1. Introduction

Semantics is the science of meaning. This definition goes back to Michel Bréal, who in 1897 published the first comprehensive study on this subject and coined the term ‘semantics’ itself (French sémantique), based on Old Greek σημαντικός ‘significant’ (from the same root as the verb σημάινειν ‘show by a sign, indicate’).

In this chapter we thus deal with changes in meaning or, rather, with changes in the way in which meaning(s) and form(s) relate to each other. The Saussurean tradition has emphasized how the relationship between the phonetic shape of a word (signified) and its meaning (signifiant) is arbitrary, in the sense that it is only due to a convention between the speakers of a language or a dialect. The arbitrariness or conventionality of this relationship can be easily proved by the fact that the same meaning is expressed by different words in different languages, as shown in (1).

(1) English core, Spanish raiz, Italian radice, Sanskrit gānas, Hebrew מַעְלָה

If there were a necessary connection between meaning and form, we would expect that the same word (or, at least, similar ones) were used across languages. Given that that relationship is conventional, it can change along time.

Semantic change can thus occur because the relation between signifiant and signifié is arbitrary.

Meaning is at the core of language by its very nature—no language would be possible if its linguistic units did not have a meaning. In spite of its central role, the study of meaning has been somewhat neglected in some approaches to language. It is sometimes considered the less linguistic part of language, in the sense that meaning has a direct connection to natural and social realities, which is not the case with other areas of language—we do not expect that the study of the social structures of the speakers of a language will cast any light on the understanding of the phonology of their language nor that there is a correlation between ergativity or accusativity and hunter-gatherer societies in opposition to agricultural societies, but we do expect a difference of vocabulary and the organization of the meaning of words between societies with a different level of technological development.

From a historical perspective, this means that a change in the sociocultural or environmental conditions of the speakers of a language may have an impact on this area of language—new words may be coined or borrowed or new meanings of words may arise; compare Spanish ratón ‘mouse’ (both animal and computer device, as a calque from English mouse; see section 4.3) vs. Italian topo (only the computer device, directly borrowed from English). A whole new terminology related to computers has been introduced in many languages of the world in the past 30 years or so. The development of a new technology has had a direct bearing on lexical and semantic change.

Semantic change can be studied basically from two perspectives—semasiological and onomasiological. In a semasiological approach to semantic change, the focus will be on analyzing the variatons in the meaning that a given word (or other linguistic unit) has undergone along time. We will learn how Latin denarius, a specific type of silver coin, has evolved into Spanish dinero meaning ‘money’ in general or how Latin argentum ‘silver’ has become French argent meaning both ‘silver’ and ‘money’—a change paralleled in some American varieties of Spanish in which plata ‘silver’ means ‘money,’ too. This is probably one of the most popular areas of linguistics. People seem to be fascinated by the changes in the meanings of words and what their original meaning was—their ‘etymology’ (see Kronasser 1952 and Chapter 17 in this volume).

Instead, from an onomasiological perspective, we will turn our attention to a given meaning or set of related meanings (e.g., verbs related to ‘knowledge,’ color names, etc.) and analyze how they have been expressed along time—how many words are used, how the meanings of these words differ from each other, etc. This will introduce us in the domain of semantic fields (see section 3.2.2 below). A question usually addressed to someone who knows a foreign language is: how do you say X in that language? People usually feel a bit disappointed when there is no straightforward answer to that question. In popular belief
languages are thought to be isomorphic—concepts are expected to be organized in the same way across languages, so that when speaking another language you would just have to change the label (i.e., the word) you are using. However, the underlying mental structures usually differ from one language to another. For instance, in English or in French the day is divided into four units (morning, afternoon, evening, and night or matin, après-midi, soir, and nuit), while in Spanish there are only three (manana, tarde, and noche), so that the limits cannot be at the same point. The organization of a given conceptual domain or semantic field may thus also vary along time for different reasons, so it is important to pay attention to how and why these changes can be brought about.

Although we will focus on diachronic change, a few words on the organization of meaning are in need. The meaning of a word is not as straightforward as we tend to think. Let us use book as an example. There will be no difficulty for an English speaker in producing a mental image associated with the word book. However, if they are asked how many pages an object must have to be a book, maybe the answer would not be so easy—does an object having just 20 pages fall into the category of ‘book?’ Certainly, it will be more likely considered a book if it is bound and has a hard cover, otherwise it will probably be regarded as a ‘leaflet.’ However, if we are told to take the book on the table and there are only a key-holder and the 20-page object, we would not have any problem in identifying which one the book is.

A word (or any other linguistic unit) has core and peripheral meanings. As in the example, there are objects that we will have no doubt in labeling as ‘books,’ ‘cars,’ ‘tables,’ ‘prayers’ or whatever, while this will not be so clear-cut in other cases. This fuzziness as to the limits of the meaning of a word (or the range of objects or mental representations it may refer to) has important implications for our understanding of semantic change. Words tend to have fuzzy meanings and be polysemous and their meanings frequently overlap—depending on pragmatic factors a five-year-old child or a five-year-old human being can be a person, a male, a boy, or a child. No radical difference can be established between encyclopedic and linguistic knowledge, either. Traditionally, semantic change has focused on the study of the change of meaning of words, but there are also semantic changes of collocations, word formation patterns and syntactic constructions. Great attention has been paid to some of them in past years, for instance, in the field of grammaticalization (see Chapter 15 (section 2) in this volume).

2. Types of Semantic Change

Since the beginnings of semantics, several attempts have been made to produce comprehensive classifications of semantic changes. In spite of these efforts, none of them is wholly satisfactory—the divisions are not exhaustive and the various criteria employed frequently overlap. A particular change of meaning can thus be at the same time an instance of specialization and pejoration. However, such classifications are useful in understanding the types of processes involved in semantic change. According to the nature of the change, we make a threefold division into mechanisms of semantic change, changes in the scope of meaning and changes in the connotations of a word.

2.1 Mechanisms of Semantic Change

The types of semantic change that we will be analyzing in this section can be due either to similarity or contiguity, whether these are real or supposed. They can be either semasiological, as in metaphor and metonymy, which are based on the connection between the referents, or onomasiological, as in folk etymology or ellipsis, for which the basis of the semantic change lies in the linguistic connection of the word to other words (Ullmann 1962: 211-227).1

2.1.1 Metaphor

Metaphor (from Greek metaphoran 'transference') involves conceiving or understanding an object, being or experience in terms of another different one. As Claudi and Heine (1986: 299) have stressed, this is usually done by employing conceptually less complex phenomena to visualize more complex ones.

Many different definitions of metaphor have been proposed in linguistic studies, so that our understanding of a given semantic change as due or not to metaphor may depend on the definition that we follow. It may thus be useful to check if a particular semantic change fulfills all the following four conditions (Heine 1997b: 142) to consider it an instance of metaphor. We will exemplify the conditions with the evolution of meaning of mouse (an animal and now also a computer device).

- The source and the target concept are different referents—in this case the source is an animal, while the target is an inanimate object.
- The transfer of meaning involves two different domains of experience—in this case from the domain of animals to that of computers.
- There is no formal expression of the transfer.
- If taken literally, the metaphorical predication is wrong—the 'mouse of the PC' is not really a 'mouse.'

Metaphor is always based on a perceived similarity between the source and the target (or the vehicle and the tenor of the metaphor in more traditional terminology)—they must share one or more traits, which constitute the ground for the metaphor (in this example, the shape of the mouse used with the computer, together with the long cable attached to it in earlier models, made it
similar to the animal). It should be noted that the similarity does not need to be 'objective'; on the contrary, it frequently has a cultural or social basis (Lakoff 1987). One of the now classical examples is the conceptual metaphor 'argument is war,' which is frequently found in Western societies—it would not be possible in a culture in which arguing is never conceived as fighting.

As Lakoff and Johnson (1980) showed, metaphor pervades our language and is inherent to an appropriate understanding of our daily lives. It is then no wonder that it plays a central role in semantic change. Instances of semantic change due to metaphor are easy to find in languages:

- English *star* meaning 'famous performer,' a metaphorical meaning from 'brilliant heavenly body.'
- Spanish *sierra* means both 'saw' and 'mountain range,' the latter being a metaphorical extension of meaning based on its indented shape.
- Latin *testa* 'pot' > French *tête* and Italian *testa,* both meaning 'head'; Middle High German *kopf* 'cup' > Modern German 'head.' This metaphorical transfer seems to be related to medieval soldiers' slang, in which battle was conceived as the smashing of pots.

Metaphorical extension of meaning of body-parts is very frequent:

- English *head* meaning 'ruler, leader;' as in *head of the department*;
- English *shoulder* meaning also the 'edge of the road';
- Latin *caput* 'head' > Spanish *cabeza* and Italian *testa,* both meaning 'head'; Middle High German *kopf* 'cup' > Modern German 'head.' This metaphorical transfer seems to be related to medieval soldiers' slang, in which battle was conceived as the smashing of pots.

2.1.2 Metonymy

As opposed to metaphor, metonymy is not based on a supposed or real similarity. Instead, the basis of metonymy (from Greek *metonymia* 'change of name') lies in contiguity, whether this is physical or not. This contiguity may be of different types—container for the thing contained or vice versa, material for object, the time for what is done at that time, the place for what is usually located there or vice versa, effect for cause, and so on. A special type of metonymy is synecdoche, which consists in referring to the whole by a part of it (pars pro toto). Some instances of this type of semantic evolution are the following:

- Latin *sexta* 'sixth (hour)' > Spanish *siesta* 'nap' (originally done at the sixth hour of the day).
- English *head,* which originally meant 'prayer' but came to mean 'bead' because when using a rosary beads were used to keep track of the recited prayers.
- Latin *arnea* 'sand' and also 'circus' (for the central sand area where the games took place).
- English *glass,* both the material and an object made of it. Similarly, *Warrgamay* *barri* 'stone' vs. Dyirbal *binda* 'stone tomahawk' (Dixon 1980: 118).
- Spanish *paella,* a special rice dish, took its name from the pan in which it was usually prepared (from Latin *patella*).

A special type of metonymy is synecdoche, which consists in referring to the whole by a part of it (pars pro toto). Some instances of this type of semantic evolution are the following:

- Mycenaean Greek *hirma* 'wheel' vs. Homeric Greek *hirma* 'chariot'; the same development must have taken place in Sanskrit *ratha* 'chariot' when compared to its Latin cognate *rotu* 'wheel.'
Continuum Companion to Historical Linguistics

- Spanish mañana ‘morning’ and also ‘tomorrow,’ paralleled by Middle Japanese aita ‘tomorrow,’ from ake-sama ‘dawning time’ (Traugott and Dasher 2002: 55).
- Latin vota ‘vows’ > Spanish boda ‘marriage’ (as nuptial vows are a fundamental part of the ceremony); similarly, Polish ślub ‘vow’ and ‘marriage’

Koch (1999, 2001) has proposed a unified analysis of the various types of metonymy, which, in a cognitive perspective, could be accounted for as the result of a figure/ground effect inside the same frame. A metonymy would thus consist in highlighting one of the members of the whole frame due to its saliency. This figure/ground effect can be triggered either by the hearer or the speaker. Hearer-induced metonymies are those in which the hearer carries out a reanalysis of what figure is highlighted in a frame. In such cases no innovation is intended by the speaker, so the change only begins with the hearer’s reanalysis. Koch adduces Spanish pregon (from Latin præcō ‘herald’) as an instance of this kind of evolution—from ‘herald’ it came to mean ‘announcement’ by a contiguity effect between salient members of a frame. Both interpretations were still possible in Old Spanish in contexts such as (2).

(2) Por Castiella oyendo van los pregones... (Poema del Mio Cid 287)
‘Throughout Castile heralds/announcements can be heard...’

Instead, speaker-induced metonymies are due either to an ‘approximate’ use of a lexical item designating a contiguous concept (as in the case of Latin coxa ‘hip’ > Vulgar Latin ‘thigh’—French cuisse ‘thigh’) or to a rhetorical trope by which a speaker intentionally wants to add expressivity to his or her utterance.

2.1.3 Folk Etymology
Folk etymology plays an important role in morphological reshaping and in lexical modification, and it must be mentioned here in connection with semantic change—a synchronically unanalyzable word or expression is restructured, so that its form allows for a semantic connection with other lexical items in the same language. This is what has happened in well-known cases as English asparagus → sparrow-grass or chaise lounge (from chaise longue ‘long chair’).

2.1.4 Ellipsis
Ellipsis is the process by which part of a complex expression acquires the meaning of the whole. Some examples:

- English (now only American English) fall ‘autumn,’ from fall of the leaves.
- English car ‘cart’ > ‘automobile,’ from motorcar, once this type of cars became the usual ones.
- Spanish hermano ‘brother,’ from frater germanus ‘brother of the same father’
- Spanish metro ‘subway.’ truncation from metropolitan ‘metropolitan,’ itself an ellipsis for ferro-carril metropolitano ‘urban railroad.’

An interesting case study is provided by the Spanish word ester ‘toilet’ (from English water). It was used as a euphemism replacing previous words such as retrete, but it is itself a case of ellipsis, since its meaning originated in the expression water closet.

A similar process occurs when one of the members of a compound is given up, as in English plane meaning ‘airplane.’

2.2 Changes in the Scope of Meaning

Semantic changes can involve a variation in the scope of the meaning of a word. We can best conceptualize these changes as involving a modification of the range of referents that a given word can be applied to, i.e., in the number of objects or mental representations that it can refer to or its extension.

2.2.1 Broadening
Sometimes the meaning of a word broadens along time, i.e., a word comes to have a more general meaning than it used to. Broadening is also known as semantic extension or generalization. From a cognitive perspective, this means that one or more features of the prototypical instances of the word meaning stop being salient, so that the range of objects or mental representations to which the word can be applied becomes wider. In other words, broadening involves that the number of contexts in which a word may be used grows, while the information that it conveys gets smaller since it has lost specificity.

Some instances of this type of semantic change are the following:

- Latin addripäre ‘reach the shore (of a river)’ > French arriver, Italian arrivare both meaning just ‘arrive.’
- Old English brid ‘young bird’ > Modern English bird (replacing in this sense Old English fugol > foul, which underwent a process of narrowing; see section 2.2.2).
- Latin passer ‘sparrow’ > Spanish pajaro ‘bird.’
- Latin panarium ‘bread basket’ > French panier ‘basket.’

From a pragmatic perspective, it has been suggested (Horn 1984) that broadening is based on the implicatures derived from the R(elation) Principle: ‘Make
Continuum Companion to Historical Linguistics

your contribution necessary. Say no more than you must'. It would thus be
speaker-based—a salient exemplar of a wider class is employed to denote that
wider class.

2.2.2 Narrowing
Narrowing, also known as semantic restriction, specialization or reduction, is
the opposite to broadening—a word comes to have a more restricted meaning
than it used to and the core instances of its meaning have to comply with a big-
ger number of salient traits. Thus, the number of contexts in which the word can
be used is reduced, but it conveys more information since it gains specificity.

This can be seen in the following examples:

- Old English *hund* meant ‘dog’ (cp. German *Hund* ‘dog’), while in Modern
  English *hound* refers only to a particular breed of dogs used in fox-hunting
  (see section 3.2.2).
- Old English *mete* ‘food’ > Modern English *meat*; similarly, French *
viande* ‘food’ > *meat*.
- Old English *steorfan* ‘die’ > Modern English *starve* ‘die of hunger’ (cp.
  German *sterben* ‘die’).
- Spanish *infante* ‘child,’ but especially ‘king’s son.’ *Infanta* was created later
  as the feminine of *infante* in the restricted sense, and thus lacks the general
  meaning.
- Latin *soror* ‘sister’ > Spanish *sor* ‘nun’ (cp. French *soeur* ‘sister’), replaced
  by *hermana* ‘sister’ (see above section 2.1.4).

Narrowing frequently occurs when a technical sense of a word develops and
then the word is given up in its general meaning. This is also the case when a
word with a general meaning is borrowed as a technical term into another lan-
guage, such as German *Angst* ‘fear,’ vs. English *angst*, only used in psychology
to refer to anxiety provoked by certain causes.

Interestingly enough, when new analogical forms are created and the old
one is kept in the language, this typically shows a semantic restriction. Thus,
when the new regular comparative *older* was created in English, the older form
*elder* lost its general meaning and was kept as an adjective only in the expres-
sions *elder brother/sister* or similar and as a substantive in specific uses in refer-
ence to an official position in some Christian churches. Something similar
has happened with the former irregular past participles in Spanish—*tinto,* the
former participle of *teñir* ‘dye,’ is now an adjective restricted in its current use to
the expression *vino tinto* ‘red wine,’ while the new analogical form *tejido* is
employed in all other occasions. As Hock (1986c: 299) remarks, such processes
lead to the isolation of these originally metaphorical expressions and the
reinterpretation of their meaning as the basic sense of the word.

A similar process may happen when a word loses its etymological transpar-
ency due to phonetic evolution. Middle English *hussey* > *husk* in its
general meaning by the newly coined *housewife*, and it underwent a process
of pejoration (see section 2.3.1).

From a pragmatic perspective, narrowing, at least in some cases, could ulti-
mately rely on the Q (uantity) Principle (Horn 1984): ‘Make your contribution
sufficient. Say as much as you can,’ and would be hearer-based. Among the nar-
rowing processes, a relevant one is that labeled by Horn ‘autohyponymy’—it is
basically a semasiological process consisting in the reinterpretation of a super-
ordinate term as a hyponym.

2.3 Changes in Connotational Meaning

Traditionally, when analyzing the meaning of a word, a distinction has been
made between its denotational and connotational meanings. Denotation would
be the ‘objective’ meaning of a word, while connotations are the subjective
appreciations that the speakers link to the word. These subjective appreciations
may become more salient than the denotative meaning, and can result in
changes of meaning. Depending whether these are regarded as positive or
negative by the community of speakers of a language, a change can be classified
as melioration (also referred to as amelioration or elevation) or pejoration (also
referred to as degeneration).

Melioration and pejoration can occur sporadically in individual use or in
particular of groups and circles of speakers, but when the meanings that they
give rise to enter current use, they constitute a valuable source of information in
regard to the study of social attitudes and sociolinguistic history.

2.3.1 Pejoration
It seems that—revealingly enough—pejoration is more frequent than meliora-
tion in semantic change. Words are ‘promoted’ less easily than they acquire
negative connotations diachronically. Pejoration is usually due to the fact that
the word is linked to an unpleasant reality or to a socially undervalued concept
or estate. It is thus usually related to taboo.

Some examples of this type of change:

- Old English *brute* ‘non-clerical’ > Modern English *lewd* ‘coarse, vile’ (in
  this sense, attested from the fourteenth century onwards).
- Spanish *criado* ‘servant,’ originally the past participle of the verb *criar* ‘raise
  up,’ in reference to those people raised up at home but not belonging to
  the family.
Traditional misogyny has a reflection in semantic change by pejoration in cases as English spinster ‘one who spins’ > ‘unmarried woman’ or Old High German diurnuthiora ‘young girl’ > Modern High German Dirne ‘prostitute.’ A similar development is found in Spanish querida, the feminine form of the adjective meaning ‘dear’ and also ‘lover, mistress.’

A parallel semantic change leads in various languages from ‘innocent’ or ‘good’ to ‘silly.’ Middle English selig originally meant ‘blessed, blissful’ (cp. German selig with that meaning) and by extension came to mean ‘innocent, helpless,’ too. This meaning was reanalyzed as ‘unconscious, unwarried’ and then ‘stupid.’ Classical Greek agathôs used to mean ‘good, noble’ in reference to the character of a person, but Modern Greek agiôs plainly means ‘silly.’ A similar evolution is found in French crédule ‘stupid,’ from Latin christianus ‘Christian.’

2.3.2 Melioration

This type of change is found in instances like the following:

- English nice ‘foolish’ was borrowed from French nice ‘silly, foolish’ (ultimately from Latin nescius ‘ignorant’) in the thirteenth century and then evolved into ‘fastidious’ in the fourteenth century. It acquired positive connotations in the sixteenth century, when it meant ‘precise, careful’ and from the eighteenth century onwards, ‘agreeable.’

- English dude used to mean ‘fastidious man’ in its first occurrences at the end of the nineteenth century and then just ‘man.’

In past societies, melioration frequently has to do with offices held in the royal house, the state administration or in the army. A well-known instance is Old High German marheskaUc ‘servant (in charge) of mares’ (from mare ‘mare’ and sknlk ‘servant’), borrowed into French as marec(h)itl{c) > marshall/ There are some interesting cases, like Old English cnihtt meaning ‘boy, youth/ but also ‘servant/ like its German cognate Knecht ‘servant’ (cf. Spanish macha ‘girl’)—the word thus underwent first a change by pejoration and then by melioration to become knight ‘member of the lower nobility’ when it was used to refer to military servants or followers of the king or a nobleman. Similarly, Old English cwen, which meant ‘wife’ and ‘queen,’ but also ‘female servant’ and ‘prostitute,’ in the twentieth century also a ‘male homosexual’ (especially a femm and showing-off one).

3. Semantic Change beyond the Word

Interesting though the change of meaning of individual words may be, it has to be borne in mind that words are not isolated in language, but related to other words. The nature of such relationships is varied. Since Saussure it is customary to differentiate between paradigmatic and syntagmatic relationships. Syntagmatic relationships are those established between linguistic units that appear together in a context. Paradigmatic relationships are those linking linguistic units that are mutually exclusive in the same context—if a singular third person runs appear in a sentence, then run cannot. Or in a language with nominal gender, such as Spanish, if masculine bonito ‘beautiful’ appears with a noun because it has masculine gender, then the feminine form bonita is automatically excluded. This division is useful for the classification of semantic changes due to relationship with other words.

3.1 Syntagmatic Changes

Standard treatments of semantic change rarely deal with syntagmatic changes that depend on the contexts in which a word is used. At most, ellipsis is mentioned (see section 2.1.4).

However, other processes of syntagmatic semantic change do occur. One of them is ‘contagion,’ by which the meaning of a word is transferred to another because they appear together frequently or in many contexts (Breal 1897: chapter 21, Ullmann 1962). An outstanding instance of this type of change, as Ullmann remarked, is the history of negation in French—a certain number of words have acquired a negative meaning because they were usually employed with the negation, as seen in (3).

\[(3) \text{Latin passus} \text{’step’} \quad \text{ne} \ldots \text{pas} \text{’not’} \]
\[\text{Latin rem (Accusative of res ‘thing’) ne} \ldots \text{rien ‘nothing’} \]
\[\text{Latin personam (Accusative of persona ‘person’) ne} \ldots \text{personne ‘nobody’} \]

In colloquial French, in fact, ne is frequently omitted and it is just pas that conveys the negative value of a sentence. And in standard French rien and personne have negative meaning even if ne does not appear in the sentence, as in (4).

\[(4) \text{Qui est arrivé? Personne. ‘Who’s come? Nobody.’} \]

3.2 Paradigmatic Changes

When studying this kind of changes, it is also useful to differentiate between changes due to similarity and contiguity (see section 2.1 for this difference in the mechanisms of semantic change).
3.2.1 Similarity in Form

Languages frequently show a tendency towards avoiding clashing homonyms, i.e., words having the same form but different meanings. An example usually mentioned when discussing these processes is that of Latin *cattus* 'cat' and *gallus* 'rooster,' which merged in Gascon French *gat*. The ambiguity resulting from this homonymy was highly inconvenient, especially in a farming context, so the meaning 'rooster' was given up in favor of other words: *aza* (originally 'pheasant'), *begey* (originally 'vicar') and *put* (originally 'chick'). Thus, two related semantic changes took place: (a) the word *gat* stopped meaning 'rooster'; (b) the other words acquired this meaning by various processes—[put] underwent a semantic extension, *begey* a change by metaphor and *aza* a shift through a previous stage of polysemy or split.

A similar case is attested in the history of English—both Old English *lētan* 'permit' and *lettan* 'stop, hinder' evolved into Middle English *let*. This posed again an uncomfortable homonymy, given that the same word could have two opposite meanings. The meaning 'stop, hinder' was thus given up and other words were favored in this meaning.10

In some cases, a word comes to be homophone with another tabooed one (see section 4.2.2 below), and due to this formal identity it stops being used. For instance, in eighteenth-century English the word *ass* 'donkey' began to be avoided given its homophony with *arsse* (OED). So that *donkey* has become the usual word for the animal, at least in American English.

In other cases, a kind of homonymic clash arises by a metaphorical extension—the new meaning is subject to taboo, with the final outcome that the word is avoided in all its senses. This is the case with *cock*, which by a common metaphorical transfer came to refer to the male sexual organ (cp. Spanish *polla* 'penis' and then 'penis'), replaced in English by *rooster* in reference to the animal. Something similar has happened with Spanish *huevos* 'eggs,' which is avoided in some areas of America since by metaphor it became a name for 'testicles'; *blanquillos* 'little white (things)' is used instead. The verb *coger* 'take' is also not used in some areas because it has undergone a specialization of meaning and it is primarily employed in the sense of 'having sexual intercourse,' so that other synonyms like *hornar* 'take, have' or *agarrar* 'catch' are favored.

3.2.2 Similarity and Contiguity in Meaning

In the same way that we find 'homonymophobia' in language, there is a well-known tendency to avoid true synonymy—the 'Avoid Synonymy' principle (Kiparsky 1983, Clark 1993).11 It is thus not difficult to find cases in which semantic change is triggered by this tendency. When synonymous lexemes appear in a language, either by internal evolution or by borrowing, they tend to be pragmatically differentiated and this can eventually induce semantic change.

In fact, some of the changes mentioned above (section 2.2.2) as instances of narrowing can be better understood if we widen our focus to cover more than individual words. For instance, when *dog* was borrowed into English from Norse, it was a synonym of *hound*; in the long run, however, the two words acquired differentiated meanings. Something similar has happened with *food* and *meat.*

However, as Traugott (2004: 543) has remarked, the principle of synonymy-avoidance and the kind of realignment in meanings that it brings about is usually only part of a larger picture. It is the whole set of semantically related words that must be analyzed to achieve an appropriate understanding of the changes involved. In this regard, she mentions Roberts' (2001) contribution, which surveys how the introduction in Middle English around 1200 of the Latinate forms in *rob-* (from Latin *robata* 'robbery') provoked a semantic realignment of the predecessors of Modern English *steal*, *thief* and others in the following 300 years.

Although many handbooks and general introductions to semantic change do not deal with this question, to gain appropriate insight into the nature of semantic change the concept of 'semantic field' (or 'lexical field') is a key one. The pioneer work in this area was done by Trier (1931) on the field of intellect in Middle High German. Trier's analyses were historically based and his explanations attempted mainly to relate the changes in the organization of vocabulary with changes in society, in this case the end of feudalism.

We do not need to go into detailed criticism of Trier's work, because for current work on semantic change studies aiming at discovering general tendencies of change inside a semantic field have had more impact and have ultimately been the basis for proposals of generalization (see section 5.1). For instance, working from an anthropological perspective, Berlin and Kay (1969) surveyed color terms across languages. They reached the conclusion that the 'basic' color terms constitute a set of eleven perceptual foci for which there is a particular order of acquisition by children and in semantic development, as shown in Figure 16.1.

Similar approaches have also been made to the evolution of verbs of perception, as shown in Figure 16.2.

4. Causes of Semantic Change

In the previous sections we have analyzed how meanings change, but an important question to ask is why meanings change. Causes of language change in general are problematic (see Chapter 20 in this volume), but focusing now on semantic change, they can be classified into various groups (Meillet 1906, Ullmann 1962), linguistic and non-linguistic.
This kind of processes cannot be neglected when trying to understand semantic change and scholars like Fortson (2003) are right in emphasizing children's role in semantic change. Fortson also remarks that it is usually taken for granted that the old and the new meanings of a word must be related, when semantic change due to reanalysis in children's learning would imply that the old meaning is just given up in favor of the new one, without any necessary period of polysemy.

However, this view is too reductionist and holding to it would amount to attributing all instances of semantic change to the process of language learning and considering all of them hearer-induced, while this is plainly not the case. In fact, semantic change can occur at an adult age and speakers of any language are bound to have experienced shifts of meaning of some words during their lifetime. Otherwise, they could not adapt to new realities. Furthermore, semantic change may arise from a conscious use. We analyzed above (section 2.1.2) hearer-based vs. speaker-based metonyms—if all semantic change were due to reanalysis, speaker-based metonyms or metaphors would not be possible. Reanalysis thus plays a role in semantic change, but it is not its only cause.13

4.1 Linguistic Causes

As we saw in previous paragraphs (sections 2.1.4 and 3.1), sometimes semantic change is language-induced. Ullman (1962) treated under this heading the phenomenon of contagion, to which ellipsis should also be added. In these cases, there does not seem to be any external motivation for semantic change—it is just linguistic mechanisms at work that provoke a reassignment of the meanings of words.

4.2 Non-linguistic Causes

Very frequently, causes of linguistic change are nonlinguistic. These causes can be broadly classified into three groups: historical, social and psychological causes.

4.2.1 Historical Causes

Semantic change can be brought about by a change in the referents of a word themselves. Words tend to be conservative in the sense that they usually remain in a language even if the reality that they refer to undergoes variations. A king in a contemporary democratic society has not the same functions as in earlier societies nor do institutions such as parliaments or courts; however, the same words are used for them. This also applies to objects or concepts and ideas—the
One of the most important motivations for lexical and semantic change is taboo. Although Ullmann (1962) analyzed it among the psychological causes of semantic change, it is perhaps more appropriate to consider it from a social perspective. Even if taboo may have a psychological basis, it cannot be properly understood without paying attention to the social context. What is considered taboo varies across cultures, but there are some areas in which taboo appears to be more frequent, like physiological functions, sex, and religion. It is interesting to note how the taboo is transferred from the object or activity to the words or expressions referring to them, so that these tend to be avoided.

A good example is provided by the history of French. Baiser ‘kiss’ (from Latin basilare ‘kiss,’ cf. Spanish besar and Italian bacare ‘kiss’) used to be a euphemism for having sexual intercourse; however, along time it came to be primarily used for this latter meaning, and was thus subject to taboo itself. As a result of that, embrasser ‘embrace’ has come to be used for ‘kiss,’ because baiser is avoided in all contexts. We saw similar examples of interference above (section 3.2.1).

Crowley (1992: 154) provides another quite interesting instance. In Bislama (the Melanesian Creole language of Vanuatu) English milk was borrowed and adapted as melik. However, it was also used with the meaning ‘semen,’ so that younger speakers of the language tend to avoid it, and when referring to plain milk they use the English word milk itself.

From the point of view of semantic change, it should be remarked that the tabooed word undergoes a process of pejoration (see section 2.3.1) the final outcome of which may be the loss of the word, but it usually does not change its referent(s). It is the euphemism that usually does change its meaning, so that it comes to convey the meaning of the tabooed word, at least until the former euphemism is in turn subject to taboo and the process begins again.

Psychological and social factors also play a role in the development of figurative senses that eventually lead to changes by metaphor or metonymy (section 2.1). Speaker-induced processes originally have a psychological basis which allows for perceiving the similarity between objects and thus transferring the meaning. However, if those similarities are not perceived by the community of speakers they will be no more than sporadic individual uses without any further consequences.

4.3 Language Contact

Language contact is also a frequent cause of semantic change, in which both linguistic and nonlinguistic factors are involved. The degree to which a language can influence another varies depending on multiple factors, especially intensity of contact and the social status or prestige of the languages and their speakers (see Chapter 18 in this volume).

Borrowing is a source of lexical innovation and loanwords may provoke a restructuring of a semantic field (see section 3.2.2). Focusing now on change of meaning in words, we should differentiate again processes due to similarity in meaning from those due to similarity in form.

Through ‘calque’ or ‘loan translation’ a new meaning can be transferred to a word in a language because it shared a former meaning with a word from the other language. We saw an instance of this at the beginning of the chapter (section 1)—Spanish ratio has come to denote a computer device because English mouse had that meaning. This process is basically the equivalent at the lexico-semantic level of proportional analogy, as shown in (6).

(6) mouse = animal ratio = animal

Processes of calque also include the creation of new words or phrases in a language as a direct translation from another, as Spanish rascaclás (from rasca ‘scrape’ and cielo ‘sky’), based on English skyscraper.

In contrast to calques proper, other changes are due just to a phonetic similarity between words of two languages. When learning a foreign language we are warned to pay attention to so-called ‘false friends,’ i.e., words that look alike but have different meanings. Typical examples include English constitute vs. Spanish constituir ‘get a cold.’ In contact situations, false friends may be the cause of interferences and give raise to new meanings of a word. For instance,
Spanish carpeta means 'folder, file' and it thus only superficially resembles English carpet. However, in United States Spanish carpeta is frequently used with the meaning 'carpet.'

5. Towards a Deeper Understanding of Semantic Change

As opposed to phonetic change, which is usually thought of as being regular in essence, semantic change has been considered basically chaotic and fuzzy. However, the work done on semantic change in the past thirty years or so, basically connected with grammaticalization (see Chapter 15 in this volume), has provided interesting insights into the nature of semantic change.

5.1 Regularity and Directionality

By analyzing semantic change in languages of various families, we can discover some general tendencies. We already saw above (section 3.2.2) some proposals concerning the patterns of change inside certain semantic fields. Relying on the body of research on semantic change numerous other patterns could be enumerated, for instance (Campbell 2004: 269–272, Heine and Kuteva 2002):

- 'alone' > 'only,' as in English alone, German allein, Bulgarian samó or Spanish solo;
- animal names > inanimate objects, as in Spanish gato 'cat' > 'jock (for raising cars)' or English crane (both animal and machine);
- 'arrive' > 'succeed,' as in Mandarin Chinese dào 'arrive' (verb of motion) > dào-hu 'manage to, succeed' (ability marker) or Lahu gà 'reach, arrive at' > 'manage to do' (after a main verb);
- deontic modality > epistemic modality. This evolution is shown by English auxiliaries must, should, will, etc., which were used for deontic modality (as in We must finish our work) before being employed also for epistemic modality (as in Anne is not here, She must be outside);
- 'know' > ability. The evolution is shown by English know vs. know how to, Motu diba 'know' > 'can, be able,' Sango funga 'know' (verb) > 'can' (ability marker), etc.
- spatial meaning > temporal meanings. This type of change is well documented in languages all over the world, as in English how 'behind' > 'after,' Romanian de 'from' > 'since,' Maltese minn 'from' > 'since,' Albanian per 'to' (directional preposition) > 'in, within' (temporal preposition), Tamil -il 'on, at' (locative suffix) > 'in, at' (temporal suffix), and so on.

Furthermore, many of these tendencies can be subsumed under more general principles. For instance, it has been shown how semasiological change has a strong tendency towards more expressiveness, i.e., increase of subjectivity. Thus, Traugott (1982: 257) proposed that meaning change in grammaticalization processes is unidirectional and follows this path:

- propositional > (textual >) expressive

Later Traugott (1989: 34–35; see also Traugott and Dasher 2002: 94–96) revised this hypothesis and reformulated it as a set of three related tendencies that may overlap:

- Tendency I: Meanings based in the external described situation > meanings based in the internal (evaluative/perceptual/cognitive) described situation. Examples: Old English felan 'touch' > 'experience mentally' or Old Greek phainómai 'be put to flight' > Modern Greek 'fear.'
- Tendency II: Meanings based in the external or internal described situation > meanings based in the textual and metalinguistic situation. Examples: Old English hwile 'time' in the adverbial phrase pa hwile pe 'the time that' > temporal and concessive connective, or Old Japanese suron 'just at the time (when . . .)' (temporal nominal phrase) > Early Modern Japanese 'immediately after, precisely, surely' > Late Modern Japanese 'namely' (discourse connective).
- Tendency III: Meanings tend to become increasingly based in the speaker's subjective belief/state/attitude toward the proposition. The above-mentioned examples of development of epistemic modality would fit here.

All these changes (and the more concrete ones just mentioned) must be envisaged as unidirectional, i.e., even if they are based on a semantic similarity or contiguity, semantic change appears to run only in one direction. In Sweetser's (1990: 19) words, 'viewing X as Y is not the same as, and does not imply, viewing Y as X.'

For instance, Traugott and Dasher (1987) have shown that physical domain verbs frequently evolve into speech-act or mental-state verbs. This is the case, e.g., with grasp 'seize' > 'understand' or defend (both physically and with arguments). This is explained by Sweetser (1990: 19–20) as the overlapping of two different systems of metaphors—both speech acts and mental states are conceived of in terms of travel through space, but speech acts are treated as an exchange or transfer of objects from one interlocutor to the other (conduit metaphor). The evolution thus is not reversible and cannot go in the other direction.
Continuum Companion to Historical Linguistics

Semantic Change

The same happens with perception verbs—vision is knowledge (Sweetser 1990: chapter 2), but not the other way round.

Most of these changes are explained as going from more concrete to more abstract meanings and general abstraction scales have been proposed to explain directionality of semantic processes associated to grammaticalization (Figure 16.3).

5.2 Polysemy and Semantic Change

The contributions referred to in the previous section have been crucial for the understanding of the processes associated with semantic change. However, as Sweetser remarks:

What we would like to know is more about the connections between concrete and abstract domains (what makes space a good source for time vocabulary, for example?). The central point is thus knowing what is related to what in human meaning-structures and understanding the motivations for form-function mappings. (Sweetser 1990: 18)

In this regard, it is important to mention the development of the semantic map methodology in past years. Haspelmath has defined semantic maps in this way:

A semantic map is a geometrical representation of functions in 'conceptual/semantic space' that are linked by connecting lines and thus constitute a network. (Haspelmath 2003: 213)

One of the main advantages of semantic maps is that they allow for dealing with the problem of multifunctionality of grammatical morphemes without having to decide between monosemic and polysemic analyses (Haspelmath 2003: 211–213). Adding diachronic information to semantic maps provides the expected patterns of diachronic change, as exemplified in Figure 16.4.

Semantic maps allow for dealing simultaneously with language-specific multifunctionality and universal patterns, as reflected in Croft's (2001: 96) 'Semantic Map Connectivity Hypothesis': 'Any relevant language-specific and/or construction-specific category should map onto a connected region in conceptual space.'

According to Croft, the pattern of links in a map represents how grammatical categories are mapped onto conceptual space. The same reasoning should be valid for lexical categories mapped onto a conceptual space.

As reflected in Haspelmath's definition above and on Croft's remarks, semantic maps have been used mainly for the analysis of the multifunctionality of grammatical morphemes. However, they can also be applied to the analysis of the polysemy of lexical units and their diachronic evolution, since lexical items seem to behave in the same way (Haspelmath 2003: 237–238, Geeraerts 1997), as shown in some of the papers contributed to the collection edited by Cysouw et al. (forthcoming). For instance, Perrin (forthcoming) provides evidence of the recurring polysemy in adjectives expressing quality—the same word is employed both for 'young' and 'little,' 'hard' and 'solid' and so on.

It is generally assumed that a key process associated with grammaticalization is semantic bleaching or desemantization, i.e., loss of meaning in favor of grammatical function. However, Croft (2003: 262) remarks that the semantic change typical of grammaticalization processes can be best described, at least in its earlier stages, as a case of polysemy, which he defines as 'a chain of related meaning or uses.' Polysemy would thus make semantic change possible.

This seems to be true, but it should not be forgotten that polysemy itself basically arises by the mechanisms of semantic change that we saw above, metaphor and metonym (section 2.1). Explaining semantic change through polysemy would in the end only take the problem to an earlier stage—how did that
synchronic polysemy arise? An integrated synchronic and diachronic perspective seems to be in order to overcome these problems. Approaches to change in semantic fields like Berlin and Kay's on color or Viberg's on verbs of perception (section 3.2.2) can be easily reformulated in this way.

Semantic maps, as Haspelmath (2003: 232–233) remarks, embody a series of implicational universals, which emerge as a side effect of the elaboration of a map. In fact, they show interesting similarities to linguistic hierarchies. Both kinds of structures are based on implicational universals, but implicative hierarchies (such as the animacy hierarchy or the hierarchy of grammatical relations) do not rely on multifunctionality while semantic maps do. Semantic maps, however, have less force of prediction than hierarchies given that in a hierarchy a prediction concerns all its members above or below a certain one, while the bundle of semantic functions that a given morpheme can have must follow the lines of the semantic map, but limits cannot be predicted so neatly. Hierarchies thus allow for a lesser number of types of languages than semantic maps.

5.3 Pragmatics

Finally, the work on historical pragmatics in the past two decades or so has provided interesting insights into semantic change, too.\(^{15}\) Especially significant are the contributions from the perspective of 'diachronic pragmatics,' whose focus is on the interface between linguistic structure and use. Pragmatics can be regarded in this sense as 'non-literal meaning that arises in language use' (Traugott 2004: 539). This can be done both from a semasiological and onomasiological perspective. As formulated by Traugott, the two questions posed would be:

What are the constraints on ways in which a meaning can change while form remains constant (modulo independent phonological changes)? [...] What constraints are there on recruitment of extant terms to express a semantic category? (Traugott 2004: 539)

As opposed to traditional approaches to semantic change, in which data were considered in isolation concerning specific linguistic units such as words or collocations, this new perspective involves paying attention to discourse pragmatic bases and motivation for semantic change.

In the past years Traugott (1999) and Traugott and Dasher (2002) have developed the 'invited inference theory' of semantic change. As Traugott explains:

The [Invited Inference Theory of Semantic Change] focuses on schemas that represent types of semasiological reanalysis that language-specific lexemes may (but do not have to) undergo, constrained by larger cross-linguistic and onomasiological conceptual categories such as casual, conditional, future epistemic, animate, etc. It also focuses on the way in which stereotypes emerge [...]. (Traugott 2004: 552).

The path of evolution is thus the following:

Invited Inference \(\rightarrow\) Generalized Invited Inference \(\rightarrow\) Semantic Meaning

If we begin by an invited inference, this means by definition that it is not yet stereotypical. However, as the invited inference becomes more and more salient in the community of speakers and comes to be a generalized invited inference the stereotype is being created for the item with which it is associated.

This can be exemplified with the evolution of the expression *so/as long as* (Traugott and Dasher 2002: 36–38). In Old and Middle English it showed both the spatial and the temporal meaning ‘for the same length of time as.’ Only in certain contexts there was an invited inference of conditional ‘provided that.’ However, in Early Modern English the conditional invited inference was generalized to contexts in which the conditional was more salient, showing thus that it had become a generalized invited inference. In the nineteenth century it began to appear in contexts where the conditional was the only possible reading.

Notes

1. As it is well known, exceptions to this principle are words based on onomatopoeia or imitation by means of language of some sensory characteristic of the referent, as in English *cuckoo* or *gobble*. Ideophones, phonetic symbolism and the iconic value of reduplication as a means of expressing intensity or repetition would also fit here as exceptions to the principle of arbitrariness.
2. According to Geeraerts (1997: 25), '[In semantic change, the "encyclopedic" information is potentially just as important as the purely semantic "senses" (to the extent, i.e., that the distinction is to be maintained at all).] A competing view is favored by Wierzbicka (1995: 311), who states: "Exploring the lexicon in a systematic and methodical way we can discover how "ordinary people" (in contrast to experts and scientists) conceptualize the world; and we can learn to discern the line which separates language-related everyday-knowledge from the language-independent specialist's knowledge."
3. An insightful critique of these traditional classifications can be found in McMahon (1994: 184–186).
4. See Koch (1995: 142–144) for a critical review of the development of this traditional distinction in four types of semantic changes, which arises from the intersection between two axes (contiguity/similarity and ideas/words) and the contributions made by Leonce Roudet and Roman Jakobson.
5. However, both metaphor and metonymy can be grouped together as producing new 'figurative senses' of a word. The difficulties of dealing with figurative meanings
become explicit when dealing with them in diachronic dictionaries — among various other problems (see Lara 1999), it is not easy to differentiate between purely contextual uses and new senses. These figurative meanings typically arise as peripheral senses and, unless they become stereotypical (see the invited inference approach in section 5.3 below), they are not stable in the language. Such figurative meanings are an instance of the ‘incidental, transient changes of word meaning’ that Geeraerts (1997: 23-25) explains as a result of the intersection between the extensional level of meaning and the nondiscreteness property of the phenomenon. This accounts for the phenomenon of ‘semantic polygeny,’ i.e., the fact that the same meaning may arise independently in several occasions in the history of a word (Geeraerts 1997: 62-68), which is frequent with figurative senses.

6. Exhaustive lists of metonymic relations have been attempted in linguistic and literary studies, but none seems to have reached its goal — see Koch (2001) for a thorough revision of the concept of metonymy and its reformulation from a cognitive approach as based on a figure-ground effect in relation to prototypical frames and contiguity relations. Interesting papers on this subject can be found in the volume edited by Panther and Radden (1999). Instances of semantic change associated to the various types of metonymy can be found in Sillier (2000: 115-122).

7. The analysis of the semantic change that head has undergone is a good case of how different analyses of the same phenomenon are possible — thus Hock (1986: 296) gives it as an instance of semantic reinterpretation, while Campbell (2004: 256) considers it an example of metaphor (while metonymy is dealt with in another section).

8. This tendency is known as Kuryłowicz’s fourth law of analogy.

9. Synchronically it is not always easy to distinguish two homonyms from different meanings of the same word (polysemy). From a diachronic perspective, homonyms were originally two different words that have come to have the same form, while polysemy arises in one word by semantic extension.

10. The tendency to avoid homonymic clashes is just the manifestation at the lexical level of the semantic principle of ‘Morphological Transparency,’ according to which it is preferred that one form has just one meaning.

11. As to the tendency to avoid homonymy (see previous note), this is the particular manifestation at the lexical level of the semantic principle of ‘Uniform Codification,’ according to which a meaning is uniform if it is conveyed only by one morpheme.

12. From a pragmatic perspective, Horn (1984) has provided interesting insights into cases of narrowing like these. It is usually the case that synchronically there is a ‘briefer and/or more lexicalized’ item and a ‘linguistically complex or more prolix’ expression. The former has an unmarked meaning and is used in stereotypical situations, while the latter is typically restricted to non-stereotypical situations, in which the use of the unmarked expression would not fit (Horn 1996: 314).

13. Traugott and Dasher (2002: 51-52) summarize the discussion of the role of children and adults in semantic change. From a pragmatic perspective, they stress that the type of changes that they are dealing with, those originating in invited reference (see section 5.3), cannot be initiated by children, ‘because of the complex inferences involved and the discourse functions in structuring text.’

14. A recent general treatment of taboo in language can be found in Allan and Burridge (2006).

15. A thorough review of historical pragmatics is out of the scope of this chapter. For a recent overview see Traugott (2004), on which the following paragraphs are based.

---

17 Etymology

Thomas Krisch

Chapter Overview

1. Introduction

Due to limitations in space, this chapter can only give a very short introduction to the very complex and extremely interesting field of the study of etymology. I had to choose between a very cursory theoretical survey with a listing of all the things one has to take into consideration when making an etymology and a ‘practical approach,’ i.e. presenting etymology by ‘doing’ it. I chose a way in between, but this chapter is much nearer to the ‘practical’ approach.

2. Etymology in Past and Present

This section mainly deals with Plato’s dialogue Kratyllos and tries to contrast Plato’s method with today’s approach. The main focus of our presentation lies on methodology.

Etymology deals with the origins of words. The English term ‘etymology’ is a learned loan from ancient Greek *etymologia* ‘etymology’ and can be analyzed as Greek *etym-o* ‘the true sense of a word’ + *-logia,* quasi-suffix denoting ‘science.’

The origin of words has fascinated mankind ever since. In antiquity, Plato’s dialogue ‘Kratyllos’ addresses this problem. In this dialogue, Socrates builds up some etymologies, mainly etymologies of names of gods and words which, as
Continuum Companion to Historical Linguistics

Edited by
Silvia Luraghi
and
Vit Bubenik
Contents

List of Illustrations vii
List of Contributors ix
Editors' Introduction xiii

1 Historical Linguistics: History, Sources and Resources 1
Silvia Luraghi and Vit Bubenik

Part I: Methodology

2 Sound Change and the Comparative Method: 39
The Science of Historical Reconstruction
John Heine

3 Internal Reconstruction 52
Brian D. Joseph

4 Typology and Universals 59
Hans Henrich Hock

5 Internal Language Classification 70
Søren Wichmann

Part II: Phonological Change

6 Segmental Phonological Change 89
Joseph Salmons

7 Suprasegmental and Prosodic Historical Phonology 106
Hans Henrich Hock

Part III: Morphological and Grammatical Change

8 From Morphologization to Demorphologization 117
Henning Andersen