

12. Semantic change

12.1. Background

It is generally agreed that language conveys meaning. However, a difficulty arises from the fact that the number of meanings which might be conveyed through language — given ‘world enough and time’ — is without bounds, is in effect infinite. At the same time, human beings are capable of producing only a limited, clearly finite, set of speech sounds. More than that, even if there were no limitations on our production, there certainly are limits on our understanding and processing the infinity of mostly completely novel linguistic symbols which would be required to encode an infinity of possible meanings.

To some degree this difficulty is remedied by the fact that meaning is conveyed not directly, through separate speech sounds for each meaning, but indirectly, through an open-ended, but in effect finite, set of conventional linguistic symbols (lexical items). (The conventionality and ‘arbitrariness’ of these symbols becomes clear if we consider the word for ‘dog’ in various languages. As example (1) shows, even closely related languages may ‘choose’ phonetically very different forms.) These are supplemented by a finite set of rules (syntax) which permit the combination of these symbols into larger structures and ensure that the meanings of these larger structures are not simply a composite of the meanings of the lexical items which they are composed of. Moreover, the lexical items themselves are ‘constructed’ out of even smaller sets of likewise conventional ‘building blocks’ (phonemes and morphemes) whose combination, again, is governed by a finite set of rules (phonology/morphology). As a consequence, meaning can be conveyed economically, with a very limited set of speech sounds (somewhere between 25 and 125) which, thanks to the lexicon and the rules of syntax, combine into a virtual infinity of possible sentences. It is this economy, then, and the conventional nature of the ‘building blocks’ and of the rules for their combination which make it possible for us to communicate at all.

- (1) E dog, G Hund [hunt], Fr. chien [šyē], Sp. perro, It. cane [kane], Lith. šuo, Hindi kuttā, etc.

However, it seems that there is a certain price to pay for this economy and for the conventional nature of language: Although they permit us to utter a virtual infinity of sentences with at least some hope of being understood, they simultaneously place a clear limit on the meanings which we can convey without ambiguity. Put differently, language provides too broad-meshed a net to capture all the fine distinctions of meaning which we may want or need to express at any given moment.

It is apparently in order to compensate for this restriction that we permit a great degree of ‘sloppiness’ in meaning: The same phonetic expression is allowed to convey quite different shades of meaning, or even completely unrelated meanings, provided that the linguistic, social, and cultural contexts make it possible to recover something approximating the intended meaning. Consider for instance the sentence in (2). This expression may convey very different shades of meaning depending on whether *Jack* is in kindergarten, first grade, high school, or college, or devoted to calligraphy, or to composing poetry or prose. Moreover, there are in English at least three radically different meanings attached to the phonetic configuration [rayt], the base morpheme of *writer*, namely the meanings which orthographically are differentiated as *write*, *right*, and *rite*. (For some people there is a fourth meaning, that of *wright*, as in *playwright*, *wainwright*, *cartwright*.)

- (2) Jack is a good writer

In this case, there is a clear difference between the lexical item *writer* on one hand and the phonetic configuration [rayt] on the other: In spite of their great diversity, the different meanings of *writer* are clearly relatable and can be accounted for as special ‘connotations’ or ‘uses’ of a single lexical item. On the other hand, the different meanings of phonetic [rayt], which can be glossed as ‘write’, ‘right’, ‘rite’ (and ‘wright’), are quite distinct from each other; they are the ‘basic’ or ‘core’ meanings of different lexical items. It is customary to distinguish these two types of situation as **polysemy** and **homonymy**, respectively.

To complicate matters further, the boundary between these two situations is by no means clear-cut. Thus, British English uses the word *reader* to refer to an academic rank (roughly equivalent to that of an American associate professor). Is this an instance of polysemous use of the same word which occurs in expressions like *He’s a slow reader*? Or is it a different, homonymous word? Different individuals might well have different interpretations: To some, a *reader* is properly so named,

because he 'reads = lectures'. To others, the similarity between the two 'words' may be intriguing, even tantalizing, but not resolvable into polysemy. While in the case of *reader*, many speakers might opt for polysemy, in cases like *ear* (of grain) beside *ear* (organ of hearing), very few would adopt such an interpretation, although some might at least try. In fact, there seems to be a general tendency to explore the possibility that two phonetically identical expressions might also be lexically identical.

Even if we agree that they are identical, our troubles are not over. For we may then have to worry about which of the two different meanings is the more basic one. In cases like *reader*, this does not appear too difficult: The meaning 'academic rank' clearly seems to be more specialized and therefore derived. However, the case is different in example (3) below: Are planets, comets, meteors, or even the moon properly referred to as stars? (Cf. the expressions in (4).) And what about the sun? If so, what is the basic meaning of *star* and what is derived? Naïve speakers may well consider it proper to refer to fixed stars, planets, comets, and meteors as *stars*, but not to the moon or the sun. On the other hand, speakers with some grounding in modern astronomy may exclude not only the moon, but also the planets, comets, and meteors from the range of meanings of *star*; but they might well include the sun, since it is a '(fixed) star'. Still, even such 'astronomically sophisticated' speakers would find it very strange if in bright daylight somebody pointed at the sun and uttered the sentence in (5). And (6) would be considered completely inappropriate when uttered at the sight of the rising sun. Conversely, even more 'naïve' uses of the word *star* nowadays tend to exclude meteors. Finally, most speakers are able to live quite comfortably with both the 'naïve' and the 'astronomically sophisticated' core meanings, shifting from one to the other as the context requires.

- (3) *star* : (a) 'luminous natural objects in the night sky, including the planets, comets, and perhaps the meteors'
 (b) 'fixed stars, i. e. self-luminous bodies, including the sun'
- (4) evening star = 'the planet Venus'
 shooting star = '(comet,) meteor'
 falling star = 'meteor'

- (5) Look at that lovely star in the sky ...
 (6) Star light, star bright, first star I see tonight ...

Similar **inclusive** and **exclusive** meanings can be found for the word *animal*; cf. (7). And again, speakers may accept any or all of these different meanings (as for instance in the expressions (8)–(10)) without any feeling of contradiction.

- (7) *animal* = (a) 'any breathing, mobile, food-consuming organism (excepting certain "plants" which come uncomfortably close to this definition)'
 (b) 'mammals, birds, reptiles, amphibians, fish'
 (c) 'mammals and birds'
 (d) 'mammals'
- (8) This powder kills noxious insects, but is harmless to humans and animals.
- (9) It's incorrect to call bacteria 'bugs', because bacteria are plant-like, but bugs or insects are animals.
- (10) Whales aren't really fish, they're animals.

In short, we seem to be prepared to live with a great degree of polysemy. And this polysemy entails a large amount of **semantic overlap**. (Thus, the two meanings of *star* overlap in the area of 'fixed stars which are seen in the night sky'. And in its more inclusive meaning, *animal* overlaps the meaning of, say, *insect*.) Moreover, we accept a great deal of individual variation in the area of semantics.

In fact, we seem to be much more ready to face semantic diversity or even confusion than the logical opposite, the semantic identity of phonetically non-identical expressions, i. e. **synonymy**. True, as a result of semantic overlap, language is full of near-synonyms, such as *unconscious* and *subconscious*. However, total synonymy is rare. There usually is some **semantic differentiation** in terms of the linguistic, social, or cultural contexts in which two words can be used. Thus, in the context of (11), *unconscious* is acceptable, but *subconscious* is not. Cf. section 10.1.4 for the similar phenomenon of differentiation in analogical change. But note that where in analogical change, the direction of differentiation

can ordinarily be predicted, no such predictability seems to exist for purely semantic differentiation.

(11) She knocked him _____

(In certain language uses, especially in poetry, there is a greater tendency than in ordinary language to treat words as synonymous, so as to avoid repetition and 'monotony'. In some poetic traditions, such as the Sanskrit one, this has been carried to an extreme. At the same time, however, poetry tends to exploit differences in connotations which might be ignored in ordinary language. Moreover, poetry may at times simultaneously treat words as synonymous and different in connotation. Some varieties of Sanskrit poetry, for instance, glory in this 'schizophrenic' treatment of meaning.)

Given that meaning is so diversified and 'shifty', it should come as no surprise that many schools of linguistics have tried to exclude it from the scope of linguistic inquiry. And it should likewise not be surprising that it is much more difficult than in other areas of historical linguistics to make statements on natural tendencies of linguistic change. Nevertheless, historical linguistics cannot ignore semantic change. For unless we can relate words such as OE *hlāf* 'bread' and NE *loaf* not only phonetically, but also semantically, it is impossible to trace many historical developments and to do meaningful historical linguistic research.

12.2. The basis for semantic change

As noted, polysemy and semantic overlap are a pervasive feature of language. Associated with these is the fact that there may be variations in the range of meaning of given words, from inclusive to exclusive. At the same time, total synonymy is rarely tolerated, there usually being some degree of semantic differentiation.

12.2.1. Metaphor

What makes it possible for lexical items to be used in this 'fuzzy', overlapping fashion is above all the concept of **metaphor**, in the

broadest possible definition of the term: We can use a given item to refer to some new meaning by implicitly or explicitly claiming a semantic relationship or similarity between its established and its intended new meaning. An example at the most elementary level would be the following: We may use sentence (2) above in the meaning that Jack faithfully corresponds with his family and friends, because the act of writing is closely linked with this activity.

The term metaphor is of course more commonly used for less elementary extensions of meaning which require a greater and more daring or conscious semantic 'leap', at least when they first arise. An example is the use of *clear* in sentences like (12), as a metaphoric extension of the meaning which we find in (13). And we can overtly express this metaphoric relation by stating something like (14).

(12) His statement was clear (to us)

(13) The water is clear

(14) His statement was clear as water

Several special subtypes of metaphor are often distinguished. Two closely related subtypes are **metonymy** and **synecdoche**. The former extends the use of a word to refer to things or activities which are considered closely associated with the meaning of that word, such as the examples in (15). The latter refers to a given semantic notion by naming its most prominent or salient part; cf. (16). Sometimes, metaphors of this sort may be humorously or ironically employed where they are totally inappropriate, cf. the synecdoches in (17). Other common metaphors are **hyperbole** or exaggeration (cf. (18)), **litotes** or understatement (cf. (19)), and **euphemism** (cf. (20)). Also ellipsis is often listed in this context, but in this book it has been treated under analogy (cf. 9.2.1).

(15) The Surf'n'Turf wants = the person who ordered the
his bill 'Surf'n'Turf' (= steak and lobster) dinner wants his bill.

The Scalpel = nickname for a 'scalpel-happy'
medical doctor

Pulpit = clergy

- (16) The Nose = the person with the prominent nose
 Hands = laborers whose hands and arms are considered their only important asset for physical labor
- (17) Curly = nickname for a person who is bald
 Speedy = nickname for an exceedingly slow person
- (18) I'm **terribly/awfully/frightfully** sorry
 He was **so**rely disappointed
 This is the **most unique** (!) experience you'll ever have
- (19) I fell a **bit** under the weather
 The danger is **not inconsiderable**
 A **couple** of people = several, but possibly more than two people
- (20) sanitation engineer = garbage hauler
 pre-owned automobile = used car
 pacified village = village that has been forced to side with 'us'
 liberation = killing or putting into 'reeducation camps' people who sided with 'them'
 final solution = 'elimination' of Jews, Gypsies, and other 'undesirables'

Metaphor thus saliently refers to non-linguistic, 'real-world' similarities (whether real or imagined). However, the relationship between sound and meaning usually remains an arbitrary one. That is, it is merely a matter of convention that in English it is the phonetic sequence [hænd] which refers to a body part and then, by metaphorical extension, also to laborers. Contrast the phonetically very different Spanish *mano* 'hand', as well as the fact that the Spanish metaphorical counterpart to E *hands* 'laborers', namely *bracero*, is based on a slightly different body part, with a pronunciation very different from E *hand*, namely *brazo* 'arm'.

12.2.2. Onomatopoeia, synesthesia

In certain lexical items, the relationship between sound and meaning appears to be more direct and non-arbitrary. The most obvious relationship of this sort is found in **onomatopoeia**, such as the English expression for the rooster's crow, *cockadoodledoo*. True, even here there is a large element of arbitrariness, as can be seen by the fact that in other languages, roosters 'crow differently'; cf. the examples in (20). Still, speakers who have such onomatopoeic expressions in their language generally are satisfied that there is a striking similarity between the linguistic expression and the non-linguistic, real-world sound which it imitates and that therefore the relationship between sound and meaning is direct and 'real'. The linguistic item acts as a metaphor for its real-world reference. A useful term for this kind of relationship is **iconicity**: the linguistic term is an **icon** (a 'likeness') of the thing which it denotes.

- (20) E cockadoodledoo, G kikeriki, Dan. kykeliky [kükelikü], Swed. kukeliku, Fr. cocorico/coquerico/coquelico [kokor/ər/əlikó], Span. quiquiriquí [kikirikí], Lith. kakariėku/kakariekú, Ru. kukarekú, Hindi kuk(a)řũkũ, Marathi kukručku, Lingala kokolikó; cf. Finn. kukku kiekuu (lit. 'the rooster crows')

There is a strong tendency in onomatopoeia to associate certain phonetic segments or segment sequences with certain types of sound. Some such associations may be rather language-specific. (This is the case, for instance, for many of the examples in section 9.1.2, Chart 9.1.) Others seem to be more common or may even constitute cross-linguistic tendencies. Thus, many languages have pairs or sets of onomatopoeic expressions in which one side has an [i] vowel and refers to relatively high-pitch noises, while the other side has low or back vowels that signal a corresponding lower-pitch noise. Examples may either be of the type (21), with minimal or near-minimal pairs, or of the type (22), where the onomatopoeic expressions differ also in terms of their consonants, etc. (As examples like Germ. *krächzen* with front and non-low [ɛ] show, some lexical items may not quite fit this pattern. Such examples are put in parentheses. Note that the glosses in (21/24) are only approximate.)

(21a)	Engl.	drip chip sniffle sip	drop chop snuffle sup (now obsolete)	
b)	Germ.	girren knirren bimmeln quieken	gurren knarren bammeln quaken	'coo' 'crackle, creak' 'ring (of bells)' 'squeal, quack'
c)	Hindi	čičī ṭiktīk ṭintin	čūčū ṭukṭuk ṭanṭan/ṭunṭun	'chirp, squeak' 'a ticking noise' 'a ringing noise'
(22a)	bird noises:			
	Engl.	cheep, (chirp,) peep, twitter		: caw, coo, hoot, whoop
	Germ.	girren, piepsen, zirpen, zwitschern		: krah (krächzen), gur- ren, heulen [hoʊlən]
	Hindi	čičī (čēčē, ṭē)		: čūčū, kāw
	Kota	čikčik, čivkčivk		: kaka, gugr(gr)
b)	laugh:			
	Engl.	giggle, snigger, snicker, titter		: laugh, guffaw, chortle, cackle
	Germ.	kichern, wiehern		: lachen (brüllen)
	Hindi	ṭhīṭhī, hīhī, khīkhī, khilkhil		: hāhā, hāsnā, aṭṭ(a)hās, ṭhaṭhānā, ghurghurākar hāsnā

There is a less forceful tendency toward similar 'sound symbolism' in other areas of the vocabulary. Consider for instance the English and German vocabulary for 'shine, twinkle, etc.'. As the examples in (23) show, a high front vowel generally is associated with a more 'vibrant' or 'pulsating' light effect. (Phonetic exceptions again are put in parentheses. Possible semantic exceptions are indicated by a following question mark.) Hindi exhibits a similar pattern, although the [i] vocalism is more restricted; cf. (24). But note that many of the Hindi lexical items that correspond to English and German [i]-words have palatal stops whose acoustic effect is similar to that of high front vowels.

(23)	Engl.	flicker, glimmer, glisten, glitter, shimmer, twin- kle	: flame, flare (?), flash (?), glare, (gleam), glow, lightning (?), shine, sparkle (?)
	Germ.	blitzen (?), flickern, flit- tern, glimmern, glitzen, schimmern	: flackern, flammen, fun- keln (?), Glanz (glän- zen), (glimmen, glü- hen), leuchten [loʊçtən], scheinen
(24)	Hindi	ṭhilmilānā ṭimṭimānā ṭagṭagānā ṭhakṭhakānā ṭhamṭhamānā ṭhamaknā ṭjamaknā čamčamānā dhakdhakānā dhagdhagānā	'shine with quick vibration (such as hot air over a desert or a light shining through haze)' 'flicker' 'glitter' 'sparkle (as of sequins)' 'sparkle (also of sounds)' 'sparkle (also of sounds)' 'be bright' 'glare' 'blaze' 'flare up'

The similarities between (21/22) and (23/24) are not limited to the opposition between [i] vs. other vocalism. Both English and German have a suffix-like element *-er(-)* in onomatopoeic words, as well as in words referring to 'visual effects'; cf. (25). And Hindi shows a widespread use of reduplication in both sets of vocabulary; cf. (26). (The suffix *-ānā* serves to turn onomatopoeic expressions into verbs.)

(25)	Engl.	twitter, snigger, snicker, titter	: flicker, glitter, shimmer
	Germ.	zwitschern, kichern, wiehern	: flickern, flittern, glim- mern, glitzern, schim- mern, flackern
(26)	Hindi	ṭin-ṭin(ānā), ṭun-ṭun(ā- nā), khil-khil(ānā), ...	: ṭim-ṭimānā, ṭag-ṭagānā, ...

One suspects that these similarities are the result of the transfer of acoustically-based onomatopoeic patterns to other areas of perception

and sensation, by a metaphoric process which is frequently referred to as **synesthesia**. Similar developments can be observed in non-onomatopoeic vocabulary, as in Engl. *a shrill red, a quiet blue*. Specifically, the use of high front vowel to designate 'high-frequency' or 'high-vibration' visual effects may be attributed to the relatively 'high pitch' of the vowel [i].

Synesthesia is at work also in other areas of the vocabulary. Consider for instance the metaphorical expressions in (27), where words of sense perception and sensation are extended into the area of 'cognition'. What is common to the examples of this type as well as the ones in (25/26) is a semantic extension from the more **concrete** or tangible to the more **abstract** or intangible, a development which recurs in many other areas of the lexicon; cf. e. g. (28).

- (27) Engl. grasp 'understand'
 Germ. (er)fassen 'grasp; understand'
 Lat. comprehendere 'grasp, collect; understand'
 Skt. avagačhati 'understands (lit. "goes down into")'
- (28) Engl. **head** of a family
foot of a hill/mountain
mouth of a river
shoulder of a road
 the **root** of all evil
 Germ. **Hauptstadt** 'capital (lit. "head city")'
Fuss eines Berges 'foot of a hill/mountain'
Rücken eines Berges/Berg**rücken** 'ridge (lit. "back") of a mountain'
Bauch einer Flasche/Flaschen**bauch** 'body (lit. "belly") of a bottle'
 Lat. **caput** 'capital (lit. "head")'
pēs montis 'foot of a hill/mountain'
caput montis 'top (lit. "head") of a hill/mountain'
 Skt. **mukhadēva-** 'chief/head god'
pada- 'foot; quarter (of a verse, etc.; cf. the **four** feet of cattle)'
dantamūla- 'pre-alveoli (lit. "tooth root")'

A synesthetic explanation has been proposed also for words like the ones in (29), in which the sound [i] appears to be associated with

smallness. Various explanations have been offered for this association, ranging from the 'narrow' or 'thin' sound of [i] to the fact that [i] is articulated with a relatively small opening of the lips. Perhaps, however, the association is a secondary one, based on the fact that small or young animals and persons tend to emit higher-pitched sounds than larger or older ones. At any rate, the tendency toward this type of semantic extension is fairly weak, as can be seen by the fact that the vowels of, say, Engl. *big* and *small* are exactly the opposite of what one would expect.

- (29) Engl. itsy-bitsy, teeny, wee, pip-squeak

This explanation has been further extended to account for the [i]-vocalism in diminutive suffixes of the type (30), or even for the feminine suffix *-ī* found in Sanskrit and later Indo-Aryan languages; cf. (31).

- (30) Engl. baby, Johnny, ... [-ī/i]
 Swiss Germ. müəs-li 'cereal (dimin.)'
 Hans-li 'Johnny'
 Goth. gum-ein [-īn] 'little man'
 Gk. paid-i-on 'small boy'
 It. bamb-ino 'little child'
 Span. perr-ito 'little dog'
- (31) Skt. vr̥ka- (m.) : vr̥kī (f.) 'wolf'
 Hindi čhōṭā (m.) : čhōṭī (f.) 'small'
 laṛkā (m.) : laṛkī (f.) 'child' (i. e. 'boy' : 'girl')

Counterexamples to this tendency toward the use of [i]-vowels in diminutive and feminine suffixes are even more wide-spread than the ones for the synesthetic use of [i]-vowels to denote smallness in lexical items.

Thus, Lithuanian has a synchronically very active system of diminutive formation; but only two out of eight diminutive affixes have [i]-vocalism; cf. (32). In fact, the majority of suffixes contain an [u]-vowel. Similarly, the earliest Indo-European diminutive suffixes seem to have been **-lo-* and **-leo-*, both without [i]. And the synchronically 'live' diminutive suffix of Hindi is *-ū*, not *-ī*; cf. (33).

- (32) -ik^yē-
 -it^ya/it^yē-
 vs. -el^ya/el^yē- or -ēl^ya/ēl^yē-
 -ul^ya/ul^yē-
 -ut^ya/ut^yē-
 -uk^ya/uk^yē- (with or without palatalization of preceding
 C)
 -ūkṣt^ya/ūkṣt^yē-
 -uṣ^ya/uṣ^yē-

- (33) *chōṭā* 'small, little' : *chōṭū* 'little one (dimin.)'
bāp 'father' : *bāpū* 'father (dimin.)'
gītā (female name) : *gītū* (id., deminutive)

As far as feminine affixes are concerned, *-ī* is productive in Sanskrit and especially in the modern Indo-Aryan languages, but not in the other members of the Indo-European language family, which prefer low-vowel *-ā*. This casts considerable doubt on the 'synesthetic' explanation of *-ī*. There are, to be sure, Hindi doublets like the ones in (34), where the feminine forms in *-ī* denote a smaller variant of the *-ā*-form. However, even in the examples of (34a), it is not always clear whether the form in *-ā* is 'basic' and the form in *-ī* a 'derived' diminutive. And in (34b) it is clearly the form in *-ā* which has a special connotation. One suspects, therefore, that *-ī* does not function as a diminutive suffix. Rather, the contrast between *-ī* and *-ā* in these words appears to be secondarily modeled on the similar morphological contrast between female/feminine and male/masculine forms in human nouns (cf. (31)). And the motivation for this secondary extension seems to lie in stereotypical associations between sex and size. As a consequence, differentiations can be made in both directions, from 'smaller' to 'larger' and vice versa.

- (34a) *jūtā* 'big shoe' : *jūtī* 'small shoe'
kaṭōrā 'big bowl' : *kaṭōrī* 'small bowl'
ghaṇṭā 'big bell' : *ghaṇṭī* 'small bell'
 b) *čītā* 'big black ant' : *čītī* 'ant'

12.2.3. Taboo

There is one other area in which speakers treat the relationship between words and meanings as iconic, not as arbitrary. This is the area of **taboo**, where the linguistic term behaves as if it were a metaphor of its non-linguistic, real-world point of reference: The 'name' becomes confused, in a very striking and salient manner, with the 'thing' (or person) which it denotes.

What is subject to taboo may differ from culture to culture. But whatever the cultural differences, tabooed expressions tend to be avoided. At the same time, however, complete avoidance commonly is not possible, since on many occasions we will have to refer to the tabooed notion after all. A common avoidance strategy is to replace the tabooed item by a different, frequently euphemistic expression which is semantically appropriate. But the new expression, in turn, tends to become taboo, since it is likewise felt to be too closely linked with the tabooed point of reference. The consequence may be a chain of ever-changing replacements, a constant turnover in vocabulary. Thus, in English and many other languages, there is a strong tendency to place a taboo on terms for excrements, or for the location where they are deposited. Some of the effects of this taboo can be seen in the plethora of current English terms for 'toilet' cited in (35). (The list is by no means exhaustive.)

- (35) bathroom, john, ladies'/men's room, lavatory, loo, powder-room, toilet, W.C., washroom

12.3. Mechanisms and causes for change

Many of the phenomena described in the preceding section as the basis for semantic change are at the same time also mechanisms and causes for change. Especially onomatopoeia, other synesthetic developments, and taboo may act as very powerful agents for linguistic change.

12.3.1. Onomatopoeia, synesthesia, taboo

Onomatopoeia frequently occasions the undoing of sound change, such that the iconic relationship between real-world reference and linguistic symbol is restored. For instance, it has been argued that onomatopoeic considerations are responsible for the fact that the normal Modern English word corresponding to ME **pīpen* is *peep*, not the expected *pīpe*. (Cf. 3.7 above.) Similar effects can be seen in synesthetic vocabulary referring to size (cf. (36)). And it is at least possible that the increasing use of diminutive suffixes with [i]-vocalism in English, early German, and Romance resulted from similar synesthetic considerations. Moreover, there is one reported case in which the stereotypic association of smallness with 'female' ultimately had a profound effect on agreement marking: In archaic varieties of the modern Indo-Aryan language Konkani, words for females ordinarily 'impose' feminine agreement marking on qualifying adjectives. But diminutives, which are characterized by a neuter ending *-ñ*, take neuter agreement, whether they refer to males or females. Compare example (37a). In certain dialects, however, the meaning of the diminutive neuter noun *čēdū* 'child' was specialized to refer only to female children, i.e. young girls. Subsequently, the agreement marking associated with *čēdū* was reinterpreted as marking 'young female' (rather than 'diminutive') and extended to other, originally feminine-gender nouns when they refer to 'young females'. Compare (37b). What is interesting is that the result of this change is a system in which *-i* is the unmarked feminine agreement suffix, while youngness is marked by the lower vowel *-ē*, contrary to the 'synesthetic' expectation.

- (36a) Engl. tiny (16th c.) : teeny (18th c.)
 b) PGmc. *lutila- 'small' > OE lytel, OHG lutzil, etc.
 vs. Goth. leitils [ī], OE (variant) lītēl, ON lītēll
- (37a) bhoyñ 'sister' : dhakt-i bhoyñ 'little sister' (f.)
 čēd-ū 'child' : dhakt-ē čēd-ū 'little child' (n./dimin.)
 b) bhoyñ 'sister' : dhakt-i bhoyñ 'little sister' (unmarked f.)
 čēd-ū 'girl' : dhakt-ē čēd-ū 'little girl' (young f.)
 Hence:
 bhoyñ 'sister' : dhakt-ē bhoyñ 'little sister' (young f.)

Even more pervasive can be the effect of taboo. First, as noted in the preceding section, taboo can lead to a constant turnover in vocabu-

lary, such as in the English expression for 'toilet'; cf. (35) above. In some societies, the effect may be much more far reaching. For instance, it has been argued that the difficulties of tracing Tahitian vocabulary to its Proto-Polynesian sources are in large measure a consequence of massive taboo: Upon the death of a member of the royal family, every word which was a constituent part of that person's name, or even any word sounding like it became taboo and had to be replaced by new words. (It appears that this massive and constant vocabulary renewal was accomplished not only by metaphorical meaning extensions in native vocabulary, but also by large-scale borrowing.)

Interestingly, in the case of some tabooed words, lexical replacement may affect not the tabooed words, but innocent homonyms. This is especially noticeable with many of the 'Anglo-Saxon' or 'four-letter' words of English which, though tabooed in polite company, are used quite frequently — and with gusto — in more 'macho' and almost deliberately impolite contexts. Thus, in American English, the animal names *ass* and *cock* were replaced by *donkey* and *rooster*. Such replacements seem to be motivated by the desire not to be perceived as uttering a tabooed word under the wrong social circumstances. Similarly, earlier English had a fair number of words with short vowel in the context [f _____ k]; cf. (38). Except for the well-known taboo word (not listed in (38)), none of these have survived as independent words, presumably in large measure because they sounded too similar to the tabooed word. (Dates given in parentheses refer to the last attestation of given items. Interestingly, most of the words died out in the Victorian area, when the taboo against words with sexual connotations was at its acme. It is from this period of English that we get expressions like *white meat* and *dark meat* for 'chicken (etc.) breast' and 'legs/thighs'.)

- (38) fuk (a sail) (1529)
 fac 'factotum' (1841)
 feck 'effect, efficiency' (1887) (now only 'Scots Engl.' *feckless*)
 fack/feck (one of the stomachs of a ruminant) (1887)
 feck(s)/fack(s) '(in) faith, (in) fact' (1891)

An alternative to lexical replacements of this sort is **tabooistic distortion**, a deliberate 'mispronunciation' of a tabooed word which enables speakers to utter the word without 'really' saying it. Compare the English examples in (39). The last two sets of examples reflect another common taboo, against 'taking the name of the Lord in vain'.

- (39) Oh, shoot! Sheet!
 Darn it! Goodness gracious! Doggone it! What in tarnation?!
 Good-bye (for older (*may*) *God be with you*)

12.3.2. Reinterpretation

Outside the area of onomatopoeia, synesthesia, and taboo, **reinter-pretation** is probably the most important mechanism of semantic change. We have already seen this process at work in the Konkani development of (37), as well as in the discussion of analogy (cf. e. g. section 9.1.2).

In many cases, reinterpretation is precipitated by other linguistic developments, including sound change and metaphor, and even by extralinguistic, social or cultural changes. These will be examined in closer detail in the following sections. At this point it is useful to note that reinterpretation can operate without such prior, 'precipitating' changes.

A famous and often-quoted example of such 'free', 'unprecipitated' reinterpretation is that of NE *bead*. Its Old English ancestor (*ge*)*bed* had a markedly different meaning, namely 'prayer', just like its Modern German cognate *Gebet*. The reinterpretation by which this word acquired its modern meaning must have taken place in the context of a practice which was very common in medieval times and which until recently was still wide-spread among Catholics: the practice of counting or keeping track of one's prayers by means of the pellets on a rosary. Within this context it was possible to reinterpret a statement like (40) to refer not to prayers, but to the pellets on the rosary.

- (40) I'm counting my beads

12.3.3. Sound change and shift in meaning

One of the developments which may precipitate semantic reinterpretation (as well as other semantically based changes) is sound change. Consider for instance the case of Engl. *daisy*: As noted in 9.2.3, this word originally was a compound of *day's* and *eye*, a metaphorical expression for the sun to which the flower was compared. However, because sound change applied differently in stressed and unstressed

syllables, this word developed into NE [dēzī], not [dēzay]; cf. (41). And in the process, its relationship to *day* and *eye* was obscured to the point that *daisy* was 'bleached' of its metaphorical meaning. It therefore had to be reinterpreted as an underived, non-metaphorical lexical item.

- (41) OE *dāges ēage* > ME *dais ei(e)* > NE *daisy* [dēzī]
 vs. *ēage* > *ei(e)* > *eye* [áy]

Semantic change is not limited to cases of phonological 'divergence'. Also 'convergence', resulting in homonymy, may trigger semantic change. As noted in section 12.1, one common reaction lies in exploring the possibility that two phonetically identical expressions might also be lexically identical. In cases like (42), most speakers will probably opt against reinterpreting the two homonymous forms as a single, polysemous lexical item. (But note that for the many Americans whose familiarity with 'ears of grain' is limited to edible corn (or maize) cobs, the identification becomes easier, since such 'ears of corn' are comparable to many animal ears in size and — with some semantic 'good will' — also in shape.) Cases like (43) are more promising, and speakers not familiar with the different spellings of the two terms are often surprised when they find out that they are written differently. A case of successful reanalysis is given in (44).

- (42) PGmc. **auzō* > NE ear (body part)
 **ahiz/ahuz* > ear (grain-bearing part of a plant)
- (43) (OFr. *mareschal* ⇒) ME *mareschal*
 > NE [ma(r)ʃəl] marshal
 (OFr. *marcial* ⇒) ME *marcial*
 > NE [ma(r)ʃəl] martial
 (cf. NE *field marshal* : *court martial*, both used in military contexts)
- (44) pre-Skt. **meth-* > Vedic Skt. *math-* 'rob'
 **menth/mṇth-* > *manth/math-* 'whirl, shake'
 → Class. Skt. *math-* 'whirl, stir, shake, "shake down" = rob'

Instead of leading to a reanalysis of originally distinct words as being identical, homonymy sometimes results in a very different development,

namely the replacement of one of the two homonymous items. This development is most frequently found in cases of so-called **homonym clash**, where the phonological merger of lexical items results in excessive ambiguities.

One of the most famous cases is the one in (45): Through sound change, Lat. *gallus* 'rooster' and *cattus* 'cat' merged in Gascon French. One can well imagine the ambiguities that this merger must have brought about, especially in a farming context where it makes a considerable difference whether it is the cat or the rooster that has entered the hen house. The response was similar to one of the 'avoidance maneuvers' in taboo: It consisted in a variety of dialectally different replacements of the word for rooster.

- (45) Lat. *cattus* 'cat' > Gasc. Fr. *gat*
gallus 'rooster' > *gat*
 → [azā] (orig. 'pheasant')
 [begey] (orig. 'vicar')
 [put] (orig. 'chick')

In some cases, the replacement of 'clashing' homonyms may be only partial; cf. (46). What is interesting is that in such cases of semantically-based change, the relic forms survive in marginal function, just as they do in analogical change. (Note that *let ball*, a term in tennis, is often replaced by folk-etymological and more 'transparent' *net ball*.)

- (46) OE *lātan* 'permit' > NE *let*
lettan 'stop, hinder' > *let* → *stop, hinder, ...*
 NE relics: without *let* or *hindrance*
let ball

12.3.4. Other linguistic change and shift in meaning

As noted in 10.1.4, doublets resulting from analogical change usually are differentiated, such that the new form takes on the synchronically productive meaning or function and the old form survives in marginal function. It may be argued that there is a difference between the differentiation in (47a) and (47b): In (a) we are dealing with simple formal differentiation as the motivation for semantic specialization. In (b), on the other hand, a semantic, metaphorical differentiation had

taken place even before the analogical replacement of the comparative *elder* by *older*. The latter change, then, led to the semantic **isolation** of the originally metaphorical expression *elder* and to its reinterpretation as a distinct lexical item in its own right. As a consequence, church officers nowadays do not have to be 'old' (or older than the rest of the congregation) in order to be called (*church*) *elders*.

- (47) pre-NE old : *elder* → *older*
 a) Relic I: *elder* (as in: *elder brother, sister*)
 b) Relic II: *elder* (of the church/community)

Lexical obsolescence likewise can engender the isolation of originally metaphorical expressions and their reinterpretation as basic, underived words. For instance, in medieval soldiers' slang, battle was referred to as the smashing of pots or cups (= heads) into shards. This brought about the metaphorical extensions in (48a). Subsequently, the basic terms for 'cup' and 'shard' became obsolete, so that the Modern German and French words in (48b) have lost their metaphorical flavor. In fact, they have become the normal words for 'head', while the older terms (Fr. *chef*, G. *Haupt*) survive in marginal, frequently metaphorical function. (Cf. e.g. the use of G. *Haupt* in *Hauptstadt*, ex. (28) above). Interestingly, in this metaphorical expression, the synchronically normal word for 'head', *Kopf*, would be inappropriate.)

- (48a) OFr. *test* 'pot, potsherd' : *test* 'head (metaph.)'
 MHG *kopf* 'cup' : *kopf* 'head (metaph.)'
 b) NFr. *tesson* 'shard' : *tête* 'head'
 NHG *Tasse* 'cup' : *Kopf* 'head'

Also borrowing can lead to the isolation and reinterpretation of originally polysemous expressions. For instance, when the German word *Angst* 'fear, anxiety, anguish' was first used in the German-language writings of Freud, it was employed in its fairly broad, ordinary-language range of connotations. However, upon being borrowed into English, the word *angst* came to be used as a technical term of Freudian psychology, with a very specialized range of meanings. (German-born Freudians have deplored this semantic narrowing, considering it a falsification of Freud's view.)

12.3.5. Social and cultural change and semantic shift

Since meaning is established by way of reference between linguistic signs and the 'real world', any change in the 'real world' can affect the meaning of words. In the majority of cases, such semantic shifts are a secondary consequence of social, cultural, etc., changes. But at times the semantic shift may be the very vehicle for such changes.

For instance, negative attitudes of Americans of European descent toward fellow-citizens of African origin for a long time brought about a situation in which any term used for Afro-Americans quickly acquired negative, derogatory, or insulting connotations. Just as with tabooed words, the response until recently consisted in a constant turnover in the words designating Afro-Americans, ranging from *Ethiopian*, *African*, *Colored*, *Negro*, *Afro-American* to the six-letter obscenity still commonly used as a term of insult. This linguistic turnover was in the nineteen-seventies brought to a halt by a conscious and deliberate redefinition of the word *black*: Where previously this word had negative and derogatory connotations, even among Afro-Americans, it was now redefined by the 'Black-Power Movement' as a word with neutral or even positive connotations, completely on a par with the word *white* which traditionally had been employed in reference to Americans of European origin. And since then it has replaced all of its predecessors, including *Afro-American*, as the most commonly used, neutral term for Americans of African descent.

The more usual, non-deliberate effect of social change is exemplified in cases like the redefinition of, say, Brit. Engl. *king* from 'absolute monarch' to '(figure)head of government' or of Am. Engl. *governor* from 'administrator of a British colony' to 'elected head of a state of the Union'. Redefinitions like these result from a common tendency to retain old terms even if the points of reference for these terms undergo considerable social, cultural, etc. change.

The effects of cultural change can be seen in the semantic developments which words like *car*, *lorry/truck*, or *tire* have undergone as the result of motorization. Consider also the case of Gmc. **writan* 'scratch, carve, make incisions': In early Germanic, this verb was appropriately applied to the art of writing runes, for runes were generally scratched or carved into wood, bark, or rock. With the advent of Christianity came a different mode of writing, namely on parchment and by means of a quill. But in spite of the fact that letters now ordinarily were no longer 'carved', the old term for writing was retained in Old English

and Icelandic. This retention, however, in effect severed the semantic link between 'scratch, engrave, etc.' and 'write'. The consequence was a semantic split: OE *writan*, OIcel. *rita* 'write' were now reinterpreted as words in their own right, different from *writan*, *rita* 'scratch, engrave, etc.' (English subsequently lost the latter word; but Modern Icelandic retains it as a separate word, a 'mere' homonym of *rita* 'scratch').

12.4. Results of semantic change

As the use of the term 'split' in the preceding paragraph shows, it is possible to classify some of the results of semantic change under headings familiar from sound change. Thus, beside the split of **writan* 'scratch, engrave, etc.; write runes' into *writan/rita* 'scratch, engrave, etc.' and *writan/rita* 'write', we also get mergers as in the case of Skt. *math-* 'stir' and *manth/math-* 'rob' → *math-* 'stir; rob'; cf. (44) above.

12.4.1. Broadening and narrowing of meanings

But note that such 'clean', clear-cut developments are not very common. Usually, semantic shifts tend to be just as 'fuzzy' as their synchronic basis, leading not to 'mergers' and 'splits', but merely to the **broadening** or **narrowing** of the range of meanings. For instance, the fact that in British English, *king* is now used to refer to a (figure) head of state does not prevent the term from being employed in reference to absolute monarchs. Rather than replacing one meaning with another one, the change broadens the meaning of *king* to cover the range of both '(figure) head of state' and 'absolute monarch'. Similarly, when Germ. *Angst* was borrowed into English as a technical term in Freudian psychology, all that happened was a narrowing of its meaning, not a complete semantic replacement.

12.4.2. Meliorization and pejoration

One effect which is common and interesting enough to have been specially noted in the literature is that the value judgments attached to

particular words can change: As the result of semantic change, the connotations of words may become more positive (**meliorization**) or more negative (**pejorization**).

Consider for instance the case of OHG *marbeskalk*, borrowed into French as *maresc(h)al(c)*: Its original meaning was 'farm or stable hand in charge of the horses'. Now, horses were very important war equipment in medieval times. As a consequence, the meaning of *maréchal* was reinterpreted as 'person in charge of important war equipment'. A series of semantic extensions, presumably via 'person in charge of horses and other war equipment' and 'person in charge of horses, other war equipment, and troops' eventually led to the fact that Fr. *maréchal* (and also the English and German borrowings *marshal*, *Marschall*) are used to refer to high military officers, etc. A similar development, perhaps significantly in the same social context, is that of OE *cniht* 'boy; servant' to NE *knight*. (This semantic shift seems to have involved the following steps: 'boy' → 'servant' → 'military servant or follower of a king or nobleman' → 'member of the lower nobility'; cf. the similar development in G *Knappe* 'boy' → 'page of a nobleman, esquire'.) This meliorization has counterparts in similar, chronologically and socially parallel developments in other European languages, such as G *Ritter*/Fr. *chevalier*/Span. *caballero* 'horse-rider' → 'knight, nobleman'.

On the other hand, the fact that OE *cniht* means not only 'boy, youth', but also 'servant' reflects a different, pejorizing tendency which likewise has parallels elsewhere. Thus, *Knecht*, the German cognate of OE *cniht*, NE *knight*, has the meaning 'servant, stable/farm hand', or even 'serf'. Similarly, in many varieties of English, the word *boy* is used in reference to inferiors or servants. An even farther-reaching development is found in OE *cnafa* 'child, youth' which via 'servant' eventually turned into NE *knave* 'villain'. And note that the word *villain*, used to gloss NE *knave*, likewise is a pejorization of a word whose original meaning was 'belonging to the villa/estate or to the village', i. e. 'servant, serf' or 'peasant = serf'.

The development of such thoroughly negative connotations or meanings may simply reflect a stereotypical distrust of servants' honesty or loyalty. But other pejorizing changes suggest a different explanation, namely that the major motivating force behind such pejorizations is the contempt in which western and many other societies tend to hold those who are weaker or less fortunate.

Consider for instance the fate of ME *sely*: Like its German counterpart *selig*, this word originally meant 'blessed, blissful'. By semantic exten-

sion, it came to be used in the meaning 'innocent, helpless, defenseless', as in Matthew Arnold's *silly sheep*. But eventually, its meaning was reanalyzed as 'innocent, helpless', hence 'unwary, incautious' and therefore 'stupid'. This development is by no means isolated. Thus, Fr. *crétin* 'feeble-minded, stupid' is in origin a dialectal development of Lat. *christianus* 'Christian'. The development from 'Christian' to 'stupid' presumably took place via an intermediate stage 'person who in true Christian fashion turns the other cheek when attacked'.

Note in addition the recurrent and pervasive pejorization of terms referring to women, the so-called 'weaker sex': This change is not limited to *hussy* (for which see 9.2.3 and 10.1.4 above). A similar development is found in OE *cwene*: early NE *quean* 'hussy, whore' or OHG *thiorna/diorna* 'girl, young woman, virgin': NHG *Dirne* 'prostitute, whore'. Moreover, notice that there is a plethora of other negative terms for women who do not live up to the strictest moral standards (such as E *slut*, *slattern*, *whore*), but few if any for men with similarly loose morals. (In fact, the few terms that do exist, such as E *stud*, tend to have 'macho', but positive, rather than negative connotations.)

The interest of such developments of meliorization and pejorization evidently lies in the fact that they tell us a lot about past cultural and social history, and probably also about certain pervasive social attitudes.

12.4.3. Taboo

What must be of perhaps even greater interest to the historical linguist is the pervasive effect which taboo can have on linguistic change. (Similar, but less far-reaching, effects are found also with onomatopoeia and synesthesia, as well as in 'homonym clashes'.)

As noted earlier, one common consequence of taboo lies in lexical replacement. And in some societies, this replacement can take place on a massive scale. A different response lies in tabooistic distortion, which may considerably alter the phonetic shape of tabooed lexical items. Since linguistic reconstruction crucially depends on the establishment of lexical cognates, such tabooistic replacement or distortion may considerably or even severely limit our ability to reconstruct.

A case in point is the Indo-European word for 'tongue': Given that all (or almost all) human beings have tongues, we can be sure that there must have been a word for 'tongue' in Proto-Indo-European. And there is good comparative evidence for the existence of such a

word in the proto-language. However, as far as the phonological shape of this word is concerned (especially of its initial consonant), the comparative evidence is quite uncertain. Compare the data in (49), where the forms on the right side indicate the possible PIE sources for the attested forms on the left. (Note that the stem-final alternation between **-wā* and **-ū-* can be accounted for in terms of a well-established PIE morphophonemic alternation. In a number of languages, the non-initial stop could be derived from more than one possible source. In such cases, that form has been chosen which best agrees with the majority of the other languages.)

(49)	Oscan	fangvā	*dhngwā
	Lat.	lingua	*lŋghwā (?)
	OLat.	dīngua	*dnghwā
	OIr.	teng(a)e	*tŋghwā-
	Gmc.	*tungwō	*dnghwā
	OCS	językŭ	*ŋghū- (i. e. Øŋghū-)
	Lith.	liežuvis	*leyghū- (?)
	Skt.	jihvā	*ǵ(h)ighwā (?)
	Av.	hizū	*siǵhū
	Toch. B	kantwo	*ǵ(h)/knt/d(h)wā

Now, it is perhaps possible to eliminate some of these various reconstructive possibilities. Oscan *fangvā* might for instance be explained as resulting from a metathesis of the feature 'aspiration' (i. e. **dhngwā* < **dnghwā*). Similarly, the Tocharian word can be explained as resulting by metathesis from an earlier form **t|d(h)ŋghwā*. For the initial *l-* of Class. Lat. *lingua* we might refer to *lacrima*: OLat. *dacrima*. However, the change of initial *d-* to *l-* does not otherwise recur in Latin and is therefore quite anomalous. A different explanation, which would derive the *l-* by contamination from the semantically related verb *lingō* 'lick', is therefore perhaps preferable. And such an explanation is almost certainly to be assumed for Lith. *liežuvis*; cf. *liežu* 'lick'.

Even with these assumptions, however, we are unable to account for the root vocalism *i* of Sanskrit and Avestan. And even more importantly, we cannot establish what was the initial consonant (if there was any): Latin and Germanic suggest **d-*, Old Irish **t-*, Old Church Slavic **Ø*, Avestan **s-*, and Sanskrit perhaps **ǵh-*. Finally, what remains unexplained is why this word should have undergone so many unusual, metathetical or contaminatory changes.

Given our knowledge about early Indo-European society, it is probable that these difficulties result from tabooistic distortion: First, for our linguistic ancestors, the tongue was the organ of speech (= language) par excellence. This is for instance reflected in expressions like *the English tongue* 'the English language', or Lat. *lingua* 'tongue, language' (the indirect source of NE *language*). Being the organ of speech, the tongue was imbued with magical powers, just like speech itself. For speech made it possible to name things or people and by naming them, to have power over them. As a consequence, the word for the organ of speech could be subject to the same kind of taboo as the word(s) for God in the Judeo-Christian tradition. If, then, reference had to be made to the tongue, tabooistic distortion made it possible to do so without actually uttering the awesome word. This explanation gains in plausibility if we consider that the words for a number of other important body parts, such as the heart and the kidneys, likewise have undergone unexpected and deviant phonetic developments in a number of the Indo-European languages.

12.5. Shifts in semantic fields

By and large, semantic change operates in a rather random fashion, affecting one word here (in one way), and another form there (in another way). Given the 'fuzzy' nature of meaning, this is of course not surprising. What is surprising is that there should be any instances at all in which semantic change exhibits a certain degree of systematicity. But some such cases can be found.

First of all, whole semantically related areas of the lexicon may undergo obsolescence or semantic change at about the same time. Most commonly this is the result of some radical change in culture or society. Thus, the effective replacement of the horse and buggy by the automobile brought about a great amount of semantic change (as in *car, truck/lorry, tire*) and/or obsolescence (as in *thill, snaffle*).

Also gradual change can have far-reaching effects, if it permeates the entire society and culture. For instance, the rise of medieval feudalism led to a large amount of semantic change to accommodate old terms to the new social context. Compare again the meliorizing changes in *marbeskalk/mareschal, cniht/Ritter/chevalier/caballero*, etc. Or consider the

hunt-oriented semantic redefinitions in (50) which seem to have arisen in the more specific context of medieval and early modern British feudalism.

- (50) OE *fugol* 'bird' : NE fowl
 deor 'animal' : deer
 hund 'dog' : hound

It is often said that in such cases, whole **semantic fields** are affected by change. However, even here we usually do not encounter a high degree of regularity or systematicity. For lexical items generally belong to several semantic fields at the same time. And membership in one field may in any given case outweigh membership in another field. Thus, where OE *cnicht* underwent feudal meliorization to *knight*, OE *cnafa* experienced pejorization to *knave*. In the meantime, the German cognates developed in just about the opposite direction, with *Knecht* being pejorized to 'servant' and *Knappe* acquiring the more favorable meaning 'page of a nobleman, esquire'.

There are, however, semantically highly structured portions of the vocabulary, such as the system of kinship terms (*father, mother, son, daughter, etc.*), the system of numerals, names for days of the week, etc. And these constitute fairly well-defined and coherent semantic fields. It is in these areas that we can — and do — most readily find instances of systematic shifts which affect whole semantic fields.

An excellent example of the results of such a shift (or series of shifts) is the sociolinguistically differentiated recategorization of meal-time names in Jamaica; cf. (51). (The sociolinguistic dialects are: (i) Upper Middle Class; (ii) Lower Middle Class; (iii) Estate Laborer; (iv) Peasant Farmer. The relative size of the meal designated by a given term is indicated as follows: H = heavy, M = medium, L = light.)

	5-7 a.m.	11-Noon	4-6 p.m.	7-8:30 p.m.	10:30-Midnight
i)	breakfast (M)	lunch (M)	tea (L)	dinner (H)	supper (L)
ii)	breakfast (M)	dinner (H)	supper (M)	supper (L)	
iii)	tea (L)	breakfast (M)		dinner (H)	
iv)	tea (L)	breakfast (H)	dinner (M)	supper (L)	

Without further interpretation, this distribution of meal-time names may not seem to be any less capricious and non-systematic than any other instance of semantic change. However, if we establish the abbreviatory conventions in (52), we can rewrite (51) as (53).

(52a) Time dimension:

T^m	= 5-7 a. m.	('morning')
T^n	= 11-Noon	('noon')
T^a	= 4-6 p. m.	('afternoon')
T^e	= 7-8:30 p. m.	('evening')
T^l	= 10:30-Midnight	('late')

b) Size dimension:

H^l	= light
H^m	= medium
H^h	= heaviest meal of the day

(53) Breakfast Lunch Tea Dinner Supper

i)	$H^m T^m$	$H^m T^n$	$H^l T^a$	$H^h T^e$	$H^l T^l$
ii)	$H^m T^m$			$H^h T^n$	$H^m T^a/H^l T^e$
iii)	$H^m T^n$		$H^l T^m$	$H^h T^e$	
iv)	$H^h T^n$		$H^l T^m$	$H^m T^a$	$H^l T^e$

This rewritten system makes it possible to see a high degree of systematicity in the various reinterpretations which must have taken place. For instance, *tea* always refers to a light meal, no matter when it is taken. Moreover, it must be a light meal which is taken at some time prior to the evening, i.e. in the morning or afternoon. Put differently, the semantic features in (54) must remain constant.

$$(54) \text{ Tea} = H^l T^{-e/l}$$

Breakfast is a relatively early and medium-size meal for the first three classes. But its exact timing depends on whether *tea*, as the lighter meal, precedes it or not. For class (iv), this meal has the same time slot as for (iii), but it has increased in size. This time-based reinterpretation of the size of *breakfast* in (iv) has the consequence that for this class another generalization does not hold which is valid for the other three classes, namely that *dinner* refers to the heaviest meal, no matter when it is taken. Finally, for the two classes which use the term, *supper* refers to a meal which is lighter and later than *dinner*.

12.6. Outlook

Examples like the one just cited demonstrate that under certain circumstances semantic change can be quite regular and systematic. However, this should not detract from the fact that in most cases, semantic change is 'fuzzy', highly irregular, and extremely difficult to predict.

As a consequence, there seem to be no natural constraints on the directions and results of semantic change. Given enough imagination — and daring — it is possible to claim semantic relationship for almost any two words under the sun. This creates difficulties when we need to evaluate the relative merits of competing historical analyses. In many cases, these difficulties can be surmounted by a careful philological investigation of the historical record, for such an investigation may uncover the route by which particular words changed their meanings. Where historical records are unavailable or too scanty, the best we can do is look for evidence that the postulated developments recur elsewhere. However, arguments based on such parallel developments must be treated with caution, for we must face the possibility that parallels can be found also for the competing analyses.

13. Syntactic change

Syntax, as currently defined, covers a broad range of phenomena. A number of these have received relatively thorough treatment in traditional linguistics. These include the syntactic use of morphological forms, the order of syntactic elements in a clause, and the combination of clauses into larger structures (i.e. into sentences). Other, more 'abstract' aspects of syntax, however, have not been dealt with as well, such as the relationship between corresponding active and passive expressions or between fully clausal structures and 'reduced', nominal or participial structures. These receive a more satisfactory account in recent generative approaches to syntax. Unfortunately for the historical linguist, however, generative syntax is characterized by a great variety of often radically different theoretical approaches and practical concerns. Moreover, generative syntax exhibits great variability not only 'synchronically', but also 'diachronically', in that — it seems — every five years or so, at least one radically new theory appears on the scene.

This chapter cannot attempt to cover in detail the full range of syntactic phenomena dealt with in contemporary generative syntax, or to do justice to the great variety of its theoretical claims and concerns. Instead, it will concentrate on outlining what appear to be the major factors that govern syntactic change, notwithstanding what particular theoretical framework one might subscribe to.

However, in order to show that syntactic change affects not only the areas covered by traditional linguistics, it is useful to give illustrations also of change in more 'abstract' syntactic phenomena, such as the relationship between active and passive. And the discussion of these changes will be couched in the terminology and concepts of a specific theoretical framework, namely 'Relational Grammar'. (But note that the version of Relational Grammar which will be employed is a fairly informal one.) The choice of this framework should not be taken to indicate that it is considered to be superior to others, but merely as a matter of convenience: In an informal version, its account of the passive (and its relationship to the active) not only seems more 'congenial' to traditional approaches to historical syntax but also requires less explanation and definition of terminology and concepts.

Note finally that in illustrating many of the changes in this chapter it has been necessary to resort to 'made-up' examples, rather than