

- The two most basic word forms are nouns and verbs. They are the minimal pair needed for a grammatical system. They seem to exist in every human language, and it is possible to have a language consisting of only nouns and verbs. Nouns and verbs together create intransitives (one-argument forms, e.g. Alf saw) and transitives (two-argument forms, e.g. Alf saw Beth).
- Lexicogrammar items most closely match nonhuman signals; they are holistic (they express a complete logical proposition) and arbitrary. They are usually single word utterances, such as Yes, No, OK, Why?, Again, expletives, etc. They are also known as interjections.
- Verbs can be Intransitive, Transitive, Ditransitive, Phrasal, Auxiliary, and Copula. They can contain temporality (tense), markers of perception and attitude (mood), and levels of uncertainty (modality). They generate the propositional (two-argument) Actor-Action-Patient construct, and they can thematise the Actor or the Patient (active or passive forms). Verbs are the tools that allow nouns to work together to generate new meanings.
- Adpositions are needed to create constructs in which more than two nouns are linked in a single event. (e.g. Alf saw Beth on the TV with Gemma). They can be pre- or postpositional for the noun they complement. They can determine position, direction, time, context, comparison or cause for the noun they complement. Because they link nouns and therefore create propositional (two-argument) forms, they are often called "little verbs".
- Nouns name or label "things". They are the basic building blocks of language, and they may have been the first type of word. They are often divided in a language into different types of thing, such as: Common or Proper; Concrete or Abstract; Collective or Individual; Count or Non-count. They can also be gendered.
- Adjectives modify the meaning of nouns. They include determiners, comparatives, descriptors, differentiators, numbers, and negatives.
- Pronouns can superficially be described as a special class of noun, but they actually represent a quite sophisticated mapping of meaning to reality - pronouns have meaning only in context, and always refer to items otherwise contextualised. Pronoun meaning is therefore always mutable. They can have adjectival force (e.g. possessives). They can also be Reflexive, Reciprocal, Demonstrative, Indefinite, Negative, Relative or Interrogative.
- Adverbs can be used to: modify a verb (e.g. to act slowly); modify an adjective (e.g. really exciting); modify a noun (e.g. only the lonely); or modify another adverb (e.g. very softly). Not all adverbs can perform all these roles. Adverbs are sometimes seen as a group of word types rather than a single word type. Lexicogrammar items are often classed as another type of adverb.
- Conjunctions are link words. They can link individual words of the same type (lexical connectors) or multiargument propositional forms (discourse connectors). Some languages differentiate between the two types. Conjunctions can be coordinating, subordinating, or correlative.
- Intensifiers add emphasis to nouns, verbs, adjectives and adverbs. They are often expletives. They are often treated as a subset of adjectives and adverbs.

Gender (also known as noun classes) is often applied to nouns and pronouns, frequently to adjectives, sometimes to verbs and rarely to other word types. Different languages have different gender groupings, but variations of the following are common (although there are also usually exceptions in any individual language):

|  |  | Feminine | Neuter | Masculine |
| :--- | :--- | :---: | :---: | :---: |
| Animate | Person | Woman | Child, Person | Man |
|  | Other Animal | Mare | Foal, Horse | Stallion |
| Inanimate | Concrete inanimate | Chair | Furniture | House |
|  | Abstraction | Actuality, Difficulty | Whole, Nothing | Ideal, Achievement |

Some examples of the way different languages divide up gender are:

- French: Feminine; Masculine
- German: Feminine; Neuter; Masculine
- Basque: Animate; Inanimate
- Polish: Feminine; Neuter; Masculine Person; Masculine Other Animal; Masculine Inanimate

Latin has an unusual division, which roughly corresponds to:

|  |  | Feminine | Neuter | Masculine | But the Roman definitions of animate and inanimate, concrete and abstract, do not match ours. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Animate | Person | $1^{s t}$ <br> Declension | $3^{r d}$ <br> Declension | $2^{n d}$ <br> Declension |  |
|  | Other Animal |  |  |  |  |
| Inanimate | Concrete inanimate |  |  |  |  |
|  | Abstraction | $4^{\text {th }}$ Declension |  | eclension |  |

This does not exhaust the range of genders in real languages. Several languages differentiate nouns in ways that seem to us quite arbitrary. In addition, some languages apply gender to adjectivals and some to verbs.

## Number

Most languages differentiate between single cases and multiple cases, especially for count nouns. However, some languages also differentiate between couples, trios and larger groups. Some languages which do not have a number line (such as Pirahã) have only the cases one, some and many (or all). Where a language marks number on the noun, it often has number-related cases for its verbs, and requires noun-verb agreement (e.g. the man sits, the men sit). It also often requires noun-adjective agreement of plurality (e.g. les chevaux bruns - literally the hairs browns).

A number line can be conceptually represented as fixed (a limited range of numbers can be handled because each number has its own ideation; for instance, numbers 1 to 10 can be represented by sets of fingers) or extensible (there is a system for representing any number, but individual numbers do not need to be ideated; instead, the system represents each number as a logical composite which can be compared but not necessarily ideated - e.g. 15,346 ). Binary finger-counting (finger- $1=1$, finger $-2=2$, finger $-3=4, \ldots$ up to finger $-10=512$ ) shows these categories are not absolute: it is fixed (range is 0 to 1,023 ), but it is unlikely the numbers are individually ideated.

If a language does not have a number line then it can be difficult for speakers of that language to generate a number line when exposed to another language; they may remain cognitively innumerate (e.g. the Pirahã).

## Utterance Functions - usually expressed as verbal mood

- Instrumental - getting others to do things [please help me]
- Obligatory - telling others to do things (command forms) [give it to me]
- Intentional - telling others that events have happened, are happening, or will happen [you have helped]
- Personal - telling others about events I have been, am being, will be, involved in [I helped to do that]
- Imaginative - modality, fantasy, fiction, lying, hyperbole [they couldn't have done it without me]
- Heuristic - prompting others for information (interrogative forms) [how can I can help?]
- Informative - telling others about events that have happened, are happening, will happen [the help you gave me was invaluable - I couldn't have done it without you]

