

Sense and Sense Relations

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Abstract:

This paper examines the term “sense” in terms by placing it within a specific system of relationships. **Synonymy** is highlighted as a relation a relation between two or more vocabulary items. As a term, **synonymy** is a matter of *sense* rather than *reference*. As it is, two vocabulary items may be recognised as differing in sense by having the same *reference*.

Sense relationships usually entail implications that are realised to be working in terms of antithetic states of *assertion* and *denial*.

This paper aims to explore and pin out the precise meaning of “sense” and how sense relations work.

Key words:

sense; sense relations; synonymy; reference; assertion; denial; vocabulary items

1. Introductory Remarks

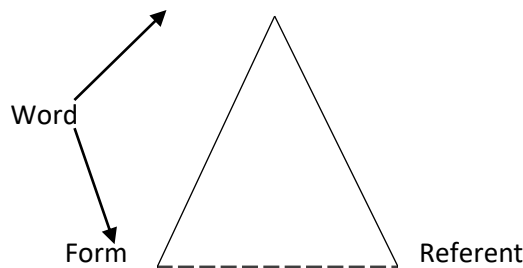
The Greek word Semantikos means "significant" (Langendoen, 1970, p.6).

Semantics is *the study of meaning* which is suggested to be "central to the study of communication" and to "the study of the human mind" (Leech, 1974, p.viii). **Sense** is a distinction that is made when semantists and attempts to define or determine meaning. However, within this semantic domain, definitional complexities frequently arise. These complexities often obscure the precise demarcation between distinct semantic categories.

Within the realm of meaning, researchers frequently encounter a comprehensive list of paired semantic terms. These often include, but are not limited to, distinctions such as "sense" and "meaning," "meaning" and "reference," "conceptual" and "associative" meanings, "significance" and "signification," and "form" and "meaning."

Until recently, there has been a heated debate between exponents of *exclusions* in terms of "form" versus "meaning", between those who advocate an entirely formal approach that excludes meaning from their grammatical analysis and those who entirely rely on meaning when explaining grammatical items. We have also the "triangle of significance", occasionally referred to as "the semiotic triangle" which represents the traditional view of the relation between the terms of "meaning", "word", "form" and "referent" (Lyons, 1971, p.405).

Meaning (concept)



However, some insightful work concerning these perplexing issues has been developed. Langacker (1973, p.24) suggests that "the relation between a word and its meaning is ... arbitrary" and that "it is a matter of convention". Robins (p.24) admits that preoccupation with reference and denotation has troubled semantic theory in the sense of "putting an excessive importance on that part of meaning which can be... treated either as a two-

term relation between the word and referent ...or as a three-term relation between word, speaker or hearer and referent.

Lyons suggests that the meaning of a lexical item is "specified...by the set of all the meaning postulates in which it occurs" (1970, pp. 168-169).

Palmer, on the other hand, lashes at those who ignore meaning altogether in their grammatical analysis and advocates a balanced treatment in connection with "form" versus "meaning" (1974, p.7).

In an earlier work, he points out that

"To say an analysis is formal is not to say that meaning has not been used in any sense at all in arriving at the analysis".

Valin and La Polla (2002, p.389) argue that "the more universal aspects of this area of grammar [ie *Linking*] are semantically motivated".

Linguists have also tried to define *sentence-meaning*, *lexical meaning*, *grammatical meaning* and *utterance meaning*. **Lyons** recognizes grammatical meaning as "a further component of sentence meaning" and utterance- meaning as falling "within the field of *pragmatics*" (1971, pp.139-140).

Scott et al (1968, p.9) speak of *contextual meaning*: "It [= contextual meaning] has something to do with the relation between a piece of language and the situation it refers to".

Leech (1974, pp.10-27) has further particularized and discussed some other meanings such as:

Conceptual or Cognitive Meaning, Connotative Meaning, Stylistic and Affective Meaning, Reflected and Collocative Meaning, Associative Meaning, Thematic Meaning and Intended and Interpreted Meaning.

Leech considers "conceptual" or "cognitive" meaning "to be integral to the essential functioning of language in a way that other types of meaning are not" (p.10). He also suggests that this kind of meaning seems to be based, in its organization, on the linguistic ground of contrastive features (p.11).

It is within this linguistic awareness that the researcher explores an immensely important term in the realm of cognitive meaning i.e. *sense*. The purpose of this paper is to dispel some confusion about this term by pinning down precisely what "sense" really means and how sense-relations operate.

2. Sense and Sense - relationships

2.1 Sense

The term "sense" means its place in a system of relationships in which it contracts with other words in the vocabulary (Lyon, 1971, p.427).

Lyon suggests that the relationships holding between vocabulary items do not carry presuppositions with them "about the existence of objects and properties outside the vocabulary of the language in question" (Lyon, *ibid*, p.427).

2.2 Sense-relationships

In order to refine sense-relation, we have to differentiate here between *sense - related* and *denotation - related lexemes*.

Lyons enunciates the point by saying that

"a lexeme which is related to other lexemes is related to them in *sense* and that a lexeme which is related to the outside world is related by means of *denotation*. (Lyons, 1981, p. 152).

The coinage of certain lexical items may be dictated by reasons other than linguistic. **Palmer**, thus, shows that alongside *lamb*, *ewe* and *ram*, English has *elephant cow* and *elephant bull*. "The [cultural] reason for the difference is obvious, we are less familiar in our culture with elephants than with sheep" (Palmer, 1971, p.45).

2.2.1 Synonymy

Lyons argues that since sameness of meaning i.e. *synonymy* enacts a relation holding between two or more vocabulary items, it is a matter of *sense*, not *reference*. He recognizes that two items may have the same *reference* but differ in *sense* and that if items have no reference, they may be *synonymous*. He assumes that "for items which have reference, identical reference is a necessary, but not *sufficient*, condition of synonymy". **Substitution**, in this respect, is shown to be a valid test for

recognizing synonymous sentences. It is suggested that two items are synonymous if the sentences resulting from substituting one for the other have the same meaning. The relation of *synonymy* is realized to be holding between lexical items and not between their senses. "The synonymy of lexical items is part of their sense" (Lyons, 1971, pp.427-428).

When speaking of *synonymy*, Bolinger (1968, p.233) defines the conditions necessary for the application of the term: "The term synonymy is not applied unless (1) the overlap is almost complete and/or (2) the area outside the overlap is ...unimportant."

Leech, who tries to illustrate the different implications of the rules of *subordination* and *identification* gives the following two *synonymous* sentences:

a- **Paris** is beautiful to an extent greater than the extent to which London is beautiful.

b- **London** is beautiful to an extent less than the extent to which Paris is beautiful.

He, thus, shows the different implications:

The slight semantic difference between (a) and (b) resides in the assumption in (a) that the degree of beauty of London is known, and the opposite assumption in (b) that the beauty of Paris is known. (pp.276-277)

Synonymy, more than any other sense relations, is context-dependent. **Lyons** (1971, p.452) shows that we have this category when the distinction between two lexical items is neutralized. He recognizes that the difference between the

marked term *bitch* and the unmarked term *dog* is neutralized in context. He exemplifies the difference by the sentence *My _____ has just had pups* where the animal referred to is determined to be female, i.e. *bitch*. He concludes that "all sense relations are in principle context-dependent, but contextually dependent synonymy is of particular importance".

2.2.2 Antonymy

Antonyms, like synonyms, are *sense relations*. They stand for lexicals that have opposing names. **Bolinger** admits the difficulty of defining the oppositeness of these words: "It is as hard to pin down the "oppositions" of antonyms as the "sameness" of synonyms, but ... the opposition is ... enclosed within sameness." (**Bolinger**, 1968, pp.233-234).

Lyons (1971, pp.460-462) recognizes that the first relation of "oppositeness" between such pairs of words as *single*, *male*, *female*, etc., is that of *complementarity*. This means that the denial of the one implies the assertion of the other and that the assertion of the one implies the denial of the other. Thus, saying *John isn't married*, implies that *John is single*. But with *good*, *bad*, *high*, *low*, only the second of these implications holds. Thus *John is good* implies the denial of *John is bad*, but *John is not good* does not imply that *John is bad*. **Lyons** considers complementarity as a special case of incompatibility holding over two-term sets. Lyons proceeds to argue that the assertion of the member of a set of incompatible terms implies the denial of each of the other members in the set taken separately (red implies minus *blue*, minus *green* etc.,) The denial asserts the disjunction

of all other members (minus *red* implies either *green* or *blue* or...).

Moreover, the use of the dichotomous terms *married* and *single* presupposes "the applicability of... the culturally accepted criteria of "marriageability". **Lyons** also notices a further point in connection with complimentary terms. He suggests that it is possible to cancel either or both of these implications and that in such cases "the implications can be regarded as "normally" and not "absolutely" analytic. But this principle holds for sense-relations in general."

2.2.3 Homonymy

Synonymy is the association of two or more forms assumed to have the same meaning (as may be exemplified by *hide* and *conceal*). But the association of two or more meanings with the same form produces *homonyms* which may be exemplified by *bank* that (a) of a river and (b) a place where money is deposited. When the orthographic form is unrelated to phonology, then **Lyons** argues (1971, p.405) that we have *homography* (eg *lead*, in (i) *a dog's lead* and (ii) *made of lead*) and *homophony* (e.g. *meat, meet; sow, sew*). **Lyons** (ibid) notices that homonymies are traditionally distinct words and that homonymy is not difference of meaning within one word. "In principle, the association of two or more meanings with one form is sufficient to justify the recognition of two or more words."

2.2.4 Polysemy

Traditional semantic analysis often characterizes lexemes like 'mouth' (e.g., 'mouth of a river,' 'mouth as a part of the body') as exhibiting polysemy, where a single word form possesses multiple, yet related, meanings. They call this relation multiple meaning or *polysemy*. Traditional lexicographers classify homonyms as different words whereas they list multiple meanings or polysemy under one *entry* in their dictionaries. However, the distinction between *homonymy* and *polysemy* remains to be indeterminate and arbitrary. It depends on the lexicographer's historical knowledge.

2.2.5 Hyponyms

Hyponymy which may be defined as the inclusion of the meaning in a lexical item is a fundamental sense relation. Classes of lexical items are established according to the relationship they hold between them. By *paraphrasing* and *implication* you will arrive at marked and unmarked members of a certain class. Thus, one of the semantic relationships that is derived by paraphrasing is called *hyponymy*.

Leech conditions this relationship as existing between two meanings "if one componential formula contains all the features present in the other formula." He shows that "woman" is hyponymous to "grown-up", because the two features make up the definition "grown up" (p.100).

Lyons (1971, p.454) suggests that *hyponymy* applies to non-referring and referring terms:

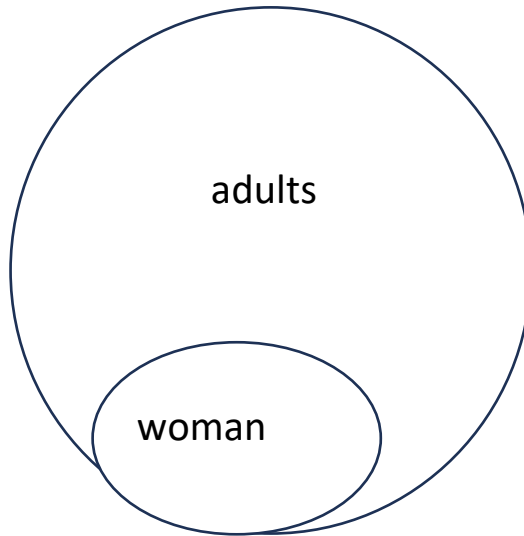
It is important to realize that *hyponyms* as a relation of sense which holds between lexical items applies to non-referring terms in precisely the same way as it applies to terms that have no reference.

However, he contributes his preference of *hyponymy* as an alternative term to "*inclusion*" to the notion that "*inclusion*" is "*somewhat ambiguous*" and problematic:

From one point of view, a more general term is more "inclusive" than a more specific term- *flower* is more inclusive than *tulip* since it refers to a wider class of things. But from another point of view, the more specific term is more "inclusive"-*tulip* is more "inclusive" than *flower* since it carries more "bits" of information, more "components" of "meaning". (Lyons, *ibid*, p. 454).

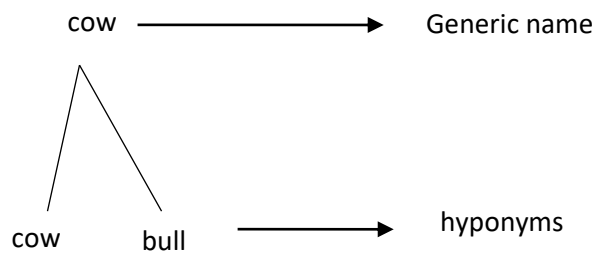
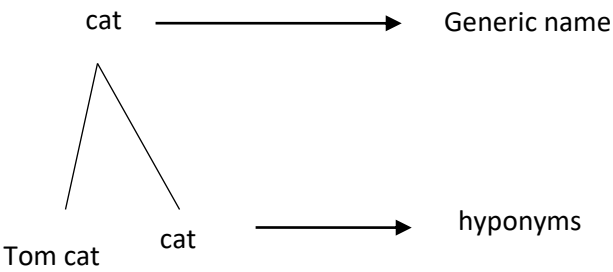
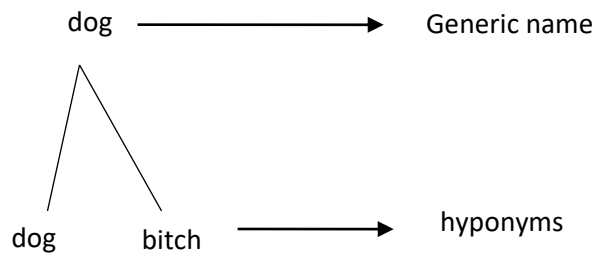
Leech also seems to disapprove of "inclusion":

"Inclusion" is a confusing word to use ... because while in one respect ... "woman" includes "grown- up", in another respect, the opposite is the case; "grown-up" includes "woman" in the sense that a general term might be said to include the meaning of the more specific term:

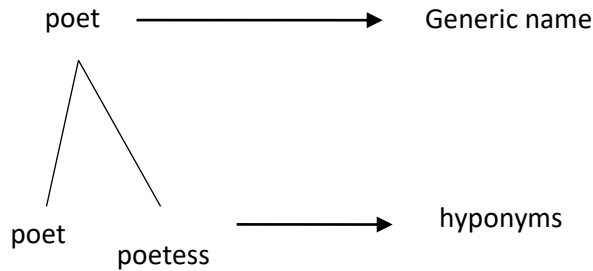
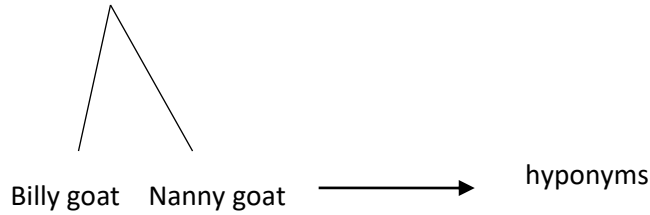


(p.101)

Hyponyms are specific terms covered in the group by the generic term. A term may be used as a generic name for species, whereas other terms can be used more specifically. Thus, *dog* in English is a generic name. The unmarked (category) *dog* (masculine) and the marked *bitch* (feminine) are *hyponymous* as shown in the following diagrams:



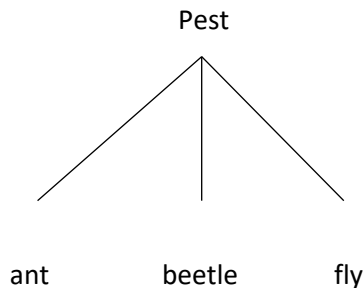
goat → Generic name



In certain cases, we have only the hyponymous category as suggested by “bachelor” and “spinister”. Sometimes the reason for this lack of terms is a cultural one. Different languages choose to have differing numbers of words for various specifications. Arabic has more words for *camel* than English which has only just one. **Palmer** (1971, p.44) shows, as suggested earlier, that English has no masculine or feminine words for elephant: "Alongside, *lamb*, *ewe*, *ram*, we have *elephant calf*, *elephant cow* and *elephant bull*." He contributes this phenomenon of having two words to describe the *baby*, the *female* or the *male* of any species to cultural reasons. In the case of *elephant*, he suggests that "we are less familiar in our culture ... with elephants than with sheep" (ibid, p.45). *Snow* in Eskimo has more lexicalized items or "hyponyms" than English which

tends to make distinctions through "fine snow" "dry snow" "soft snow" etc. On the other hand, English lexicalizes words denoting specific types of *sheep* (*ram*, *ewe*, *lamb*). The tendency of "lexicalization" in English may be viewed as belonging to a past period. This reveals that a lexically developed field in one language (Arabic *camel*, for instance) may be a lexically undeveloped field in another.

Aristotle considered all vocabulary items could be considered as coming under a hierarchy so that a *lamb* is a *sheep*, which is an animal, which is a mammal, etc. This perspective remained prevalent for an extended period, only to be challenged more recently. However, it is not feasible to force vocabulary items into categories of a hierarchy, a thing which can only be done with great feeling of artificiality as in a Thesaurus. There are other factual, non- linguistic (referential) relationships functioning between words. "Pest", for instance, can include a lot of things, but it does not follow that these sub-elements are always "pests" In the end, it is a matter of opinion.



In the field of relational nouns, Langendoen (1971, p.51) proposes that like other kinship terms, *family* may be used to designate not only a particular group of humans but also such things as animals, nations and languages. The range of kinship system covers those terms that are not customarily employed. Thus ancient Greek could be called an *aunt* of French and Spanish and English could be designated as *cousin* languages.

Relational nouns also do not fit the hierarchy pattern. To capture the meaning of relational nouns, you have to paraphrase them into "is something of something" or "is something to something" - verb to BE is involved. For example, "aunt" which belongs to family relationship, is paraphrased into "someone who is a sister of a parent of someone". Thus a paraphrase has a follow on that ends with a link, with another noun, passively indicated by "of someone". [This does not occur in *ewe*, a sheep which is female]. But if you want to define it in terms of non- relational paraphrase, you have to resort to introducing some rather artificial, non-everyday speech terms.

"*Aunt* is a relative, a female, a co- lineal and of old generation". Thus, it is impossible to define words containing generation differences without giving relative data in relational terms.

Kin terms are usually within the relational nouns field. Some nouns (such as *child*) have *polysemy* indicating in one sense the age scale and in another the family relation. These pairings have no word *referent*. Relationally, "child" can be used for someone of any age.

Semantically, **relational nouns** do not only involve *polysemy*, *hyponymy*, *paraphrase* but also *conversity*. "If he is her brother" then "she is his sister" Thus, *conversity* relationship can be stated in two different ways: parent/child, aunt/ nephew, brother / sister etc. *Converse* terms are loosely called (by many people) opposites.

Lyons (1971,p.p. 468-469) suggests that the vocabulary of kinship and social status provides instances of what he labels as symmetry and converseness. NP₁ is NP₂ 's *cousin* implies, and is implied by NP₂ is NP's *cousin*, but NP₁ is NP₂ 's *husband* implies and is implied by NP₂ is NP's *wife*.

"Opposites" is a topic that may contain types of relationship.

Conversity is typical of verbs, adjectives and nouns such as "*big-small*", "*length-width*", "*buy-sell*", each implies the other but a change of theme is involved. The same thing holds with the passive.

Consider the following converse terms:

1. *Tall - short* (involving a scale other than two fixed qualities - regularly gradable and relative) (tall means taller than the average). This *sense relation* (antonym) is labelled as "opposites par excellence".
2. *Male - Female* (binary taxonomic, non-gradable, "absolute" complementarity relationship)
3. *Go - Come* (the relationship involving a place relative to the speaker)
4. *Go - Stay* (involving double negative property. He *stayed* here = He didn't go to somewhere not here (ie there).

5. *Ask - Answer* (involving one following the other in sequence. "Ask" does not imply "answer" but "answer" does imply a previous question.

6. *Love - Hate* (a relation described in terms of oppositeness).

Semantically, nouns may be classified as *agentive* (with *er*), *stative*, *non-stative* etc.

In the **colour field**, the English terms *red*, *orange*, *yellow*, *green* and *blue* are referentially imprecise but as a set covering the visible spectrum, their relative position in the lexical system is fixed (*orange* lies between *red* and *yellow*, etc.). It is part of the sense of these lexical items that they belong to a particular system (in English) and they hold relationships of "betweenness" relative to one another.

Robins shows that *colour terms* exemplify naturally delimited fields. He argues (p.67) that we know the meaning of *red* when we also know the colour words bordering on it in various directions (*pink*, *purple*, *orange*, *brown*, etc.) and the principal words for colour being comprised within the class designated by *red* (e.g. *vermillion*, *scarlet*, *rose*, etc.). **Robins** points out that colours constitute a naturally separate field of reference or semantic field:

Lyons (1971, p.59) recognizes the affinity between *kinship-words* and *colour terms*:

Colour-words (like kinship-words), ... constitute an organized system of words which are related to one another in a certain way.

He shows (pp.429-430) that each of the terms *red*, *orange*, *yellow*, *green* and *blue* is referentially imprecise but that they have a fixed position in the lexical system. He, thus, shows that *orange* lies between *red* and *yellow*, *yellow* between *orange* and *green* and so on. Part of the sense of each of these terms is that they belong to this particular lexical system in English and that they contract relationships of "betweenness" in relation to one another in the system. **Lyons** recognizes that the relationship between colour-terms and their meaning is not straightforward. "The difference in the reference of *red*, *orange*, *yellow*, *green* and *blue* can be described in terms of their variation in *hue*."

2.2.6 Paradigmatic and Syntagmatic relationships

Apart from the categories already mentioned there are other sense relations, one of which is that of *paradigmatic* and *syntagmatic* categories. The first category (i.e. paradigmatic) suggests the "vertical" relationship between forms which might occupy the same, particular place in a structure. Each lexical item in a language is in paradigmatic relationship with the whole set of possible items. The second category realizes a "horizontal" relationship between linguistic elements forming linear sequences.

Hockett recognizes the advantage of these relationships:

The main advantage of hierarchical presentation is that it brings out facts which tend to be concealed by a mere listing of eight or ten smaller stem-classes all on a par (p.222).

One has to suggest that **paradigmatic relations** are usually established through *paraphrase* and *implication* criteria. **Lyons** (pp.428-429), enlarging on these paradigmatic and syntagmatic sense relations, suggests that terms may be related pragmatically (all the members of the sets of semantically-related terms occurring in the same context) as exemplified by *husband* and *wife*, *knock* and *bang*, *tap* and *rap*.

Lyons (ibid) also suggests that terms may be related to one another *syntagmatically*. Such sense-relation may be exemplified by *blond* and *hair*; *bark* and *dog*; *kick* and *foot* etc. These sense relations may be viewed in the light of the assumption that "some vocabulary items fall into *lexical systems*, and that the *semantic structure* of these systems is to be described in terms of the *sense-relations* holding between the lexical items".

3. Conclusion:

The paper has shown that *sense* and *sense relationships* are complex semantic issues that have to be pinned down and linguistically handled. People tend to mix things in the semantic domain and to treat what is potentially non- linguistic as being linguistic. They do not realize that when particular semantic aspects occur, they do so by forging various relationships that hold between lexical items. It emphatically transpires that *sense relationships* interact and intersect to produce interpretations peculiar to the context in which they occur. People tend to take things as they are. For instance, they often look at *antonyms* as clear-cut linguistic entities where, in reality, one of their distinctive features is that they overlap.

I have given a lot of space to the sense-relation of *hyponymy* because it poses problems of implications and of structure. Hyponomous relational nouns, for example, fail to fit the hierarchical pattern. They do not only involve *polysemy*, *hyponymy* and *paraphrases* but also *symmetry* and *converseness*.

It has been interestingly shown that the pedagogical value of sense as a thematic concern is somewhat limited. Yet, sense and sense relationships are increasingly relevant to lexicographers and curriculum designers. However, the importance of this paper emanates from the fact that these refined semantic aspects can be linguistically handled, hence the insights gained from this process.

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