

Semantics: The Meanings of Language

Language without meaning is meaningless.

Roman Jakobson

B.C.

Johnny Hart



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For thousands of years philosophers have been pondering the meaning of "meaning"; yet speakers of a language can understand what is said to them and can produce strings of words that convey meaning.

Learning a language includes learning the "agreed-upon" meanings of certain strings of sounds and learning how to combine these meaningful units into larger units that also convey meaning. We are not free to change the meanings of these words at will, for if we did we would be unable to communicate with anyone.

Humpty Dumpty, however, was unwilling to accept this fact when he said:

"There's glory for you!"

"I don't know what you mean by 'glory,'" Alice said.

Humpty Dumpty smiled contemptuously. "Of course you don't—till I tell you. I meant 'there's a nice knock-down argument for you!'"

"But 'glory' doesn't mean 'a nice knock-down argument,'" Alice objected.

"When I use a word," Humpty Dumpty said, in rather a scornful tone, "it means just what I choose it to mean—neither more nor less."

"The question is," said Alice, "whether you *can* make words mean so many different things."

Alice is quite right. You cannot make words mean what they do not mean. Of course, if you wish to redefine the meaning of each word as you use it, you are free to do so, but you would be making an artificial, clumsy use of language, and most people would not wait around long to talk to you. A new word may be created, but it enters the language with its sound-meaning relationship already determined.

Fortunately there are few Humpty Dumptys; all the speakers of a language share the basic vocabulary—the sounds and meanings of words. All speakers know how to combine words to produce phrase and sentence meaning. The study of the linguistic meaning of words, phrases, and sentences is called **semantics**.

Word Meanings

"My name is Alice . . ."

"It's a stupid name enough!" Humpty Dumpty interrupted impatiently. "What does it mean?"

"Must a name mean something?" Alice asked doubtfully.

"Of course it must," Humpty Dumpty said with a short laugh. "My name means the shape I am—and a good handsome shape it is, too. With a name like yours, you might be any shape, almost."

Lewis Carroll, *Through the Looking-Glass*

Not only do we know what the morphemes of our language are, we also know what they *mean*. Dictionaries are filled with words and their meanings. So is the head of every human being who speaks a language. You are a walking dictionary. You know the meaning of thousands of words. Your knowledge of their meanings permits you to use them appropriately in sentences and to understand them when heard, even though you probably seldom stop and ask yourself: "What does *boy* mean?" or "What does *walk* mean?" The meaning of words is part of linguistic knowledge and is therefore a part of the grammar. Your mental storehouse of information about words and morphemes is what we have been calling **the Lexicon**.

Semantic Properties

Words and morphemes have meanings. We shall talk about the meaning of words, even though words may be composed of several morphemes.

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Suppose someone said:

The assassin was stopped before he got to Mr. Thwacklehurst.

If the word *assassin* is in your mental dictionary, you know that it was some *person* who was prevented from *murdering* some *important person* named Thwacklehurst. Your knowledge of the meaning of *assassin* tells you that it was not an animal that tried to kill the man and that Thwacklehurst was not likely to be a little old man who owned a tobacco shop. In other words, your knowledge of the meaning of *assassin* includes knowing that the individual to whom that word refers is *human*, is a *murderer*, and is a killer of *important people*. These pieces of information, then, are some of the **semantic properties** of the word upon which speakers of the language agree. The meaning of all nouns, verbs, adjectives, and adverbs—the “content words”—and even some of the “function words” such as *with* or *over* can at least partially be specified by such properties.

The same semantic property may be part of the meaning of many different words. “Female” is a semantic property that helps to define

tigress	hen	actress	maiden
doe	mare	debutante	widow
ewe	vixen	girl	woman

The words in the last two columns are also distinguished by the semantic property “human,” which is also found in

doctor	dean	professor	bachelor	parent	baby	child
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The last two of these words are also specified as “young.” That is, part of the meaning of the words *baby* and *child* is that they are “human” and “young.” (We will continue to indicate words by using *italics* and semantic “properties” by using double quotation marks.)

The meanings of words have other properties. The word *father* has the properties “male” and “adult,” as does *uncle* and *bachelor*; but *father* also has the property “parent,” which distinguishes it from the other two words.

Mare, in addition to "female" and "animal," must also denote a property of "horseness." Words have general semantic properties such as "human" or "parent," as well as more specific properties that give the word its particular meaning.

The same semantic property may occur in words of different categories. "Female" is part of the meaning of the noun *mother*, of the verb *breast-feed*, and of the adjective *pregnant*. "Cause" is a verbal property of *darken*, *kill*, *uglify*, and so on.

<i>darken</i>	cause to become dark
<i>kill</i>	cause to die
<i>uglify</i>	cause to become ugly

Other semantic properties that help account for the meaning of verbs are shown in the following table:

Semantic Property	Verbs Having It
motion	bring, fall, plod, walk, run . . .
contact	hit, kiss, touch . . .
creation	build, imagine, make . . .
sense	see, hear, feel . . .

For the most part no two words have exactly the same meaning (but see the discussion of synonyms below). Additional semantic properties make for finer and finer distinctions in meaning. *Plod* is distinguished from *walk* by the property "slow," and *stalk* from *plod* by a property such as "purposeful."

The humor of the cartoon at the head of this section is that the verb "roll over" has a specific semantic property, something like "activity about the longest axis." The snake's attempt to roll about its shortest axis indicates trouble with semantic properties.

Semantic Features Words may be in intersecting semantic classes. For example *woman* is in the class with the property "female"; *child* is in the class "young," and *girl* is in the intersecting class with the two properties "female" and "young."

Additionally, there are semantic relations between words, and certain semantic categories may imply others. For example, the property "human" implies "animate."

Such relationships can be expressed by **semantic features**, similar to phonetic features. In this case the lexical entries for words such as *father*, *girl*, and *mare* would have the following (incomplete) appearance:

<i>woman</i>	<i>father</i>	<i>girl</i>	<i>mare</i>	<i>stalk</i>
+female	+male	+female	+female	+motion
+human	+human	+human	-human	+slow
-young	+parent	+young	-young	+purposeful
...	+horseness	...

Intersecting classes share the same features, such as the class of human females, which are marked "plus" for the features *human* and *female*.

Additional facts, such as that "human" implies "animate," could be stated using **redundancy rules** on these features, for example:

$$[+human] \rightarrow [+animate]$$

This rule means that if *any* word contains the feature [+human], it "automatically" contains the feature [+animate]. Therefore the feature [+animate] need not be specifically mentioned in the lexical entry for *father* (or *girl*, *professor*, *child*); it can be inferred from the feature [+human] by the redundancy rule.

Some semantic redundancy rules reveal "negative" properties. For example, if something is "human" it is not "abstract"; an activity that is "slow" is not "fast." Thus we could state:

$$\begin{aligned} [+human] &\rightarrow [-abstract] \\ [+slow] &\rightarrow [-fast] \end{aligned}$$

Meaning Postulates We have a great deal of linguistic knowledge about words, their properties, and the relationships among them. Consider the following information about words that speakers of English share:

- If something is *metal*, it is a concrete object.
- If something *swims*, it is in a liquid
- If something is *open*, it is not closed.

These statements are true due to the meaning of the italicized words. This lexical knowledge can be revealed through **meaning postulates**, which are formal rules, similar to semantic redundancy rules. For example,

$$(x) \text{ metal} \rightarrow (x) \text{ concrete}$$

is a meaning postulate that states that if anything is metal, it must be a concrete object. (Thus **metal idea* is semantically odd unless it is a metaphor, because *idea* is [-concrete].) Similarly,

$$(x) \text{ open} \rightarrow \text{not } (x) \text{ closed}$$

means open things are not closed.

Meaning postulates reveal even more complex knowledge. If you *own* something, then that something *belongs to you*, and vice versa. This connection follows from the meanings of the words, and it is expressed by the following meaning postulate, which goes in *both* directions (notice the two-headed arrow):

$$(x) \text{ owns } (y) \leftrightarrow (y) \text{ belongs to } (x)$$

Meaning postulates and redundancy rules are a part of the *lexicon*. These

"formal" devices reveal knowledge about the meanings of words that all speakers have.

Evidence for the existence of semantic properties is found in the speech errors, or "slips of the tongue," that we all produce. In Chapter 3 on phonology some errors were cited that reveal the internalized phonological system of the language. Other errors, which result in the substitution of a word for an intended word, reveal semantic classes. Consider the following word-substitution errors that some speakers have actually produced:

Intended Utterance	Actual Utterance (Error)
bridge of the nose	bridge of the neck
when my gums bled	when my tongues bled
he came too late	he came too early
Mary was young	Mary was early
the lady with the dachshund	the lady with the Volkswagen
that's a horse of another color	that's a horse of another race
he has to pay her alimony	he has to pay her rent

These errors and thousands we and others have collected, reveal that the incorrectly substituted words are not random substitutions but share some semantic property with the intended words. *Nose* and *neck*, *gums* and *tongues* are all "body parts" or "parts of the head." *Young*, *early*, and *late* are related to "time." *Dachshund* and *Volkswagen* are both "German" and "small." The semantic relationships between *color* and *race* and even between *alimony* and *rent* are rather obvious.

The semantic properties that describe the linguistic meaning of a word should not be confused with other properties, such as physical properties. Scientists know that water is composed of hydrogen and oxygen. We know that water is an essential ingredient of lemonade or a bath. We need not know any of these things, though, to know what the word *water* means, and to be able to use and understand this word in a sentence.

Linguistic knowledge includes knowing the meaning of words and morphemes. Meaning is specified in part by a set of semantic properties, some of which may be specific to the word, together with redundancy rules and meaning postulates that reveal more general relationships. This system enables speakers to use and understand words and to combine them to produce meaningful utterances.

Ambiguity

"*Mine is a long and sad tale!*" said the Mouse, turning to Alice and sighing.

"*It is a long tail, certainly,*" said Alice, looking with wonder at the Mouse's tail, "but why do you call it sad?"

Lewis Carroll, *Alice's Adventures in Wonderland*

We said above that knowing a word means knowing its sounds and meaning. Both are necessary, for the same sounds can sometimes mean different things. **Homo-**

nyms or homophones are different words that are pronounced the same. They may have the same or different spelling. *To*, *too*, and *two* are homophones because they are all pronounced /tu:/; *will* as in *last will and testament*, *Will* the man's name, and *will* to denote future tense mean different things but are spelled and pronounced identically.

THE BORN LOSER

Art Sansom



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Homonyms may create ambiguity. A word or a sentence is **ambiguous** if it can be understood or interpreted in more than one way. The sentence

She cannot bear children.

may be understood to mean "She is unable to give birth to children" or "She cannot tolerate children." The ambiguity is due to the two words *bear* with two different meanings. Sometimes additional context can help to disambiguate the sentence:

She cannot bear children if they are noisy.

She cannot bear children because she is sterile.

Both words *bear* as used in the above sentences are verbs. There is another homonym *bear*, the animal, which is a noun with different semantic properties. The adjective *bare*, despite its different spelling, is homophonous with the above words and also has a different meaning. *Bare* as a verb is yet another homonym.

Homonyms are good candidates for humor as well as for confusion.

"How is bread made?"

"I know *that*!" Alice cried eagerly.

"You take some flour—"

"Where do you pick the flower?" the White Queen asked. "In a garden, or in the hedges?"

"Well, it isn't *picked* at all," Alice explained. "it's *ground*—"

"How many acres of ground?" said the White Queen.

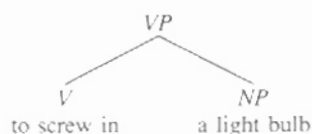
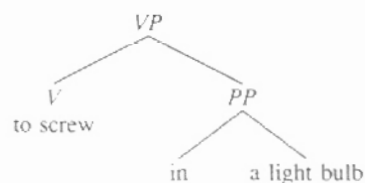
The humor of this passage is based on two sets of homonyms: *flower* and *flour* and the two meanings of *ground*. Alice means *ground* as the past tense of *grind*, whereas the White Queen is interpreting *ground* to mean "earth."

Thus, sentences may be ambiguous because they contain one or more ambigu-

ous words. This condition is **lexical ambiguity**. Some other examples of such lexically ambiguous sentences are:

- (1) (a) The Rabbi married my sister.
 (b) Do you smoke after sex?
 (c) It takes two mice to screw in a light bulb.

Item c is also an example of **structural ambiguity**, which was examined in Chapter 5 on syntax, in which the two or more meanings are not the result of lexical ambiguity but the result of two or more *structures* underlying the same string of words. The word *screw* has two meanings, and the sentences have two structures:



Such examples of homonyms and ambiguous sentences show that there is no one-to-one relation between sounds and meanings, and that we cannot always determine the precise meaning from the sound alone. They are further evidence that the sound-meaning relationship in language is arbitrary, and that we must learn how to relate sounds and meanings when learning the language.

Paraphrases

Does he wear a turban, a fez or a hat?

Does he sleep on a mattress, a bed or a mat, or a Cot,

The Akond of Swat?

Can he write a letter concisely clear,

Without a speck or a smudge or smear or Blot,

The Akond of Swat?

Edward Lear, "The Akond of Swat"

There are not only words that sound the same but have different meanings; there are also words that sound different but have the same or nearly the same meaning. Such words are called **synonyms**. There are dictionaries of synonyms that contain many hundreds of entries, such as:

apathetic/phlegmatic/passive/sluggish/indifferent
pedigree/ancestry/genealogy/descent/lineage

It has been said that there are no perfect synonyms—that is, no two words ever have *exactly* the same meaning. Still, the following pairs of sentences have very similar meanings.

I'll be happy to come./I'll be glad to come.
He's sitting on the sofa./He's sitting on the couch.

Some individuals may always use *sofa* instead of *couch*, but if they know the two words they will understand both sentences and interpret them to mean the same thing. The degree of semantic similarity between words depends to a great extent on the number of semantic properties they share. *Sofa* and *couch* refer to the same type of object and share most, if not all, of their semantic properties.

There are words that have many semantic properties in common but that are not synonyms or near synonyms. *Man* and *boy* both refer to male humans; the meaning of *boy* includes the additional semantic property of "youth," whereby it differs from the meaning of *man*. Thus the semantic system of English permits you to say *A sofa is a couch* or *A couch is a sofa* but not *A man is a boy* or *A boy is a man*, except when you wish to describe "boylike" qualities of the man or "man-like" qualities of the boy.

Often a word with several meanings, called a **polysemous** word, will share one of its meanings with another word. Thus *mature* and *ripe* are synonymous when applied to fruit, but only *mature* can apply to animals. *Deep* and *profound* are another such pair. Both apply to thought, but only *deep* applies to water. Sometimes words that are ordinarily opposites can mean the same thing in certain contexts; thus a *good* scare is the same as a *bad* scare. Similarly, a word with a positive meaning in one form, such as the adjective *perfect*, when used adverbially, undergoes a "weakening" effect, so that a "perfectly good bicycle" is neither perfect nor always good. "Perfectly good" means something more like "adequate."

When synonyms occur in otherwise identical sentences, the sentences will be paraphrases. Sentences are **paraphrases** if they have the same meaning (except possibly for minor differences in emphasis). Thus the use of synonyms may create **lexical paraphrase**, just as the use of homonyms may create lexical ambiguity.

Sentences may also be paraphrases because of *structural differences* that are not essential to their meanings. Some examples were cited in the previous chapter. We noted that a pair of sentences may be paraphrases in terms of the *logical relations*, but differ in the matter of *focus* or in terms of the *topic/comment* structure. Thus many active/passive pairs of sentences such as *John kissed Mary* and *Mary was kissed by John* differ in meaning only in that John is the topic of the first, whereas Mary is the topic of the second. The two sentences may still be considered to be paraphrases.

Other instances of paraphrases will be described later on in this chapter.

Antonyms

As a rule, man is a fool;
When it's hot, he wants it cool;
When it's cool, he wants it hot;
Always wanting what is not.

Anonymous

The meaning of a word may be partially defined by saying what it is *not*. *Male* means *not female*. *Dead* means *not alive*. Words that are opposite in meaning are often called **antonyms**. Ironically, the basic property of two words that are antonyms is that they share all but one semantic property. *Beautiful* and *tall* are not antonyms; *beautiful* and *ugly*, or *tall* and *short*, are. The property they do not share is present in one and absent in the other. Thus, in order to be opposites, two words must be semantically similar or in the same semantic category, such as "gender" or "height."

There are several kinds of antonymy. There are **complementary pairs**:

alive/dead present/absent awake/asleep

They are complementary in that *not alive* = *dead* and *not dead* = *alive*, and so on.

There are **gradable pairs** of antonyms:

big/small hot/cold fast/slow happy/sad

With gradable pairs the negative of one word is not synonymous with the other. For example, someone who is *not happy* is not necessarily *sad*. It is also true of gradable antonyms that more of one is less of another. More bigness is less smallness; wider is less narrow, and taller is less short. Another characteristic of many pairs of gradable antonyms is that one is **marked** and the other **unmarked**. The unmarked member is the one used in questions of degree. We ask, "How *high* is it?" (not "How low is it?") or "How *tall* is she?" We answer "One thousand feet high" or "Five feet tall" but never "Five feet short," except humorously. *High* and *tall* are the unmarked members of *high/low* and *tall/short*. Notice that the meaning of these adjectives and other similar ones is relative. The words themselves provide no information about absolute size. Because of our knowledge of the language, and of things in the world, this relativity normally causes no confusion. Thus we know that "a small elephant" is much bigger than "a big mouse."

Another kind of "opposite" involves pairs like

give/receive, buy/sell, teacher/pupil

They are called **relational opposites**, and they display symmetry in their meaning. If X *gives* Y to Z, then Z *receives* Y from X. If X is Y's *teacher*, then Y is X's

pupil. Pairs of words ending in *-er* and *-ee* are usually relational opposites. If Mary is Bill's employer, then Bill is Mary's employee.

These relationships may be expressed formally through *meaning postulates*:

$$\begin{aligned}(x) \text{ gives } (y,z) &\leftrightarrow (z) \text{ receives } (y,x) \\ (x) \text{ teacher } (y) &\leftrightarrow (y) \text{ pupil } (x)\end{aligned}$$

Comparative forms of gradable pairs of adjectives often form relational pairs. Thus, if Sally is *taller* than Alfred, then Alfred is *shorter* than Sally. If a Cadillac is *more expensive* than a Ford, then a Ford is *cheaper* than a Cadillac.

If meanings of words were indissoluble wholes, there would be no way to make the interpretations that we do. We know that *big* and *red* are not opposites because they have too few semantic properties in common. They are both adjectives, but *big* is in the semantic class involving size, whereas *red* is a color. On the other hand, *buy/sell* are relational opposites because both contain the semantic property "transfer of property," and they differ only in one property, "direction of transfer."

Redundancy rules on semantic features can reveal our knowledge about antonyms. Consider:

$$[+ \text{married}] \rightarrow [- \text{single}] \quad [+ \text{single}] \rightarrow [- \text{married}]$$

These rules show that any word that bears the semantic property "married," such as *wife*, is understood to lack the semantic property "single"; and conversely, any word that bears the semantic property "single," such as *bachelor*, will not have the property "married."

BROOM HILDA

Russell Myers



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In English there are a number of ways to form antonyms. You can add the prefix *un*:

likely/unlikely able/unable fortunate/unfortunate

or you can add *non*:

entity/nonentity conformist/nonconformist

or you can add *in*:

tolerant/intolerant discreet/indiscreet decent/indecent

Because we know the semantic properties of words, we know when two words are antonyms, synonyms, or homonyms, or are unrelated in meaning.

Names

*Her name was McGill and she called herself Lil
But everyone knew her as Nancy.*

John Lennon and Paul McCartney, "Rocky Raccoon"¹

TUMBLEWEEDS

T.K. Ryan



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"What's in a name?" is a question that has occupied philosophers of language for centuries. Plato was concerned with whether names were "natural," though the question did not bother Adam when he named the animals; Humpty Dumpty thought his name meant his shape, and in part it does.

Usually when we think of names we think of names of people or places.

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which are **proper names**. We do not think of *Canis familiaris* as being named "dog." Still, the old view persists that all words name some object, though that object may be abstract. This view presents difficulties. We are unable to identify the objects named by *sincerity* or *forgetfulness*, not to mention *into*, *brave*, and *think*.

Proper names can refer to objects. The objects may be extant, such as those designated by

Disa Karin Viktoria Lubker
Lake Michigan
The Empire State Building

or extinct, such as

Socrates
Troy

or even fictional

Sherlock Holmes
Dr. John H. Watson
Oz

Proper names are **definite**, which means they refer to a unique object insofar as the speaker and listener are concerned. If I say

Mary Smith is coming to dinner.

my spouse understands Mary Smith to refer to our friend Mary Smith, and not to one of the dozens of Mary Smiths in the phone book.

Because they are inherently definite, proper names are not in general preceded by *the*:

*the John Smith
*the California

There are some exceptions, such as the names of rivers, ships, and erected structures:

the Mississippi
the *Queen Mary*
the Empire State Building
the Eiffel Tower
the Golden Gate Bridge

and there are special cases such as *the John Smiths* to refer to the family of John Smith. Also, for the sake of clarity or literary effect, it is possible to precede a

proper name by an article if the resulting noun phrase is followed by a modifying expression such as a prepositional phrase or a sentence:

The Paris of the 1920s . . .

The New York that everyone knows and loves . . .

Proper names cannot usually be pluralized, though they can be plural, like *the Great Lakes* or *the Pleiades*. There are exceptions, such as *the John Smiths* mentioned above, or expressions like *the Linguistics Department has three Bobs*, meaning three people named Bob, but they are special locutions used in particular circumstances. Because proper names generally refer to unique objects, it is not surprising that they occur mainly in the singular.

For the same reason, proper names cannot in general be preceded by adjectives. Many adjectives have the semantic effect of narrowing down the field of reference, so that the noun phrase *a red house* is a more specific description than simply *a house*; but what proper names refer to is already completely narrowed down, so modification by adjectives seems peculiar. Again, as in all these cases, extenuating circumstances give rise to exceptions. Language is nothing if not flexible, and we find expressions such as *young John* used to discriminate between two people named John. We also find adjectives applied to emphasize some quality of the object referred to, such as *the wicked Borgias* or *the brilliant Professor Einstein*.

Names may be coined or drawn from the stock of names that the language provides; but once a proper name is coined, it cannot be pluralized or preceded by *the* or any adjective (except for cases like those cited above), and it will be used to refer uniquely, for these rules are among the many rules already in the grammar, and speakers know they apply to all proper names, even new ones.

Phrase and Sentence Meaning

"Then you should say what you mean," the March Hare went on.

"I do," Alice hastily replied, "at least—I mean what I say—that's the same thing, you know."

"Not the same thing a bit!" said the Hatter. "You might just as well say that 'I see what I eat' is the same thing as 'I eat what I see!'"

"You might just as well say," added the March Hare, "that 'I like what I get' is the same thing as 'I get what I like!'"

"You might just as well say," added the Dormouse . . . "that 'I breathe when I sleep' is the same thing as 'I sleep when I breathe!'"

"It is the same thing with you," said the Hatter.

Lewis Carroll, *Alice's Adventures in Wonderland*

Words and morphemes are the smallest meaningful units in language. For the most part, however, we communicate in phrases and sentences, which also have meaning. The meaning of a phrase or sentence depends on both the meaning of its words

and how these words are structurally combined. (Idioms are exceptional and will be discussed later.) Some of the semantic knowledge we have about words can be applied to sentences. Words are synonyms; sentences are paraphrases. Words may be homonyms; sentences may be ambiguous. Words have opposites; sentences can be negated. Words are used for naming purposes; sentences can be used that way too. Both words and sentences can be used to refer to, or point out, objects; and both may have some further meaning beyond this referring capability, as we shall see in the following section.

Sense and Reference

You mentioned your name as if I should recognize it, but beyond the obvious facts that you are a bachelor, a solicitor, a Freemason, and an asthmatic, I know nothing whatever about you.

Sir Arthur Conan Doyle, "The Norwood Builder," *The Memoirs of Sherlock Holmes*

Take care of the sense, and the sounds will take care of themselves.

Lewis Carroll, *Alice's Adventures in Wonderland*

We hinted earlier that the name *Humpty Dumpty* not only referred to a fictional object, but had some further meaning, something like "a good round shape." Do proper names have a meaning over and above referring to objects? Certainly, the name *Sue* has the semantic property "female," as evinced by the humor in "A Boy Named Sue," a song sung by Johnny Cash. *The Pacific Ocean* has the semantic properties of *ocean*, and even such names as *Fido* and *Bossie* are associated with dogs and cows, respectively.

Words other than proper names both have a meaning and can be used to refer to objects, and so can larger units such as phrases and sentences. The German philosopher Gottlob Frege proposed that the meaning of an expression be called *sense* (*Sinn*), and if the expression refers to something, it has *reference* (*Bedeutung*).

Noun Phrases normally have sense and can be used to refer. Thus the noun phrase

The man who is my father

refers to a certain individual and has a certain sense or meaning that is different from that of

The man who married my mother

although both expressions may have the same referent.

Phrases may, however, have sense but no reference. If not, we would be unable to understand sentences like these:

The present king of France is bald.
By the year 3000, our descendants will have left Earth.

Speakers of English can understand these sentences, even though France now has no king, and our descendants of a millennium from now do not exist.

Combining Words into Sentences

... I placed all my words with their interpretations in alphabetical order. And thus in a few days, by the help of a very faithful memory, I got some insight into their language.

Jonathan Swift, *Gulliver's Travels*

Although it is widely believed that learning a language is merely learning the words of that language and what they mean—a myth apparently accepted by Gulliver—there is more to it than that, as you know if you have ever tried to learn a foreign language. We comprehend sentences because we know the meaning of individual words, and we know rules for combining their meanings.

We know the meanings of *red* and *balloon*. The semantic rule to interpret the combination *red balloon* adds the property “redness” to the properties of *balloon*. The phrase *the red balloon*, because of the presence of the definite article *the*, means “a particular instance of redness and balloonnness.” A semantic rule for the interpretation of *the* accounts for this fact.

The phrase *large balloon* would be interpreted by a different semantic rule, because part of the meaning of *large* is that it is a relative concept. *Large balloon* means “large for a balloon.” What is large for a balloon may be small for a house and gargantuan for a cockroach; yet we correctly comprehend the meanings of *large balloon*, *large house*, and *large cockroach*.

There are many more rules involved in the semantics of noun phrases. Because noun phrases may contain prepositional phrases, semantic rules are needed for such expressions as *The house with the white picket fence*. We have seen how the rules account for *the house*, and *the white picket fence*. The semantic rule for prepositions indicates that two objects stand in a relationship determined by the meaning of the particular preposition. For *with*, that relationship is “accompanies” or “is part of.” A preposition like *on* means a certain spatial relationship, and so on for other prepositions.

The syntactic structure of a phrase is important to its meaning. *The dog on the bed* has a different meaning than *the bed on the dog*; *red brick* is different than *brick red*.

Meanings build on meanings. Thus the meaning of *on* combines the meanings of the noun phrases on either side of it. In turn, the noun phrases may be the combinations of meanings of articles, adjectives, nouns, prepositional phrases, and even sentences.

Thematic Relations

B.C.

Johnny Hart



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In the chapter on syntax, we observed that verbs are subcategorized for zero, one, or two "objects," and that these objects have a "logical relation" to the verb. *Sleep* was an example of a zero-object or intransitive verb; *find* was subcategorized for one object, and *put* for two.

A verb is related in various ways to the constituents in a sentence. The relations depend on the meaning of the particular verb. For example the NP *the boy* in *the boy found a red brick* is called the **agent** or "doer" of the action of finding. The NP *a red brick* is the **theme** (sometimes called **patient**) or "recipient" of the action. (The boldfaced words are technical terms of semantic theory.) Part of the meaning of *find* is that its subject is an agent and its logical object is a theme. That fact is reflected in the entry for *find* in the lexicon.

The noun phrases that follow the verb *put* have the relation of theme and location. In the verb phrase *put the red brick on the wall*, *the red brick* is the theme and *on the wall* is the location. The entire verb phrase is interpreted to mean that the theme of *put* changes its position to the location. The location, itself a prepositional phrase, will have its own meaning, which is combined with the meaning of *put* and the meaning of *the red brick*. *Put*'s subject is also an agent, so that in *The boy put the red brick on the wall*, "the boy" performs the action. Semantic rules do all this work, revealing speaker knowledge about the meaning of such sentences.

The semantic relationships that we have called *theme*, *agent*, and *location* are among the **thematic relations** or **θ -roles** of the verb. Other thematic relations are **goal**, where the action is directed, **source**, where the action originated, and **instrument**, an object used to accomplish the action. Consider the following example:

The boy carried the red brick from the wall to the wagon.

The boy is the agent; *the red brick* is the theme; *the wall* is the source; *the wagon* is the goal. In

The boy broke a window with the red brick.

The boy is again the agent, *a window* is the theme, and *the red brick* is the instrument. These examples show that the same noun phrase (*the red brick*) can function in a different thematic role depending on the sentence.

The lexical entries for *find* and *put* would now look something like this:

find, V, ___ NP, (Agent, Theme)
 put, V, ___ NP PP, (Agent, Theme, Location)

The thematic relations are contained in parentheses. The first one states that the logical subject is an agent. The remaining thematic relations belong to the constituents for which the verb is subcategorized. The logical object of both *find* and *put* will be a theme. The Prepositional Phrase for which *put* subcategorizes will be a location.

Our knowledge of verbs includes their syntactic category, how they are subcategorized, and the thematic relations that their NP subject and object(s) have, and this knowledge is explicitly represented in the lexicon.

Thematic relations are the same in sentences that are paraphrases. In both these sentences

The dog bit the man.
 The man was bitten by the dog.

the dog is the agent and *the man* is the theme.

Thematic relations may remain the same in sentences that are *not* paraphrases, as in the following instances:

The boy opened the door with the key.
 The key opened the door.
 The door opened.

In all three of these sentences, *the door* is the theme, the thing that gets opened. In the first two sentences, *the key*, despite its different structural role, retains the thematic role of instrument.

In many languages thematic roles are reflected in the *case* assumed by the noun. The *case* or *grammatical case* of a noun is the particular morphological shape that it takes. English nouns do not have extensive case, but the possessive form of a noun, as in *the boy's red brick*, is called the genitive or possessive case.

In other languages such as Finnish, the noun assumes a morphological shape according to its thematic role in the sentence. For example, in Finnish *koulu-* is the root meaning "school," and *-sta* is a case ending that means "directional source." Thus *koulusta* means "from the school." Similarly, *kouluun* (*koulu* + *un*) means "to the school."

Some of the information carried by grammatical case in languages like Finnish is borne by prepositions in English. Thus *from* and *to* often indicate the thematic relations of Source and Goal. Instrument is marked by *with*, Location by prepositions such as *on* and *in*, and Agent by *by* in passive sentences. The role of Theme is generally unaccompanied by a preposition, as is Agent when it is the structural subject of the sentence. What we are calling thematic relations or roles in this section has sometimes been studied as *case theory*.

Irrespective of how we label the semantic relations that exist between verbs and noun phrases, they are a part of every speaker's linguistic competence and account for much of the meaning of language.

The "Truth" of Sentences

... Having Occasion to talk of Lying and false Representation, it was with much Difficulty that he comprehended what I meant. ... For he argued thus: That the Use of Speech was to make us understand one another and to receive Information of Facts; now if any one said the Thing which was not, these Ends were defeated; because I cannot properly be said to understand him. ... And these were all the Notions he had concerning that Faculty of Lying, so perfectly well understood, and so universally practiced among human Creatures.

Jonathan Swift, *Gulliver's Travels*

Some philosophers and linguists would say that the meaning of a sentence is the set of conditions that determine the truth of the sentence. *The boy found a red brick* is true just in case *someone aptly described as "the boy" had a "finding relationship" with something aptly described as "a red brick."* The meaning of the sentence would be this italicized set of conditions, or something similar to it.

Part of the meaning of a sentence is certainly knowledge of its "truth conditions." Those truth conditions would contain much of the information about meaning discussed in the previous section. In the world as we know it, the sentence

The Declaration of Independence was signed in 1776.

is true, and the sentence

The Declaration of Independence was signed in 1976.

is false. We know the meaning of both sentences equally well, and knowing their meaning means knowing their truth conditions. We compare their truth conditions with "the real world" or historical fact, and can thus say which one is true and which one false.

You can, however, understand well-formed sentences of your language without knowing their truth value. Knowing the truth conditions is not the same as knowing the actual facts. Rather, the truth conditions, the meaning, permit you to examine the world and learn the actual facts. If you did not know the linguistic meaning—if the sentence were in an unknown language—you could never deter-

mine its truth, even if you had memorized an encyclopedia. You may not know the truth of

The Mecklenburg Charter was signed in 1770.

but if you know its meaning you know *in principle* how to discover its truth, even if you do not have the means to actually do so. For example, consider the sentence

The moon is made of green cheese.

We knew before space travel that going to the moon would test the truth of the sentence.

Now consider this sentence:

Rufus believes that the Declaration of Independence was signed in 1976.

This sentence is true if some individual named Rufus does indeed believe the statement, and it is false if he does not. Those are its truth conditions.

It does not matter that a subpart of the sentence is false. An entire sentence may be true even if one or more of its parts are false, and vice versa. Truth is determined by the semantic rules, which permit you to combine the subparts of a sentence and still know under what conditions the sentence is true or false.

Knowing a language includes knowing the semantic rules for combining meanings and the conditions under which sentences are true or false.

Discourse Meaning

Though this be madness, yet there is method in't.

William Shakespeare, *Hamlet*

Linguistic knowledge accounts for speakers' ability to combine phonemes into morphemes, morphemes into words, and words into sentences. Knowing a language also permits combining sentences together to express complex thoughts and ideas. This linguistic ability makes language an excellent medium for communication. These larger linguistic units are called **discourse**.

The study of discourse, or **discourse analysis**, involves many aspects of *linguistic performance* and of "sociolinguistics" (taken up in the next chapter), as well as linguistic competence. Discourse analysis involves questions of style, appropriateness, cohesiveness, rhetorical force, topic/subtopic structure, differences between written and spoken discourse, and so on.

Maxims of Conversation

With a little hoard of maxims preaching down a daughter's heart.

Tennyson, "Locksley Hall"

Speakers recognize when a series of sentences "hangs together" or when it is "disjointed." The discourse below, which gave rise to Polonius' remark quoted at the head of this section, does not seem quite right—it is not **coherent**.

POLONIUS: What do you read, my lord?

HAMLET: Words, words, words.

POLONIUS: What is the matter, my lord?

HAMLET: Between who?

POLONIUS: I mean, the matter that you read, my lord.

HAMLET: Slanders, sir: for the satirical rogue says here that old men have grey beards, that their faces are wrinkled, their eyes purging thick amber and plum-tree gum, and that they have a plentiful lack of wit, together with most weak hams: all which, sir, though I most powerfully and potently believe, yet I hold it not honesty to have it thus set down; for yourself, sir, should grow old as I am, if like a crab you could go backward.²

Hamlet, who is feigning insanity, refuses to answer Polonius' questions "in good faith." He has violated certain conversational conventions or **maxims of conversation**.³ One such maxim, the **cooperative principle**, states that a speaker's contribution to the discourse should be as informative as is required—neither more nor less. Hamlet has violated this maxim in both ways. In answering "Words, words, words" to the question of what is being read, he is providing too little information. His final remark goes to the other extreme in providing more information than required.

He also violates the **maxim of relevance**, when he "misinterprets" the question about the reading matter as a matter between two individuals.

The "run on" nature of Hamlet's final remark is another source of incoherence. This effect is increased in the final sentence by the somewhat bizarre choice of phrasing to compare growing younger with walking backward.

Conversational conventions such as the requirement to "be relevant" allow the various sentence meanings to be sensibly connected into discourse meaning, much as rules of sentence grammar allow word meanings to be sensibly (and grammatically) connected into sentence meaning.

Most of the rules of grammar we have studied are for phrases and sentences. Such rules interact heavily with nonlinguistic knowledge in discourse.

The Articles *the* and *a*

There are discourse rules that apply regularly, such as those that determine the occurrence of the articles *the* and *a*. The article *the* is used to indicate that the referent of a noun phrase is agreed upon by speaker and listener. If someone says

I saw the boy.

²Hamlet, Act II, Scene ii.

³These maxims were first discussed by H. Paul Grice in the William James Lectures, delivered at Harvard University in 1967.

My uncle has been dieting strenuously, understood from previous discourse, in this way:

g strenuously, and she has lost a good

nt "My mother has been dieting .ht." Rules of discourse not only provide the entire second sentence

Verb phrases are not specifically about, "you know" is every- of the reason is that rules of gram- tual knowledge to fill in missing

discourse, and the importance of ly of how context influences the matics.

or semantics. The term *pragmat-* of signs. Linguistic signs are one . Within semiotics, *syntax* means what signs mean or signify," and is and their users."

language in contexts, so it is a part nce.



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When two Discourses their *antec* used instead a pronoun ples of the

Perfo many of th as a well-f perfectly a

You can do things with speech. You can make promises, lay bets, issue warnings, christen boats, place names in nomination, offer congratulations, or swear testimony. By saying *I warn you that there is a sheepdog in the closet*, you not only say something, you *warn* someone. Verbs like *bet*, *promise*, *warn*, and so on are **performative verbs**. Using them in a sentence does something extra over and above the statement.

There are hundreds of performative verbs in every language. The following sentences illustrate their usage:

- (2) *I bet* you five dollars the Yankees win.
I challenge you to a match.
I dare you to step over this line.
I fine you \$100 for possession of oregano.
I move that we adjourn.
I nominate Batman for mayor of Gotham City.
I promise to improve.
I resign!

In all these sentences the speaker is the subject (that is, they are in "first person") who by uttering the sentence is accomplishing some additional action, such as daring, nominating, or resigning. Also, all these sentences are affirmative, declarative, and in the present tense. They are typical **performative sentences**.

An informal test to see whether a sentence contains a performative verb is to begin it with the words *I hereby*. . . . Only performance sentences sound right when begun this way. Compare *I hereby apologize to you* with the somewhat strange *I hereby know you*. The first is generally taken as an act of apologizing. In all the examples in (2), insertion of *hereby* would be acceptable. As the cartoon at the beginning of this section shows, Snoopy is aware that using *hereby* will ensure that his statement is taken as an act of despising.

Actually, every utterance is some kind of speech act. Even when there is no explicit performative verb, as in *It is raining*, we recognize an implicit performance of *stating*. On the other hand, *Is it raining?* is a performance of *questioning*, just as *Leave!* is a performance of *ordering*. In all these instances we could use, if we chose, an actual performative verb: *I state that it is raining*; *I ask if it is raining*; *I order you to leave*.

The study of how we do things with sentences is the study of **speech acts**. In studying speech acts, we are acutely aware of the importance of the *context of the utterance*. In some circumstances *There is a sheepdog in the closet* is a warning, but the same sentence may be a promise or even a mere statement of fact, depending on circumstances. We call this purpose—a warning, a promise, a threat, or whatever—the **illocutionary force** of a speech act.

Speech act theory aims to tell us when we appear to ask questions but are really giving orders, or when we say one thing with special (sarcastic) intonation and mean the opposite. Thus, at a dinner table, the question *Can you pass the salt?* means the order *Pass the salt!* It is not a request for information, and *yes* is an inappropriate response.

Because the illocutionary force of a speech act depends on the context of the utterance, speech act theory is a part of pragmatics.

Presuppositions

Speakers often make implicit assumptions about the real world, and the sense of an utterance may depend on those assumptions, which some linguists term **presuppositions**.⁵ Consider the following sentences:

- (3) (a) Have you stopped hugging your sheepdog?
- (b) Who bought the badminton set?
- (c) John doesn't write poems in the bathroom.
- (d) The present King of France is bald.
- (e) Would you like another beer?

In sentence 3a the speaker has *presupposed* that the listener has at some past time hugged his sheepdog. In 3b there is the presupposition that someone has already bought a badminton set, and in 3c it is assumed that John writes poetry.

We have already run across the somewhat odd 3d, which we decided we could understand even though France does not currently have a king. The use of the definite article *the* usually presupposes an existing referent. When presuppositions are inconsistent with the actual state of the world, the utterance is felt to be strange, unless a fictional setting is agreed upon by the conversants, as in a play, for example.

Sentence 3e presupposes or implies that you have already had at least one beer. Part of the meaning of the word *another* includes this presupposition. The Hatter in *Alice's Adventures in Wonderland* would not agree with us.

"Take some more tea," the March Hare said to Alice, very earnestly.

"I've had nothing yet," Alice replied in an offended tone, "so I can't take more."

"You mean you can't take *less*," said the Hatter: "It's very easy to take *more* than nothing."

The humor in this passage comes from the fact that knowing English includes knowing the meaning of the word *more*, which in this usage presupposes some earlier amount.

These phenomena may also be described as **implication** or **entailment**. Part of the meaning of *more* implies or entails that there has already been something. The definite article *the*, in these terms, entails or implies the existence of the referent within the current context.

Presuppositions can be used to communicate information indirectly. If someone says *My brother is rich*, we assume that person has a brother, even though that fact is not explicitly stated. Much of the information that is exchanged in a conver-

⁵Other linguists call the same phenomenon **implication**. *Presupposition* is used here because it seems to be more widely accepted.

sation or discourse is of this kind. Often, after a conversation has ended, we will realize that some fact was imparted to us that was not specifically mentioned. That fact is often a presupposition.

The use of language in a courtroom is restricted so that presuppositions cannot influence the court or jury. The famous type of question *Have you stopped beating your wife?* is disallowed in court, because accepting the validity of the question means accepting its presuppositions; the question imparts "information" in a way that is difficult to cross-examine and even difficult to detect. Presuppositions are so much a part of natural discourse that they become second nature and we do not think of them, any more than we are directly aware of the many other rules and maxims that govern discourse.

Deixis

DENNIS THE MENACE

Hank Ketcham



"Dennis the Menace"® used by permission of Hank Ketcham and © by North America Syndicate

In all languages there are many words and expressions whose references rely entirely on the circumstances of the utterance and can only be understood in light of these circumstances. This aspect of pragmatics is called deixis. Pronouns are often deictic.

I my mine you your yours

These pronouns require identification of speaker and listener for interpretation. Proper names as well as expressions such as

this person
that man
these women
those men

are deictic, for they require pragmatic information in order for the listener to make a "referential connection" and understand what is meant. The above examples illustrate **person deixis**. They also show that the use of **demonstrative articles** like *this* and *that* is deictic.

There is also **time deixis** and **place deixis**. The following examples are all deictic expressions of time:

now	then	tomorrow
this time	that time	seven days ago
two weeks from now	last week	next April

In order to understand what specific times such expressions refer to, we need to know when the utterance was said. Clearly, *next week* has a different reference when uttered today than a month from today. If you found an advertising leaflet on the street that said "BIG SALE NEXT WEEK" with no date given, you would not know whether the sale had already taken place.

Expressions of place deixis require contextual information about the place of the utterance, as shown by the following examples:

here	there	this place
that place	this ranch	those towers over there
this city	these parks	yonder mountains

The "Dennis the Menace" cartoon at the beginning of this section indicates what can happen if the deictic conventions are not observed.

Directional terms such as

before/behind	left/right	front/back
---------------	------------	------------

are deictic insofar as you need to know which way the speaker is facing. In Japanese the verb *kuru* "come" can only be used for motion toward the place of utterance. A Japanese speaker cannot call up a friend and ask

May I *kuru* to your house?

as you might, in English, ask "May I come to your house?"

The correct verb is *iku*, "go," which indicates motion away from the place of utterance. These verbs thus have a deictic aspect to their meaning.

Deixis abounds in language use and marks one of the boundaries of semantics and pragmatics. The pronoun *I* certainly has a meaning independent of context—its semantic meaning, which is "the speaker"; but context is necessary to know who the speaker is, hence what "I" refers to.

When Rules Are Broken

*For all a rhetorician's rules
Teach nothing but to name his tools.*
Samuel Butler, *Hudibras*

The rules of language are not laws of nature. Only by a "miracle" can the laws of nature be broken, but the rules of language are broken every day by everybody. This lawlessness is not human perversity, but rather another way in which language is put to use.

There are three kinds of rule violation that we will discuss: **anomaly**, a violation of semantic rules to create "nonsense"; **metaphor**, or nonliteral meaning; and **idioms**, in which the meaning of an expression may be unrelated to the meaning of its parts.

Anomaly: No Sense and Nonsense

Don't tell me of a man's being able to talk sense; everyone can talk sense. Can he talk nonsense?
William Pitt

If in a conversation someone said to you

My brother is an only child.

you might think that he was making a joke or that he did not know the meaning of the words he was using. You would know that the sentence was strange, or **anomalous**; yet it is certainly an English sentence. It conforms to all the grammatical rules of the language. It is strange because it represents a contradiction; the meaning of *brother* includes the fact that the individual referred to is a male human who has at least one sibling.

The sentence

That bachelor is pregnant.

is anomalous for similar reasons; the word *bachelor* contains the semantic property "male," whereas the word "pregnant" has the semantic property "female." Through a semantic redundancy rule *pregnant* will also be marked [-male]. The anomaly arises from trying to equate something that is [+male] with something that is [-male].

The semantic properties of words determine what other words they can be combined with. One sentence that is used by linguists to illustrate this fact is

Colorless green ideas sleep furiously.⁶

The sentence seems to obey all the syntactic rules of English. The subject is *colorless green ideas* and the predicate is *sleep furiously*. It has the same syntactic structure as the sentence

Dark green leaves rustle furiously.

but there is obviously something wrong *semantically* with the sentence. The meaning of *colorless* includes the semantic property "without color," but it is combined with the adjective *green*, which has the property "green in color." How can something be both "without color" and "green in color" simultaneously? Other such semantic violations also occur in the sentence.

There are other sentences that sound like English sentences but make no sense at all because they include words that have no meaning: they are **uninterpretable**. One can only interpret them if one dreams up some meaning for each "no-sense" word. Lewis Carroll's "Jabberwocky" is probably the most famous poem in which most of the content words have no meaning—they do not exist in the lexicon of the grammar. Still, all the sentences "sound" as if they should be or could be English sentences:

'Twas brillig, and the slithy toves
Did gyre and gimble in the wabe;
All mimsy were the borogoves,
And the mome raths outgrabe.

He took his vorpal sword in hand;
Long time the manxome foe he sought—
So rested he by the Tumtum tree,
And stood awhile in thought.

Without knowing what *vorpal* means, you nevertheless know that

He took his vorpal sword in hand.

means the same thing as

He took his sword, which was vorpal, in hand.
It was in his hand that he took his vorpal sword.

Knowing the language, and assuming that *vorpal* means the same thing in the three sentences (because the same sounds are used), you can decide that the "truth value" of the three sentences is identical. In other words, you are able to decide that two things mean the same thing even though you do not know what either one

⁶Noam Chomsky, 1957. *Syntactic Structures*. Mouton. The Hague.

means. You decide by assuming that the semantic properties of *vorpals* are the same whenever it is used.

We now see why Alice commented, when she had read "Jabberwocky":

"It seems very pretty, but it's *rather* hard to understand!" (You see she didn't like to confess, even to herself, that she couldn't make it out at all.) "Somehow it seems to fill my head with ideas—only I don't exactly know what they are! However, *somebody* killed *something*; that's clear, at any rate—"

The semantic properties of words show up in other ways in sentence construction. For example, if the meaning of a word includes the semantic property "human" in English, we can replace it by one sort of pronoun but not another. This semantic feature determines that we call a boy *he* and a table *it*, and not vice versa.

According to Mark Twain, Eve had such knowledge in her grammar, for she writes in her diary:

If this reptile is a man, it ain't an *it*, is it? That wouldn't be grammatical, would it? I think it would be *he*. In that case one would parse it thus: nominative *he*; dative, *him*; possessive, *his'n*.

The linguist Samuel Levin has shown that in poetry semantic violations may form strange but interesting aesthetic images. He cites Dylan Thomas's phrase *a grief ago* as an example. *Ago* is ordinarily used with words specified by some temporal semantic feature:

a week ago		*a table ago
an hour ago	but not	*a dream ago
a month ago		*a mother ago
a century ago		

When Thomas used the word *grief* with *ago* he was adding a durational feature to *grief* for poetic effect.

In the poetry of E. E. Cummings there are phrases like

the six subjunctive crumbs twitch
a man . . . wearing a round jeer for a hat
children building this rainman out of snow.

Though all of these phrases violate some semantic rules, we can understand them; it is the breaking of the rules that creates the imagery desired. The ability to understand these phrases and at the same time recognize their anomalous or deviant nature shows knowledge of the semantic system and semantic properties of the language.

Metaphor

Our doubts are traitors.

Shakespeare

Walls have ears.

Cervantes

*The night has a thousand eyes
and the day but one.*

Frances William Bourdillon

Sometimes the breaking of semantic rules can be used to convey a particular idea. *Walls have ears* is certainly anomalous, but it can be interpreted as meaning "you can be overheard even when you think nobody is listening." In some sense the sentence is ambiguous, but the literal meaning is so unlikely that listeners stretch their imagination for another interpretation. That "stretching" is based on semantic properties that are inferred or that provide some kind of resemblance. Such non-literal interpretations of sentences are called **metaphor**.

The literal meaning of a sentence such as

My new car is a lemon.

is anomalous. You could, if driven to the wall (another metaphor), provide some literal interpretation that is plausible if given sufficient context. For example, the *new car* may be a miniature toy carved out of a piece of citrus fruit. The more common meaning, however, would be metaphorical and interpreted as referring to a newly purchased automobile that breaks down and requires constant repairs. The imagination stretching in this case may relate to the semantic property "tastes sour" that *lemon* possesses.

Metaphors are not necessarily anomalous when taken literally. The literal meaning of the sentence

Dr. Jekyll is a butcher.

is that a physician named Jekyll also works as a retailer of meats or a slaughterer of animals used for food. The metaphorical meaning is that the doctor named Jekyll is harmful, possibly murderous, and apt to operate unnecessarily.

Similarly, the sentence

John is a snake in the grass.

can be interpreted literally to refer to a pet snake on the lawn named John. Metaphorically the sentence has nothing to do with a scaly, limbless reptile.

To interpret metaphors we need to understand both the literal meaning and facts about the world. To understand the metaphor

Time is money.

it is necessary to know that in our society we are often paid according to the number of hours or days worked. To recognize that the sentence

Jack is a pussycat.

has a different meaning than

Jack is a tiger.

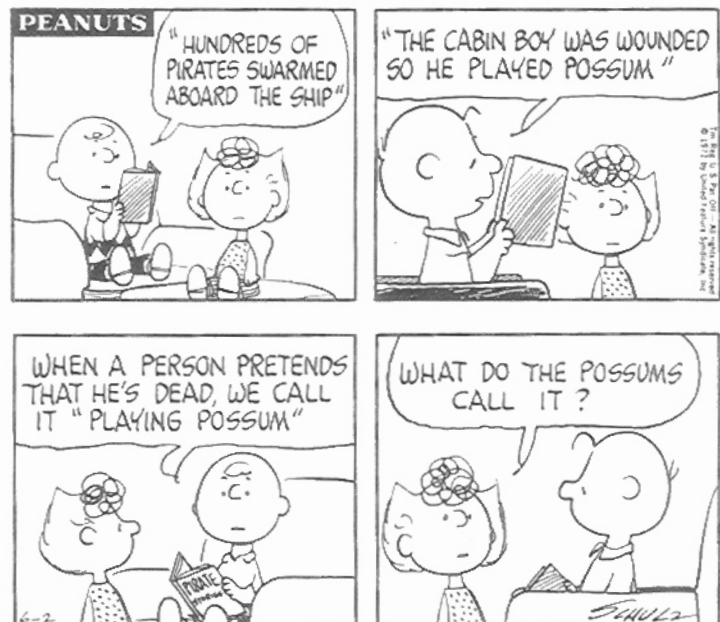
requires knowledge that the metaphorical meaning of each sentence does *not* depend on the semantic property "feline." Rather, other semantic properties of these two words are referred to.

Metaphorical use of language is language creativity at its highest. Nevertheless, the basis of metaphorical use is the ordinary linguistic knowledge about words, their semantic properties, and their combining powers that all speakers possess.

Idioms

PEANUTS

Charles M. Schulz



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Knowing a language includes knowing the morphemes, simple words, compound words, and their meanings. In addition it means knowing fixed phrases, consisting of more than one word, with meanings that cannot be inferred from the meanings of the individual words. The usual semantic rules for combining meanings do not apply. Such expressions are called **idioms**. All languages contain many idiomatic phrases, as in these English examples:

sell down the river
 haul over the coals
 eat my hat
 let their hair down
 put his foot in his mouth
 throw her weight around
 snap out of it
 cut it out
 hit it off
 get it off
 bite your tongue
 give a piece of your mind

Idioms are similar in structure to ordinary phrases except that they tend to be frozen in form and do not readily enter into other combinations or allow the word order to change. Thus,

(4) She put her foot in her mouth.

has the same structure as

(5) She put her bracelet in her drawer.

but whereas

The drawer in which she put her bracelet was hers.
 Her bracelet was put in her drawer.

are sentences related to sentence 5.

The mouth in which she put her foot was hers.
 Her foot was put in her mouth.

do not have the idiomatic sense of sentence 4.

On the other hand, the words of some idioms can be moved without affecting the idiomatic sense:

The FBI kept tabs on radicals.
 Tabs were kept on radicals by the FBI.
 Radicals were kept tabs on by the FBI.

Idioms can break the rules on combining semantic properties. The object of *eat* must usually be something with the semantic property "edible," but in

he ate his hat
 eat your heart out

this restriction is violated.

Idioms, grammatically as well as semantically, have special characteristics. They must be entered into the lexicon or mental dictionary as single "items," with their meaning specified, and speakers must learn the special restrictions on their use in sentences.

Many idioms may have originated as metaphorical expressions that "took hold" in the language and became frozen in their form and meaning.

Summary

Knowing a language is knowing how to produce and understand sentences with particular meanings. The study of linguistic meaning, called **semantics**, is concerned with the meaning of words, morphemes, phrases, and sentences.

The meanings of morphemes and words are defined in part by their **semantic properties** or **features**. Relationships between semantic properties, such as that "human" implies "animate," can be expressed through **redundancy rules**. Other relationships between words, such as that "open" implies "not closed," are expressed in **meaning postulates**.

When two words have the same sounds but different meanings, they are **homonyms** or **homophones** (for example, *bear* and *bare*). The use of homophones in a sentence may lead to **ambiguity**, which occurs when a single utterance has more than one meaning. Ambiguity may also occur because of the structure of the sentence. *Flying planes can be dangerous* is both structurally and lexically ambiguous. *Planes* can refer to special woodworking tools or airplanes. If the *airplane* meaning is intended, the sentence can be interpreted to mean "To fly planes can be dangerous" or "Planes that are flying can be dangerous." These two meanings result from the sentence structure.

Sentences with the same meaning are **paraphrases**. Sentences may be paraphrases of one another because they contain **synonyms** (different words that mean the same thing, such as *couch* and *sofa*) or because they differ structurally in ways that do not affect meaning (*They gave the boy help/They gave help to the boy*).

A word that has several meanings is **polysemous**. For example, the word *good* means "well-behaved" in *good child* and "sound" in *good investment*.

Two words that are "opposite" in meaning are **antonyms**. Antonyms have the same semantic properties except for the one that accounts for their oppositeness. There are antonymous pairs that are **complementary** (*alive/dead*), **gradable** (*hot/cold*), and **relational opposites** (*buy/sell*, *employer/employee*).

Proper names are special morphemes used to designate particular objects uniquely; that is, they are **definite**. Proper names cannot ordinarily be preceded by an article or an adjective, or be pluralized.

Words, phrases, and sentences have **sense** and can be used to refer. Frege showed that meaning is more than reference alone. Some meaningful expressions (for example, *the present King of France*) have sense but no reference.

Languages have rules for combining the meanings of words. For example, a *red balloon* is a balloon with the additional property of redness. Sentence meaning

is determined in part by the **thematic relations** of the noun phrases to the verb. These semantic relationships indicate who, to whom, toward what, from which, with what, and so on to make up sentence meaning.

The meaning of a sentence determines under what conditions the sentence is true or false. You can understand a sentence without knowing its "truth value," but you cannot determine the truth value without knowing the meaning.

Discourse consists of several sentences. Discourse analysis involves questions of style, appropriateness, cohesiveness, rhetorical force, topic/subtopic structure, differences between written and spoken discourse, and so on. Well-structured discourse follows certain rules and **maxims**, such as "be relevant," that make the discourse **coherent**. There are also grammatical rules that affect discourse, such as those which determine when to use the definite article *the*, when to use *pronouns*, and when to draw "missing information" from previous parts of the discourse.

The general study of how context affects linguistic interpretation is **pragmatics**. Pragmatics includes **speech acts**, **presuppositions**, and **deixis**. Speech act theory is the study of what an utterance does beyond just saying something. The effect of what is done is called the **illocutionary force** of the utterance. For example, use of a **performative verb** like *bequeathe* may be an act of bequeathing, which may even have legal status.

Presuppositions are implicit assumptions that accompany certain utterances. *Have you stopped beating your wife?* carries with it the presupposition that at one time you beat your wife.

Deictic terms such as *you*, *there*, *now* require knowledge of the circumstances (the person, place, or time) of the utterance to be interpreted referentially.

Pragmatics itself is part of the linguistic theory of performance.

Sentences are **anomalous** when they deviate from certain semantic rules. *The six subjunctive crumbs twitched* and *The stone ran* are anomalous. Other sentences are **uninterpretable** because they contain "words" without meaning, such as *An orkish sluck blecked nokishly*.

Many sentences have both a literal and nonliteral or **metaphorical** interpretation. *He's out in left field* may be a literal description of a baseball player or a metaphorical description of someone mentally deranged.

Idioms are phrases whose meaning is *not* the combination of the meanings of the individual words (for example, *put her foot in her mouth*). Idioms often violate co-occurrence restrictions of semantic properties.

Everything you know about linguistic meaning is included in the semantic system of your grammar, including how to interpret sentences within context.

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