

semantics system of rules underlying our knowledge of word and sentence meaning

In this chapter, we will explore our unconscious knowledge of the semantics of words and the system of rules that underlies this knowledge. Understanding and creating meaning out of words is not a simple matter but rather involves a complex system of linguistic rules that interact with other grammatical systems, including syntax, phonology, and morphology. **Semantics** is the study of how we construct and understand the meanings of words and groups of words (clauses, sentences, etc.). Our complex knowledge of word meaning encompasses a wide range of phenomena and overlaps with other fields of study, including philosophy (in particular, logic) and mathematics (algebra and set theory), and it is central to the study of literature, humor, gender, politics, advertising, and law.

We will see in this chapter that meaning can in fact be meaningless and that meanings can deviate from expected meaning but still be meaningful. How can that be? A good starting point for the discussion of word meaning is, in fact, to discuss what it means for a word or sentence to be meaningless.

Making Meaning

We have seen in other chapters that even sentences made up of nonsense words have some kind of meaning. Consider this sentence:

She yarped that canzos spleeked the batoids.

We can tell that whatever the canzos are, they are doing something to the batoids, and whoever she is, she's yarping about that. We know that there is more than one canzo, more than one batoid, and that the yarping and spleeking happened in the past. All this information comes from the syntax and morphology of the words in the sentence. We therefore derive some meaning from this sentence even though we don't know what any of the words really mean.

Speakers would also probably conclude that the following sentence (invented by Noam Chomsky to illustrate the semantic phenomenon we are discussing here) is English but, again, is odd:

Colorless green ideas sleep furiously.

English speakers know that there is something deviant about this sentence and also something completely grammatical about it. This sentence is well formed in terms of syntax and morphology but odd because the meanings of the words don't fit together.

Semantic Deviance

Sentences like *Colorless green ideas sleep furiously* are **anomalous**, which means they deviate from expected meaning. This sentence therefore

anomaly deviation from expected meaning

provides important evidence that the grammar of our language includes a system of meaning rules. Even though Chomsky's sentence breaks no syntactic or morphological rules, it breaks meaning rules. Our meaning rules are therefore somehow separate from (although they interact with) other rule systems in our grammar. Speakers of a language not only have complex knowledge of meaning that allows them to interpret words and sentences, assigning them grammatical meanings, but this knowledge also gives speakers the ability to recognize anomaly. Knowledge of meaning, then, is just like syntactic, morphological, and phonological knowledge in this way: we know what is grammatical and what is not, but lack of grammaticality doesn't always preclude us from coming up with some kind of interpretation.

To take another example, recall that we can understand child language, even though the grammatical rules the child employs may deviate from those of adult grammar, leading children to produce such sentences as *What time it is?* or *We holded the baby rabbits*. The first sentence deviates syntactically from the adult version, *What time is it?* in which the auxiliary verb *is* inverts with the subject *it*. The second sentence deviates morphologically from adult grammar by affixing *hold* with the past tense affix *-ed* rather than using the adult form *held*. We understand phonological deviations in child language as well when, for example, a child calls a *spider* a *pider* and a *spoon* a *poon*.

The same is true of semantic deviance: when we hear a child refer to a horse as a *dog*, we can probably figure out what the child means, just as when we hear someone make a slip of the tongue, saying, "You have too many irons in the smoke" instead of "You have too many irons in the fire." We often find such semantic errors amusing; in fact, humor is frequently based on deviations from expected meanings. Henriksson (2003: 54, 75) offers the following gaffes in his collection of errors made by college students in their history papers:

British paternalists were motivated by "noblesse oblique."

St. Teresa of Avila was a Carmelized nun.

Often, such errors are created for comic effect and are referred to as *mala-propisms* (French for *mal à propos*), after Mrs. Malaprop, a character created by Richard Sheridan in his 1775 Restoration comedy *The Rivals*. Some examples, in lines uttered by the infamous Mrs. Malaprop:

... promise to forget this fellow, to *illiterate* him, I say, quite from your memory.

I have since laid Sir Anthony's *preposition* before her.

I'm sorry to say, Sir Anthony, that my *affluence* over my niece is very small.

Poetry is often based on deviations from expected meanings as well, as this poem by Shel Silverstein (1981) shows:

What Did?

What did the carrot say to the wheat?

“ ‘Lettuce’ rest, I’m feeling ‘beet.’ ”

What did the paper say to the pen?

“I feel quite all ‘write,’ my friend.”

What did the teapot say to the chalk?

Nothing, you silly . . . teapots can’t talk! (*Light in the Attic*, p. 16)

These deviations from expected meaning, whether expressed in slips of the tongue or child speech or designed for comic effect, all illustrate not only the complexity of meaning but also that our understanding of semantics includes knowledge of both meaning and anomaly.

RPE 9.1

Lexical Semantics

In the ancient Western world, a central question about language was whether it is *natural* (not under human control) or *conventional* (under human control). In Plato’s *Cratylus*, Socrates, Cratylus, and Hermogenes argue at length over whether names of things are chosen by individuals, communities, or some higher “reality” outside human control. In the Bible, God charges Adam with naming all things, and in this way meanings are assigned to words. Such approaches to word meanings, however, assume a monoglot (single-language) view of the world and do not take into account evidence from other languages. From such evidence, we find that the connection between a word and its meaning is *arbitrary*: there is no intrinsic reason why the word *dog* best represents the meaning we attach to it. In French, this animal is a *chien*; in German, a *Hund*; and in Japanese, an *inu*. This arbitrariness is reflected not only across languages but also within a particular language; a speaker from Alabama might put things in a *poke*, but a speaker from Montana would use the term *sack*, and a speaker from Wisconsin, *bag*.

Nevertheless, there is a class of words for which the connection between sound and meaning is nonarbitrary—namely, onomatopoeic words (*onomatopoeia* is Greek for ‘name making’), words that sound like their meanings. These words are also called *echoic* words.

buzz, clang, splash, purr, kapow, boom

moo, cock-a-doodle-do, oink oink

Though there are some interesting similarities among onomatopoeic words across cultures (cows in Turkish, Greek, Albanian, Estonian, French, Hebrew,

and English all say something very much like *moo*), much cross-cultural variation in onomatopoeia still exists. In Albanian, a horse says *hihi hi* but in Finnish, *ii-hahahaha*; in Korean, *hi-hing*; and in Hindi, *hin hin hin*. In English, horses *neigh* and *whinny*. Though a Portuguese rooster says *cocorococo*, a Russian one says *ku-ka-re-ku*, and a Thai one says *ake-e-ake-ake*. Onomatopoeia nevertheless is a useful way to use sound to *suggest* meaning, and many authors invoke onomatopoeia for just this purpose.

Hear the sledges with the bells—
Silver bells!
What a world of merriment their melody foretells!
How they tinkle, tinkle, tinkle,
In the icy air of night!

From “The Bells” by Edgar Allen Poe

The pronunciation of onomatopoeic words can provide clues to their meanings (so Poe uses *tinkle* here instead of *clang* to suggest a light, merry sound), though this relationship between sound and meaning is still somewhat arbitrary. We can gather other clues about meaning from the morphology of a word and also from its syntactic position. We also use *etymological* clues to unlock meaning—we draw on our knowledge of the origins of words and of *cognates*: words that have common ancestors such as *Hund* in German and *hound* in English. (We discuss cognates in more detail in Chapter 11.) *Context* also provides important clues to meaning, and we draw on our knowledge of the world and our experience to unlock meanings of words we don’t know (meaning constructed from context is discussed in the next chapter).

Suppose, for example, that you hear the following sentence, and you don’t know the meaning of the word *defenestrated*.

About to be caught in the act, the burglars *defenestrated* the jewelry.

Even if you don’t already know what *defenestrated* means, you can pick up some clues from morphology and syntax. You know that the word is a verb because of its position, and you know that it is in the past tense because of the *-ed* inflectional suffix. Its *-ate* derivational suffix also tells you this word is probably a verb. You might also figure out that it means to not *fenestrate* in some way because of the negative prefix *de-*, which you might recognize as similar in meaning to the *de-* in *declaw* and *deforestation*. Some of you may infer that *defenestrate* has something to do with windows, based on etymological information: you may know that ‘window’ in French is *fenêtre*, and you might also be familiar with the cognate words *Fenster* in German or *fenestra* in Latin. Context can also help us determine the meaning of a word. For example, the following sentences includes more information about what

happens when one *defenestrates*, helping us infer that *defenestrate* means ‘to fall out of a window’.

About to be caught in the act, the burglars defenestrated the jewelry.

The heavy sack fell two stories and landed on the lawn, spilling its contents into the bushes.

Your knowledge of the world tells you that in order for something to fall two stories, it must fall from a building, and it would typically fall out of a window or perhaps off a balcony. The reference to a lawn suggests the burglars are in a house. Thus, you may conclude that *defenestrate* means ‘to throw from a window’, which would be correct.

So, sometimes we make meaning out of words we don’t know, using various clues and strategies and a variety of semantic rules. The formal study of the conventions of word meaning is called **lexical semantics**.

lexical semantics
formal study of the
conventions of word
meaning

RPE 9.3

Meaning Classifications: Semantic Features

Some aspects of meaning can be represented in terms of oppositions expressed by binary features. These features allow us to divide words into different semantic categories. For example, part of our understanding of words includes our understanding of **semantic features** inherent in many words, features such as [+/-human], [+/-animate], [+/-young], [+/-married]. To illustrate, consider the following sentences, all of which are in some way semantically deviant but otherwise completely well formed.

The *bachelor* is married.

The *baby* drove to town in a Ford pickup.

The *rock* combed its hair.

We understand the oddity of the first sentence to follow from our understanding of the word *bachelor* as [–married]. The second sentence is strange because *baby* is [+young] and only adults, typically, drive. The third is bizarre because humans, not rocks, comb their hair, so we expect the subject of *comb* to be [+human]. In each of these sentences, then, inherent semantic features have a grammatical function or effect.

semantic features
classifications of
meaning that can be
expressed in terms
of binary features
[+/-], such as
[+/-human],
[+/-animate],
[+/-count]

Noun Classes

In addition to the nouns we’ve considered so far, verbs, adjectives, and other syntactic categories of words can be divided into semantic classes. *Go* and *chase* are both verbs of motion, for example, but differ in that only *chase* implies pursuit of something. Part of the study of semantics

involves analyzing and describing such semantic classifications. In this section, we will explore the semantic features of nouns in yet more detail to give you an idea of how semantic features interact with other principles of grammar.

hwaet!

In British English, *mathematics* is shortened to *maths* rather than *math*, though it's still a mass noun: 'maths is fun!' But in French, the related word *les mathématiques* is morphologically plural: *les mathématiques sont amusantes!*

Concrete and abstract nouns Concrete nouns are names for things in the physical world (they name things we can point at). Abstract nouns are not physical objects.

concrete: dog, car, the Empire State Building, rice

abstract: love, attitude, terrorism, indignation

Some words have two (related) meanings and can, therefore, belong to more than one category; *light*, for example, is both abstract (*I need more light! The light in the eastern sky is purple.*) and concrete (*Turn on the light.*).

Count and noncount nouns Count nouns are those that we can, well, count. Count nouns can therefore be pluralized, preceded by numerals and certain quantifiers such as *each*, *both*, *every*, *few(er)*, and *several*. Noncount nouns cannot be pluralized, nor can they occur with numerals or the quantifiers just listed. They can, however, occur with quantifiers *much*, *most*, *all*, and *less*.

count nouns: dog, car, puppy, country

noncount nouns: rice, jewelry, furniture, fruit, love, terrorism, mud, indignation

Some noncount nouns in U.S. English are morphologically plural, a relationship that we can also see reflected by the verb through subject-verb agreement.

mathematics/ethics/linguistics *is*/**are* fun to study.

Notice that many nouns can be both count and noncount. For example, *beer* and *paper* can be count or noncount.

Etienne drank six *beers*. Etienne likes *beer*.

Etienne bought six *papers*. Etienne bought *paper*.

Common and proper nouns Common nouns are nouns that have more than one *referent*, or entity to which the noun refers. Proper nouns, on the other hand, have only one referent; they are the names of unique entities.

common: tulip, baseball, brother, horseradish, language, school, anger

proper: Etienne, Harry Potter, the Kentucky Derby, Halloween, Lake Victoria, the Kremlin

Language Alive!

Is the Team Playing? Are the Team Playing?

Collective nouns name groups that act as a single unit of some kind, such as *team*, *family*, *committee*, *herd*, *fleet*, *group*, and *class*. In U.S. English, such nouns are count nouns and can be pluralized: *teams*, *families*, and so on.

The team *is* going to win.

The teams *are* going to win.

Six teams *were* at the competition.

In most dialects of British English, on the other hand, collective nouns are semantically plural but not morphologically so. That is, collective nouns lack a plural suffix *-s*, but subject-verb agreement is plural, not singular. The same is true of singular “nouns of multitude,” (referring to the German soccer team as *Germany*, for example).

The team *are*/**is* going to win.

The Royal Family *live*/**lives* in Buckingham Palace.

Germany *are* in first place.

Interestingly, several U.S. athletic teams have names that are treated as “nouns of multitude” in the British way by those in the sports community. (You may or may not be aware of this usage, depending on your familiarity with sports.) These nouns are morphologically singular but (always) semantically plural, triggering plural subject-verb agreement.

The Utah Jazz **is/are* going to play tonight.

The Seattle Storm **is/are* an excellent basketball team.

Sometimes the same word can function as both a proper and a common noun. Proper nouns have only a single referent and therefore can't be plural, so they are by definition count nouns (because there is only *one* of them). So, if someone says, “I just saw Etienne at the movies,” the proper noun *Etienne*, which refers to a particular person, is also a count noun: there is one *Etienne* to which this noun refers. In the sentence *I know many Etiennes*, *Etienne* is arguably no longer a proper noun but a common (count) noun because it refers to a member of a set of more than one.

RPE 9.5

entailment

inclusion of one aspect of a word's or sentence's meaning in the meaning of another word or sentence

Entailment and Markedness

Semantic features can also be useful in expressing **entailments**, or the inclusion of one aspect of the meaning of one word in the meaning of another word. For example, the word *man* has the semantic features

[+human, +male, +adult], and the meaning of the word *bachelor* includes the features [+human, +male, +adult, –married]. The meaning of *bachelor* thus overlaps—or more specifically, *entails*—the meaning of *man*. We will return to entailment in later sections because it is part of other semantic relationships among words.

Though all languages share certain semantic features (animate/inanimate, human/nonhuman), not all languages divide words into the same semantic categories. For example, in Swahili, which is a Bantu language spoken in Africa, nouns are divided into about thirteen classes according to morphological and semantic criteria. Trees, plants, and nature fall into one class; names of human beings and names of animals into another; and names of fruits, mass nouns, everyday life objects, persons, and names of Arabic origin into another. In Navajo, a member of the Athabaskan language family, nouns are also divided into different semantic classes, including animate, round object; long, stiff object; and granular object.

Some problems arise with defining meaning in terms of semantic features alone when we consider a wider range of examples. One problem with semantic features is that binary oppositions by definition depend on positive and negative values. An obvious case where this becomes problematic is in the feature specification of biological sex as [+/-male]. This specification assumes that biological sex is binary, an opposition that fails to account for a more complex and inclusive view of biological sex that includes, for example, transgendered people. Another issue that arises with this feature specification is that gender can be expressed only in positive/negative terms, with *female* as negative, [–male], and *male* as positive, [+male], which is inconsistent with social attitudes about gender equity. Nor do binary features necessarily capture socially defined meanings, which can carry positive or negative connotations. For example, consider the different feature specifications of the opposition *spinster/bachelor*:

<i>spinster</i>	=	[+adult, –married, –male]
<i>bachelor</i>	=	[+adult, –married, +male]

The only distinction between these terms is the feature of maleness or lack thereof. However, we are all familiar with the negative connotations of *spinster* and the positive connotations of *bachelor*, a socially defined distinction that is not captured by semantic features.

A case in which semantic features are actually defined in terms of social attitudes is illustrated by *nurse/male nurse*. The opposition between *nurse* and *male nurse* suggests that for many people *nurse* is specified as [+female] (or as [–male]) based on social expectations and that the adjectival modifier *male* is required in order to indicate a deviance from the typical interpretation of the term. The semantic feature for which *nurse* is specified is therefore based on cultural expectations about career paths for women rather than on grammatical properties.

markedness

opposition that differentiates between the typical form of a word and its “marked” opposite (“right” is unmarked, and “left” is marked)

Similarly, we all “know” a number of oppositions that are not clearly explained by binary features and that can have positive and negative social values attached to them. The idea of **markedness** can help us describe just such distinctions. Markedness occurs in phonological, morphological, syntactic, and semantic relationships, defining them in terms of marked and unmarked opposites; the dominant term is known as the unmarked term and the secondary term as the marked one. This concept of asymmetry has been extended to the analysis of sets of linguistics concepts and to grammatical constructions, and it has also been applied to various cultural relationships as well, with background cultural categories. Markedness has been the subject of much discussion in linguistics. (See, for example, Battistella 1990, 1996.)

In semantic relationships, markedness is based on how we consider one member of a pair of words “typical” and the other “marked.”

right/left, white/black, rich/poor
knife/fork, salt/pepper

In English, the term *nurse* is unmarked (based on cultural expectations); the term *male nurse* deviates from the typical meaning of *nurse* and is marked.

It is probably impossible to explain all the nuances of meaning in terms of binary features; nevertheless, the semantic features that do have a grammatical function must be part of our mental lexicon. How this information is encoded in our lexicons is unclear; do we, for example, list *Mom* (*Mom went to work today*) as a proper noun and also as a count noun (*All the moms were at the game*), or do we simply know a rule that allows us to make proper nouns count nouns? And how are gendered words listed in our lexicons? How does culture affect the meanings of those words and how they are stored? We won't attempt to answer these questions here but will simply point out the complexity involved in understanding what words mean.

Meaning Subclassifications: Semantic Fields

semantic fields

basic classifications of meaning under which words are stored in our mental lexicons (FRIENDS, for example)

Another thing we know about word meaning is that words can be divided into semantic categories called **semantic fields**. Semantic fields are classifications of words associated by their meanings. There is a great deal of evidence that words are stored in semantic fields in our mental dictionaries. Semantic fields could be CLOTHING, PARTS OF THE BODY, EMOTIONS, OLD BOYFRIENDS; the fields may vary across speakers, and words may belong to more than one category. The meaning of the word *pig* in the semantic field FARM ANIMALS overlaps the meaning in the semantic field MEAT and even (possibly) PETS.

Slips of the tongue provide interesting evidence for semantic fields. The word substituted for the intended word in the following slips of the tongue

is a semantically related one (adapted from the Fromkin Speech Error Database):

Intended Utterance

he's going *uptown*
 you have too many irons
 in the *fire*
 that's a horse of another *color*

Actual Utterance

he's going *downtown*
 you have too many irons
 in the *smoke*
 that's a horse of another *race*

See the link on the Max Planck Institute for Psycholinguistics website: http://www.mpi.nl/cgi-bin/sedb/sperco_form4.pl.

The semantic field including both *up* and *down* might be DIRECTIONS; for *fire* and *smoke*, THINGS HAVING TO DO WITH FIRE, and so on. Speakers rarely, if ever, make random substitutions when producing a slip of the tongue (though we know from other chapters that some slips are phonetic, some phonological, and some morphological, as well as semantic).

In addition to slips of the tongue, aphasia provides us with evidence of how words might be stored in the brain. Many people who suffer from aphasia (language deficit as the result of trauma to the brain, introduced in Chapter 2) suffer from lexical access problems and are not able to produce the word they intend but often select a related word—for example, *table* for *chair*, *boy* for *girl*, *knife* for *fork*—suggesting that words that are semantically related are stored together in the brain.

RPE 9.6

Meaning Relationships: The Nyms

nyms meaning relationships among words—antonyms, synonyms, homonyms, etc.

Part of knowing the meaning of a word includes knowing the semantic relations among words. These same relationships, which we'll call **nyms**, exist across languages.

Opposite Meanings: Antonymy

antonyms words that we think of as opposites, though oppositions may be relational (*doctor/patient*), complementary (*alive/dead*), or gradable (*hot/cold*)

We all learn, early on, that *rich* is the opposite of *poor*, *awake* is the opposite of *asleep*, and *teacher* is the opposite of *student*. These opposites, or **antonyms**, seem based on fact: if you are rich, you can't be poor; if you are awake, you can't be asleep; and in class, the "opposite" roles of teacher and student seem well defined and obvious. (If you ask someone what the opposite of *pepper* is, they'll probably say *salt*.) Nevertheless, there are important differences among these pairs. Some antonyms are *gradable*; that is, the antonyms are two ends on a scale, and there can be various gradations of each term. So, what is considered *rich* or *poor* varies from person to person.

What *rich* means to Tevye in the musical *Fiddler on the Roof* as he sings "If I Were a Rich Man" is quite different from what *rich* means to Donald Trump; for someone who used to weigh 300 pounds, weighing 200 pounds might

Table 9.1 Antonym Types

Gradable	Relational	Complementary
smart/stupid	teacher/student	dead/alive
often/rarely	friend/enemy	before/after
fat/thin	question/answer	permit/prohibit
most/least	doctor/patient	precede/follow
up/down	mother/father	send/receive
tall/short	parent/child	beginning/end
rich/poor	lawyer/client	day/night

hwæt!

Some words can have two diametrically opposed meanings: *cleave* can mean either to adhere closely or to divide. Look up some other “contra-nyms”: *sanction*, *oversight*, *moot*.

RPE 9.7

RPE 9.8

be thin, but not everyone would share this interpretation. These antonyms therefore express degree in various ways: by comparative and superlative morphology (*smarter*, *thinner*) or syntactically (*more gigantic*, *extremely minuscule*). *Complementary antonyms* are another subtype of antonymy: if you are one, you cannot be the other; these are “absolute” opposites. That is, if you are dead, you cannot also be alive; if you are asleep, you are not awake, and so on. Similar pairs of this sort include *legal/illegal* and *beginning/end*. *Relational antonyms* are a third type; these are pairs in which each member describes a relationship to the other: *teacher/student*, *father/mother*, *lawyer/client*, *doctor/patient*. All languages have antonyms as well as these subtypes of antonyms. (See Table 9.1.)

Did You Know...?



Can Something Be Very Dead?

Although it may seem obvious that *dead* and *alive* and other antonyms are complementary, it doesn't mean we always use them that way. We say such things as “Downtown is completely dead by 8 p.m.” and “That plant is quite dead” and “She's *really* pregnant,” where we modify *dead* and *pregnant* with degree words even though these adjectives by definition should not be modifiable (because you either are or aren't dead or pregnant). We also say *very unique*, a phrase that rubs many language purists the wrong way but which is nevertheless quite common even among the most educated speakers. Our colleague Eric Hyman explains such examples as morphosyntax “outranking” meaning—adjectives can always take degree words precisely because they are adjectives. Our unconscious knowledge of lexical categories allows us to use degree words with adjectives regardless of prescriptive, meaning-based edicts.

Similar Meanings: Synonymy

synonyms words that have similar meanings (*purse/handbag*)

Words that are different in form but similar in meaning are called **synonyms**. Synonyms are derived from a variety of sources, and we make choices among synonyms for a variety of reasons.

One source of synonyms is dialectal variation. In some dialects of North American English, a long, upholstered seat is called a *couch*, but speakers of another dialect call the same piece of furniture a *sofa*. Canadian English speakers might call this item a *chesterfield*, and still other speakers might call it a *divan*. Though these words all mean the same thing and are therefore synonyms, they tend to be dialect specific and may not be shared across dialect boundaries.

Synonyms can also cross dialect boundaries; most North American English speakers are familiar with the synonyms *professor/instructor*, *doctor/physician*, and *lawyer/attorney*. Still other synonyms arise as a result of language change over time. For example, your grandparents might use a particular term that seems old fashioned to you, and you might use a more modern

term. For example, what might be a *pocketbook* for your grandmother is called in current fashion circles a *handbag* or a *bag* or a *purse*. An older term for *dress* is *frock*, and what used to be called a *baby carriage* or *perambulator* is now a *stroller* or *jogger*; we are less likely now to refer to women as *gals*.

Two other, closely related sources for synonyms are style and register. In casual speech, a speaker might say, "That's a nice ride," but in more formal speech, "That's a nice car."

For a variety of historical reasons (discussed elsewhere in this book), we attach social value and prestige to words with Latin or Greek roots. We therefore might choose a Latinate synonym over its native English (Anglo-Saxon) counterpart in formal, academic writing. Table 9.2 shows some pairs of synonyms or at least close synonyms. (Exact synonyms are quite rare.)

hwæt!

Isn't it fun when antonyms come to be synonyms? *Bad* is bad and it's good. It's bad to be sick, but *sick* can mean 'good'.

RPE 9.9

Euphemisms

English has a vast number of synonyms, more than most languages, largely because of borrowing from other languages, especially French and Latin. Though synonymy allows for a variety of ways to express ideas, it can also be the source of **euphemisms**. Euphemisms are words and phrases used to avoid offending (by directly addressing taboo subjects) or to deliberately obscure actual (usually unpleasant) meanings. Government terminology provides a good source of examples. *Area denial munitions* are 'landmines', and *physical persuasion* means 'torture'. *Operational exhaustion* means 'shell shock', and *wet work* is 'assassination'. We use euphemisms to avoid talking about bodily functions: *sweat* can be replaced by *perspire*, *genitalia* by *privates*, and *urinate* by *go to the bathroom*. Still another source of synonyms

euphemism word or phrase used to avoid offending or to purposely obscure (*collateral damage* for 'civilian deaths')

Table 9.2 Synonyms of Anglo-Saxon and Latin/Greek Origin

Anglo-Saxon Origin	Latin/Greek Origin
land	alight
try	attempt
hard	difficult
talk (about)	discuss
crazy	insane
ghost	spirit
clean	sanitary
dirt	soil
go	advance
see	visualize
holy	sacred
space	cosmos
heavenly	celestial

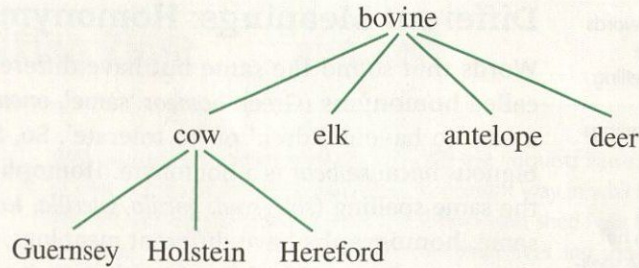
is *politically correct language*, terminology specifically intended to limit use of certain terms in favor of more socially and culturally acceptable ones in public discussion. Common examples include *Native American* for *Indian*, *firefighter* for *fireman*, *differently abled* rather than *disabled* or *handicapped*, and *mail carrier* rather than *mailman*. The use of politically correct language can be the source of some controversy because politically correct terms can be—not surprisingly—political, which raises questions about the accuracy of their meanings and the implications of those meanings.

RPE 9.10

hyponym word whose meaning is included, or entailed, in the meaning of a more general word (*tulip/flower*)

Meaning Categories: Hyponymy

Another word-meaning relationship is hyponymy. A **hyponym** is a word whose meaning is included, or entailed, in the meaning of a more general word. For example, *thoroughbred* is a hyponym of *horse*, and *house* is a hyponym of *building*. A hyponym can itself have hyponyms, as shown in this diagram:



The entailments expressed by hyponymy can be illustrated as follows:

Guernseys are cows.

Bossie is a Guernsey.

Bossie is a cow.

Hyponymy expresses how we assign meaning to larger categories and to smaller categories included in these larger ones. We use hyponymy in language to make general statements more specific:

What are you reading?

A book/a Russian novel/*War and Peace*

RPE 9.11

polysemy refers to words with two or more related meanings (*lip* = of a cliff or part of the mouth)

Related Meanings: Polysemy

Words that are **polysemous** have two or more related meanings (Greek *poly* ‘many’, *semy* ‘meanings’). For example, *lip* is polysemous because we can use it not only to refer to a part of one’s mouth but also in phrases such as *lip of the cliff* or the *lip of a cup*, and we also have the expression *don’t give me any lip*. We call a furry, burrowing animal a *mole*, and *mole* can also refer to a spy who pretends to be a legitimate member of the group on which he or she is spying. *Foot* is polysemous as well: in addition to meaning ‘the lowest part of the body’ (with the top being the *head*), we have *foot/head of the bed*, as well as *foot of the stairs* and *foot of the mountain*. Body parts are often polysemous; we use *leg* to refer to the leg of a chair and the leg of a table, *arm* to refer to the arm of a chair, and *eye* to refer to the eye of a storm. We return to a discussion of polysemy in the section on figurative language; most polysemy makes use of figurative, or nonliteral, meanings.

retronym new word or phrase created to distinguish an original word from a more recent meaning of the word (*analog watch*/digital watch)

Another meaning relationship, which can perhaps also be considered a type of polysemy since the two terms have related meanings, is also called a **retronym**. A retronym is a new word, compound word, or phrase created to distinguish an original word from a more recent meaning of the word: for example, *analog watch* to distinguish from *digital watch*, *acoustic guitar* to distinguish from the newer *electric guitar*, or *film camera* to distinguish from *digital camera*.

RPE 9.12

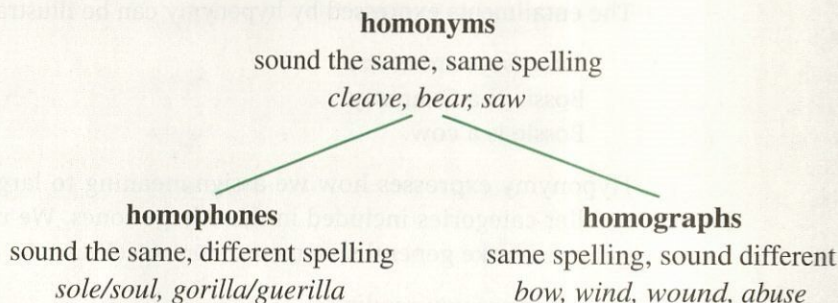
homonyms words with the same sound and spelling but different, unrelated meanings (*saw/saw*)

homophones words that do not share the same spellings or meanings but sound the same (*sole/soul*)

homographs words that have the same spelling, different meanings, and different pronunciations (*bow/bow*)

Different Meanings: Homonymy

Words that sound the same but have different (unrelated) meanings are called **homonyms** (Greek *homeos* 'same', *onoma* 'name'). The verb *bear* can mean 'to have children' or 'to tolerate'. So, *She can't bear children* is ambiguous because *bear* is a homonym. **Homophones** do not necessarily share the same spelling (*sole/soul*, *gorilla/guerilla*, *to/too/two*), but they sound the same; **homographs** have different meanings, the same spelling, but different pronunciations (the *bow* of a ship versus a *bow* and arrow).



RPE 9.13

Many Meanings: Lexical Ambiguity

We've already talked about how sentences can be ambiguous; the following example of syntactic ambiguity is explained by two different phrase structure trees. No actual words in this sentence are ambiguous.

Six hungry gorillas spotted the sandwiches in the tree.

Polysemes and homonyms are therefore, by definition, ambiguous because both polysemes and homonyms have more than one meaning. For example, the sentence *She met a guerilla* is ambiguous (in speech) because of the homonyms *gorilla/guerilla*, and the sentence *The area around the mouth is rather uninteresting* is also ambiguous because of the polysemous *mouth* (human or river or cave). In speech, then (where spelling can't offer clues to meaning), we must rely on context to decipher ambiguity. Clues can be nonlinguistic (pragmatic): if we were to hear the sentence *The area around the mouth is rather uninteresting* in a classroom with someone pointing at a map of the Mississippi River, the sense of *mouth* would be quite clear. Clues can also be linguistic: were we to hear the sentence *She met a guerilla* with a linguistic clue attached, as in *She met a guerilla, and he has a Ph.D.*, we would infer that the *guerilla* in question is not only male but human rather than simian.

Vagueness

Ambiguity is different from vagueness, though the difference between the two can sometimes be hard to see. One way to think about it is that an

LINGUISTICS
IN THE NEWS

Talking Right . . . and Left

Linguistic analysis of political discourse has come more and more into the public eye. Two linguists in particular have received a lot of press. Geoffrey Nunberg, “the NPR linguist,” appears regularly on National Public Radio’s *Fresh Air* with Terry Gross, often discussing the language of politics. George Lakoff, professor of linguistics at UC Berkeley, is well known for his work on metaphor and is also founder of the progressive think tank The Rockridge Institute. Both linguists’ work has appeared in a number of publications, including the *New York Times*.

In his book *Talking Right*, Nunberg looks at the language of conservatives and liberals—the political Right and the political Left. The conservative Right, he claims, is more skilled than the liberal Left in coining catchphrases and shaping convincing political discourse. Two examples are conservatives’ use of *climate change* instead of *global warming* and *death tax* instead of *estate tax*. He also argues that conservatives are more successful at

shaping public interpretations of core vocabulary: *values* really means ‘conservative values’, for example.

In his book *Moral Politics*, George Lakoff suggests that his ideas about the mind and its conceptual structure are central to understanding the political process and political views. Like Nunberg, Lakoff believes that the Left is linguistically less powerful in its message than the Right. Lakoff has been an advisor to the Democratic Party, so his analysis and proposals are gauged to help the Democrats develop their message and to frame the political debates.

Nunberg’s and Lakoff’s work shows that the study of political language has gone far beyond anecdotal observation. This use of language can now be tracked in online discussions, press databases, broadcast transcripts, and even advertising. Linguists can now analyze and document this body of evidence, construct hypotheses about it, and even test their hypotheses against additional evidence. The work

of these linguists illustrates an important way in which linguistic science can shed light on our everyday lives and shows how linguists themselves are increasingly entering the domain of public discourse.

For more information

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Nunberg, G. 2004. Political language. *Fresh air*. National Public Radio. September 1. <http://www.npr.org/templates/story/story.php?storyId=3883628>

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ambiguous word has more than one possible meaning and that (as with *mouth* and *guerilla*) the appropriate meaning is quite obvious, given a context. *Vague words*, on the other hand, aren’t so easily clarified by context. In fact, what it means for a word to be vague is rather, well, vague. *Vague* is defined in dictionaries as ‘obscure’, ‘undefined’, or ‘lacking in clarification’ and is the subject of much discussion in philosophy. We therefore won’t pursue a precise definition of vagueness here because it is actually quite complicated. Rather, we’ll provide one example of a linguistic argument for

distinguishing vague words from ambiguous ones; it involves VP deletion, which we talked about in Chapter 8. Remember that VP deletion has the effect of deleting a VP that refers to an identical antecedent VP.

hwæt!

The Sorites paradox (from the Greek word for 'heap') stems from the inability to define a thing precisely and can be applied to syntactic vagueness; for example, when grains of sand are removed from a heap of sand, at what point does it stop being a heap? When does blue stop being blue? Or old, old? Or young, young? Many words involve such vagueness.

Mary bought a Ferrari, and John *did* Δ, *too*.

Speakers interpret the phrase *did* Δ, *too* as identical in meaning to a previous phrase: *bought a Ferrari*.

Kempson (1977) made up a test using VP deletion to distinguish ambiguous words from vague ones. Consider what happens when we construct sentences with *did* Δ, *too* and ambiguous words:

The student pointed at the mouth, and the teacher *did* Δ, *too*.

Here, whichever interpretation of *mouth* jumps into your mind (mouth of a river or a human mouth, say), the phrase *did* Δ, *too* must have the same interpretation. That is, the sentence can mean (a) or (b) but not (c) (where * indicates an unacceptable sentence).

- a. The student pointed at the mouth (of the river), and the teacher *did*, *too* (pointed at the mouth of the river).
- b. The student pointed at the mouth (human), and the teacher *did*, *too* (pointed at the human mouth).
- c. *The student pointed at the mouth (of the river), and the teacher *did*, *too* (pointed at the human mouth).

When words are simply vague, such an interpretation, where the meaning of an ambiguous word must match that of the *did too*-phrase, is not required. For example, the verb *contact* is not ambiguous but just vague, as illustrated in the following examples:

Margaux contacted him (by phone, e-mail, post, telepathy).

Margaux contacted him (by phone) and Sue *did* Δ, *too* (by e-mail).

RPE 9.14

Meaning Change: Semantic Shift

semantic shift
change in the
meaning of words
over time

shift in connotation
change in words'
general meanings
over time

So far, we've talked about some of the meaning relationships among words. Here, we turn to how word meanings (and thus their meaning relationships) can change over time. These **semantic shifts** happen in a variety of (sometimes overlapping) ways. They can be **shifts in connotation**, or changes in general meanings associated with a word. In Old English, the word *Hund* meant 'dog', but in modern English, *hound* refers to a particular type of dog. This process is called **narrowing**. In Old English, *gōme* meant 'jaw, palate, inside of the mouth', but the meaning narrows in Middle English, in which *gome*

narrowing change in words' meanings over time to more specific meanings

broadening change in words' meanings over time to more general or inclusive

amelioration shift of words' meanings over time from neutral or negative to positive

pejoration shift of words' meanings over time from neutral or positive to negative

shift in denotation complete change in words' meanings over time

means 'gum'. In Early Modern English, the word *acorn*, which formerly meant 'fruits', narrows to 'fruit of an oak tree', and *courage*, which meant 'heart, mind, disposition, nature, bravery, valor', narrowed to 'bravery, valor'.

The Old English word *dogge*, on the other hand, referred to a particular breed of dog and today refers to domestic canines in general, through a process called **broadening**. In Old English, *bridd* meant 'young bird', but the meaning of this term broadened in Middle English, and *bird* came to mean 'fowl of any age'. (Note the phonological *metathesis* that occurred here, too: *bridd* → *bird*.) The word *twist* used to mean 'twig, tendril, or branch', but after the seventeenth century, its meaning broadens to mean 'the action of twisting something', and 'anything that has been twisted' (such as a slice of lemon, a wire, yarn). *Decimate*, for the Romans, meant 'to kill every tenth person', but now its meaning has broadened to mean 'destroy, utterly wipe out, annihilate'.

Word meanings also undergo **amelioration**, a shift to a more positive connotation. The word *croon*, for example, which in English means 'to sing softly', comes from Dutch *kronen*, which means 'to groan or lament'. Word meanings can also undergo **pejoration**, shifting to a more negative connotation. The Old English word *ceorl* meant 'peasant, freeman, layman', but during Middle English degenerated in meaning; it occurs in Present-Day English as *churl*, 'a rude or ill-bred person'.

Words can also **shift in denotation**, eventually shifting to mean something else entirely. For example, *blush* used to mean 'look' or 'gaze'. In Early Modern English, this word came to mean 'to redden in the face (from shame or modesty)'. The term *moody* in Old English meant 'brave' and now means 'given to changeable emotional states'. Although the current meaning of a word may not seem related at all to its original meaning, such shifts are usually not arbitrary. The modern English word *bead* comes from the Old English word *gebed* 'prayer'. The shift in meaning here came from beads threaded on a string to count prayers (a rosary), but without knowledge of the word's history, *bead* and *prayer* seem completely unrelated in meaning.

In the morphology chapter, we discussed how we bring new words into the language through the morphological processes of coining, blending, compounding, clipping, and so on. We are equally creative in assigning new meanings to words or shifting meanings of words in the ways just outlined. Some current innovations are *bad* for 'good' and *sweet* for 'exceptional'. *Awesome*, which used to mean 'inspiring awe' or 'full of awe', usually means in current speech 'remarkable, great, fantastic'. Though shifts in meaning are inevitable, change can sometimes cause some confusion. For example, *aggravate*, which originally meant 'to worsen', is often now used to mean 'irritate'; *anxious*, which meant 'filled with anxiety', is now used to mean 'eager'. Because these changes are not complete—and many people still have only the first meanings—confusion and lack of precision of meaning may result. When one meaning truly takes over the other, the language changes.

RPE 9.15

RPE 9.16

RPE 9.17

Making New Meanings: Figurative Language

figurative language
nonliteral language;
language that shifts
meaning from the
primary meaning of
the word

Often, particularly in discussions of literature, we talk about language being **figurative**, or expressing *nonliteral* meanings, meanings that do not conform to the *primary meaning* of a word. Primary meanings of words are listed first in dictionary definitions and are the most typical or common meanings we associate with a word. And though we may think that the use of figurative language is confined to stories and poems, in fact, *most* of our everyday language use is nonliteral, from what we say in casual conversation to what we hear in a weather report on the news to political speeches. We think of objective writing and speaking, conveying “just the facts,” as less figurative than literary language. On some level, this might be true, but as C. S. Lewis points out in his short treatise on language, *Studies in Words* (1990), “By his metaphor [discussed in next section] the speaker is trying to communicate what he believes to be a fact.” That is, we can still express “facts” figuratively. When we say “He was madder than a hornet” or “I bombed that test,” we are using nonliteral meanings of *hornet* and *bombed*. And what about when we say “Why the long face?” We aren’t commenting on the length of someone’s jaw but rather on their mood; and when we say “I see what you mean,” we are using *see* to mean ‘to understand’ rather than ‘to perceive with the eye’.

Language Alive!

Shifts in Meaning: Progress or Decay?

Though semantic shift is inevitable and very common, some language purists see it as a kind of language decay. Two examples of shifts that are often thought of this way are *imply/infer* and *affect/effect*. The verb *imply* traditionally meant ‘to suggest without explicitly stating’, and *infer* meant ‘to arrive at a conclusion based on evidence.’ So, when someone says, “We’d better go,” he or she is *implying* that it is time to leave. If someone says, “I missed my bus,” you can *infer* that he or she did not get to the bus stop on time. Due to their similarity in meaning, *imply* and *infer* are often used interchangeably. And *affect* and *effect*? The verb *affect* (with stress on the second syllable) traditionally meant ‘to influence’, as in ‘The new process affects how we make cheese.’ The verb *effect* means ‘to create’, as in ‘The new process will effect a change in how we make cheese.’ The fact that these words are pronounced identically by most speakers contributes to their tendency to be used interchangeably. Also, both words can be nouns with different meanings, but we don’t mix these up as often as we do the verbs, though we do often misspell them.

Many writers are even commended for their use of figurative language to convey scientific (and presumably objective) ideas. Physician Lewis Thomas, well known for his lyrical essays on the human condition, describes the relationship between sea anemones and crabs in the following way:

The anemones who live on the shells of crabs are precisely finicky; so are the crabs. Only a single species of anemone will find its way to only a single species of crab. They sense each other exquisitely, and live together as though made for each other. (1979: 4)

By describing the relationship between sea anemones and crabs figuratively, Thomas conveys not just his thoughts on the habits of marine creatures but also his thoughts on human relationships.

Contrast Thomas's description of the behavior of the sea anemone with the following description from *The Columbia Electronic Encyclopedia* (2005), which is more technical and relies on primary meanings:

Most sea anemones attach temporarily to submerged objects; a few thrust themselves into the sand or live in furrows; a few are parasitic on other marine organisms . . .

It might be argued, then, that the distinction between figurative language and objective, factual language is rather fuzzy, and it is perhaps not surprising that the linguistic properties of figurative language are a topic of some debate. For Aristotle, figurative language is a rhetorical device that is distinct from the standard use and meaning of language. Philosopher John Searle takes a similar view in his 1979 article "Metaphor." For the Romantics, on the other hand, figurative language is part of the imagination, central to how we see the world. From this perspective, there is no distinction at all between literal and nonliteral language. Still another view of figurative language, somewhere between the Aristotelian and Romantic models, is the position taken by linguists George Lakoff and Mark Johnson (1980: 4), who argue that figurative language reflects much about our cognition and conceptual structure but that there is still a distinction, though not as great a one as Aristotle or Searle would propose, between literal and nonliteral language.

The role of figurative (nonliteral) language in creating and reflecting how we conceive of our world is complex and relevant to the larger question of the relationship between language and thought (something we take up in more detail in the following chapter). On the one hand, figurative language provides a tool to express a vast range of meaning beyond the primary meanings of words (if, in fact, we can designate certain meanings as primary, a proposal to which a Romantic might object). On the other hand, not all meaning can be expressed through language; some meaning is better expressed visually, through physical movement, drawing, and so on. (For example, try to describe the meaning of the word *spiral* or the way scissors

work without using your hands.) Below, we examine some of the ways in which we use figurative language and discuss how such language creates meaning.

Connecting Meanings: Metaphor

metaphor nonliteral meaning of one word or phrase describes another word or phrase (*My car is a lemon.*)

Perhaps the most recognizable use of figurative language is **metaphor**. A metaphor, as Aristotle conceived it and as we still understand it, is a figure of speech that sets up an analogy between two words or phrases: *something is something else*. The word ultimately comes from the Greek *metaphero*, meaning 'to carry over' or 'transfer.'

As mentioned, Lakoff and Johnson (1980) take the position that there is no real distinction between metaphors and literal speech because metaphorical meanings actually reflect our conceptual structures, how we view the world. Lakoff and Johnson also argue that these metaphorical conceptual structures influence how we behave. Metaphor for Lakoff and Johnson is not a rhetorical device but rather a way of perceiving the world that is woven throughout ordinary language. They provide examples of metaphors such as the following to support this claim:

hwæt!

The word *lemon*, used to refer to a malfunctioning vehicle, narrowed in meaning from the early 1900s slang meaning of *lemon*: something bad or undesirable or which fails to meet one's expectations. It has now expanded again to mean any item that is unsatisfactory or defective.

Time is money

we spend it, waste it, save it, don't have it, invest it, budget it,
lose it

Argument as war

your claims are indefensible
you attacked every weak point in my argument
your criticisms were right on target
I've never won an argument with you
you shot down all my arguments

To what extent, if at all, do you think such metaphors shape our perspective and our behavior?

Types of Metaphors

dead metaphor metaphor that is so common that it goes unnoticed as a metaphor (*I see your point.*)

Dead metaphors Dead metaphors are those that are so conventionalized in everyday speech that we don't even realize they are metaphors. Metaphors of sight provide some examples: *I see your point. I'll take a look at your paper for you. He is blind to new ideas.* These uses of *see*, *look*, and *blind* have nothing to do with visual perception; we use *see* as a synonym for *understand*, *blind* to express intentional lack of understanding, and *take a look* to mean 'investigate'. (Lakoff and Johnson argue that because these metaphors are so commonly used, they are not really dead at all but very productive.)

Another example of a truly dead metaphor is *broadcast*, which began as a metaphorical use of the casting of seeds broadly; today, it is not likely that anyone makes a connection with the spreading of seed.

We do have to *learn* that these are dead, however, as evidenced by some children's use and understanding of these words. A child who overhears the sentence *He can be so blind sometimes!* might ask, "Is he really blind?" And one child, knowing that *say* means 'to utter', said about a sign: "The sign wrote . . ." rather than "The sign said . . ." She had not yet learned the metaphorical meaning of *say*.

mixed metaphor
metaphor that
comprises parts of
different metaphors:
*hit the nail on the
jackpot* combines *hit
the nail on the head*
and *hit the jackpot*

Mixed metaphors Mixed metaphors are those in which parts of different metaphors are telescoped into one utterance. This mixing can occur for a variety of reasons. The following examples were taken from the University of Illinois at Chicago website (<http://tiger.uic.edu/~rramakri/Readings/Fun/Mixed-Metaphors.htm>):

She grabbed the bull by the horns, and ran with it.
I've hit the nail on the jackpot.
I'm shooting from the seat of my pants.
You're pulling my leg over my eyes.
I'm flying by the edge of my seat.
Beware my friend . . . you are skating on hot water.
I would not trust him with a ten-foot pole.
We're robbing Peter to pay the piper.
I can see the carrot at the end of the tunnel.

We might come up with "hit the nail on the jackpot" because the two source metaphors ("hit the nail on the head" and "hit the jackpot") overlap in meaning ('to achieve a goal of some kind') and/or because they both include the verb *hit*. We might produce "flying by the edge of my seat" because both "flying by the seat of my pants" and "on the edge of my seat" have related meanings (unplanned action that may include fear and anxiety) and/or because both metaphors include the word *seat*.

RPE 9.18

personification
attribution of
human qualities to
something that is
not human

Personification Personification, another subtype of metaphorical language, gives human attributes to something that is not human. (For some, there is overlap between personification and *anthropomorphism*, but others argue that anthropomorphism is more specific, ascribing human qualities to gods, while others believe anthropomorphism to be more general that just language use; for example, ascribing human characteristics to nonhuman form in art.)

The steeples swam in the mist.
The gates opened their arms.
The project ate up all my time.
The cold knocked me out.

RPE 9.19

The idea died a natural death.
His theory explained . . .
These facts suggest . . .

synesthesia
metaphorical language in which one kind of sensation is described in terms of another; for example, a smell described as *sweet* or a color as *loud*

Synesthesia Synesthesia is a type of metaphorical language in which one kind of sensation is described in terms of another (color is attributed to sounds, odor to color, sound to odor, etc.). Examples include “sweet” smells (taste attributed to smell), “loud” colors (sound attributed to color), and so on. In the following lines from Charles Baudelaire’s poem “Correspondances,” “perfumes” (smells) are described in terms of touch, “fresh like the skin of infants.” The sense of touch is described in terms of sound (“sweet like oboes”). Finally, perfumes are described in terms of color (“green like prairies”).

There are perfumes fresh like the skin of infants
Sweet like oboes, green like prairies . . .

metonymy
description of something in terms of something with which it is closely associated: *The pen is mightier than the sword* (pen = the written word/diplomacy, sword = violence/force)

Metonymy Another type of figurative speech is **metonymy**; we refer to something by describing it in terms of something with which it is closely associated. A well-known example of metonymy is *The pen is mightier than the sword*, in which *pen* refers to writing or diplomacy and *sword* to action or war. Additional examples are the following:

The Pentagon/The White House/Congress issued a statement yesterday.
The law is after her.

We often use metonymy to create verbs from nouns.

They *limousined* to the prom last night.
We *Taco Belled* for lunch today.

Synecdoche is a specific type of metonymy in which we use a part of something to refer to the whole thing. A physician may refer to a patient as *the tonsillectomy* rather than *the patient in 4B* or *Mary Jones*. We may refer a car as *wheels* or a *ride*.

head (of cattle), threads (clothing), skirt (woman), suit (man)
Sometimes synecdoche is more abstract:

Give me a *hand* = help
Lend me an *ear* = your attention
Two heads are better than one = cooperation

Synecdoche can also involve referring to something by manufacturer, product, material, or color.

I like my *Honda* = producer for product
Natural fibers are all the rage these days = cotton clothes
Do you take *plastic*? = credit cards

Did You Know...?



Hearing Colors

Synesthesia (related to the Greek word for 'sensation') is more than just a literary device; it is also a neurological phenomenon in which stimulation of one sensory or cognitive pathway leads to automatic, involuntary experiences in a second sensory or cognitive pathway. For example, one common form of synesthesia is grapheme → color synesthesia, in which letters or numbers are perceived as inherently colored. Writer Patricia Lynne Duffy reports, in her book *Blue Cats and Chartreuse Kittens*,

"One day," I said to my father, "I realized that to make an 'R' all I had to do was first write a 'P' and then draw a line down from its loop. And I was so surprised that I could turn a yellow letter into an orange letter just by adding a line."

Russian writer Vladimir Nabokov also had grapheme → color synesthesia, though it was likely actually phoneme → color since when he writes "letter" he means phoneme because it's aural.

Another form of synesthesia is music → color synesthesia, in which synesthetes experience colors when they hear certain tones, timbres, or keys.

For more information

Duffy, P. 2001. *Blue cats and chartreuse kittens*. New York: Henry Holt.

Nabokov, V. 1966. *Speak, memory: An autobiography revisited*. New York: Putnam.

van Campen, C. 2010. *The hidden sense: Synesthesia in art and science*. Cambridge, MA: MIT Press.

Some theorists suggest that all language is metonymic since words stand for things. (See Lakoff 1987, for example.)

Comparing Meanings: Simile

Similes differ from metaphor and metonymy in that they involve a comparison of two unlike things and usually involve the words *like* or *as*.

He eats like a pig.
She's big as a house.
We're happy as clams.
My brain is like a sieve.

Here are some famous similes:

Suspicion climbed all over her face, like a kitten, but not so playfully. (Raymond Chandler)

simile comparison, usually of two unlike things, in order to create a nonliteral image (*run like a deer*)

Exuding good will like a mortician's convention in a plague year.
(Daniel Berrigan)

As good as gold. (Charles Dickens)

Death hangs on her like an untimely frost. (William Shakespeare)

Solitude . . . is like Spanish moss which finally suffocates the tree it hangs on. (Anaïs Nin)

A woman without a man is like a fish without a bicycle. (attributed to Gloria Steinem)

Idioms

idiom collocation of words or phrases with nonliteral meaning (*kick the bucket* = die)

Another type of figurative speech is **idiom**. Like other kinds of figurative language, idioms are collocations of words or phrases with nonliteral meanings.

a chip on one's shoulder, dodge the bullet, champing at the bit, foaming at the mouth, push the envelope, pull the wool over someone's eyes, tongue in cheek, pull one's leg

Idioms in other languages can be completely distinct from those in English, though some have English counterparts, sometimes with interesting twists.

Idioms in Portuguese

Macacos me mordam! (monkeys bite me) 'to be intrigued or surprised'

botar um ponto final em (put the final dot in) 'bring the curtain down'

encurralado (cornered) 'in a corner'

cair em si (to fall in oneself) 'to become aware'

andar na boa vai ela (to go in the good goes she) 'to be out on a spree'

Idioms in French

faire d'une pierre deux coups (to hit twice with a stone) 'to kill two birds with one stone'

avoir le cafard 'to have the blues'

casser les couilles 'break one's balls/piss one off'

mort de rire 'to die laughing'

se taper la cloche (to tap/ring the bell) 'to eat very well'

Idioms in German

Hans hat den Vogel abgeschossen. (Hans has shot off the bird.)
'Hans stole the show.'

Er hat ins Gras gebissen. (He has bitten into the grass.) 'He died.'

Accent on Linguistics and Computers



Does your spell-checker save or confuse you? Does your grammar-checker help or hinder your writing? Does your speech-recognition software make funny mistakes? Do you get frustrated or amazed by these computer programs? Well, have you ever wondered who invented and programmed them? Computational linguists have a major role here.

To program these computer features that we use every day required development of software that provides the computer with the grammatical rules of our language. Imagine the complexity! For example, how do you program a computer to recognize and understand ambiguity? Consider these two sentences:

They gave the monkeys the bananas because they were hungry.

They gave the monkeys the bananas because they were overripe.

They are syntactically identical, but they crucially differ in who or what *they* refers to. And this ambiguity is different from the one in the following “garden path” sentence:

The horse raced past the barn fell.

A garden path sentence is one that misleads us because we begin to decode (or parse) it one way but then have to backtrack to decipher its actual meaning. (We are led down the wrong

garden path, so to speak.) How do we get a machine to decode it to [*The horse (who was) raced past the barn*] *fell*? To complicate it more, there are sentences with the same syntactic structure that are not ambiguous:

The horse ridden past the barn bucked.

How does one create a software program that understands both the ambiguity of the garden path sentence and the lack of ambiguity of the second sentence, which has the same syntactic structure? This is the kind of challenge that draws many linguists into *computational linguistics*, the study of language and computers. This field is very broad and includes the following subfields:

- Natural language processing: Design software that (ideally) gives computers the capability to analyze, decode, and produce “natural” language.
- Machine translation: Design software that allows computers to translate from one language to another.
- Speech generation: Use computers to program telephones, cars, elevators, GPSs, and games to produce speech (and this involves getting intonation right!). Apple’s new Siri app (see photo) does all this and more!
- Speech recognition: Use computers to transform spoken language into written language.
- Corpus linguistics: Use computers to study large collections of spoken or written language (a collection is a *corpus*; plural *corpora*) statistically for frequency of patterns and so on.

(continued)

Computational linguistics extends beyond the borders of linguistics and computer science to include psychology (which provides models of how we think and solve problems), information theory (which provides models of communication), and mathematics and statistics (which provide tools for analyzing such models).

It is possible now to specialize in computational linguistics and then find rewarding employment with technology giants all over the world—AT&T Labs, General Electric, IBM, Lucent Technologies, Bell Labs, Microsoft, Xerox, SRI International in the United Kingdom, XRCE in France, DFKI in Germany, and IRST in Italy, to name just a few.

For more information

Professional organizations

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Summary

We now know that to know what a word means is not a simple thing; our understanding of word meanings involves a complex semantic rule system. In this chapter, we've examined some of the parts of that system. We've seen that the meanings of some words can be expressed in terms of binary features and that word meanings fall into different categories, or semantic fields, that tell us something about how we view the world. Word meanings can also include the meanings of other words (entailment), and other meaning relationships among words can be described by the nyms, the complex relationships that we bring into play in our everyday language. We've explored how the meanings of the words we use (euphemisms and metaphors, among other examples) may reflect how we think and perceive things and how word meanings change and shift over time in various ways. And finally, we've discussed in some detail how much of what we say is

actually figurative in meaning, which provides us with yet another example of our unique ability to use language creatively.

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Review, Practice, and Explore

RPE 9.1 Deciphering Meaning: American English Vocabulary

We can derive meaning from the morphology and syntax of a word even if we've never seen it before. We can also derive meaning from context. Here are some words from different dialects of English, words you may or may not be familiar with (these are words taken from the *Dictionary of American Regional English*). Can you match each word with its meaning? Check your answers with the key at the end of this section. How did you come up with your answers? What clues did you use? Which words were the most difficult to match to meanings, and why? (To explore the DARE website, go to <http://polyglot.lss.wisc.edu/dare/dare.html>.)

- | | |
|----------------|--|
| pinkie | a. a tomato |
| princeton | b. a man's short hairstyle |
| poison apple | c. a nickname for an unimportant or out-of-the-way place |
| pirok | d. a water faucet placed on the outside of a building |
| sill cock | e. a main-dish pie, frequently containing fish and rice |
| Skunk's Misery | f. a trick, deception |
| prairie | g. a vacant lot or city block |
| sandy | h. a small sailing vessel with a sharp stern |

RPE 9.2 Onomatopoeia

Onomatopoeia can be used as a rhetorical device to create the illusion of sound in a text, as in the following example:

And ere three shrill notes the pipe he uttered, / You heard as if an army *muttered*; /
The *muttering* grew to a *grumbling*; / And the *grumbling* grew to mighty *rumbling*; /
And out of the house the rats came tumbling. (Browning 1888)

Find at least three examples of onomatopoeia in poetry or prose. You might find examples in unlikely places such as the newspaper and e-mails.

RPE 9.3 Etymological Clues

Sometimes we use etymology (word origins) to help us decipher meanings. As you know, many English words have Latin and Greek roots. Below is a list of Greek and Roman gods' names. See if you can list words that have these names as roots. How does the meaning of the god's name help you decipher the meaning of the words on your list?

Luna—goddess of the moon. At one time, people believed that the moon had the power to drive some people out of their minds.

Hypnos—Greek god of sleep

Somnus—Roman god of sleep

Nox—goddess of darkness of night

Lethe—means ‘forgetfulness’; the river in Hades where the spirits of the dead drink and then forget their former lives and become listless ghosts

Phobos—son of Ares, the Greek god of war. His name means ‘fear’.

Pan—god of fields, forests, wild animals. Part man and part goat, he often caused serious trouble. The belief that he was nearby caused people to run in terror.

Gaea—goddess of the earth; Greek word for earth

Terra—Roman goddess of the earth

Gratiae—the Graces, three sisters who were goddesses of all that is charming in women

Hygeia—Greek goddess of health

Pysche—the maiden who fell in love with Eros, the Greek god of love. Her name means ‘soul’.

Hydra—a water serpent slain by Heracles

Helios—god of the sun

Sol—Roman god of the sun

Morta—Roman sister of Fate

RPE 9.4 Count or Noncount Nouns?

Many nouns can have both count and noncount interpretations. For example:

noncount: Love is patient.

count: She had two loves: philosophy and poetry.

noncount: Rice is good for you.

count: There are many rices to choose from: arborio, jasmine, basmati—to name a few.

Consider whether the following words are count or noncount, and give evidence (use them in sentences) to support your analysis.

truth, courage, music, fish, money

RPE 9.5 Semantic Features of Nouns

Write out the feature specifications of each of the following nouns. Remember that each noun is specified for three features: concrete/abstract, count/mass, and proper/common. Be prepared to justify your answers, as not all of you will agree on the features you assign to each noun.

kitten, homework, beer, the president of the United States, music, river, light, Santa Claus

RPE 9.6 Children's Semantic Fields

Children do an amazing job of acquiring word meanings quickly and accurately. However, most children do make errors; most commonly, they overgeneralize the meaning of a word. Here are some typical examples:

Word	Child's Meaning
sweet	all things sweet (syrup, cookies, doughnuts, sugar, etc.)
apple	all fruits that are recognizable to child (round)
hot	light, bright objects (fire, lights, lamps, etc.)

Describe how these examples illustrate how the children are constructing semantic fields and how those are different from adult versions.

RPE 9.7 Antonyms: Find the Opposites

Give antonyms for the following terms, and label each pair as gradable, relational, or complementary. Compare your answers. Did everyone come up with the same pairs? Discuss why or why not.

- | | |
|------------|------------|
| a. over | e. chicken |
| b. hello | f. near |
| c. quickly | g. black |
| d. now | h. give |

RPE 9.8 Antonymy and Markedness

Antonyms come in different forms: gradable, relational, and complementary. Nevertheless, we tend to think of antonyms as opposites. Markedness is a related concept involving binary oppositions, highlighting how we tend to consider one member of a pair of antonyms typical and the other marked. Markedness is illustrated by the following pairs of antonyms, with the “typical” member of the pair on the left and the “marked” member on the right.

- How high/*low is it? (height)
- How long/*short is it? (length)
- How wide/*narrow is it? (width)
- How heavy/*light is it? (weight)
- How deep/*shallow is it? (depth)

What are three or four other pairs of adjectives that illustrate this markedness relation?

RPE 9.9 Synonyms

Write a short paragraph (four or five sentences) on a topic of your choice. Use at least four Anglo-Saxon terms from Table 9.2. Then rewrite the paragraph, replacing the Anglo-Saxon terms with their Latin or Greek synonyms. How does this substitution change your paragraph? Explain briefly.

RPE 9.10 Ethnic Slurs

Research the origins of four or five ethnic slurs you are familiar with. Trace how those terms have evolved in meaning over time. Why do you think such terms are so powerful? Do you think that by changing terms (by using politically correct language or euphemisms) we can also

change attitudes and reduce discrimination? Will changing how we talk also change how we think about ourselves and about groups other than our own?

RPE 9.11**Hyponymy**

Here are four semantic categories:

CARS STUDENTS JOBS DOGS

Come up with at least four hyponyms for each category. What criteria did you use to decide? Are your hyponyms distinguishable in terms of semantic features? Compare notes with your classmates. Why might your hyponyms for these categories differ from person to person?

RPE 9.12**Polysemy**

Explain how each of the following words is polysemous. The first example is done for you.

- a. finger (lift a finger, give someone the finger, finger something—steal or touch)
- b. lip
- c. heart f. butt
- d. face g. hand
- e. toe h. ear

Now, find as many examples of polysemy in the following poem as you can.

Things

What happened is, we grew lonely
 living among the things,
 so we gave the clock a face,
 the chair a back,
 the table four stout legs
 which will never suffer fatigue.
 We fitted our shoes with tongues
 as smooth as our own
 and hung tongues inside bells
 so we could listen
 to their emotional language,
 and because we loved graceful profiles
 the pitcher received a lip,
 the bottle a long, slender neck.
 Even what was beyond us
 was recast in our image;
 we gave the country a heart,
 the storm an eye,
 the cave a mouth
 so we could pass into safety.

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 from *Alive Together*, by Lisel Mueller. Copyright ©1996 by Lisel Mueller.)

RPE 9.13 Homonyms

Recall the following distinctions between homonyms, homophones, and homographs:

homonyms: sound same, same spelling

homophones: sound same, different spelling

homographs: same spelling, sound different

Supply a homonym, homophone, or homograph for each of the following words. Label your examples.

compact, bat, see, pupil, refuse, aisle, pail, bank, race, job, entrance, alter, braid

RPE 9.14 Ambiguity

Label each of the following newspaper headlines as *lexically* ambiguous (ambiguous because of a word) or *syntactically* ambiguous (ambiguous because of the structure of the sentence). Briefly explain each of your answers. If the sentence is both lexically and syntactically ambiguous, label it as such and explain why.

- a. Grandmother of Eight Makes Hole in One
- b. Quarter of a Million Chinese Live on Water
- c. Police Begin Campaign to Run Down Jaywalkers
- d. Two Convicts Evade Noose, Jury Hung
- e. Safety Experts Say School Bus Passengers Should Be Belted
- f. Milk Drinkers Are Turning to Powder
- g. Iraqi Head Seeks Arms
- h. Two Sisters Reunite after Eighteen Years at Checkout Counter
- i. Doctor Testifies in Horse Suit
- j. Police Discover Crack in Australia

Also, choose two lexically ambiguous words that you find in these headlines. How do you know these words are ambiguous rather than simply vague?

RPE 9.15 Meaning Change in Progress

The *American Heritage Dictionary* gives the following definitions for *aggravate*:

1. To make worse or more troublesome
2. To rouse to exasperation or anger; provoke

Many usage experts believe only the first definition should be used. Here's the dictionary's usage note: "Aggravate comes from the Latin verb *aggravare*, which meant 'to make heavier,' that is, 'to add to the weight of.' It also had the extended senses 'to annoy' and 'to oppress.' Some people claim that *aggravate* can only mean 'to make worse', and not 'to irritate', on the basis of the word's etymology. But in doing so, they ignore not only an English sense in use since the seventeenth century but also one of the original Latin ones. Sixty-eight percent of the *American Heritage* Usage Panel approves of its use in *It's the endless wait for luggage that aggravates me the most about air travel*. Look up the following words to see what the experts

have to say about them; then discuss your own usage and attitudes about the words and their meanings.

anxious
hopefully
orientate
comprise
literally

RPE 9.16 Historical Shifts in Meaning

Below are a number of words from Old English (and a few that came into Old English from Old French) that still exist in Present-Day English, though each has shifted in meaning. Identify the type of meaning shift for each word. Choose from amelioration, pejoration, narrowing, broadening, and shift (in denotation—a completely new meaning).

PDE Word	Original Word	Meaning
dream	dréam	‘mirth’
moody	mōdig	‘brave’
deer	déor	‘beast/animal’
knight	cniht	‘boy, lad’
gum	góma	‘inside of mouth or throat’
bead	bedu	‘prayer’
dizzy	dysig ¹	‘foolish’
bird	bridd	‘young bird’
tide	tíd	‘time’
uncouth	uncúþ ²	‘unknown’
witch	wicca	‘male or female sorcerer’
PDE Word	Old French	Meaning
butcher	bocher	‘one who slaughters goats’
accident	accident	‘an event’
carry	carier	‘transport by cart’

RPE 9.17 Shifts in Meaning: Slang Words

The changes in meanings of English slang and taboo words are particularly interesting to study because these meanings have often changed rather dramatically over time. For example, the slang word *crapper* has its origin in one Thomas Crapper, who was in some way associated with the originator of the flush toilet (the “Silent Valveless Water Waste Preventer” patented in 1819, by Albert Giblin).

Choose four slang terms and look up their meanings. Explain how the meaning of each word has shifted over time. Illustrate with examples, and identify examples of broadening,

1. This symbol (ȝ), called *yogh*, was used in Middle English to represent /y/ and sometimes other velar phonemes.

2. This symbol, þ, called *thorn*, was used in Old and Middle English to represent either of the interdental fricatives, /θ/ and/or /ð/.

narrowing, pejoration, amelioration, and shift in denotation. (Slang dictionaries are excellent resources for this exercise.)

RPE 9.18 Metaphors We Live By?

What are some of the metaphors we use in talking about the following concepts, and do they fall into a particular category? If so, do you think that category accurately represents our cultural perceptions of that concept? Explain briefly.

love marriage illness life

RPE 9.19 Human Qualities: Personification

Personification involves ascribing human attributes to inanimate or abstract concepts:

High gas prices are *killing us*, and they are the *enemy* of commuters.

The bad weather is truly *treacherous* and might *cheat* farmers out of some of the growing season.

In a text of your choice, find five examples of personification. Examples can come from a newspaper, poem, story, TV news report, magazine, radio program, or other medium. (*Hint*: sports commentary abounds with personification and metaphor.)

RPE 9.20 Semantic Classes of Idioms

Idioms can be classified by the concepts they express. For example, there are many idiomatic expressions for anger, work, love, and sex.

Anger: flip your lid, blow your stack, bite someone's head off, let off steam

Love: fall for, be crazy about, dig, have a crush on, hit it off with, get hung up on, make eyes at someone

Come up with two classes of idioms on your own, and give three or four examples of idioms that fall into each class.

RPE 9.21 The Semantics of Jokes

Many jokes are funny for semantic reasons, relying on ambiguous words, synonyms, antonymy, and various types of figurative language to create humor. We also use our knowledge of other grammatical components (syntax, morphology, phonology) to create humor. Explain the humor in each of the following jokes using your grammatical knowledge. What contributes to the humor in each joke? Be as specific and detailed as you can.

Q: What's the difference between Cheerios and Georgia Tech (insert team of your choice)?

A: Cheerios belong in a bowl.

Q: What lies at the bottom of the ocean and twitches?

A: A nervous wreck.

Q: Why do chicken coops have two doors?

A: Because if they had four doors, they would be chicken sedans.

Q: What does a skeleton get when he goes to a bar?

A: A beer and a mop.

Q: How many men does it take to wallpaper a room?

A: About two, if they're thinly sliced.

Q: How many ears did Davy Crockett have?

A: Three—his left ear, his right ear, and his wild front ear.

Q: Why don't cannibals eat clowns?

A: Because they taste funny.

Answers to RPE 9.1

pinkie (h), princeton (b), poison apple (a), pirok (e), sill cock (d), Skunk's Misery (c), prairie (g), sandy (f).