

What is language?

Language is a structured system of communication used by humans. Languages consist of spoken sounds in spoken languages or written elements in written languages. Additionally, a language may consist of other symbolic elements like hand gestures in sign languages.

Cuneiform is the first known form of written language, but spoken language predates writing by at least tens of thousands of years.

The scientific study of language is called linguistics. Questions concerning the philosophy of language, such as whether words can represent experience, have been debated at least since Gorgias and Plato in ancient Greece. Thinkers such as Rousseau have argued that language originated from emotions while others like Kant have held that it originated from rational and logical thought. Twentieth century philosophers such as Wittgenstein argued that philosophy is really the study of language. Major figures in linguistics include Ferdinand de Saussure and Noam Chomsky.

Estimates of the number of human languages in the world vary between 5,000 and 7,000. However, any precise estimate depends on the arbitrary distinction (dichotomy) between languages and dialect. Natural languages are spoken or signed, but any language can be encoded into secondary media using auditory, visual, or tactile stimuli – for example, in writing, whistling, signing, or braille. This is because human language is modality-independent. Depending on philosophical perspectives regarding the definition of language and meaning, when used as a general concept, "language" may refer to the cognitive ability to learn and use systems of complex communication, or to describe the set of rules that makes up these systems, or the set of utterances that can be produced from those rules. All languages rely on the process of semiosis to relate signs to particular meanings. Oral, manual and tactile languages contain a phonological system that governs how symbols are used to form sequences known as words or morphemes, and a syntactic system that governs how words and morphemes are combined to form phrases and utterances.

Human language has the properties of productivity and displacement, and relies on social convention and learning. Its complex structure affords a much wider range of expressions than any known system of animal communication. Language is thought to have originated when early hominins started gradually changing their primate communication systems, acquiring the ability to form a theory of other minds and a shared intentionality. This development is sometimes thought to have coincided with an increase in brain volume, and many linguists see the structures of language as having evolved to serve specific communicative and social functions. Language is processed in many different locations in the human brain, but especially in Broca's and Wernicke's areas. Humans acquire language through social interaction in early childhood, and children generally speak fluently by approximately three years old. The use of language is deeply entrenched in human culture. Therefore, in addition to its strictly communicative uses, language also has many social and cultural uses, such as signifying group identity, social stratification, as well as social grooming and entertainment.

Languages evolve and diversify over time, and the history of their evolution can be reconstructed by comparing modern languages to determine which traits their ancestral languages must have had in order for the later developmental stages to occur. A group of languages that descend from a common ancestor is known as a language family. A language that has been demonstrated to not have any living or non-living relationship with another language is called a language isolate. Languages whose relationships have not been established are unclassified. Academic consensus holds that between 50% and 90% of languages spoken at the beginning of the 21st century will probably have become extinct by the year 2100.

Theory of language

The English word language derives ultimately from Proto-Indo-European *dn̥ǵʰwéh₂s "tongue, speech, language" through Latin lingua, "language; tongue", and Old French language. The word is sometimes used to refer to codes, ciphers, and other kinds of artificially constructed communication systems such as formally defined computer languages used for computer programming. Unlike conventional human languages, a formal language in this sense is a system of signs for encoding and decoding information. This article specifically concerns the properties of natural human language as it is studied in the discipline of linguistics.

As an object of linguistic study, "language" has two primary meanings: an abstract concept, and a specific linguistic system, e.g. "French". The Swiss linguist Ferdinand de Saussure, who defined the modern discipline of linguistics, first explicitly formulated the distinction using the French word langage for language as a concept, langue as a specific instance of a language system, and parole for the concrete usage of speech in a particular language.

When speaking of language as a general concept, definitions can be used which stress different aspects of the phenomenon. These definitions also entail different approaches and understandings of language, and they also inform different and often incompatible schools of linguistic theory. Debates about the nature and origin of language go back to the ancient world. Greek philosophers such as Gorgias and Plato debated the relation between words, concepts and reality. Gorgias argued that language could represent neither the objective experience nor human experience, and that communication and truth were therefore impossible. Plato maintained that communication is possible because language represents ideas and concepts that exist independently of, and prior to, language.

During the Enlightenment and its debates about human origins, it became fashionable to speculate about the origin of language. Thinkers such as Rousseau and Herder argued that language had originated in the instinctive expression of emotions, and that it was originally closer to music and poetry than to the logical expression of rational thought. Rationalist philosophers such as Kant and Descartes held the opposite view. Around the turn of the 20th century, thinkers began to wonder about the role of language in shaping our experiences of the world – asking whether language simply reflects the objective structure of the world, or whether it creates concepts that in turn impose on our experience of the objective world. This led to the question of whether philosophical problems are really firstly linguistic problems. The resurgence of the view that language plays a significant role in the creation and circulation of concepts, and that the study of philosophy is essentially the study

of language, is associated with what has been called the linguistic turn and philosophers such as Wittgenstein in 20th-century philosophy. These debates about language in relation to meaning and reference, cognition and consciousness remain active today.

Mental faculty, organ or instinct:

One definition sees language primarily as the mental faculty that allows humans to undertake linguistic behaviour: to learn languages and to produce and understand utterances. This definition stresses the universality of language to all humans, and it emphasizes the biological basis for the human capacity for language as a unique development of the human brain. Proponents of the view that the drive to language acquisition is innate in humans argue that this is supported by the fact that all cognitively normal children raised in an environment where language is accessible will acquire language without formal instruction. Languages may even develop spontaneously in environments where people live or grow up together without a common language; for example, creole languages and spontaneously developed sign languages such as Nicaraguan Sign Language. This view, which can be traced back to the philosophers Kant and Descartes, understands language to be largely innate, for example, in Chomsky's theory of Universal Grammar, or American philosopher Jerry Fodor's extreme innatist theory. These kinds of definitions are often applied in studies of language within a cognitive science framework and in neurolinguistics.

Formal symbolic system:

Another definition sees language as a formal system of signs governed by grammatical rules of combination to communicate meaning. This definition stresses that human languages can be described as closed structural systems consisting of rules that relate particular signs to particular meanings. This structuralist view of language was first introduced by Ferdinand de Saussure, and his structuralism remains foundational for many approaches to language.

Some proponents of Saussure's view of language have advocated a formal approach which studies language structure by identifying its basic elements and then by presenting a formal account of the rules according to which the elements combine in order to form words and sentences. The main proponent of such a theory is Noam Chomsky, the originator of the generative theory of grammar, who has defined language as the construction of sentences that can be generated using transformational grammars. Chomsky considers these rules to be an innate feature of the human mind and to constitute the rudiments of what language is. By way of contrast, such transformational grammars are also commonly used in formal logic, in formal linguistics, and in applied computational linguistics. In the philosophy of language, the view of linguistic meaning as residing in the logical relations between propositions and reality was developed by philosophers such as Alfred Tarski, Bertrand Russell, and other formal logicians.

Tool for communication:

A conversation in American Sign Language

Yet another definition sees language as a system of communication that enables humans to exchange verbal or symbolic utterances. This definition stresses the social functions of

language and the fact that humans use it to express themselves and to manipulate objects in their environment. Functional theories of grammar explain grammatical structures by their communicative functions, and understand the grammatical structures of language to be the result of an adaptive process by which grammar was "tailored" to serve the communicative needs of its users.

This view of language is associated with the study of language in pragmatic, cognitive, and interactive frameworks, as well as in sociolinguistics and linguistic anthropology.

Functionalist theories tend to study grammar as dynamic phenomena, as structures that are always in the process of changing as they are employed by their speakers. This view places importance on the study of linguistic typology, or the classification of languages according to structural features, as it can be shown that processes of grammaticalization tend to follow trajectories that are partly dependent on typology. In the philosophy of language, the view of pragmatics as being central to language and meaning is often associated with Wittgenstein's later works and with ordinary language philosophers such as J.L. Austin, Paul Grice, John Searle, and W.O. Quine