

# Linguistics is the Scientific Study of Language – An Overview

**\*Prof. L.H.Mamadapur. Asst Professor of English, Govt First Grade College, Managuli.**

## ABSTRACT

This paper seeks to understand linguistic is the scientific stud of Language. Literature is quite an interesting topic of study since it deals with various ideas both fictional and non-fictional. The word linguistics was been derived from the Latin word Lingna (tongue) and istics (Knowledge of science. Linguistics is thus the scientific study of language. The paper argues that the most significant trend in linguistics is the emergence of the field as a generic discipline, involving several subareas, all characterised by the aim of developing theoretical and emperical studies of language as a key element in real word problems. There are three principal levels in linguistics. This can offer to literary studies an understanding of form and the way by which a text is used to communicate meaning.

Language is by its nature a complex system and its comprehension may prove extremely difficult for anyone trying to describe and study it from a general and global perspective. On the other hand, the structure and functioning of this system reveal a coherent and harmoric organisation if linguistic investigation focuses on the various levels of analysis that form such a system (phonology, morphology, syntax, semantics pragmatics) and their basic interactions. The different levels must clearly remain distinct throughout the analysis, but it should be kept in mind that all of them jointly make up a language system.

Keywords: Language, nature, complex, system, comprehension, prove, extremely.

## INTRODUCTION

### Definition of linguistics

Linguistics may be defined as the scientific study of language. This definition is hardly sufficient to give the reader any positive indication of the fundamental principles of the subject. It may be made a little more revealing by drawing in greater detail the implications contained in the qualification 'scientific'. For the moment, it will be enough to say that by the scientific study of language is meant its investigation by means of controlled and empirically verifiable observations and with reference to some general theory of language-structure.

### Linguistic terminology

It is sometimes suggested that the terminology, or 'jargon', of modern linguistics is unnecessarily complex. This is a criticism which need not detain us long. Every science has its own technical vocabulary: it is only because the layman takes on trust the established sciences, and especially the 'natural' sciences, that he does not question their right to furnish themselves with special vocabularies. The technical terms used by linguists arise in the course of their work and are easily understood by those who approach the subject sympathetically and without prejudice. It should not be forgotten that most of the terms which the non-linguist employs to talk about language ('word', 'syllable', 'letter', 'phrase', 'sentence', 'noun', 'verb', etc.) originated as technical terms of traditional grammar and are no less 'abstract' in their reference than the more recent creations of linguists.

Before going in detail about linguistics, we should know something about language. Language is the chief source of communication of ideas. There are some other ways also, such as dance, music, physical gesture, and symbol, through which we can communicate the ideas. But language is a very common and an easy source of communication. It is the basis of human civilization, which would have been impossible without it. Language does not come into being overnight; it evolves over a period of time. Linguistics is a very broad discipline and includes many different approaches to the study of language. So linguistics is a course that introduces information on the nature of language, how grammar and other levels of organization in a language work, as well as information of the core linguistic features of English. The framework developed by Holliday in his work on functional linguistics is often used in courses for language teachers. Linguistics can be one source of the knowledge base.

Linguistics encompasses many fields related to language in general, but my major concentrations are in second language acquisition (SLA) and language pedagogy. I received my Bachelor's degree in French & Linguistics in 2004 and my Master's degree in Linguistics & Teaching English as a Second Language in 2007. I was officially awarded my PhD in Applied Linguistics in December 2015.

My major research interests are related to the role textbooks play in language teaching and learning, including the use of (or lack of) realia and informal language, as well as the teaching of vocabulary with regards to frequency and corpora and the importance of listening comprehension for learning vocabulary. I'm also interested in the role technology plays in language learning, especially computer-assisted language learning (CALL) that allows for more audio-visual input than the regular classroom.

I will be updating this section with more information on Applied Linguistics, Second Language Acquisition, and Language Pedagogy in the future. Also make sure to check out the Teaching English articles for information on teaching English as a second language as well as English grammar and the history of English.

The language activity has three principal levels: substance, form and context. Substance is the raw material of language that may be phonic (audition) or graphic (visual or written). Form is the internal structure. It is grammar + lexis. Context is the relationship between form and situation. It is studied, under the head Semantics (meaning).

Linguistic level is a hierarchical analysis of language structure. Different linguists describe it in different ways. Robert Hall recommends three levels: "phonology" (phonemics and phonetics), "morphology" and "syntax". R.H. Robins also describes three: "phonology", "grammar" and "semantics". Hockett advocates five levels which he calls subsystems, of which three are central and two are peripheral. The linguistic datum should therefore be examined and compared in its multiple aspects: From a methodological view point this type of research is radically different from traditional analyses. Those analyses have usually assumed an inventory of (only defined) basic categories and have mainly been based on a classification exercise which is nothing more than an uninteresting and not particularly useful labelling exercise. A fruitful analysis should rely on the observation and systematic description of linguistic data in order to provide explanatory hypotheses. However, it will be more useful and valuable if it involves an interlinguistic dimension of different languages.

1. What does it mean to say that Linguistics is a science?

- The field consists of a set of true facts that can be proven objectively.
- The field uses the scientific method to determine objective rankings of language quality.
- The field uses empirical observations to develop theories of language behaviour.

2. Each of the following sentences represents something someone might say about language. Which of them illustrates a descriptive view of language?

- The use of quotative *like* in sentences such as, “She was like, I can’t believe you did that!” began to enter Canadian English with the generation of speakers born in 1971.
- The song “I can’t get no satisfaction” should really mean that “I can get some satisfaction” because two negatives always make a positive.
- In a phrase like, “the people who the bride invited to the wedding,” it’s proper to use *whom* rather than *who*.

3. Which of the following kinds of data would a linguist be likely to observe?

- Which method is most effective to help a child stop stuttering.
- Whether Korean includes tones that change the meaning of words.
- How many undergraduates can correctly use the words *affect* and *effect* in their essays.
- If second-language speakers can pronounce English words correctly.

---

## VIDEO SCRIPT

Linguistics is one of those subjects that not many people have heard of, so you might well be wondering exactly what it is.

The simplest definition of Linguistics is that it’s **the science of language**.

This is a simple definition but it contains some very important words. First, when we say that linguistics is a science, that doesn’t mean you need a lab coat and safety goggles to do linguistics. Instead, what it means is that the way we ask questions to learn about language uses a scientific approach.

The scientific way of thinking about language involves making systematic, **empirical observations**. There’s another important word: empirical means that we observe data to find the evidence for our theories.

All scientists make empirical observations: botanists observe how plants grow and reproduce. Chemists observe how substances interact with other. Linguists observe how people use their language.

A crucial thing to keep in mind is that the observations we make about language use are NOT value judgments. Lots of people in the world — like your high school English teacher, various newspaper columnists, maybe your grandparents, and maybe even some of your friends — make judgments about how people use language. But linguists don’t. A short-hand way of saying this is that linguists have a **descriptive approach** to language, not a prescriptive approach. We describe what people do with their language, but we don’t prescribe how they should or

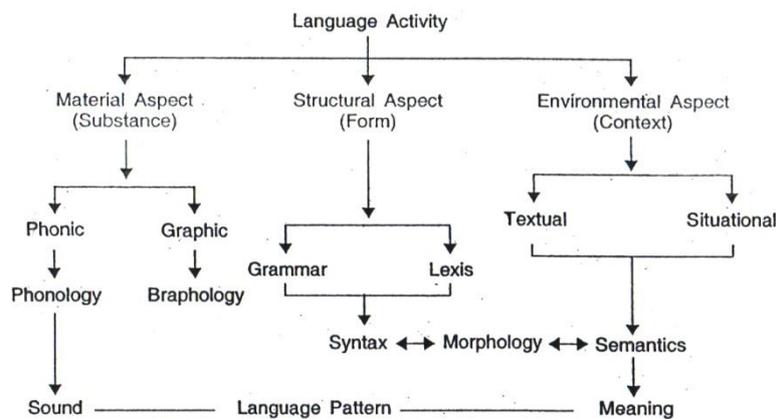
shouldn't do it. This descriptive approach is consistent with a scientific way of thinking. Think about an entomologist who studies beetles. Imagine that scientist observes that a species of beetle eats leaves. She's not going to judge that the beetles are eating wrong, and tell them that they'd be more successful in life if only they eat the same thing as ants. No — she observes what the beetle eats and tries to figure out why: she develops a theory of why the beetle eats this plant and not that one. In the same way, linguists observe what people say and how they say it, and come up with theories of why people say certain things or make certain sounds but not others. In our simple definition of linguistics, there's another important word we need to focus on: linguistics is **the science of human language**. There are plenty of species that communicate with each other in an impressive variety of ways, but in linguistics, our job is to focus on the unique system that humans use. It turns out that humans have some important differences to all other species that make our language unique. First, what we call the **articulatory system**: our lungs, larynx & vocal folds, and the shape of our tongue, teeth, lips, nose, all enable us to produce speech. No other species can do this in the way we can, not even our closest genetic relatives the chimpanzees, bonobos, and orangutans. Second, our **auditory system** is special: our ears are sensitive to exactly the frequencies that are most common in human speech. There are other species that have similar patterns of auditory sensitivity, but human newborns pay special attention to human speech, even more so than synthetic speech that is matched for acoustic characteristics. And most important of all, our **neural system** is special: no other species has a brain as complex and densely connected as ours with so many connections dedicated to producing and understanding language. Humans' language ability is different from all other species' communication systems, and linguistics is the science that studies this unique ability.

## MAJOR TRENDS IN LINGUISTICS

As we have already seen, linguistics is the science that describes and classifies languages. Substance of a language may include phonic and graphic. The phonic substance tells about the sound, its production (articulation), transmission and audition. The study of phonic substance is called phonetics. Its study primarily belongs to natural (physical and biological) sciences. In phonetics we study the description of vocal organs, which come under the field of biology, and the articulation of sound, its transmission and audition, which is an area of physics. All these topics are included in pure sciences. These activities may be Observed through experiments. The graphic substance is about purely material aspects of the written language. It does not require any specialized technique. The other aspects of language, such as the formal and the contextual, come under behavioural or social sciences. These are grouped together as one field of study, called "linguistics". If spoken language is considered an organized noise, then phonetics studies the noise, and linguistics its organization. A linguist has his language laboratory, too. He makes so many experiments on the transmission of sound through waves.

Again, like a scientist the /linguist develops hypothesis, makes generalized statements, and tests them against the established facts about languages. In science, each observable phenomenon is required to be given a precise explanation as, for example, a chemist classifies elements into metals and non-metals; a biologist classifies living things into plants and animals; further classifications are also made on the basis of the characteristics of the objects belonging to a particular class, subclass, etc. Similarly, a linguist or a phonetician, too, observes the features of a language, classifies them as whether they are sound features of a particular type or words belonging to a particular class on the basis of similarity or differences with

other sounds and words. From these observations and tests, hypotheses are formulated to account for the events, and a concrete theory of how language works is stated. It leads to methods for making statements about linguistic events. These statements link the theory to the events and they are evaluated by reference to both the theory and the events. The best statements are those which make the maximum use of the theory to account most fully for the facts.



### The level of linguistics analysis

The categorical study of linguistics leads to two aspects. The first, when we study its phonetic side (phonology), we find it very close to natural sciences such as physics, physiology, biology, and zoology. It touches on physics through acoustics and audition, on physiology through the structure of the human vocal organs, and on zoology through the comparative study of the communicative systems of living beings.

Like a scientist, he observes his data. His method of observation includes simple listening, phonetic transmission, and the use of various instruments, such as oscillograph, sounds, pectograph, kymograph, chromograph, mingograph, laryngoscope, endoscope, sonograph, autophonoscope, breathing flask, strobolaryngoscope, electric vocal tract, pitch meter, intensity meter, speech stretcher and formant graphing machine. Recording and cassettes are also made use of, which constitute various kinds of objective description. Linguistics shares some of the characteristics of social science, because it studies language which is a form of social behaviour and exists in interaction between human beings in the society.

The various subsidiary trends are apparent including numerous methodological and theoretical developments. The paper argues that so far these trends respond only in consistently to two major challenges in the relationship between the academy and the lay community. 1) Identifying and studying issues held to be problems by those outside the academy. 2) Classifying the nature of the contributions of research to those real world problems. Three themes are considered; the relationship between surface data and theory development, the problem of the specific and general, and the importance of problematicity.

Finally, we are to agree that linguistics is the scientific study of language. It may be inductive or deductive. But in both cases, linguistic analyses are objective, tentative and systematic. It is concerned with reportable facts, methods, and principles. It works by means of observations, hypotheses, experiments and tests, postulates, and inferences. As Lyons puts it, linguistics has natural links with a wide range of academic disciplines. To say that 'linguistics is a science' is not to deny that, by virtue of its subject matter; it is closely related to such eminently human disciplines as philosophy and literary criticism.

Before the twentieth century, the study of language was not regarded as a separate area of study in its own right, and it was considered as a part of studying the history or the philosophy of language. Linguistics is a specific modern discipline which describes the nature, scope, structure, production, perception and transmission of language independently. It establishes a theory of language. It studies the components of a language system and ultimately arrives at an explanatory statement on how it works. The modern linguistics is chiefly descriptive. But there are also other aspects within the scope of linguistics such as historical and comparative studies of language.

## CONCLUSION

The paper concludes Linguistics is a growing and exciting field with an increasingly important impact on other fields as diverse as psychology. Philosophy, education, sociology, anthropology, computer science and artificial intelligence. Linguistics needs to be accountable to two communities . The academy and the lay communities it aims to work with.

## REFERENCES

1. Halliday, M.A.K., Angus McIntosh and Peter Strevens, *The Linguistic Sciences and Language Teaching*, Longmans, London, 1965, p. 9.
2. Sweet, Henry, *The History of Language, from Secondary Source, An Introductory Text Book of Linguistics & Phonetics* by R.L. Varshney, Student Store, Bareilly, 1993, p. 2.
3. Pei, Mario A. and Franch Gaynor, *Dictionary of Linguistics*, 1954. Secondary source *ibid*, p. 2.
4. Lartgacker, Ronald W., *Language and Its Structure*, Brace & World, Harcourt, 1967.
5. Robins, R.H., *General Linguistics: An Introductory Survey*, Longmans, London, 1985, p. 3.
6. Trends in Linguistics studies [www.degruytor .com](http://www.degruytor.com)
7. Some current trends in Linguistics <https://benjamin.com>
8. Linguistics in the study of literature <https://pure.stgath.ac.uk>
9. *A course in Linguistics*. Prentice Hall of India, New Delhi