Linguistics: Schools of Thought

Early grammarians

The formal study of language began in India with Pāṇini, the 5th century BC grammarian who formulated 3,595 rules of Sanskrit morphology. Pāṇini’s systematic classification of the sounds of Sanskrit into consonants and vowels, and word classes, such as nouns and verbs, was the first known instance of its kind. In the Middle East, the 7th century BC Islamic scholar Al-Kitāb fi al-naḥw (The Book on Grammar), the first known author to distinguish between sounds and phonemes (sounds as units of language), made a detailed description of Arabic in 760 AD in his monumental work, Al-Kitāb fi al-naḥw (The Book on Grammar), the first known author to distinguish between sounds and phonemes (sounds as units of language).

Western interest in the study of languages began as early as the East, but the grammarians of the classical languages did not use the same methods or reach the same conclusions as their contemporaries in the Indic World. Early interest in language in the West was a part of philosophy, not of grammatical description. The first insights into semantic theory were made by Plato in his Cratylus dialogue, where he argues that words denote concepts that are eternal and exist in the world of ideas. This work is the first to use the word etymology to describe the history of a word’s meaning. Around 280 BC one of Alexander the Great’s successors founded a university (see Museum) in Alexandria, where a school of philologists studied the ancient texts in and taught Greek to speakers of other languages. While this school was the first to use the word “grammar” in its modern sense, Plato had used the word in its original meaning as "technē grammaticēς" (Τέχνη Γραμματική), the “art of writing,” which is also the title of one of the most important treatises of the Princeton phyletists. Throughout the Middle Ages the study of language was sustained under the topic of the philology, the study of ancient languages and texts, practiced by such educators as Roger Ascham, Wolfgang Ratke and John Amos Comenius.

Historicism

In the 18th century, the first use of the comparative method by William Jones sparked the rise of comparative linguistics. Bloomfield attributes “the first great scientific linguistic work of the world” to Jacob Grimm, who wrote Deutsche Grammatik. It was soon followed by other authors writing similar comparative studies on other language groups of Europe. The scientific study of language was broadened from Indo-European to language in general by Wilhelm von Humboldt, of whom Bloomfield asserts: “This study received its foundation in the Prussian statesman and scholar Wilhelm von Humboldt (1767—1835), especially in the first volume of his work on Kavi, the literary language of Java, entitled Über die Verschiedenheit des menschlichen Sprachbaues und ihren Einfluß auf die geistige Entwicklung des Menschen (‘On the Variety of the Structure of Human Language and Its Influence upon the Mental Development of the Human Race’).”

Structuralism

Early in the 20th century, Saussure introduced the idea of language as a static system of interconnected units, defined through the oppositions between them. By introducing a distinction between diachronic to synchronic analyses of language, he laid the foundation of the modern discipline of linguistics. Saussure also introduced several basic dimensions of linguistic analysis that are still foundational in many contemporary linguistic theories. These distinctions between syntagm and paradigm, and the langue–parole distinction, distinguishing language as an abstract system (language) from a concrete manifestation of this system (parole). Substantial additional contributions following Saussure’s definition of a structural approach to language came from The Prague school, Leonard Bloomfield, Charles F. Hockett, Louis Hjelmlev, Émile Benveniste and Roman Jakobson.

Generativism

During the last half of the 20th century, following the work of Noam Chomsky, linguistics was dominated by the generativist school. While formulated by Chomsky in part as a way to explain how human beings acquire language and the biological constraints on this acquisition, in practice it has largely been concerned with describing the formal accounts of specific phenomena in natural languages. Generative theory is a generativist and formalist in character. Chomsky built on earlier work of Zellig Harris to formulate the generative theory of language. According to this theory the most basic form of language is a set of syntactic rules universal for all humans and understanding the grammars of all human languages. This set of rules is called a Universal Grammar, and for Chomsky describing it is the primary objective of the discipline of linguistics. For this reason the grammars of individual languages are of importance to linguistics only in so far they allow us to discern the universal underlying rules from which the observable linguistic variability is generated.

In the classic formalization of generative grammars first proposed by Noam Chomsky in the 1950s, a grammar consists of the following components:

- A finite set N of nonterminal symbols, none of which appear in strings formed from G.
- A finite set S of terminal symbols that is disjoint from N.
- A finite set P of production rules, that map from one string of symbols to another.

A formal description of language attempts to replicate a speaker’s knowledge of the rules of their language, and the aim is to produce a set of rules that is minimally sufficient to successfully model valid linguistic forms.

Functionalism

Functional theories of language propose that since language is fundamentally a tool, it is reasonable to assume that its structures are best analyzed and understood with reference to the functions they carry out. Functional theories of grammar differ from formal theories of grammar, in that the latter seek to describe the deep structures of the formal accounts of specific phenomena in natural languages. Generative theory is a generativist and formalist in character. Chomsky built on earlier work of Zellig Harris to formulate the generative theory of language. According to this theory the most basic form of language is a set of syntactic rules universal for all humans and understanding the grammars of all human languages. This set of rules is called a Universal Grammar, and for Chomsky describing it is the primary objective of the discipline of linguistics. For this reason the grammars of individual languages are of importance to linguistics only in so far they allow us to discern the universal underlying rules from which the observable linguistic variability is generated.

In the classic formalization of generative grammars first proposed by Noam Chomsky in the 1950s, a grammar G consists of the following components:

- Phonological function: the function of the phonemes is to distinguish between different lexical material.
- Semantic function: Agent, Patient, Recipient, etc., describing the role of participants in states of affairs or actions expressed.
- Syntactic functions: (e.g. subject and object), defining different perspectives in the presentation of a linguistic expression

Pragmatic functions: (Theme and Rheme, Topic and Focus, Predicate), defining the informational status of constituents, determined by the pragmatic content of the verbal interaction. Functional descriptions of grammar strive to explain how linguistic functions are performed in communication through the use of linguistic forms.

Cognitive linguistics

In the 1970s and 1980s, a new school of thought known as cognitive linguistics emerged as a reaction to generativist theory. Led by theorists such as Ronald Langacker and George Lakoff, linguists working within the realm of cognitive linguistics propose that language is an emergent property of basic, general-purpose cognitive processes. In contrast to the generativist school of linguistics, cognitive linguistics is non-modularist and functionalist in character. Important developments in cognitive linguistics include cognitive grammar, frame semantics, and conceptual metaphor, all of which are based on the idea that form-function correspondences based on representations derived from embodied experience constitute the basic units of language.

Cognitive linguistics interprets language in terms of the concepts, sometimes universal, sometimes specific to a particular tongue, which underlie its forms. It is thus closely associated with semantics but is distinct from psycholinguistics, which draws upon empirical findings from cognitive psychology in order to explain the mental processes that underlie the acquisition, storage, production and understanding of speech and writing. Cognitive linguistics denies that there is an autonomous linguistic faculty in the mind; it understands grammar in terms of conceptualization; and it claims that knowledge of language arises out of language use. Because of its conviction that knowledge of language is learned through use, cognitive linguistics is sometimes considered to be a functional approach, but it differs from other functional approaches in that it is primarily concerned with how the mind creates meaning through language, and not with the use of language as a tool of communication.

References