

Sense relations1: Reference, denotation and connotation

Sense, reference and denotation are three aspects of what is commonly conveyed by the loose term 'meaning'. A fourth, very important aspect of meaning is **connotation**. Connotation names those aspects of meaning which do not affect a word's sense, reference or denotation, but which have to do with secondary factors such as its emotional force, its level of formality, its character as a euphemism, etc. 'Police officer' and 'cop', for example, have very different connotations, but similar denotations

The sense of a lexeme may be defined as the *general meaning* or the *concept* underlying the word. As a first approximation, we can describe this as what we usually think of as contained in a dictionary entry for the word in question, although we will see later that this characterization needs significant modification. A word's **referent** is the object which it stands for on a specific occasion of use. A word's referent, then, is the particular thing, person, place, etc, which an expression stands for on a particular occasion of use, and it changes each time the word is applied to a different object or situation in the world. By contrast, a word's sense does not change every time the word takes on a new referent.

Reference deals with the relationship between the linguistic elements, words, sentences, etc., and the non-linguistic world of experience. Sense relates to the complex system of relationships that hold between the linguistic elements themselves (mostly the words); it is concerned only with intra-linguistic relations. The dictionary is usually concerned with sense relations, with relating words to words, though most dictionaries state such relations in a most unsystematic way. The **sense** of an expression may be defined as the set, or network, of sense-relations that hold between it and other expressions of the same language.

Ogden and Richards called the bond between word and concept an 'association,' the bond between concept and object 'reference,' and the bond between object and word 'meaning.' When we hear or read a word, we often form a mental picture of what the word represents, and so we are apt to equate 'concept' with a mental picture.

Reference is the relation between a language expression such as *this door, both doors, the dog, another dog* and whatever the expression pertains to in a particular situation of language use, including what a speaker may imagine. Denotation is the potential of a word like *door* or *dog* to enter into such language expressions. Reference is the way speakers and hearers use an expression successfully; denotation is the knowledge they have that makes their use successful.

The trouble with a mentalistic theory of meaning is, first, that not all words can be associated with mental images and some words have a range of meaning

greater than any single association. The bigger problem with a mentalistic theory is that we have no access to other people's minds. How can we ever know that we all have the same mental images? If semantics is a science, it cannot operate scientifically by starting with things that are not observable and not comparable. Words are not the only semantic units. Meanings are expressed by units that may be smaller than words—**morphemes**. Furthermore, meaning is more than denotation. People not only talk and write to describe things and events and characteristics; they also express their opinions, favorable and unfavorable. Language furnishes the means for expressing a wide range of attitudes; this aspect of meaning is called **connotation**. Another aspect is **sense relations**: the meaning of any expression varies with context, what other expressions it occurs with and what expressions it contrasts with.

Part of its meaning is its **connotation**, the affective or emotional associations it elicits, which clearly need not be the same for all people who know and use the word. A denotation identifies the central aspect of word meaning, which everybody generally agrees about. Connotation refers to the personal aspect of meaning, the emotional associations that the word arouses. Connotations vary according to the experience of individuals but, because people do have common experiences, some words have shared connotations.

Meaning is more than denotation and connotation. What a word means depends in part on its associations with other words, the relational aspect. Lexemes do not merely 'have' meanings; they contribute meanings to the utterances in which they occur, and what meanings they contribute depends on what other lexemes they are associated with in these utterances. The meaning that a lexeme has because of these relationships is the **sense** of that lexeme. Part of this relationship is seen in the way words do, or do not, go together meaningfully. It makes sense to say *John walked* and it makes sense to say *An hour elapsed*. It doesn't make sense to say *John elapsed* or *An hour walked*.

Part of the relationship is seen in the way word meanings vary with context. A *library* is a collection of books (*Professor Jones has a rather large library*) and is also a building that houses a collection of books (*The library is at the corner of Wilson and AdamsStreets*).

Adjectives, too, can have different senses. If you come across some object which you have never seen before, and you wonder about its origin and its purpose, we can say that you are *curious* about it. But we can also call the object a *curious* kind of thing.

First, there is the relation of the lexeme with other lexemes with which it occurs in the same phrases or sentences, in the way that *arbitrary* can co-occur with *judge*, *happy* with *child* or with *accident*, *sit* with *chair*, *read* with *book* or *newspaper*. These are **syntagmatic** relations, the mutual association of two or more words in a sequence (not necessarily right next to one another) so that the

meaning of each is affected by the other(s) and together their meanings contribute to the meaning of the larger unit, the phrase or sentence.

Another kind of relation is contrastive. Instead of saying *The judge was arbitrary*, for instance, we can say *The judge was cautious* or *careless*, or *busy* or *irritable*, and so on with numerous other possible descriptors. This is a **paradigmatic** relation, a relation of choice.

As children, we learn vocabulary first through specific associations with specific things, actions, and characteristics (reference) and as we learn to recognize different instances of the 'same' thing, the 'same' event, and so on, we generalize (denotation). Slowly we learn from other members of our speech community and from our personal experiences what associations are favorable and which are not (connotation). And we acquire an implicit knowledge of how lexemes are associated with other lexemes (sense relations). Our implicit knowledge of syntagmatic relations facilitates our perception and identification of what we hear and read, enabling us to correct automatically what we hear and see, or what we think we hear and see, when correction is needed: we must have heard *five o'clock* because **fine o'clock* is not a familiar collocation.

There is the evaluation of semantic (as opposed to syntactic) well-formedness, another is the language user's ability to assess certain systematic aspects of the meanings of words when they are compared to each other. Another semantic skill of speakers (and hearers) is their ability to make claims about the meaning of two words in comparison.

Referring and non-referring expressions

We can apply this distinction in two ways. Firstly there are linguistic expressions which can never be used to refer, for example the words *so*, *very*, *maybe*, *if*, *not*, *all*. These words do of course contribute meaning to the sentences they occur in and thus help sentences denote, but they do not themselves identify entities in the world. We will say that these are intrinsically non-referring items. By contrast, when someone says the noun *cat* in a sentence like *That cat looks vicious*, the noun is a referring expression since it is being used to identify an entity. So nouns are potentially referring expressions.

The second use of the distinction *referring/non-referring* concerns potentially referring elements like nouns: it distinguishes between instances when speakers use them to refer and instances when they do not. For example, the indefinite noun phrase *a cholecystectomy* is a referring expression in the following sentence: They performed a cholecystectomy this morning.

Constant versus variable reference

Expressions like *the Pacific Ocean* are sometimes described as having **constant reference**, while expressions like *I, you, she*, etc. are said to have **variable reference**.

Referents and extensions

We can also make useful distinctions among the things referred to by expressions. We use the term **referent** of an expression for the thing picked out by uttering the expression in a particular context; so the referent of *the capital of Nigeria* would be, since 1991, the city of Abuja. Similarly, the referent of *a toad* in *I've just stepped on a toad* would be the unfortunate animal on the bottom of my shoe.

The term **extension** of an expression is the set of things which could possibly be the referent of that expression. So the extension of the word *toad* is the set of all toads. As mentioned earlier, in the terminology of Lyons (1977), the relationship between an expression and its extension is called **denotation**.

Names

The simplest case of nominals which have reference might seem to be names. Names after all are labels for people, places, etc. and often seem to have little other meaning. It does not seem reasonable to ask what the meaning of *Karl Marx* is, other than helping us to talk about an individual. One important approach can be termed the **description theory**, associated in various forms with Russell (1967), Frege (1980) and Searle (1958). Here a name is taken as a label or shorthand for knowledge about the referent, or in the terminology of philosophers, for one or more definite descriptions. So for *Christopher Marlowe*, for example, we might have such descriptions as *The writer of the play Dr Faustus* or *The Elizabethan playwright murdered in a Deptford tavern*. In this theory understanding a name and identifying the referent are both dependent on associating the name with the right description.

Another, very interesting, explanation is the **causal theory** espoused by Devitt and Sterelny (1987), and based on the ideas of Kripke (1980) and Donnellan (1972). This theory is based on the idea that names are socially inherited, or borrowed. At some original point, or points, a name is given, let us say to a person, perhaps in a formal ceremony. People actually present at this begin to use this name and thereafter, depending on the fate of the named person and this original group, the name may be passed on to other people.

