MA (English), Sem III
Paper III – (Elective VIII) PELE-658
Linguistics, Phonetics and Modern Grammar -I

Instructor: Prof Susheel Kumar Sharma (SKS) Complied by: SKS

Unit 1 (SKS)

Linguistics: Definition, Linguistics as a Science, Scope of Linguistics, Branches of Linguistics,

Leonard Bloomfield, "Linguistics as a Science", Studies in Philology, Vol. 27, No. 4 (Oct., 1930), pp. 553-557, University of North Carolina Press,https://www.jstor.org/stable/4172074

Science:

"The observation, identification, description, experimental investigation, and theoretical explanation of phenomena.
Such activities restricted to explaining a limited class of natural phenomena. Such activities applied to an object of inquiry or study. Knowledge, especially that gained through experience." (THE AMERICAN HERITAGE® STEDMAN'S MEDICAL DICTIONARY)

"The investigation of natural phenomena through observation, theoretical explanation, and experimentation, or the knowledge produced by such investigation.♦ Science makes use of the **scientific method**, which includes the careful observation of natural phenomena, the formulation of a hypothesis, the conducting of one or more experiments to test the hypothesis, and the drawing of a conclusion that confirms or modifies the hypothesis. See Note at hypothesis." (THE AMERICAN HERITAGE® SCIENCE DICTIONARY)

"The most common meaning of science is a body of established, verifiable and organised data secured by controlled observation, experience or experiment. The scientific method is the method followed in obtaining such data." Justice R.A. Jahagirdar (Retd) (1927-2011), Scientific Temper, p.15.

"Science is a system of knowledge, a body of knowledge, held together by a group of propositions which have been tested and found to be valid in the light of evidence gathered." Justice Jahagirdar, Collected Works of Justice R.A. Jahagirdar (Retd) (1927-2011), Scientific Temper, Rationalist

The method of science or the scientific method consists of formulating a hypothesis on the basis of the current knowledge and of gathering additional data or facts to test the validity of the hypothesis. The validity of the hypothesis is not tested merely by the gathered facts or data. The deductions of a hypothesis are worked out and they are also tested. Thus there is no self-evident truth. Hypothesis is a stage in the inquiry, and therefore it must provide the answer to the problem which has set the inquiry. A hypothesis may also be tested by an experiment in a given case. In the process, a hypothesis may be modified or in some cases may he thrown away in favour of another hypothesis. In other words, a scientist or a man with a scientific temper or attitude does not cling to a proposition merely because it is attractive or because it is more convenient or because it is after his own heart's desire. You cannot impose your own hopes or desires on the course of the quest of know ledge. As Faraday has said: "The world little knows how many of the thoughts and theories which have passed through the mind of the

scientific investigator have been crushed in silence and secrecy by his own severe criticism and adverse examination; that in the most successful instances not a tenth of the suggestions, the hopes, the wishes, the preliminary conclusions have been realised" (quoted by Karl Pearson in "*Grammar of Science*")

It is only after a hypothesis is tested and found valid, that it is placed on the pedestal of a theory. Even then its position is shaky. With the accumulation of more knowledge or with the need to explain some more phenomena, that theory may be found wanting. It may require correction, modification and some times a burial. Even the most intelligent, the most prolific scientist does not claim to be a treasure of revealed wisdom. However, he also does not accept unquestioningly the opinions handed down to him from the past. Though one of the conditions of a good hypothesis is that it must accord with the existing state of scientific knowledge, it may happen and it has happened that a hypothesis when tested may overturn the current thesis and a new era in scientific knowledge may be heralded. The Copernican revolution is a classic example of this type of development. In other words, a scientist is not afraid of a revolution in knowledge.

Scientific method, mathematical and experimental technique employed in the sciences; more specifically, technique used in the construction and testing of a scientific hypothesis.

Experiment 1 How do the different chemicals in fertilizers affect plant growth?	Independent variable: Dependent variable:	different chemicals in fertilizers plant growth
Experiment 2 How long does it take three different types of enzymes each individually to digest a litre of milk?	Independent variable: Dependent variable:	type of enzyme time taken to digest milk
Experiment 3 What is the effect of the density of different mediums (e.g., air and glass) on the speed at which light travels?	Independent variable: Dependent variable:	density of different mediums speed at which light travels

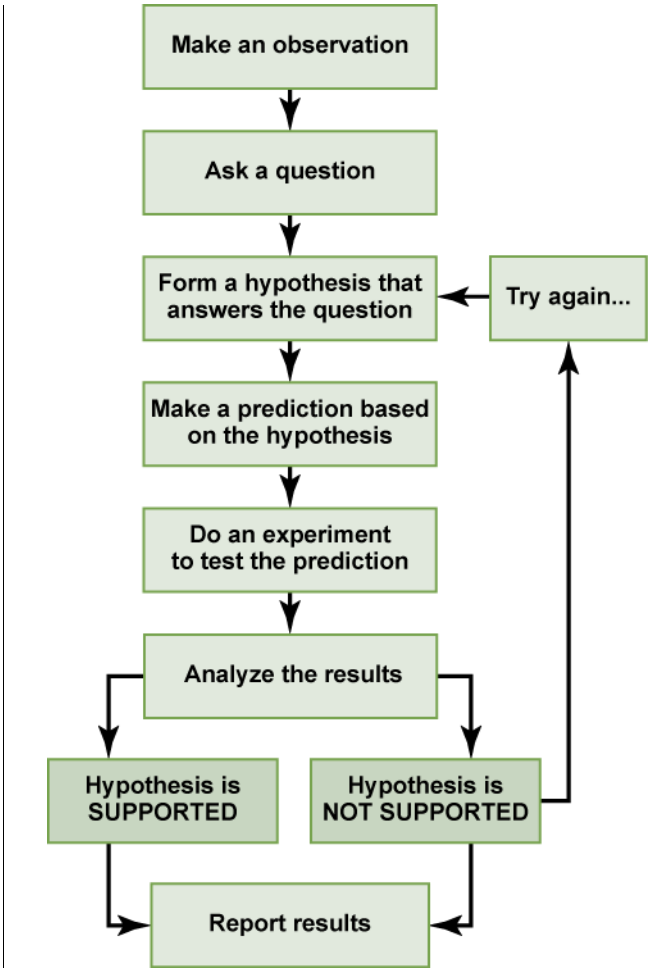
SCIENTIFIC METHOD; examples of independent and dependent variables The variable deliberately changed in an experiment is known as the independent variable. The dependent variable is the variable that may change as a result of changes in the independent variable. In most experiments, one variable is independent, one is dependent, and all others are controlled. *Encyclopædia Britannica, Inc.*

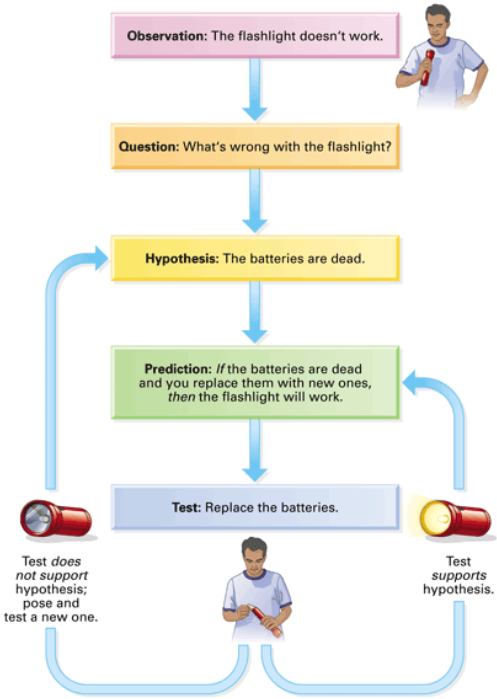
The process of observing, asking questions, and seeking answers through tests and experiments is not unique to any one field of science. In fact, the scientific method is applied broadly in science, across many different fields. Many empirical sciences, especially the social sciences, use mathematical tools borrowed from probability theory and statistics, together with outgrowths of these, such as decision theory, game theory, utility theory, and operations research. Philosophers of science have addressed general methodological problems, such as the nature of scientific explanation and the justification of induction.

The scientific method is critical to the development of scientific theories, which explain empirical (experiential) laws in a scientifically rational manner. In a typical application of the scientific method, a researcher develops a hypothesis, tests it through various means, and then modifies the hypothesis on the basis of the outcome of the tests and experiments. The modified hypothesis is then retested, further modified, and tested again, until it becomes consistent with observed phenomena and testing outcomes. In this way, hypotheses serve as tools by which scientists gather data. From that data and the many different scientific investigations undertaken to explore hypotheses, scientists are able to develop broad general explanations, or scientific theories.

Linguistics as a Science

"Linguists are not only polyglots, grammarians, and word lovers. They are researchers dedicated to the systematic study of language who apply the scientific method by making observations, testing hypotheses, and developing theories. The science of language encompasses more than sounds, grammar, and meaning. When you study linguistics, you are at the crossroads of every discipline." (https://www.linguisticsociety.org/resource/science-linguistics)





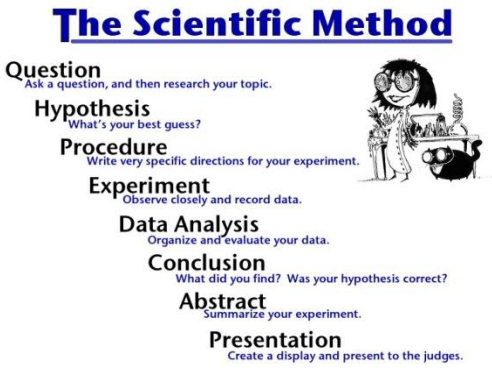
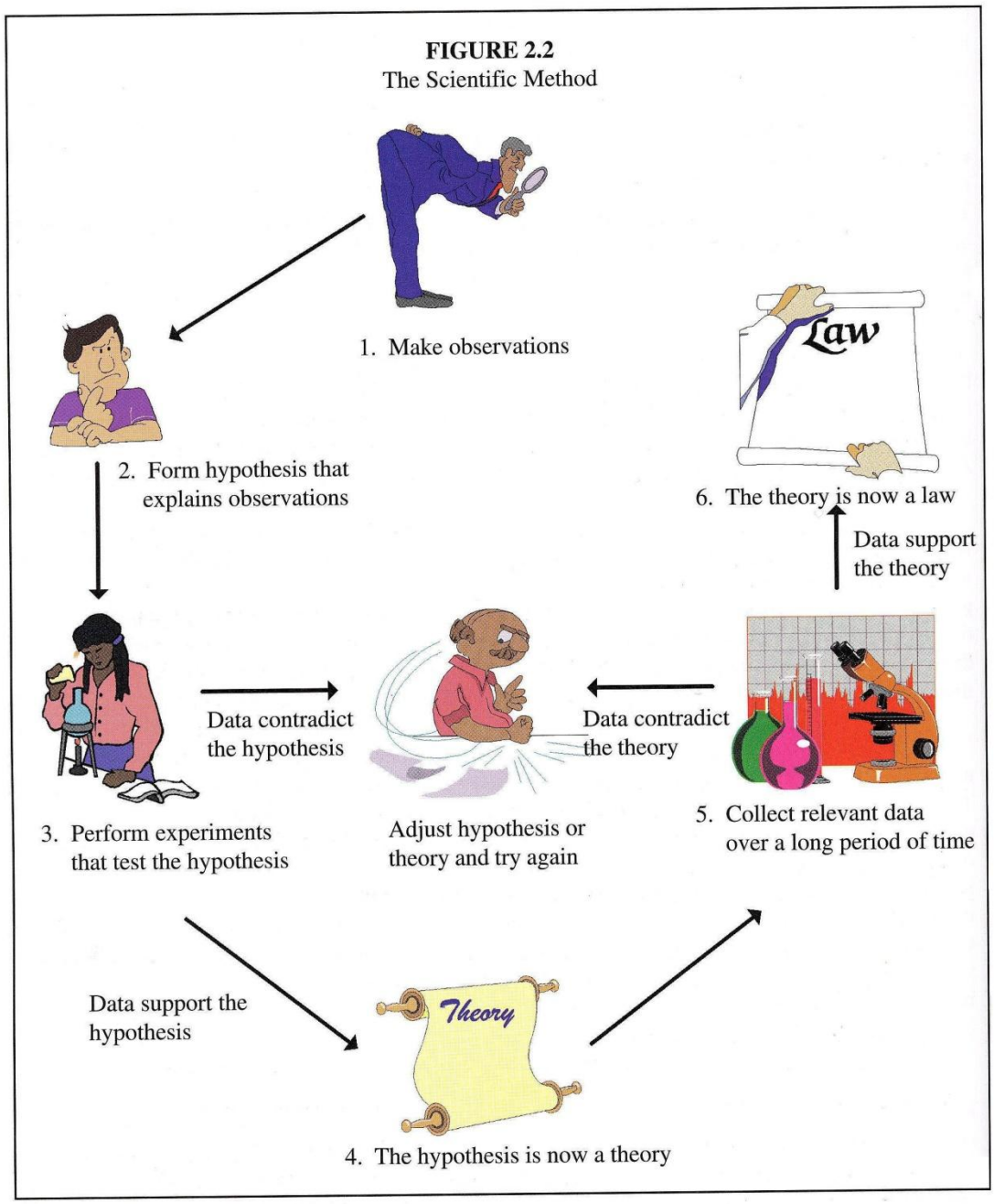
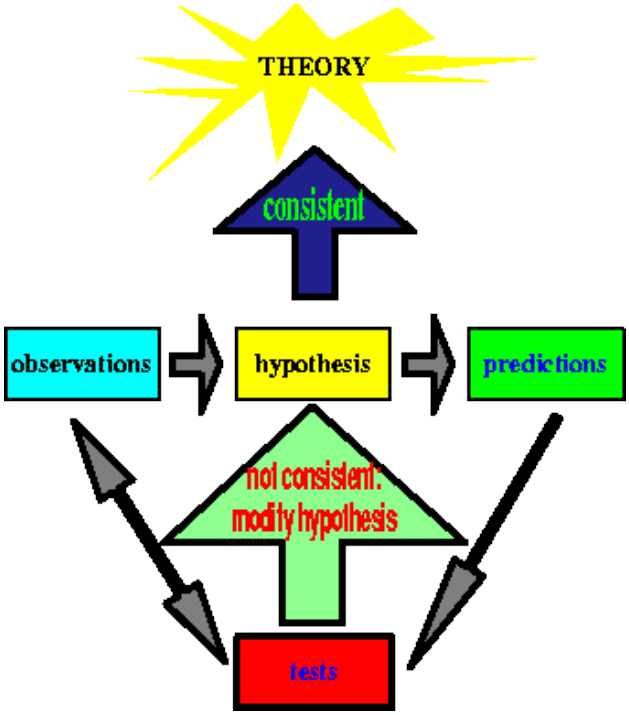


FIGURE 2.2
The Scientific Method





Research as Interpretation of texts

Entire Research Methodology in one Shloka. And world says Indians don't know Research Methodology

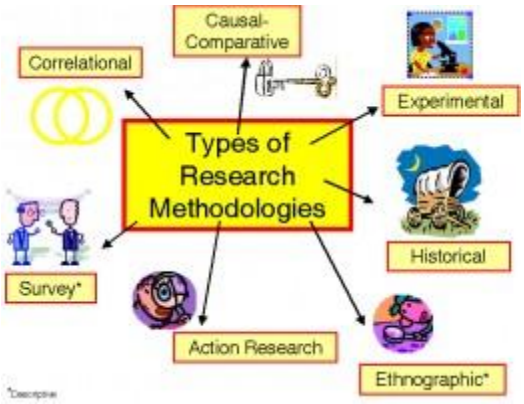
उपक्रमोपसंहारौ अभ्यासोऽपूर्वता फलम् ।
अर्थवादोपपत्ती च लिङ्गं तात्पर्यनिर्णये ॥

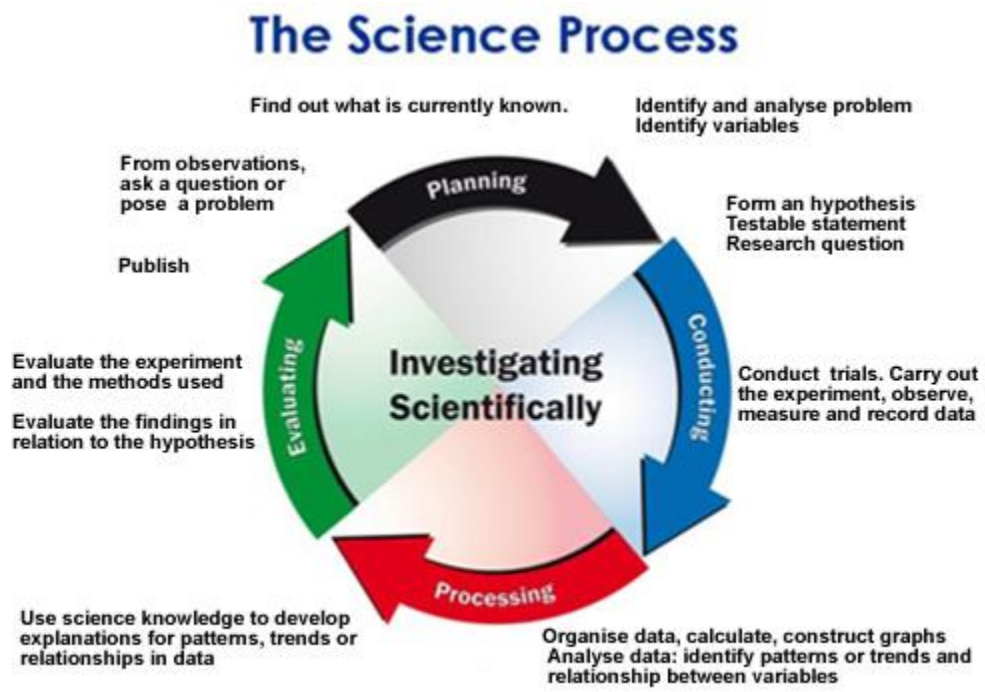
किसी का तात्पर्य निकालना हो तो उसका आरंभ, अंत, अभ्यास का नावीन्य, फल, अर्थवाद और उपपत्ति इन सात बातों को साधन बनाकर निर्णय करना चाहिए । -

-Mimansa Sutra.

The six-fold indicatory marks required for ascertaining the purport of a text, spoken of in the pUrva mImAmsA shAstra, is collectively presented in the Vedanta shAstra thus:

'1. the commencement (Research Design) and conclusion (upasamhAra)' put together is one mark
'2. reiteration, (citationor referencing) (abhyAsa)
4. uniqueness (apUrvatA)
5. fruit or benefit (phalam)
6. eulogy (arthavAda) and
7. reasoning (upapattiH)





Areas of inquiry are not divided up into ***sciences*** and ***non-sciences,*** even though Universities have organized themselves in this unfortunate way. Rather the scientific method is a way of investigating phenomena and may be applied to pretty much anything. The scientific method can even be applied to painting, for example (Tim's Vermeer), even though painting may be canonically thought of as an art, not a science.

So, a more precise question would be, **is the scientific method regularly applied to the study of language**, and the answer is a resounding yes.

Indeed, some define **linguistics** as the ***scientific study of language***. I don't think that's quite accurate, as language revitalization is a part of linguistics, for example. but doesn't involve the scientific method.

Outside of examples like that, however, the scientific method is used regularly across most linguistic subfields. The basic framework for many of the theoretical sub-fields is as follows:

1) Observe some interesting, unexplained phenomenon, like the consistent patterning of some sounds or some words, in a language
2) Make some hypothesis, often in the form of a model or a modification to an existing model. This may involve the introduction of some phonological constraint, or some Minimalist transformation.
3) Test that model against all other languages to see if it accounts for all the relevant patterning observed in these languages

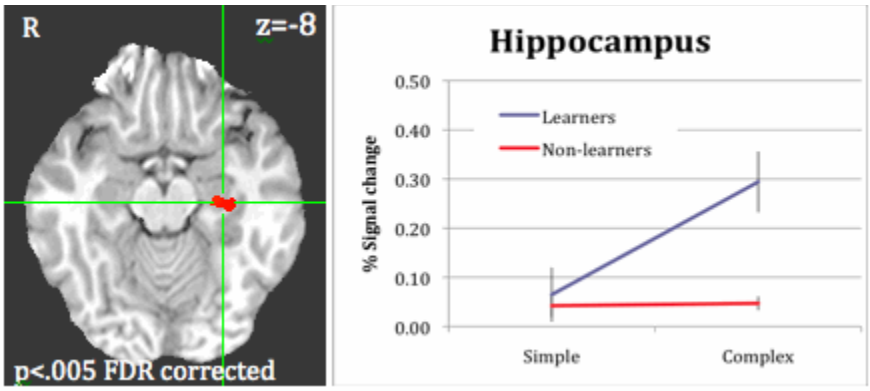
Some of these steps may be a bit hard to recognize using a prototype of scientists in lab coats, measuring things using weird-looking tools. For example, collecting linguistic data may involve hunting down books, namely grammars of languages, in the library and nothing may be measured, just looked up.

Conversely, Phonetics, where the hypotheses concern the physiological and acoustic aspects of speech, may involve lab coats, instruments and fine quantitative measurements of things like tongue position or sound waves.

My advisor, Keith Johnson, looking science-y whilst measuring airflow.

John Ohala, eminent phonetician, in a plethysmograph, which also looks pretty science-y.

More broadly, Psycholinguistics and Neurolinguistics are also more canonically science-looking. For example, in my study of the neurobiological basis of language and language disorders, I produce figures like this:



Science!

But crucially, linguistics as a science can also look like this:

Here you see data being collected that will ultimately confirm or falsify some hypothesis about how language works.

Yes, especially in its modern form. It's origins are primarily anthropological, and in the past it has been the victim of a great deal of "armchair science" . But, with the exception of philology and perhaps philosophy of language* (as David Rosson points out), almost all subfields of linguistics now employ the scientific method at least to some extent. Even where they don't use traditional null hypothesis testing, the major subfields of linguistics (phonetics, phonology, morphology, syntax, semantics, and pragmatics) are data driven, using data from actual speech (phonetics/phonology), puzzling out morphological and syntactic rules from sets of grammatical and ungrammatical utterances (morphosyntax), using association nets to map semantic networks (like WordNet), and using experiments to determine how context and interaction contribute to linguistic understanding (pragmatics).

*and I would argue these are actually subfields of anthropology and philosophy, respectively, rather than linguistics

Basically because some of it is (natural) science. Some of it arguably isn't.

Here are some parts that are obviously science.

- Phonetics and phonology. It deals with what sounds people can make and which ones they can and do distinguish (the latter varies a lot by language). Very empirical stuff.
- Psycholinguistics, neurolinguistics and child language acquisition. How does human brain process language. This is almost purely experimental science.

In the middle:
- Historical linguistics. This is an observational science, kind of like astronomy or parts of geology. It's hard to do experiments, but it's heavily based on empirical data, and mostly seems very plausible.
- Sociolinguistics. I actually don't know much about it, but it deals with harder to quantify aspects because it deals with smaller groups and people in general which are harder to be objective about.

Here are some less scientific parts:
- Syntax and semantics. Here people tend to come up with theories, some very mathematical or philosophical, not so much based on experimentation.
- Computational linguistics. It's engineering (computer science), basically.

This is not intended to be an exhaustive list of branches of linguistics, just examples for illustration.

One interesting aspect of this question is that it refers to the way how academic disciplines are carved up in English, where you have sciences and humanities (apparently non-sciences). In other languages, this is different, as in German, where the names for groups of academic disciplines are compound ending in -wissenschaft (i.e. science). So there is 'Naturwissenschaften' (sciences), 'Gesellschaftswissenschaften' (social s.), 'Ingenieurwissenschaften' (engineering), and 'Geisteswissenschaften' (humanities).
The big question is whether linguistics belongs to the Geisteswissenschaften. Linguistics clearly has developed a method different from from philology around the beginning of the last century, but this is not always acknowledged by people doing philology and linguistics in philology. On the other hand, linguistics was a formative part in the scientific area in the 1920-1950s which bred theoretical computer science, cybernetics, various advanced logics, and proper linguistics among other stuff, and many areas of linguistics have proper interfaces with computer science, logic, mathematics, and psychology. Data-analysis and proper experimentation belong to linguistics, which allies itself with some of the social sciences and psychology. But we must admit that language is a bio-cultural hybrid, and that linguistics (despite rhetorical attempts by Chomsky) will never make it into the life sciences.
Once again, you don't have to find the correct hypernym if you use German, where linguistics is 'Sprachwissenschaften' (language sciences).

Eugene Holman, former Taught and Researched English and Linguistics. at University of Helsinki (1971-2012)

Updated Feb 14

Yes. **A science is a discipline that collects, analyzes, describes, and models data, and then constructs hypotheses, verifiable by replicable experiments, and theories to account for and explain it.** A central part of linguistics is the construction of grammars. An adequate grammar is based on the analysis of a corpus of texts in a given language, and it is a theory of that language strong enough to allow for the production and interpretation of new texts in that language. If you regard studying a phenomenon common to all humans but to no other living creature using such methodologies and having such an agenda as a science, then linguistics is a science. The scientific study of language and grammars raises other issues that are also amenable to scientific investigation. These include the question of how the human brain has evolved to use and because of the use of language, why children born in the most diverse cultural settings devise the same strategies for learning whatever language or languages are spoken in their surroundings, and why human languages use only a subset of the grammatical structures, processes, and sounds theoretically available to them.

George Corley, PhD student in Linguistics, University of Wisconsin at Madison

Answered Sep 10, 2013 · Upvoted by Logan R. Kearsley, MA in Linguistics from BYU, 8 years working in research for language pedagogy. and Steve Rapaport, Linguistics PhD candidate at Edinburgh. Has lived in USA, Sweden, Italy, UK.

Originally Answered: Is linguistics a science?

Linguistics is one of the social or anthropological sciences, specifically studying language as a unique ability of humans. How "hard" a science it is depends partly on the sub-field, but all linguistics involves using the scientific method to attempt to figure out how Language works. Our data comes from corpora (databases of written or recorded speech, sg, *corpus*), native speaker intuitions, and experiments involving such things as language acquisition, processing, etc.

Linguistics is important in that it explores how we know things that we don't consciously understand. Very often, when working with

speakers, linguists run into people explaining how their language works in ways that clearly contradict the data. They know intuitively how to speak their own native language, but they don't consciously have access to the rules they use every day. To me, that's one of the most interesting parts of linguistics -- learning what native speakers don't know that they know.

As George Corley said, **it depends on the sub-field**.

- Traditionally you have **philology**: comparable to hermaneutics or classics.
- Then there's **sociolinguistics**: ranging from some data-based analyses to ethnography to just opinions.
- As a backdrop, there's always **philosophy of language**, e.g. Chomsky's arguments for the language organ. This field is also varied, it used to be like Freud, but it points out some directions which can be scientifically investigated, e.g. Child Language Acquisition studies went from Darwin-style home diaries to lab experiements (which follow on from Chomsky's theory).
- Personally, I think **syntactic**ians are like mathematicians, they work with conceptualised ideals and notations based on largely contrived "data" in an enclosed study or basement.
- In the middle you have lab **phonology**, **psycholinguistics**, **acquisition** etc. whose "hardness" can be on par with modern lab psychology (which itself has a long history of varied "hardness"), depending on design.
- The so-called "**applied linguistics**" covers a lot of education-related topics, such as ESL, reading, or cirriculum design. It's kind of like what you study at a formal school: largely empirical (even anecdotal), lots of data-independent theories.
- **Computational linguistics** (NLP) would have largely computer/data scientists who work on projects related to linguistics.
- On the other side you also have what is more like medicine, e.g. **neurolinguistics**, **pathology**, which study normal functioning and disorders with clinical techniques.

Again, it depends on the specific field, methodology, and design -- or more generally the specific project and people working on it.

Is it? Let me answer like so:

The linguistics' community strives to distance itself from any non-scientific method. It is still questionable whether this has already been achieved and whether it is desirable: Are all non-scientific methods really bad and useless? In any case, history shows that even the so-called non-scientific methods have produced many valuable findings which mankind still draws on. It should be noted that not everything must be quantifiable in order to be considered valuable and not everything that can be considered valuable is quantifiable.

Yes, it is, even in the more narrow sense. It is sometimes said that the philological or cultural disciplines importantly dealing with language are totally different from disciplines like the natural sciences, and insofar as linguistics is concerned with language it belongs rather to the first than to the second group of disciplines.

I believe this to be a wrong conclusion. The human species is a product of biological evolution. Every young child is capable of learning the languages spoken in the environment. Therefore, language as part of the human species is a topic of biology (belongs to the natural sciences) just as echo locomotion is part of the bat species.

Many aspects of language are investigated in subdisciplines of the natural sciences. For instance, phonetics (the scientific study of human-produced sounds) began as a subdiscipline of medical sciences. Neurolinguistics is part of the modern neural sciences. The question of why young chimpanzees cannot compete with human kids in their interest for languages tries to compare biological species and so must be answered within biology. Even that we don't know how the human linguistic capacity is inherited, it must be done genetically, and so the answer we expext should come from the natural sciences.

But not every in linguistics is natural science. Yes, there are linguistic tasks like the decoding of cuneiform script or the analysis of the morphological kinship within a language family that do not belong to natural history. Nevertheless, for being successful, the linguists must be trained in mathematics. They have to solve a problem in which observation, hypothesis and probability play a role.

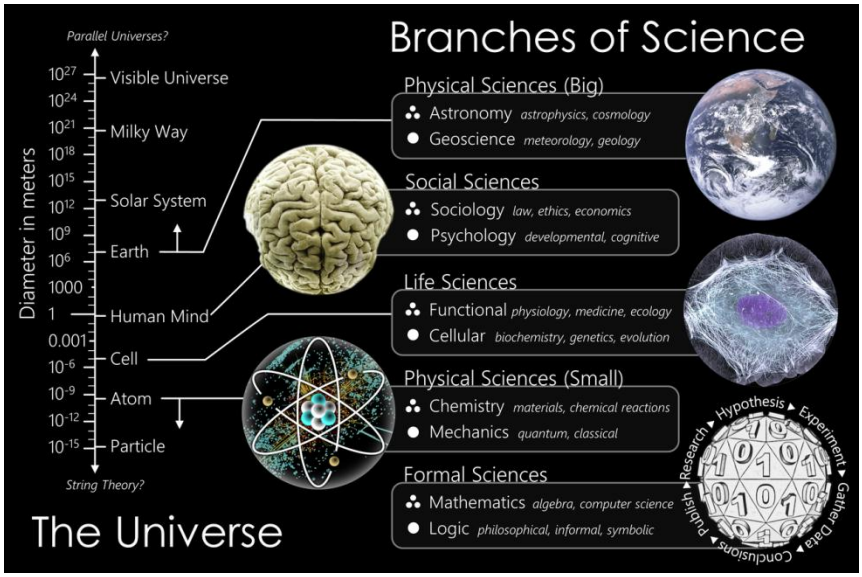
A very loose definition of science that I hope we can all agree on is "a systematic empirical study of some subject."

What exactly we mean when we say systematic is a question for another day, but at the very least, there has to be some external subject matter to study, and we have to use data, not *a priori* arguments.

Languages, just like many other subject matters, can be discussed empirically, so we can investigate them scientifically - and that's exactly it, linguistics is the systematic empirical study of languages.

https://www.linguisticsociety.org/resource/science-linguistics

The Science of Linguistics



Linguistics is the science of language, and linguists are scientists who apply the scientific method to questions about the nature and function of language.

Linguists conduct formal studies of speech sounds, grammatical structures, and meaning across all the world's over 6,000 languages. They also investigate the history of and changes within language families and how language is acquired when we are infants. Linguists examine the relationship between written and spoken language as well as the underlying neural structures that enable us to use language.

Clearly, many of the questions that linguists pose overlap with fields in the life sciences, social sciences, and humanities, thus making linguistics a multidisciplinary field. Linguistics, as a multidisciplinary field, attempts to understand how language is stored in the human mind/brain and how it is part of everyday human behavior through its sister fields of neuroscience, philosophy, psychology, anthropology, sociology, and computer science.

It is important to note that the term "linguist" may cause some confusion because it is known to be used differently in non-academic domains. Sometimes language experts are referred to as linguists, but those individuals do not generally conduct the same kind of scientific research on language that is carried out by those with advanced degrees in linguistics. "Polyglot" is the term used for a person who has knowledge of multiple languages. And although it is possible for a person to be both a linguist and a polyglot, it is just as likely that a linguist speaks only one language.

The resources available below on this page offer some perspectives on the science and applied science of linguistics. A selection of FAQ pamphlets which offer particular insights into language from a scientific perspective may be found here. Other resources describing the science of linguistics from the LSA YouTube channel may be found below:

- Language documentation
- Sociolinguistics
- Neuro- and psycholinguistics
- Anthropological linguistics
- Computational linguistics

The Domain of Linguistics is a series first published by the Linguistic Society of America in 1982. It was written to explain the discipline to the general public, facilitated by a Challenge Grant from the National Endowment for the Humanities. A selection is available below:

- Applied linguistics by G. R. Tucker
- Grammar by S. Chung and G. Pullum
- Language and the Brain by S. Crain
- Language Variation and Change by S. Thomason
- Machine Translation by M. Kay
- Meaning by W. Ladusaw
- The Sounds of Speech by M. Halle
- Neurolinguistics by L. Menn
- What is 'Correct' Language?: Prescriptivism by E. Finegan

The Routledge Guides to Linguistics series, produced as part of the LSA's publishing partnership with Routledge, is a new series of publications meant to serve as introductions to various topics and questions within the field of Linguistics. You can find a full list of available new titles and purchase them here. The series includes approachable and informative guides to many topics in Linguistics:

- *Language in Children* by Eve V. Clark
- *Language and Meaning* by Betty J. Birner
- *Is English Changing?* by Steve Kleinedler
- *Sign Languages* by Diane Lillo-Martin, Sandra Wood, and Joseph Hill (forthcoming)
- *Why Study Linguistics* by Kristen Denham and Anne Lobeck (forthcoming)
- *Language, Gender, and Sexuality* by Scott F. Kiesling (forthcoming)
- *Bilingualism* by Sharzad Mahootian (forthcoming)
- *Ebonics* by Sonja L. Lanehart (forthcoming)

Scope of Linguistics

Linguistics is simply, "The study of language." It can and does study languages but it looks at everything from the smallest bits (phonemes/phonetics) to large units like Sentences and syntax, pragmatics, semantics (meaning). Branches overlap with psychology (neurolinguistics/psycholinguistics as it seeks to understand how the brain processes languages (listening, and speaking). The skills of writing and reading tend to be researched far more by psychologists. It looks at the history of language and how it changes over time. It studies how language is influenced by culture "sociolinguistics." At a basic level (until you "specialize" it is a very practical subject and provides an excellent background for teaching (especially ESL). How do children learn language? How do adults learn 2nd or subsequent languages? These are also important areas of research.

I would recommend that all teachers have at least an introductory course in linguistics and it is also an excellent "elective" course for other majors.

Linguistics is a vast and wide spread world. It pertains every kinds of communications and the meanings being communicated or being communicating. We can receive or transfer our notions and ideas in forms of sounds, gestures, signs, writings, colours, mimics etc. And the all are included in discourse analysis . More over the nature of learning mechanism and the process of learning and coding and decoding of meanings and the choice of word orders and sentence elements order, in other words sentence structures are included in linguistics . Linguistics in general studies human beings as an unknown creature and the process of development of the making and cause and effects in the process of making. There are a lot to say about linguistics ,but the subject should be to the point to get a definite point. There are more than 50 subgroups in Linguistics with definite specialities and each one of them opens our mind towards an amazing worlds of meanings about the meaning of nature of human being and real meaning of existence. And meanings of the secrets of lives of all around us.

The scope of linguistics is entirely limited to language, particularly human language, as opposed to "machine language" or "computer language." (The communication systems of other animals may be of interest to some linguists but are not generally considered the subject of "linguistics.") Human language, however, is a very broad category. Some areas within linguistics include: phonetics, semantics, syntax,

historical linguistics, comparative linguistics, psycholinguistics, sociolinguistics, anthropological linguistics, applied linguistics and others.

It's extremely broad and covers everything under the umbrella of "understanding how language works"

That includes:

-how your brain processes information (psycholinguistics)

-how language can be coded (audio, visual, touch)

-how we make speech sounds, and what sounds there are (phonetics)

-how speech sounds can affect each other (phonology)

-how we differentiate speech sounds

-how languages emerge, evolve, and change over time

-how grammar works, and what grammar is

-how we code ideas into language (semantics)

-how language works socially (pragmatics)

-how we can simulate language on a computer (Natural Language Processing)

-big data analysis of speech and language (computational linguistics)

-how humans learn languages as children and as adults (language acquisition)

-medical conditions that affect language (Speech language pathology)

-identifying and codifying the current meaning and usage of words (lexicography)

-studying how language has changed over time (historical linguistics)

-documenting undocumented languages for study (language documentation)

-reconstructing and encouraging growth of dead or dying languages (language revitalization)

If you do graduation in linguistic the you can have scope in the following field

Language teaching [1]

- foreign language teaching
- teaching English as a second language
- teaching English as a foreign language
- teaching English as a first language
- teaching in literacy programs

Information technology

- natural language processing
- speech recognition, speech synthesis

Publishing

- editor (for a publishing house, working with government or educational documents)
- lexicographer (e.g. working for Merriam-Webster)
- technical writer

Professions

- speech pathologist/therapist
- audiologist
- college/university professor (combining research, teaching and service)
- lawyer
- medical doctor or researcher

Miscellaneous [2]

- interpretor/translator, e.g. for a publisher, the U.S. State Department or other government agencies
- missionary, e.g. working for SIL (Summer Institute of Linguistics , Wycliffe Bible Translators
- librarian
- civil service employee
- computer programmer
- writer
- advertising industry employee

What is the main scope of linguistics?

Absolutely anything and everything having to do with language.

Linguistics has a number of sub-disciplines. From the list at LINGUIST List Subfields you will find the following. In short, anything you can conceive that involves human language is within the scope of linguistics.

Anthropological Linguistics

Applied Linguistics

Cognitive Science

Computational Linguistics

Discourse Analysis

Forensic Linguistics

General Linguistics

Historical Linguistics

History of Linguistics

Language Acquisition

Language Documentation

Lexicography

Linguistics and Literature

Linguistic Theories

Mathematical Linguistics

Morphology

Neurolinguistics

Philosophy of Language

Phonetics

Phonology

Pragmatics

Psycholinguistics

Semantics

Sociolinguistics

Syntax

Text and Corpus Linguistics

Translating and Interpreting

Typology

Writing Systems

Scope of Linguistics

The scope of Linguistics is vast and huge. And its covers a wide range of fields and topics. Thus, Phonetics is concerned with the sounds of languages, phonology with the way sounds are used in individual languages, morphology with the structure of words, syntax with the structure of phrases and sentences, and semantics with the study of meaning. A number of linguistic fields study the relations between language and the subject matter of related academic disciplines, such as sociolinguistics (sociology and language) and psycholinguistics (psychology and language). In principle, applied linguistics is any application of linguistic methods or results to solve problems related to language, but in practice it tends to be restricted to second-language instruction. However, the scope of Linguistics is given below:

Phonetics (from the Greek: φωνή, phōnē, "sound, voice") is the subfield of linguistics that comprises the study of the physical sounds of human speech. It is concerned with the physical properties of speech sounds (phones), and the processes of their physiological production, auditory reception, and neurophysiological perception.

Phonetics was studied as early as 2,500 years ago in ancient India, with Pānlini's account of the place and manner of articulation of consonants in his 5th century BC treatise on Sanskrit. The major Indic alphabets today order their consonants according to Pālini's classification.

It is the scientific study of the production, transmission and reception of speech sounds. It studies the medium of spoken language, touching upon physiology and physics, phonetics is now a pure science

that studies speech processes including the anatomy, neurology and pathology of speech, as well as the articulation, description, production and perception of speech sounds. The study of phonetics can divides into three main branches - Articulatory Phonetics studies the speech organs, which produce sounds of language; Acoustic phonetics studies the physical properties of speech sounds such as frequency and amplitude in their transmission, and Auditory Phonetics studies the way in which human beings perceive sounds through the medium of the ear. Phonetics studies the defining characteristics of all human vocal noise, and concentrates its attention on these sounds which occur in the languages of the world. In other words, Phonetics tries to study how the various organs of speech the lungs, the larynx, the soft palate, the tongue and the lip function in the production of speech.

Semantics (derived from Greek semantikos, "significant"), the study of the meaning of linguistic signs—that is, words, expressions, and sentences. Scholars of semantics try to answer such questions as "What is the meaning of (the word) X?" They do this by studying what signs are, as well as how signs possess significance—that is, how they are intended by speakers, how they designate (make reference to things and ideas), and how they are interpreted by hearers. The goal of semantics is to match the meanings of signs—what they stand for—with the process of assigning those meanings.

The shorter Oxford Dictionary glosses the term Semantics as "relating to signification or meaning". Broadly speaking, semantics is the aspect of linguistics which deals with the relations between referents (names) and referends (things) that is linguistic levels (words, expressions, phrases) and the objects or concepts or ideas to which they refer - and with the history and changes in the meaning of words. A semanticist would like to find how a man is able to paraphrase, transform, and detect ambiguities and why the surrounding words sometimes force him to choose one interpretation rather than another. A semantic analysis, for example, of English must also explain antonyms, Synonyms, Hononyms and transformations of the language.

Phonology: Phonology (Greek 'phone' means voice , sound and 'logos' means word, speech) 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 of the sounds in language rather than with the actual physical articulation of speech sounds. Phonology is about the underlying design, the blueprint of the sound type, which serves as the constant basis of all the variations in different physical articulations of that sound type in different contexts.

Thus, when we think of the (t) sound in the words star, writer, and eighth as being the same, we actually mean that in the Phonology of English, they would be represented in the same way. In actual speech, these (t) sounds are all very important.

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.

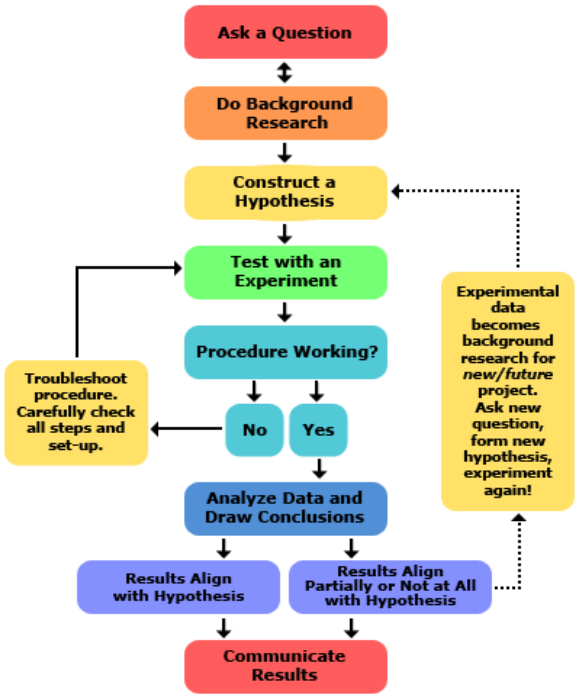
Grammar: Etymologically, the term grammar goes back to a Greek word grammatika or grammatika techne which may be translated as 'the art of writing'. But for a long time this term has been used very loosely to incorporate the whole study of language. The Greeks considered grammar to be a branch philosophy concerned with the art of writing. By the Middle Ages grammar had come to be regarded as a set of rules, usually in the form of a text-book, dictating 'correct' usage. So in the widest and the traditional sense, grammar came to mean a set of normative and prescriptive rules in order to set us a standard of 'correct usage'. And grammar was both the art and the science of language. The grammarian until the nineteenth century was the law-give. Though it is still a valid interpretation for a law man, no contemporary or modern linguist will accept this definition of grammar in our age.

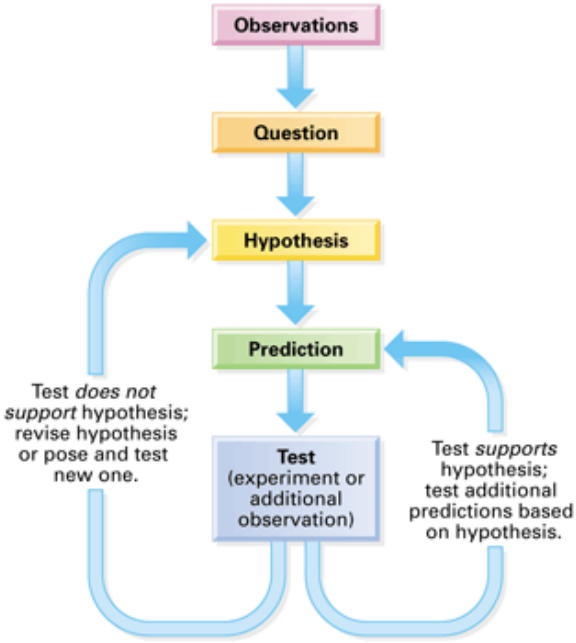
Around the central core of the Linguistics, are various branches of linguistics: such as Psycholinguistics, Sociolinguistics, Neurolinguistics, anthropological Linguistic, Cognitive linguistics, Generative linguistics.

Psycholinguistics: Psycholinguistics or psychology of language is the study of the psychological and neurobiological factors that enable humans to acquire, use, and understand language. Modern research makes use of biology, neuroscience, cognitive science, and information theory to study how the brain processes language. Psycholinguistics covers the cognitive processes that make it possible to generate a grammatical and meaningful sentence out of vocabulary and grammatical structures, as well as the processes that make it possible to understand utterances, words, text, etc. Developmental psycholinguistics studies children's ability to learn language.

Sociolinguistics: is the study of the effect of any and all aspects of society, including cultural norms, expectations, and context, on the way language is used. Sociolinguistics overlaps to a considerable degree with pragmatics.

It also studies how dialects differ between groups separated by certain social variables, e.g., ethnicity, religion, status, gender, level of education, age, etc., and how creation and adherence to these rules is used to categorize individuals in social class or socio-economic classes. As the usage of a language varies from place to place (dialect), language usage varies among social classes, and it is these sociolects that sociolinguistics studies.





What are the different branches of linguistics?

The main branches of linguistics are:

1. Historical linguistics
2. Geographical linguistics
3. Descriptive linguistics
4. Comparative and contrastive linguistics
5. Psycholinguistics
6. Sociolinguistics
7. Ethnolinguistics
8. Syntactics/Grammar
9. Semantics
10. Pragmatics
11. Dialectology
12. Morphology
13. Phonetics
14. Phonemics
15. Morphophonology
16. Lexicology

17. Lexicography
18. Translation theory
19. Etymology
20. Stylistics
21. Computational linguistics
22. Linguistic philosophy
23. Philosophy of language (not the same as linguistic philosophy but the bigger set).
24. Zoolinguistics
25. Text lingustics
26. Discourse and conversation analysis
27. Non-verbal communication theory (including kinesics, paralanguage, haptics, chronemics etc.)
28. Stylistics
29. Neurolinguistics

de Saussure has a more simplified logical scheme:

1. Synchronic and diachronic linguistics
2. Prospective and retrospective linguistics (the latter is historical linguistics)

Traditionally semiotics of which linguistics is technically speaking a study of one particular code - language consists of syntactics, semantics and pragmatics.

Amongst the many branches are branches of pure linguistics (morphology, syntax, semantics, phonetics, phonology) and of applied linguistics (amongst which socio- and psycholinguistics). The difference (to use de Saussure's terminology) is between "langue" (pure linguistics) which studies grammatical systems and "parole" (applied linguistics) which studies language usage

Linguistic:
Linguistic is basically a study of human language.

Branches of linguistic:
There are five main branches of linguistic.

1. Macro Linguistic.
2. Micro Linguistic.
3. General Linguistic.
4. Computational Linguistic.
5. Descriptive Linguistic.

Macro and Micro Linguistic have further fields.

I hope you find this helpful, Thank you for reading!

https://en.wikipedia.org/wiki/Outline_of_linguistics

The following outline is provided as an overview of and topical guide to linguistics:

Linguistics is the scientific study of natural language. Someone who engages in this study is called a **linguist**. Linguistics can be theoretical or applied.

Contents

Nature of linguistics[edit]

Linguistics can be described as all of the following:

- An academic discipline – a body of knowledge given to—or received by—a disciple (student); a branch or sphere of knowledge, or field of study, that an individual has chosen to specialise in.
- A field of science – a widely recognized category of specialized expertise within science, embodying its own terminology, nomenclature, and scientific journals.
  - A social science – a field of academic scholarship that explores aspects of human societies related to the languages they speak.

Branches of linguistics[edit]

Subfields of linguistics[edit]

- Theoretical linguistics - the study of language in abstract and model form
  - Cognitive linguistics - the study of language and cognition (thinking)
  - Generative linguistics - the theory of grammar as a mental system that generates complete sentences
  - Functional theories of grammar - language as used and coming from use
  - Quantitative linguistics - the study of mathematical language laws and corresponding general theories
  - Phonology - the usage of vocalized sounds and systems of sounds to form language
    - Graphemics - the study of language writing systems
  - Morphology - the property of sound and meaning change in language
  - Syntax - the property of grammar that governs sentence structure
  - Lexis - the complete set of words in a language
  - Semantics - the study of meaning as encoded in language
  - Pragmatics - the study of how context contributes to meaning
- Descriptive linguistics - describing how a particular language is used
  - Anthropological linguistics - *the place of language in its wider social and cultural context, and its role in making and maintaining cultural practices and societal structures*
  - Historical linguistics - study of historical language change over time
    - Comparative linguistics - comparing languages to find similarities and historical connections
  - Phonetics - the study of the speech faculty
    - Graphetics - the study of writing shapes as assigned to sounds or ideas
  - Etymology - the study of word histories and origins
  - Sociolinguistics - the study of society's effects on language
- Applied linguistics - finding solutions to real-life problems related to language

- Computational linguistics - the use of computation applied to language databasing, analysis, translation, and synthesis
- Evolutionary linguistics - *is a subfield of psycholinguistics that studies the psychosocial and cultural factors involved in the origin of language and the development of linguistic universals*
- Forensic linguistics - language science applied to the processes of law and justice
- Internet linguistics - the study of language usage on the Internet
- Language assessment - assessing first or second language faculty in individuals
- Language documentation - comprehensive description of the grammar and use practices of languages of a particular group
- Language revitalization - *is an attempt to halt or reverse the decline of a language or to revive an extinct one*
- Language education - teaching specific language and language science
- Linguistic anthropology - *study of how language influences social life*
- Neurolinguistics - study of the connections between neurology and language
- Psycholinguistics - *is the study of the psychological and neurobiological factors that enable humans to acquire, use, comprehend and produce language*
    - Language acquisition - the study of how children and adults acquire language knowledge and ability
    - Language development - the study of early language formation
    - Second-language acquisition - the study of how a second language is learned

Subfields, by linguistic structures studied *[edit]*

Sub-fields of structure-focused linguistics include:

- Phonetics – study of the physical properties of speech (or signed) production and perception
- Phonology – study of sounds (or signs) as discrete, abstract elements in the speaker's mind that distinguish meaning
- Morphology – study of internal structures of words and how they can be modified
- Syntax – study of how words combine to form grammatical sentences
- Semantics – study of the meaning of words (lexical semantics) and fixed word combinations (phraseology), and how these combine to form the meanings of sentences
- Pragmatics – study of how utterances are used in communicative acts – and the role played by context and nonlinguistic knowledge in the transmission of meaning
- Discourse analysis – analysis of language use in texts (spoken, written, or signed)
- Linguistic typology – comparative study of the similarities and differences between language structures in the world's languages.

Subfields, by nonlinguistic factors studied *[edit]*

- Applied linguistics – study of language-related issues applied in everyday life, notably language policies, planning, and education. (Constructed language fits under Applied linguistics.)
- Biolinguistics – study of natural as well as human-taught communication systems in animals, compared to human language.
- Clinical linguistics – application of linguistic theory to the field of Speech-Language Pathology.
- Computational linguistics – study of linguistic issues in a way that is 'computationally responsible', i.e., taking careful note of computational consideration of algorithmic specification and computational complexity, so that the linguistic theories devised can be shown to exhibit certain desirable computational properties implementations.
- Developmental linguistics – study of the development of linguistic ability in individuals, particularly the acquisition of language in childhood.
- Evolutionary linguistics – study of the origin and subsequent development of language by the human species.
- Historical linguistics – study of language change over time. Also called diachronic linguistics.
- Language geography – study of the geographical distribution of languages and linguistic features.
- Neurolinguistics – study of the structures in the human brain that underlie grammar and communication.
- Psycholinguistics – study of the cognitive processes and representations underlying language use.
- Sociolinguistics – study of variation in language and its relationship with social factors.
- Stylistics – study of linguistic factors that place a discourse in context.

Other subfields of linguistics[edit]

- Contrastive linguistics
- Corpus linguistics
- Dialectology

- Discourse analysis
- Grammar
- Interlinguistics
- Language didactics
- Language learning
- Language teaching
- Language for specific purposes
- Lexicology
- Linguistic statistics
- Orthography
- Rhetoric
- Text linguistics

Schools, movements, and approaches of linguistics[edit]

- Cognitive linguistics
- Danish School
- Functionalism
- Generative linguistics
- Geneva School
- Neo-Grammarians
- Prague School
- Prescription and description
- Soviet linguistics
- Stratificational linguistics
- Structuralism
- Systemic linguistics
- SIL International
- Tagmemics

Related fields[edit]

- Semiotics – investigates the relationship between signs and what they signify more broadly. From the perspective of semiotics, language can be seen as a sign or symbol, with the world as its representation.

History of linguistics[edit]

History of linguistics

- Unsolved problems in linguistics

Timeline of discovery of basic linguistics concepts[edit]

When were the basic concepts first described and by whom?

- Ancient Sanskrit grammarians
- Ancient Greek study of language
- Roman elaborations of Greek study
- Medieval philosophical work in Latin
- Beginnings of modern linguistics in the 19th century
- Behaviorism and mental *tabula rasa* hypothesis
- Chomsky and functionalism

- Generative grammar leads to generative phonology and semantics
- Alternate syntactic systems develop in 80s
- Computational linguistics becomes feasible the late 80s
- Neurolinguistics and the biological basis of cognition

Questions in linguistics[edit]

1. What is language?
2. How did it/does it evolve?
3. How does language serve as a medium of communication?
4. How does language serve as a medium of thinking?
5. What is common to all languages?
6. How do languages differ?

Basic concepts[edit]

What basic concepts / terms do I have to know to talk about linguistics?

- Morphology
  - morpheme, inflection, paradigm, declension, derivation, compound
- Phonology
  - phoneme, allophone, segment, mora, syllable, foot, stress, tone
- Grammar
  - tense, aspect, mood and modality, grammatical number, grammatical gender, case
- Syntax
  - phrase, clause, grammatical function, grammatical voice
- Lexicology
  - word, lexeme, lemma, lexicon, vocabulary, terminology
- Semantics
  - meaning, sense, entailment, truth condition, compositionality
- Pragmatics
  - presupposition, implicature, deixis

Languages of the world[edit]

Languages by continent and country[edit]

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Languages of Africa

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Languages of North America

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Languages of South America

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Languages of Asia

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Languages of Europe

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Languages of Oceania

Linguistics scholars[edit]

Main article: List of linguists

People who had a significant influence on the development of the field

- John Langshaw Austin
- Leonard Bloomfield
- Franz Bopp
- Noam Chomsky
- David Crystal

- Daniel Everett
- M.A.K. Halliday
- Louis Hjelmslev
- Roman Jakobson
- Sir William Jones
- Pānini
- Kenneth L. Pike
- Rasmus Rask
- Edward Sapir
- Ferdinand de Saussure
- August Schleicher
- John R. Searle
- Claude Lévi-Strauss
- Nikolai Trubetzkoy
- Noah Webster
- Benjamin Lee Whorf

Linguistics lists[edit]

- Languages
  - Language families and languages
  - ISO 639
  - Official languages
  - Definitions by language
- Alphabets & Orthography

Arabic	Aramaic	Armenian	Braille	Coptic	Cyrillic
Georgian	Gothic	Korean	Hebrew	IPA	English IPA
Kannada	Hiragana	Katakana	Morse code	ICAO spelling	Phoenician
Runic	SAMPA chart	English SAMPA	Shavian	Thai	

- Ideograms - Chinese and Japanese
- Syllabaries - Korean
- Mixed: Ancient Egyptian
- Common misspellings
- English words without rhymes
- Acronym
  - Wiktionary:Definitions of acronyms and abbreviations

See also[edit]

- ***Linguistics portal***

- Number of words in English
- Lexicography

External links[edit]

- Glottopedia, MediaWiki-based encyclopedia of linguistics, under construction
- Subfields according to the Linguistic Society of America
- Glossary of linguistic terms and French<->English glossary at SIL International
- "Linguistics" section of A Bibliography of Literary Theory, Criticism and Philology, ed. J. A. García Landa (University of Zaragoza, Spain)
- Linguistics and language-related wiki articles on Scholarpedia and Citizendium