

WORD MEANING

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INTRODUCTION

Word meaning relates to the semantic value that is conventionally associated with individual lexical items, which is to say *WORDS* (see also *LEXICAL SEMANTICS*). For instance, the English lexical form *cat*, which may have the *PHONETIC* realisation [kæt], is conventionally associated with a particular idea, namely an animate feline entity which has four legs, a tail, whiskers, and sounds miaow. The conventional meaning associated with a word is often referred to more technically as a *semantic representation*, *semantic unit* or *lexical CONCEPT*. In modern linguistics, word meanings are held to be conceptual entities, which is to say, they are held to constitute mental units, paired with phonetically-realizable forms, and stored in long-term *MEMORY* (see also *SEMANTIC MEMORY*). The repository of such form-meaning pairings forms a structured inventory which is commonly referred to as the *MENTAL LEXICON*.

While this much is generally accepted, there have been a bewildering array of approaches and theories with respect to the nature and organisation of word meaning. In large part, this is due to the “slipperiness” of word meaning. That is, word meaning is protean in nature, which is to say, the semantic value of a given word is

prone to often quite significant variation across instances of use. To illustrate, consider the word *fast* in the following utterances:

- (1) a. That parked BMW is a fast car
- b. That car is travelling fast
- c. That dodderly old man is a fast driver
- d. That's the fast lane (of the motorway)

The semantic value associated with *fast* appears to be somewhat different. In (1a) *fast* has to do with the potential for rapid locomotion. In (1b) it has to do with rapid locomotion. In (1c) it relates to caused motion beyond an established norm: a speed limit. And in (1d) *fast* concerns a venue for rapid locomotion.

In view of the variation in word meaning of this kind, one of the issues that research on word meaning has attempted to address is how much of the meaning associated with a given instance of use is due to the word itself, and how much is due to the context (linguistic or extra-linguistic) in which each token is embedded. This issue is addressed in the next section below. Another issue that has exercised researchers on word meaning has been how best to model the semantic representations associated with words. This is addressed in the subsequent section.

The issue of word meaning, in terms of the nature (and extent) of word meaning and how best to model word meanings qua conceptual entities is a crucial and indeed a central issue for linguistic theory. It has also been, and remains, a keenly contested one. In part this follows as the lexicon, the repository of lexical form-meaning pairings, represents the pivotal interface between *SYNTAX*—

knowledge relating to the form that sentence-level organisation takes—
SEMANTICS—knowledge relating to the meaning associated with linguistic forms—
and *PRAGMATICS*—the way syntactic and semantic knowledge is deployed in
service of the expression of situated *COMMUNICATIVE INTENTIONS*. At stake are
issues concerning the source of the information that is necessary in the interpretation
of an utterance and the role of the productive (“rule-based”) component of the
linguistic system. The position taken with respect to these issues bears on the
relationship between words and the human conceptual system—the repository of
human concepts. In addition, the view a given theoretical stance takes with respect
to the nature of semantic representations associated with words directly correlates
with the view the analyst takes on the distinction between conventionalised linguistic
knowledge and encyclopaedic knowledge. This corresponds, more or less, to the
traditional distinction between semantics and pragmatics.

THE NATURE OF WORD MEANING

Procedure for Determining Distinct Senses

An issue central to the study of word meaning has been to develop criteria or
tests for distinguishing between *AMBIGUITY* and *VAGUENESS* and thus for
identifying the sense-units conventionally associated with a word. A linguistic
meaning is vague rather than ambiguous if context, rather than information stored in
the mental lexicon, provides the meaningful detail about the entity in question.
Consider the expression *two dishes*. Here the meaning of *dish* cannot be one food
item and one food vessel. That is, the meaning of both the dishes in question must be
of the same sort. This counts as evidence that *dish* has (at least) two distinct

meanings stored in memory, and thus must be ambiguous. In contrast, in the expression *two writers*, this expression could relate to a novelist and a technical writer. This counts as evidence that *writer* is vague with respect to these two meanings, which are provided by context.

Ambiguity is often associated with that of *polysemy*. While ambiguity relates to the distinctiveness of a distinct word-meaning, also known as a *sense*, polysemy concerns the relationship between distinct (i.e., ambiguous) but related word-senses. For instance, recent work on the English preposition *over* has argued that the following meanings, while related, are distinct and thus are stored in the mental lexicon as distinct sense-units (see in Particular Brugman and Lakoff 1988; Lakoff 1987 and Tyler and Evans 2001, 2003).

- (2) a. The picture is over the mantelpiece [above]
- b. The tank drove over the bridge [across]
- c. The picture is over the hole in the wall [covering]
- d. The ball landed over the wall [on the other side]

While a range of tests have been proposed in the literature to distinguish distinct sense-units associated with a given word (ambiguity/polysemy) from contextually-induced meanings (vagueness)—see for instance Cruse (1986) for a review—these tests are often not reliable and give ambiguous results (see Geeraerts 1993). Other scholars have devised tests to distinguish between the polysemous senses associated with a single word (see in particular Evans 2004, 2005; Tyler and Evans 2001, 2003). In addition, some polysemous senses appear to show up only in

certain contexts. For instance, Cruse has distinguished between what he refers to as *facets* and *micro-senses*, which are contextually-induced polysemous meanings (Cruse 2002; Croft and Cruse 2004).

Core and Non-core Aspects of Word Meaning

Traditionally, linguists have distinguished that part of a word's meaning which is core (semantic knowledge) and that which is non-core (pragmatic or encyclopaedic knowledge). One way in which this has been expressed is in terms of the distinction between *denotation*—what a word refers to or designates—and *connotation*—what a word evokes. For instance, the word *December*, on this view, denotes the twelfth month of the calendar, while it evokes, at least for English-speaking inhabitants of the United Kingdom, cold, short days and Christmas.

The view that core and non-core aspects of word meaning can be self-evidently and sharply distinguished has come under sustained attack from two more recent developments. The first relates to a pragmatic approach to meaning which developed from the work of Grice (e.g., 1975). This tradition is best exemplified by *RELEVANCE THEORY* (for instance, Carston 2002; Sperber and Wilson 1995). On this account, word meaning is a function of mentally stored mental units which are always interpreted in context. This process of interpretation involves inferential processes driven by a psychological Principle of Relevance. In essence, interlocutors use the Principle of Relevance in order to derive situated word meanings and thus interpret utterances. On this account, the role of context and interpretation driven by communicative principles is crucial to word meaning, rather than a putative distinction between core and non-core aspects of word meanings.

The second challenge comes from work in the tradition known as *COGNITIVE LINGUISTICS* (see Evans *et al.* 2007; Evans and Green 2006, for overviews). Since the 1980s influential studies in this tradition including Fillmore (1985) and Langacker (1987) have argued that to distinguish word meaning based on core meaning, versus non-core meaning, is problematic on grounds of practicality, as well as psychological plausibility (see also Haiman 1980). Such approaches argue for an encyclopaedic approach to word meaning, which see words as providing points of access to extremely rich bodies of encyclopaedic knowledge including non-linguistic knowledge as well as knowledge based on the range of ways in which a given word has been used. On this account, what a word designates in any given instance of use, what Langacker refers to as the *profile* of a word, is relativised to a larger background knowledge structure. For Fillmore this larger unit is referred to as a *semantic FRAME*. Langacker refers to it as the *base*. For both Langacker and Fillmore, word meaning constitutes both the *designatum*—the entity designated by a given word—as well as the larger knowledge unit with respect to which the designatum is relativised. For instance, the word *elbow* profiles the joint in the larger unit: the arm. For Langacker, the meaning of *elbow*, what he refers to as its *scope of predication*, includes both the profile and the base, and both are essential to the meaning of the word (see figure 1).

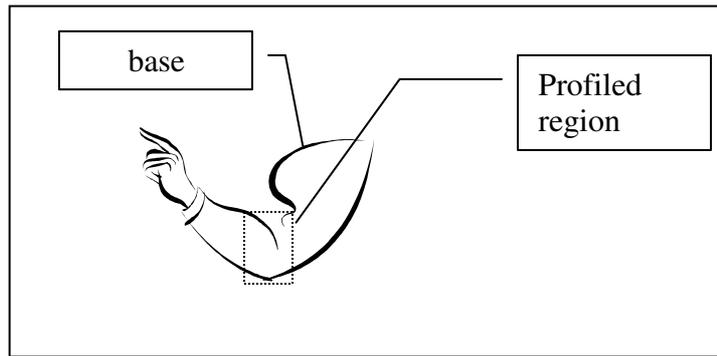


Figure 1 Profile-base organisation for *elbow*

In the most recent encyclopaedic accounts (for instance, Allwood 2003; Croft 1993; Evans 2006) word meaning represents the activation of part of the encyclopaedic knowledge network activated by virtue of the specific context in which a word is embedded. For instance, in examples of the sort provided in (3) due to Croft (1993) the lexical form *Proust* provides access to a *semantic potential* (Evans 2006), a rich body of encyclopaedic knowledge:

- (3) a. Proust spent a lot of time in bed
 b. Proust is tough to read

The meaning of the word is a contextual activation of part of this potential. For instance, the meaning of *Proust* in (3a) concerns which part of the encyclopaedic knowledge accessed by *Proust* is activated—knowledge relating to the man and his habits, while the meaning of *Proust* in (3b) results from activation of knowledge having to do with the body of work associated with the man. Moreover, this usage of *Proust* constitutes a case of metonymy [see also *METONYMY*], in which the use in

(3b) is derived from the primary or *prototypical meaning* [see also *PROTOTYPE*] associated with Proust, relating to the man.

MODELLING SEMANTIC REPRESENTATIONS

There have been three main kinds of approaches to modelling the nature of the semantic representations, qua conceptual structures, which make up word meanings.

Componential Analysis

The first kind is often referred to as componential analysis. The essential insight of this approach is that word meanings are made up of atomic elements or components. An early componential-style analysis was that developed by Katz and colleagues (Katz and Fodor 1963; Katz and Postal 1964; Katz 1972). In this account word meanings consist of semantic markers and distinguishers. Semantic markers consist of the information shared by words, while distinguishers constitute the idiosyncratic information specific to a given word meaning. For instance, based on Katz and Postal (1964) the polysemous senses for the word *bachelor* can be represented as in (3), where the semantic markers are given in parentheses and the semantic distinguishers are given square brackets.

- (4) a. (human) (male) [who has never married]
- b. (human) (male) [young knight serving under the colours of
another]

- c. (human) [recipient of the lowest academic degree]
- d. (human) (male) [young fur sale without a mate]

More recent and more sophisticated componential analyses of word meaning are provided by Anna Wierzbicka (for instance 1996) in her Natural Semantic Metalanguage (NSM) account of word meaning, and Ray Jackendoff (1983, 1990) in his theory of Conceptual Semantics.

Derivational Approach

This type of approach views word meaning as an outcome of an underlying conceptual representation together with generative devices which operate on the underlying representation in order to produce 'surface' word meaning. An influential and sophisticated model of this type is Pustejovsky's (1995) Generative Lexicon approach. On this account, the underlying dimension of word meaning consists of what Pustejovsky terms a *lexical conceptual paradigm* or LCP. The LCP includes four levels of representation: *argument structure*, which concerns the entities (semantic arguments) with which the word in question can co-occur; *event structure*, which relates to the situation type encoded by the word (e.g., state, process, event, and so forth), *lexical inheritance structure*, which concerns how a given LCP relates to other LCPs. The fourth, and in some ways, crucial level of representation concerns what is referred to as *qualia structure*. Each LCP has a number of *QUALIA ROLES* (*qualia* is plural of the Latin *quale*). These relate to how a given entity is constituted, its physical properties, its purpose, and so forth. On this view, word

meaning results from the way a given word combines with another in terms of integration of the qualia roles associated with each.

Network analyses

The third sort of approach relates to semantic network analyses developed within the framework of cognitive linguistics (see Evans 2004; Geeraerts 2006; Lakoff 1987; Sandra and Rice 1995; Tyler and Evans 2003 for studies employing this approach; see also *CONNECTIONISM*). Research in this vein has emphasised the prototype structure of words, which can be modelled in terms of a radiating lattice structure, with lexical items conceptualised as categories of distinct related senses, which exhibit typicality effects (see Evans and Green 2006 for a review). In particular, early work on spatial prepositions, for instance, argued that word meanings in such semantic networks could be modelled in terms of image-schemas, which are multimodal sensory representations, with added features, having to do with spatio-geometric properties (Lakoff 1987). More recent versions of this general approach (e.g., Evans 2006) argue that word meaning can be of representation, a level of semantic structure which is purely linguistic in nature, known as the *lexical concept*, and a level of non-linguistic encyclopaedic representation, known as the *cognitive model*.

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