COGNITIVE LINGUISTICS

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Cognitive linguistics is a modern school of linguistic thought and practise which is concerned with the relationship between human language, the mind and socio-physical experience. It emerged in the 1970s arising from rejection of the then dominant formal approaches to language in linguistics and philosophy. While its origins were, in part, philosophical in nature, cognitive linguistics has always been strongly influenced by theories and findings from other **cognitive science** disciplines, particularly **cognitive psychology**. This is particularly evident in work relating to human categorisation, as evidenced in work by Charles Fillmore in the 1970s (e.g., Fillmore 1975) and George Lakoff in the 1980s (e.g., Lakoff 1987). In addition, earlier traditions such as Gestalt psychology have been influential, as applied to the study of grammar by Leonard Talmy (e.g., 2000) and Ronald Langacker (e.g., 1987). Finally, the character of cognitive linguistic theories have been influenced by the neural underpinnings of language and cognition. This is evident both in early work on how visual perception constrains colour terms systems (Kay and McDaniel 1978) and more recent work on the Neural Theory of Language (Gallese and Lakoff 2005).

Cognitive linguistics constitutes an 'enterprise', rather than a single closely-articulated theory. This follows as it is populated by a number of complementary, overlapping and

occasionally, competing, theories. The cognitive linguistics enterprise derives its distinctive character from a number of guiding assumptions. In particular, cognitive linguists assume i) that language is the outcome of general properties of cognition (the Generalisation Commitment, Lakoff 1990), ii) that conceptual representation is the outcome of the nature of the bodies humans have and how they interact with the socio-physical world (the thesis of embodied cognition), Lakoff 1987; Johnson 1987 , iii) that grammar is conceptual in nature, Langacker 1987; Talmy 2000, and iv) that **meaning**, as it emerges from language use, is a function of the activation of conceptual **knowledge** structures as guided by **context**; hence, there is no principled distinction between **semantics** and **pragmatics**, Fauconnier 1997.

 Cognitive linguistic practise can be divided into two main areas: cognitive semantics and cognitive (approaches to) grammar. The area known as cognitive semantics is concerned with investigating the relationship between experience, the conceptual system, and the semantic structure encoded by language. Specifically, scholars working in cognitive semantics investigate knowledge representation (conceptual structure), and meaning construction (conceptualisation). Cognitive semanticists have employed language as the lens through which these cognitive phenomena can be investigated. Consequently, research in cognitive semantics tends to be interested in modelling the human mind as much as it is concerned with investigating linguistic semantics.

A cognitive approach to grammar, in contrast, is concerned with modelling the language system (the mental 'grammar'), rather than the nature of mind per se. However, it does so

by taking as its starting point the conclusions of work in cognitive semantics. This follows as meaning is central to cognitive approaches to grammar, which view linguistic organisation and structure as having a conceptual basis. From this it follows that cognitive linguists reject the thesis of the autonomy of syntax, as advocated by the Generative tradition in linguistics.

Cognitive approaches to grammar have also typically adopted one of two foci. Scholars such as Ronald Langacker (e.g., 1987, 1991) have emphasised the study of the cognitive principles that give rise to linguistic organisation. In his theory of *Cognitive Grammar*, Langacker has attempted to delineate the principles that structure a grammar, and to relate these to aspects of general cognition. The second avenue of investigation, pursued by researchers including Fillmore and Kay (Fillmore *et al*. 1988; Kay), Lakoff (Lakoff & Thompson 1975, Lakoff 1987) Goldberg (1995, 2006) and Croft (2002), aims to provide a more descriptively and formally detailed account of the linguistic units that comprise a particular language. These researchers attempt to provide an inventory of the units of language, from morphemes to words, idioms, and phrasal patterns, and seek accounts of their structure, compositional possibilities, and relations. Researchers who have pursued this line of investigation are developing a set of theories that are collectively known as *construction grammars*. This general approach takes its name from the view in cognitive linguistics that the basic unit of language is a form-meaning pairing known as a *construction*.

It is cognitive semantics, rather than cognitive approaches to grammar, which bear on the study of pragmatics. Hence, the remainder of this article considers some of the main theories and approaches in this area.

Encyclopaedic semantics: Approaches to the study of meaning within cognitive linguistics take an encyclopaedic approach to semantics. This contrasts with the received view which holds that meaning can be divided into a dictionary component and an encyclopaedic component. According to this view, associated with formal linguistics, it is only the dictionary component that properly constitutes the study of *lexical semantics*: the branch of semantics concerned with the study of word meaning. There are a number of assumptions associated with the encyclopaedic semantics perspective:

i) There is no principled distinction between semantics and pragmatics
Cognitive semanticists reject the idea that there is a principled distinction between 'core' meaning on the one hand, and pragmatic, social or cultural meaning on the other. This means that cognitive semanticists do not make a sharp distinction between semantic and pragmatic knowledge. Knowledge of what words mean and knowledge about how words are used are both types of 'semantic' knowledge.

Cognitive semanticists do not posit an autonomous mental lexicon which contains semantic knowledge separately from other kinds of (linguistic or non-linguistic) knowledge. It follows that there is no distinction between dictionary knowledge and encyclopaedic knowledge: there is only encyclopaedic knowledge, which subsumes what we might think of as dictionary knowledge.

ii) Encyclopaedic knowledge is structured

Cognitive semanticists view encyclopaedic knowledge as a structured system of knowledge, organised as a network. Moreover, not all aspects of the knowledge that is, in principle, accessible by a single word has equal standing.

iii) Encyclopaedic meaning emerges in context

Encyclopaedic meaning arises in context(s) of use, so that the 'selection' of encyclopaedic meaning is informed by contextual factors. Compared with the dictionary view of meaning, which separates core meaning (semantics) from non-core meaning (pragmatics), the encyclopaedic view makes very different claims. Not only does semantics include encyclopaedic knowledge, but meaning is fundamentally 'guided' by context. From this perspective, fully-specified pre-assembled word meanings do not exist, but are selected and formed from encyclopaedic knowledge.

iv) Lexical items are points of access to encyclopaedic knowledge

The encyclopaedic approach views lexical items as *points of access* to encyclopaedic knowledge (Langacker 1987). Accordingly, words are not containers that present neat pre-packaged bundles of information. Instead, they selectively provide access to particular parts of the vast network of encyclopaedic knowledge.

Specific theories in cognitive semantics which adopt the encyclopaedic approach include Frame Semantics (Fillmore 1982; Fillmore and Atkins 1992), the approach to domains in

Cognitive Grammar (Langacker 1987), the approach to Dynamic Construal (Croft and Cruse 2004), and the Theory of Lexical Concepts and Cognitive Models—LCCM Theory (Evans 2006; To appear).

Cognitive lexical semantics: Cognitive linguistic approaches to lexical semantics take the position that lexical items (words) are conceptual categories; a word represents a category of distinct yet related meanings organized with respect to a *prototype*: a central meaning component (Lakoff 1987). In particular, Lakoff argued that lexical items represent the type of complex categories he calls *radial categories*. A radial category is structured with respect to a prototype, and the various category members are related to the prototype by convention, rather than being 'generated' by predictable rules. As such, word meanings are stored in the mental lexicon as highly complex structured categories of meanings or *senses*.

This approach was developed in a well-known case study on the English preposition *over*, developed by Claudia Brugman and George Lakoff (Brugman and Lakoff 1988). Their central insight was that a lexical item such as *over* constitutes a conceptual category of distinct but related (polysemous) senses. Furthermore, these senses, as part of a single category, can be judged as more prototypical (central) or less prototypical (peripheral). Hence, word senses exhibit *typicality effects*. For instance the ABOVE sense of *over: The picture is over the mantelpiece,* would be judged by many native speakers of English as a 'better' example of *over* than the CONTROL sense: *Jane has a strange power over him.*

While the Brugman/Lakoff approach has been hugely influential, there nevertheless remain a number of outstanding problems that have attracted significant discussion. For instance, this view has been criticised as it entails a potentially vast proliferation of distinct senses for each lexical item (e.g., Sandra, 1998). A proliferation of senses is not problematic *per se*, because cognitive linguists are not concerned with the issue of economy of representation. However, the absence of clear methodological principles for establishing the distinct senses is problematic. More recent work such as the Principled Polysemy model of Evans and Tyler (e.g., Evans 2004; Tyler & Evans 2003) has sought to address some of the difficulties inherent in Lakoff's approach by providing a methodology for examining senses associated with lexical categories. With the also quite recent use of empirical methods in cognitive linguistics (see Cuyckens *et al.* 1997), and particularly the use of corpora and statistical analysis (e.g., Gries 2005), cognitive lexical semantics has now begun to make serious progress in providing cognitively realistic analyses of lexical categories.

Conceptual Metaphor Theory: Conceptual Metaphor Theory (Lakoff and Johnson 1980, 1999) adopts the premise that **metaphor** is not simply a stylistic feature of language, but that thought itself is fundamentally metaphorical. According to this view, conceptual structure is organised by *cross domain mappings* which inhere in long term memory. Some of these mappings are due to pre-conceptual embodied experiences while others build on these experiences in order to form more complex conceptual structures. For instance, we can think and talk about QUANTITY in terms of VERTICAL ELEVATION, as in: *She got a really high mark in the test*, where *high* relates not literally to physical height but to a good mark. According to Conceptual Metaphor Theory, this is because the

conceptual domain QUANTITY is conventionally structured and therefore understood in terms of the conceptual domain VERTICAL ELEVATION.

Mental Spaces Theory and Conceptual Blending Theory: Mental Spaces Theory is a theory of meaning construction developed by Gilles Fauconnier (1994; 1997). More recently, Fauconnier, in collaboration with Mark Turner (2002), has extended this theory, which has given rise to a new framework called *Conceptual Blending Theory*. Together these two theories attempt to provide an account of the often hidden conceptual aspects of meaning construction. From the perspective of Mental Spaces Theory and Blending Theory, language provides underspecified prompts for the construction of meaning, which takes place at the conceptual level.

According to Fauconnier, meaning construction involves two processes: (1) the building of *mental spaces*; and (2) the establishment of *mappings* between those mental spaces. Moreover, the mapping relations are guided by the local discourse context, which means that meaning construction is always context-bound. The fundamental insight this theory provides is that mental spaces partition meaning into distinct conceptual regions or 'packets', when we think and talk.

Linguistic expressions are seen, from this perspective, as underdetermined prompts for processes of rich meaning construction: linguistic expressions have *meaning potential*. Rather than 'encoding' meaning, linguistic expressions represent partial 'building instructions'**,** according to which mental spaces are constructed. Of course, the actual meaning prompted for by a given utterance will always be a function of the discourse

context in which it occurs, which entails that the meaning potential of any given utterance will always be exploited in different ways dependent upon the discourse context.

The crucial insight of Blending Theory is that meaning construction typically involves integration of structure from across mental spaces, which draws upon background (encyclopaedic) knowledge and contextually available information giving rise to *emergent structure*: structure which is more than the sum of its parts. Blending theorists argue that this process of *conceptual integration* or *blending* is a general and basic cognitive operation, which is central to the way we think.

See also: Cognitive pragmatics, cognitive anthropology; cultural scripts; cross-cultural pragmatics, philosophy of language; philosophy of mind

Suggestions for further reading:

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