** often remote from everyday experience, and
- d. recognizes that **being disproved** doesn't devalue his/her contribution.

A linguist, just like a scientist, explains the observed data of natural languages alive or dead by constructing hypothesis, theories and laws. And like scientific theories a linguistic theory has to not only

explain the observed data but also predict that which constitute potential though not actual data. Thus *explanation* of the observed data and *prediction* of the potential data are the two functions of any scientific (linguistic) theory. Explanation and prediction are two sides of the same coin. A general principle explains what has already been observed and it predicts what has not been observed as yet. Consider, for example, the following Hindi words:

garm “hot”
Σarm “shyness”

In Hindi, these words are possible but sequences like

**ga:rm*
**Σa:rm*

are not possible. A linguistic analysis of Hindi should be able to explain this phenomenon. (The reason for this is that in Hindi the word final cluster [-rm] is never preceded by a long [a:]). You will read more about this in the next unit). Once it has an explanation, it can *predict* that words like **ga:rm* and **Σa:rm* will never occur in Hindi. It will also predict that an English word like *farm* pronounced as /fa:m/ with a long vowel will pose a problem for native speakers of Hindi, who tend to simplify it as *fa:ram/* fa:ram /.

And finally, like a true scientist, the linguist is constantly engaged in discovering more about languages, in refining their methods of investigation and in constructing better theories.

Activity C As a child, I'm sure, you must have collected leaves of various shapes, sizes and colours, you may have even tried to find their names and how they are classified in botany. Would you then consider it to be a scientific activity? If not, why not.

You shouldn't take more than 5 – 10 minutes to do this activity.

Discussion

The question itself gives you a clue, saying it is not a scientific study. I would advise you to go back to the previous section to find out what else is needed in order to make this a scientific study.

We have defined linguistics as a scientific study of language. We already know what constitutes language in linguistic terms and how linguistics is similar to any other science in explaining the facts about languages. The next question to ask then is: how do we study a language?

1.3 What is studying a language?

Linguistics is defined as a scientific *study* of language.

What do we understand by the word study? Is there a difference between *learning* a language and *studying* a language? All of us have learnt to use at least two languages – our mother tongue and English. Learning a language means learning how to use the language. However, when we say a linguist studies a language, we mean they study the mechanism of the language. That is, they study the way a language works. Linguistics comprises language in all its forms and manifestations. Its aim is to seek a scientific understanding of language and the function it performs in human life. Again, linguistics is not concerned with any particular language or languages. It is concerned with human language as a universal and recognisable part of human behaviour. Thus, the study of an individual language is the *grammar* of that language while the study of language in general is linguistics.

Activity D What is the difference between “the study of language” and “the study of *a* language”? Can you think of a similar kind of distinction

in any other kind of scientific study? You should not take more than 10-15 minutes in doing this activity.

Discussion

Since we have established that linguistics is a science, we can think of a similar example from astronomy or physics or biology and extend the notion of “studying” to them as well.

1.4 What is language?

Linguistics is a scientific study of **language**.

In the previous sections you have read about what is understood by the term scientific and studying (as opposed to learning) a language. In this section, you will read about those properties/characteristics of human language which differentiate it from the animal system of communication.

Animals, it is said, have a *communication system* as opposed to humans who have *language*. Language, in the restricted sense in which linguists define the term, is a special gift to human beings. Only human beings have the power of speech. The logical question, therefore, to ask at this point is: in what way does human language differ as a means of communication from the system of animal communication? In order to answer this question, we shall now read about the differences and similarities between human languages and natural animal communication system. These characteristics are set up (perhaps unfairly) with reference to *human* languages. Some of the important characteristic features or design characteristic features of human languages were listed by Hockett (1955), which when taken together help us isolate language from other forms of communication. These are:

1. Duality of structure or patterning
2. Creativity or productivity
3. Interchangeability
4. Cultural transmission
5. Displacement
6. Specialization.

We shall now examine these concepts in detail.

1. Duality of structure or patterning

Human language displays two levels of patterning: (a) where, meaningless units (i.e. phonemes) are combined to form arbitrary signs (i.e. words), and (b) these signs in turn are combined to form new meaningful larger units (i.e. sentences).

Level I	(Primary)	S + P + O + T = SPOT
(compounding of sounds		T + O + P + S = TOPS
		or phonemes)

O + F = OF

T+H+E= THE

P + O + T + S = POTS

Level II	(Secondary)	Spot+the+tops+of+the+pots=
(compounding of words)		spot the tops of the pots

In other words, in languages investigated so far two levels of structures are found: Primary level – compounding of sounds into words – and secondary level – compounding of words into sentences. (In later units/blocks you will read in detail about what a phoneme or a word or a sentence is in linguistics).

There is no evidence of this type of *patterning* in any known animal communication system. Therefore, we can say that one major difference between human languages and the animal communication system is the duality of structure present in human languages.

2. Creativity/Productivity

This feature refers to the fact that human language has the ability to produce new messages on any topic at any time. A sentence never heard of before can be created by human beings. That is, the same limited sets of phonemes (sounds) are combined in a novel form to give novel messages. For example: If I say "last night I had a pleasant meal with a leopard on top of a tree" it would be a novel sentence which I don't think I have ever heard or read anywhere. The construction of such a sentence, therefore, involves creativity/productivity. The following quotation sums up this feature of language:

The most striking aspect of linguistic competence is what we may call the "creativity of language", that is the speaker's ability to produce new sentence, sentences that are immediately understood by other speakers although they bear no physical resemblance to sentences which are familiar (Chomsky as quoted in Verma and Krishnaswamy 1989:147)

3. Interchangeability

This feature means that all members (male or female) of the species can both send and receive messages. This is obviously true of human language. This is not the case with the animal communication system. Bee dance is done only by foragers and birdsong is performed only by males. The calls are not interchangeable between the sexes in the animal communication system. But they are fully interchangeable in human language.

4. Cultural transmission

Language is a set of conventions that have grown as a result of the common living of a large number of people. These are, therefore, conventions common to the entire social group which uses the language. This implies that languages have to be learnt. They cannot be transmitted through heredity. Charles Hockett (1955) points out that the system of conventions particular to each language is *culturally transmitted* (i.e. acquired through learning) and not *genetically transmitted*. (i.e. acquired through heredity).

Psychologists often make a distinction between instinctive and non-instinctive behaviour. For example human beings have no

instinct about building houses. They have to *learn* how to build houses because nature has not supplied them with an inbuilt knowledge of engineering. Bees, on the other hand, can build beehives in hexagonal shapes without learning geometry. For them the knowledge about hexagonal shapes is inbuilt, and genetically transmitted. We can therefore say that for bees, making use of hexagons is *instinctive*, whereas for human beings building a house is *non instinctive*.

Instinctive, behaviour is handed down from one generation to the next through heredity. All the relevant information is built into the genes of the organisms. Non-instinctive behaviour, on the other hand, has to be acquired. Therefore human beings can speak Hindi, Malayalam, Chinese, Japanese, Swahili or Pushto depending on the “culture” where they have been brought up. (However, recent developments in linguistics talk about the “universal grammar” which is genetically transmitted in the case of human beings. This distinction, therefore, is not valid today. You will read more about this in Block III of this course.)

5. Displacement

Displacement implies that users of the system are able to refer to events remote in space and time. Animals cannot communicate about imaginary past or future which humans are able to do with language. In other words, animal communication is *context-bound* but human language is *context-free*. Human beings can talk about experience without actually living them because human language is not controlled by stimulus. (You will read more about stimulus-response theory in your lesson on language acquisition, in Unit 6, Block III of this course.)

6. Specialization

Specialization implies that there should not be a total physical involvement in the act of communication. Human beings can talk while engaged in activities totally unrelated to the subject under discussion. For example, they can talk about cricket while cutting vegetables. A bee in a bee dance, however, is completely involved

physically in the communication process. At that point it cannot do anything else.

Several other features relating to the differences between the animal communication system and the human language have also been listed by other linguists. Some of these are:

a. Arbitrariness

This feature implies that there is no natural or inherent connection between a written word (or sounds) and its reference (or symbols). This is overwhelmingly true of human language with the possible exception of a few onomatopoeic terms. That is, the relationship between words and their meanings is quite arbitrary; it is a matter of conventions. For example, there is no logic behind why a word like *rose* refers to a flower and not to a horse or a cat or a pencil or a mouse! The decision that *rose* should refer to a flower of a specific kind is purely arbitrary. There is nothing scientific about it. A few people decided to call it a rose and the society accepted it as a word of the English language. The animal communication system generally does not have any arbitrariness, although vervet (a kind of a monkey) alarm calls are said to have arbitrariness.

b. Redundancy

There is a lot of redundancy in human language. For example, when we *speak* a sentence like: *Are you coming?* there are two markers to show that it is a question:

- i. the placement of the helping verb at the beginning, and
- ii. the rising tone with which the question would be asked.

and when we *write* the sentence there are also two markers to show that it is a question:

- I the placement of the helping verb at the beginning, and
- ii. the punctuation (the use of question mark) at the end of the sentence to show that it is a question.

This kind of redundancy i.e. two or three markers to show the same thing does not exist in the animal communication system.

c. Discreteness

Bee-dancing or bird-song seems to have very few discrete units which are recombinable. Human language has phonemes, syllables, morphemes, syllables, morphemes, (you will read about this in the following units) words, etc. which are discrete units and can be recombined to mean different things. That is, language consists of isolatable, repeatable units. For example, with the help of three discrete units like *p*, *a* and *twe* can create *pat*, *tap* and *apt*. This is not possible in the animal communication system.

d. Reflexiveness

By reflexiveness we mean the ability to use the communication system to discuss the system itself. No evidence exists that any other species writes grammar or linguistic textbooks.

Review question

The approximate number of basic vocal signals for different species is given below:

Species	No. of vocal sounds
Chickens	20
Cows	08
Foxes	36
Pigs	23
Dogs	10
Dolphins	7 – 19
Monkeys	10 - 37
Human beings	11 – 20

On the basis of number of signals/sounds alone, can we say that the monkeys that use 37 signals are more sophisticated than human beings who use a language which has about 20 signals? If not, why not?

For the correct answer refer to the model answer given at the end this unit.

You are now in a position to understand several definitions of language that are available. A few are listed below.

Language is a purely human and non-instinctive method of communicating ideas, emotions, and desires by means of a system of voluntarily produced symbols (Sapir: 1921:8)

A language (is a) symbol system based on pure or arbitrary convention infinitely extendable and modifiable according to the changing needs and conditions of the speakers. (R H Robins: 1964:13)

Human languages are unlimited..... (an unlimited set of discrete signals)..... have great structural complexity structured on at least two levels (the learning task is considerable) are open endedallow for the transmission of information. (R W Langacker: 1967:20-21)

When we study human language, we are approaching what some might call “human essence”, the distinctive analytics of mind that are, so far as we know, unique to men. (N Chomsky: 1968:100)

Summary of features for humans and animals		
	Animals	Humans
Duality of pattern	no	yes
Productivity	no	yes
Interchangeability	no	yes
Culturally transmitted	no	?
Displacement	no	yes
Specialization	no	yes
Arbitrariness	no	yes
Redundancy	no	yes
Discreteness	no	yes
Reflexiveness	no	yes

Activity E Give examples from your language to illustrate:

Duality of structure _____

Creativity _____

Arbitrariness _____

This activity should not take you more than 15-30 minutes.

Discussion

Some of the clues to the answer are given in the question itself. Perhaps you should go back to this section in order to decide which specific property of language these illustrate. Answers to this activity will be discussed during the contact programme. Do remember to ask your tutor to check your answers. You can also write it up and send it to me if you feel it's crucial to your understanding of this unit. I promise to reply immediately.

1.5 Summary

In this unit, we have defined linguistics and explained how human languages differ from the animal system of communication. Here are the main points:

- a. Linguistics is a scientific study of language.
- b. The function of a scientific theory is to not only offer explanation of the data but also predict the potential data.
- c. Studying a language is different from learning a language. When we study a language, we look at language itself by analysing different aspects of its structure.

d. The term language in linguistics refers to natural language. Natural languages differ from the animal system of communication in terms of the following design features:

- creativity
- interchangeability
- duality of structure
- cultural transmission
- displacement
- specialization
- arbitrariness
- redundancy
- discreteness
- reflexiveness

Thus, the subject matter of linguistics is all natural languages, living or dead. Like all other sciences linguistics employs careful methods to observe, record and analyse the data related to its subject matter, namely, language. Similarly, like a scientist a linguist constructs a theory and tests it against the facts of language. The theory should explain observed data and predict potential data.

1.6 Sources and recommended reading

I am giving this list of sources in case some of you are interested in reading directly from the book.

But the unit in itself is self-contained and I do not see any need for you to read any extra material on the issue discussed in this unit.

Akmajian, Dimers and Harnish (1979): *Linguistics: An Introduction to Language and Communication*. (Chapter I pp. 1-6; Chapter 5 pp. 52-66).

Chomsky, N. (1986): *Language in Mind*. Harcourt Brace Jovanovich. New York.

Crystal, D. (1987): *The Cambridge Encyclopedia of Language*. CUP. Cambridge.

Finegan, E. And N.Besnier (1989): *Language: Its structure and Use*.Harcourt Brace Jovanovich. New York.

Hockett, C (1955):*A Course in Modern Linguistics*. The MacmillanCompany. New York.

Langacker, R. W (1967): *Language and its structure: Some Fundamental Linguistic Concepts*. Harcourt, Brace and World, Inc. New York.

Lyons, J. (1968): *Introduction to Theoretical Linguistics*. CUP. Cambridge.

O 'Grady, Dobrovolsky and Aronoff (1994): *Contemporary Linguistics – AnIntroduction* (Chapter 14, pp. 523-526).

Sapir, E. (1921): *Language*. Harcourt, Brace and World, Inc. New York

Verma and Krishnaswamy (1989): *Modern Linguistics: An Introduction*.(Section I pp 1 – 5; pp 16-17)

(The books listed above contain exhaustive bibliographies on all aspects of linguistics).

1.7 Answer to the review question

No.

Because human language is creative and has duality of structure. Therefore, with the help of a few symbols alone, human beings can create a large number of words and sentences. The animal communication system does not have these properties, a monkey will therefore have only 37 signals whereas humans can create infinite signals out of the given 20 signals.

