



Parsing, syntax analysis, or syntactic analysis is the process of analyzing a [string of symbols](#), either in natural language, [computer languages](#) or [data structures](#), conforming to the rules of a [formal grammar](#). The term *parsing* comes from Latin *pars (orationis)*, meaning [part \(of speech\)](#).^[1]

The term has slightly different meanings in different branches of [linguistics](#) and [computer science](#). Traditional [sentence parsing](#) is often performed as a method of understanding the exact meaning of a sentence or word, sometimes with the aid of devices such as [sentence diagrams](#). It usually emphasizes the importance of grammatical divisions such as [subject](#) and [predicate](#).

Within [computational linguistics](#) the term is used to refer to the formal analysis by a computer of a sentence or other string of words into its constituents, resulting in a [parse tree](#) showing their syntactic relation to each other, which may also contain [semantic](#) and other information ([p-values](#)).^[citation needed] Some parsing algorithms may generate a [parse forest](#) or list of parse trees for a [syntactically ambiguous](#) input.^[2]

The term is also used in [psycholinguistics](#) when describing language comprehension. In this context, parsing refers to the way that human beings analyze a sentence or phrase (in spoken language or text) "in terms of grammatical constituents, identifying the parts of speech, syntactic relations, etc."^[1] This term is especially common when discussing what linguistic cues help speakers to interpret [garden-path sentences](#).