

# Cognition, pragmatics and grammar

by Maria Josep Cuenca

## Abstract


In this article I present some examples of the way in which cognition, pragmatics and grammar can be integrated. This view of language, which underlies the theories of language use like cognitive linguistics, contrasts with models like structuralism or generative grammar whose object of study is clearly separated from use. The general principles of cognitivism and the discussion and exemplification of the concepts of construction, grammaticalisation or subjectivisation point to the fact that grammar is a continually evolving entity under the effect of discursive use (pragmatics) and it reflects to some extent aspects of cognition.

The scientific study of language, or more precisely of grammar, has gone forward through different models such as structuralism, generativism and models based on language use among which cognitive linguistics is specially relevant. Each of these models has focused in different ways on what, according to Geeraerts (2003), can be viewed as three complementary perspectives on language: language as a social system, as an individual system and as an individual activity.

- a) Language is a social system to the extent that languages are means of socialisation and develop in collective environments.
- b) Language is an individual system because we all have our own knowledge of the social system identified as a specific language.
- c) Language is an individual activity because any language is an abstraction resulting from the integration of the individual activities of all its speakers, and the concept of speaker has an inherently social dimension, since human communication presupposes more than one person.

This triple perspective explains the interdisciplinary nature of the study of language and helps understand the different approaches in Linguistics. Ferdinand de Saussure's structuralist model, which is considered strictly speaking the first scientific approach to linguistics, is based on the dichotomy between language and speech.

Figure 1. Structuralism

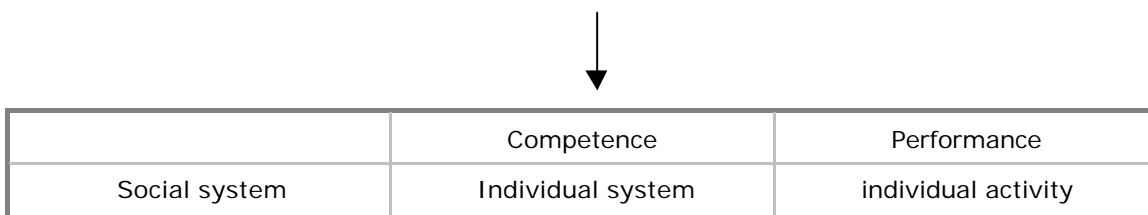


Language		Speech
Social system	Individual system	Individual activity

Language is a set of collectively codified conventions (a social system), while speech is the ensemble of combinations effectively produced through the code (and thus, an individual psychological activity). For structuralists, linguistics can only concern itself with the system; as a consequence, what we have is a divided model of grammar, in which the system as an activity is ignored, and the individual system (the individual knowledge of the social system) is neglected.

From a generativist point of view, the faculty of language can be identified with linguistic competence, that is, the innate ability of the speaker-hearer to understand and produce a theoretically infinite number of linguistic strings. A finite number of elements (grammatical categories: noun, verb, adjective, etc.) combine according with generative and interpretative rules resulting in grammatical sentences.

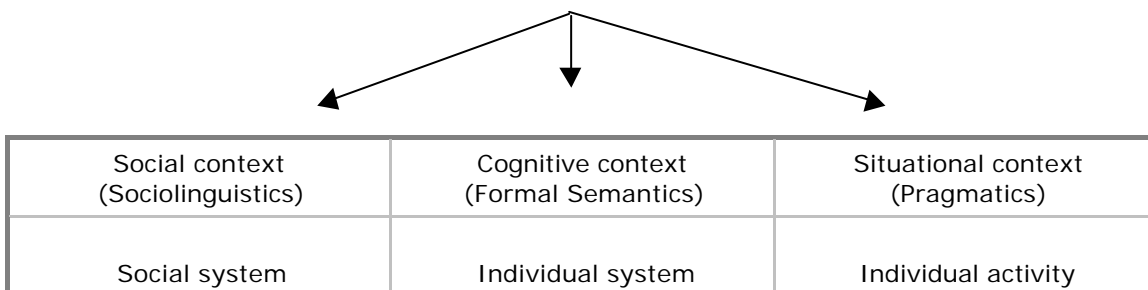
Figure 2. Generative grammar



Competence, which corresponds to the individual system, is opposed to performance, the actual realisation of competence in specific linguistic outputs, which can contain errors and features not obviously derivable from the system. The mind is seen as a computer which, among other modules, has one devoted to language. It combines categories according to generative rules for well-formedness and gives rise to sentences which take on physical substance by means of phonetic and semantic interpretative rules. This leads to the isolation of grammar, which is considered to be a separate module from the rest of the cognitive capacities and is studied at the individual level as a system, leaving aside the linguistic activity (performance) as unsystematic. Similarly, the social side of language - its inherent social nature - is also ignored.

After the appearance on the scene of generativism, by the end of the fifties, different disciplines filled the spaces left empty by this model: the social context (sociolinguistics), the situational context (language use) and the cognitive context (the relation between meaning and experience). The bases of the theories of language use emerged, seeking to "recontextualise" grammar and link it to the social setting in which it is developed and realised, to the world and to experience of the world. In this category we find, variously, the functionalism, formal semantics, pragmatics and discourse analysis, sociolinguistics and cognitive linguistics, amongst others.

Figure 3. Theories of language use  
(Cognitive linguistics)



Cognitive Linguistics can be considered the most comprehensive theory of use because it aims at studying and interrelating the three aspects of language. Some of the basic principles of Cognitive Linguistics will serve to show the importance given to context:

- a) Language is not an autonomous faculty, but rather is related to other human cognitive abilities. Thus, the philosophy that inspires this theory is what George Lakoff calls *experientialism*, in opposition to *objectivism*, which regards language as a faculty which is separate from the other cognitive faculties or capacities and so to speak disconnected from the world.
- b) The main object of study is not system, but language use. Therefore, the system is conceived in a dynamic way, interrelating linguistic structure (syntax), meaning (semantics), language use (pragmatics) and conceptual structure (cognition).
- c) Grammar is the result of structuring and symbolising a semantic content through a phonological form.

- d) Meaning is not seen from a purely denotative point of view, but includes connotative aspects, so that semantics and pragmatics cannot be separated.
- e) Semantico-pragmatic structure in many cases motivates grammatical structure and, therefore, syntax cannot be treated as autonomous.
- f) This dynamic view of language breaks down the divisions between the different linguistic levels of language (semantics and pragmatics, semantics and grammar, grammar and lexicon) and shows the weakness of dichotomies such as dichrony and synchrony, competence and performance, denotation and connotation.

Some examples can illustrate this conception of language and linguistics. From the contrastive point of view, it can be noted that a common concept may be expressed by different linguistic forms in three relatively closely related languages. For instance, what in Catalan is called *oficina d'objectes trobats* (literally, 'the office of found objects'), in Spanish is *oficina de objetos perdidos* (literally, 'the office of lost objects') while in English this is called *lost and found*. Obviously, the meaning is the same in all cases, i.e., a place where lost objects are stored, and where people who have lost objects go to get them back. However, each of the languages focuses on an aspect of this reality: in Catalan the term expresses the place (office) and the end of this process (finding), in Spanish the place and the origin are focused upon (losing), and in English the two parts of the process (losing and finding) are highlighted. The reality behind the three expressions is the same, but the conceptualisation is not. The other ways of expressing it could be valid in the respective languages (*oficina d'objectes perduts i trobats* in Catalan, *oficina de objetos encontrados* in Spanish, *found objects office* in English), but, simply, these are not the terms used. In each language the former expressions and not the latter have been conventionalised. This difference cannot be explained by means of a linguistic theory that limits itself to the linguistic system or to competence and does not take into account pragmatics and cognition.

Turning now from lexicon to syntax, we can now review some examples of constructions that, from a logicist point of view, have the same basic meaning:

(1)

- a) Joan va trobar l'error / John found the mistake.
- b) L'error ha estat trobat per Joan / The mistake was found by John.
- c) L'error ha estat trobat / The mistake was found.

Traditionally, passives (1b) have been considered a transformation of the corresponding active sentences (1a): the subject of the active has become an agent complement and may be left out as in (1c). This analysis, which constitutes one of the basic examples of transformations in generative grammar, raises a number of questions. If actives and passives are purely structural variants: Why do both structural options exist (one form would have been enough)? And why, if we analyse any Catalan corpus, the passive with an explicit agent turns out to be unfrequent? And under what conditions is one structure used rather than the other?

By looking at the conditions on use, at the context, answers to these questions can be found. Passive constructions are means of relegating the subject of an agentive construction to a second place or eliminating it altogether, and, as a consequence, highlighting the object. The latter is shifted to the prominent position in the sentence, that of grammatical subject.

In line with this perspective, it is clearer why the agent tends not to appear: in this way the object is fully highlighted. So, though actives and passives are related, they do not comply with the mathematical principle that "the order of the factors does not alter the product". There might be a correspondence between the two structures, but they are not equivalent, since they exhibit differences in meaning and in discourse conditions on use. It can easily be shown that periphrastic passives are little used in informal conversation, and in the case of Catalan, these passives only occur in formal registers, such as academic or legal language.

Defocusing the agent is not an exclusive property of the passive. The same or similar function is carried out by reflexive constructions (middle voice forms) (2a), or by impersonals with a generic interpretation (2b-c).

(2)

- a) S'ha trobat l'error / Se (REFLEX) has found the mistake.
- b) Hom ha trobat l'error / One (INDET) has found the mistake.
- c) Han trobat l'error / they (INDET, elliptic) have found the mistake.

The sentences in (2) are almost equivalent to the passive *L'error ha estat trobat* ('the mistake has been found'); however, they differ in not highlighting the object of the action, because the agent is still implicit ('someone has found the mistake'). It is an indeterminate agent, whose specification is, for whatever reason, of no interest in the context of the discourse. Thus, the action is focused upon. The concept of construction gives an adequate account of examples as the previous ones since it shows that form and meaning are not related in a totally arbitrary, nor totally predictable way. It can be concluded that certain aspects of the form or the meaning of a construction cannot be derived from its components but are effects of the construction itself, which conveys pragmatic aspects that speakers know.

On the other hand, it is evident that Catalan uses the periphrastic passive much less than English, and this may be due to the existence of reflexive constructions, which occupy the space taken up by the passive in English - a language that lacks reflexive structures to express passive conceptualisations. Just as in the case of the "lost and found" languages conceptualise situations in a different way and codify them with structures which in turn imply differentiated discourse effects. Thus, grammar is not independent from cognition and conditions of use, but rather a constant interrelation is set up between the three levels: cognition, pragmatics and grammar.

The connection between pragmatics and grammar is pointed out by the research carried out within grammaticalisation theory by cognitive linguists like Sweetser, as well as functionalists like Traugott, Hopper, Thompson or Heine. Grammaticalisation theory has its roots in the work of Meillet or the structuralist Kurylowicz, who define grammaticalisation as the process by which "a lexical unit or structure takes on a grammatical function, or [...] a grammatical unit takes on a more grammatical function" (Heine *et al.* 1991: 2). The modern version of this line of research argues that grammaticalisation is more than a process of turning lexical elements into grammatical ones; it is a more complex phenomenon that entails modifications in the discourse function and syntactic structure of languages.

Let us consider the example of the Catalan word *pesar*, that has multiple functions and meanings:

(3)

- a) Joan volia *pesar* el peix ell mateix / John wanted to *weigh* the fish himself.
- b) La notícia li va causar un gran *pesar* / The news caused him great *sadness*.
- c) A *pesar* de la notícia, va continuar el que estava fent / In *spite* of the news, she continued with what she was doing.

The verb *pesar* ('to weigh') is the original form, the literal sense of which is "to have a particular weight". The abstract noun (*el*) *pesar* ('sadness', 'grief') derives from the verb, and represents a change of category plus a modification of the meaning based on a metaphor: WHAT IS SAD "IS HEAVY", "IS DEPRESSING", "WEIGHS US DOWN". The noun is the basis for the preposition or conjunction *a pesar de/a pesar que* ('in spite of') where in it becomes concessive, the equivalent of *though*. This too can be explained metaphorically on the grounds that HEAVY THINGS ARE A BURDEN, A DIFFICULTY; thus the idea of 'difficulty overcome' is the origin of the concessive meaning developed by the collocation *a pesar de/que*.

These grammatical changes have to do necessarily with the expressive needs that are conventionalised in discourse: the repetition of new forms in similar or identical discourse contexts activate a conversational implicature that can become a conventionalised implicature and then is incorporated into the grammar. The same happens with a number of conjunctions, like *mentre que* ('while'). This conjunction originally had a purely temporal meaning (simultaneity) which, by being combined with contexts in which there was a contrast between the linked elements, has taken on a contrastive meaning:

(4)

a) Mentre tu havies sortit, ha trucat algú (temporal = *when*) / While you were out someone phoned.

b) Jo no he sortit en tot el dia, mentre que tu encara no has entrat (contrastive = *and, in contrast; however*) / I haven't been out all day, while you haven't come in yet.

It is worth noticing that similar processes can be observed in other languages, as with the marker *cependant* in French or the English marker *still*, which derive from forms that indicate temporal simultaneity and have come to indicate contrast. This process implies changes from a more concrete notion (time) to a more abstract notion (contrast) which entail greater involvement of the speaker in the message being transmitted.

Grammaticalisation theory thus becomes a framework for the study of language variation, in "that part of the study of language that focusses on how grammatical forms and constructions arise, how they are used and how they shape the language" (Hopper & Traugott 1993: 1). In this process, pragmatic and discourse factors, and even extra-linguistic factors, play a major role. As Heine *et al.* (1991: 23-24) point out, "Grammaticalization is initiated by forces that are located outside language structure", somewhere between language *per se* and the outside or "real" world: the world "of experience". Thus, the concept of grammaticalisation takes on a cognitive and pragmatic dimension, and can be seen as a basic mechanism for understanding the nature of language and the way in which the variation within languages and between languages works.

In fact, if structuralism and generative grammar seeks to reveal the immutable principles of language, cognitive linguistics sets out to understand diversity and to show that there is more systematicity and order in the differences than had been thought until now. Hudson (1997) recalls the concept of inherent variability coined by Labov, in order to explain "the coexistence of alternative ways of saying the same thing within the speech of a single speaker who alternates between them in a statistically regular way" (1997: 73). Hudson observes that Sociolinguistics generally studies the diversity of usage, but it has not entered into the study of grammar and it has not influenced the (synchronic) theories of language. He adds that "it is hard to think of a single example (until very recently) where statistical data on inherent variability has been used as evidence in discussions of language structure" (Hudson 1997: 73). Cognitive linguistics aims at relating variants and invariants, system and use.

As can be seen, the common denominator in many of the examples that have been looked at is the importance given to the speaker (at the individual level and above all at the social level) in grammatical structure and the selection of forms. Cognitive linguistics introduces a dynamic element into the study of grammar associated with the speakers' involvement in the messages which he or she emits. In the lines of Ungerer and Schmid (1996: xi-xii), the speaker's involvement (subjectivisation) can be developed by three principles: the experiential perspective, the prominence perspective and the attention perspective of language.

a) According to the **experiential** perspective, the definition of words and other structures is not objective and is not only based on logical rules, since words and constructions involve associations of meaning and impressions that are part of the experience of the speaker.

b) The **prominence perspective** recognises the fact that not all associated elements have an equal value and that this difference in value can be translated into formal syntactic differences.

c) The **attention perspective** accounts for the fact that the parts of an event which attract our attention are more important cognitively and this is reflected by linguistic structure. This principle, then, complements and reformulates the previous one.

The example of the passives and the actives previously commented on exemplifies the way in which the attention perspective works. The following examples illustrate the prominence perspective.

(5)

- a) La casa és davant del col·legi / The house is in front of the school.
- b) El col·legi és darrere de la casa / The school is behind the house.

(6)

- a) Juan s'assembla a Pere / John resembles Peter.
- b) Pere s'assembla a Juan / Peter resembles John.

Prominence explains how information in a sentence is selected and organised, and justifies the differences between version (a) and (b) in the preceding pairs of examples.

These differences cannot be attributed to semantic factors associated with truth conditions, since both versions are identical in this respect. The same holds if we look at their syntactic structure: both sentences have the same categorial configuration (noun phrase *ser/assemblar-se* preposition + noun phrase) and the same functional configuration (subject – verb – attribute/complement). The only apparent difference is the change of places between the noun phrases. However, each version reflects a different standpoint adopted by the speaker or writer, a difference in prominence (figure-ground relationship) of the entities referred to, similarly to the famous example of the bottle, containing the same quantity of liquid, which is said to be half empty or half full.

In some cases, the differences of prominence and experiential perspective may even justify the acceptability or non-acceptability of sentences that should be synonymous as in (7):

(7)

- a) Maria s'assembla a la seva mare / Mary looks like her mother.
- b) ? Marta s'assembla a la seva filla / ?Marta looks like her daughter.
- c) ?? La mare de Maria s'assembla a la seva filla / ??Mary's mother looks like her daughter.

The fact that the second and third versions of sentence (7a) are odd, and in some contexts might not be acceptable, cannot be derived from their syntax or from differing truth conditions –understood as logical propositions they mean the same and, in fact, (7a) *implies* (7b). Rather, this effect derives from a difference of prominence and according to our knowledge-based experience: when looking for family resemblances –as it is often the case with newborn children– the perspective of the parent and not the child is generally adopted (the former is more prominent than the latter). Parents constitute a better reference point than children given the directionality of the relationship: the parents are the origin of their offsprings and not the reverse. This explains why (7a) is more acceptable than (7b) or (7c) in neutral context conditions.

Similarly, only our encyclopaedic knowledge of the world, linked to a culture and to prototypical or "idealised" social relations, can explain the asymmetries exhibited by (8) and (9), analysed by Hilferty and Valenzuela (2001):

(8)

- a) Té marit / She has a husband.
- b) Té marits / She has husbands.

(9)

- a) No té fills / She doesn't have children.
- b) No té fill / She doesn't have child.

The sentences in (8) and (9) are well-formed; nonetheless, the sentence *Té marits* ('she has husbands') is odd, as does *No té fill* ('She doesn't have child') or, rather, we are obliged to reinterpret them by creating a special context in which they are adequate. It is our knowledge of the world, cultural conceptions –that may not coincide with an external situation which is changing rapidly– that explains the asymmetry. In our culture, an *idealised cognitive model* operates whereby families consist of a man, a woman and more than one child (no matter how reality might show that in an increasing number of cases this is not so).

Probably, as the model changes, the grammar will reflect this and allow for more structural possibilities. In point of fact, (9b), which would not be easily interpreted forty years ago, at least in Spain, is now interpretable in the context of someone who is divorced, referring to the fact that on that particular day he or she does not have to take care of the child and can go out in the evening.

In conclusion, grammar, pragmatics and cognition are interrelated in language use. Thus, from the cognitive point of view, grammar can be characterised as an entity in continuing evolution, "a set of cognitive routines, which are constituted, maintained and modified by language use" (Langacker 1987: 57). Many facts which are considered part of language use or performance can be integrated into system or competence, and at the same time the dividing line between diachrony and synchrony disappears.

Assuming this view, variation and the idiomatic or idiosyncratic aspects of languages are not seen as secondary, but, on the contrary, they constitute the real, central object of linguistics, the entering wedge for discovering the invariant, the system viewed as a living entity, an entity which takes shape and evolves through use, through the speakers as members of a group sharing a culture and a vision of the world.

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