Semantics: The Meanings of Language

Language without meaning is meaningless.

R. 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:

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“There’s glory for you!”

“I don’t know what you mean by ‘glory,’” Alice said.

Humphry Dumpty smiled contemptuously. “Of course you don’t,—all I tell
you. I mean ‘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,” Humphry 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 Humphry 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...”

“That’s a stupid name enough!” Humphry Dumpty interrupted impatiently. “What does it
mean?”

“Aunt a name mean something?” Alice asked doubtfully.

“Of course it must,” Humphry 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 per-
mits 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 wait 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.
Suppose someone said:

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

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 Twackelhurt.

Your knowledge of the meaning of assassin tells you that it was not an animal that tried to kill the man and that Twackelhurt 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

<table>
<thead>
<tr>
<th>tigeress</th>
<th>hen</th>
<th>actress</th>
<th>maiden</th>
</tr>
</thead>
<tbody>
<tr>
<td>doe</td>
<td>mare</td>
<td>debutante</td>
<td>widow</td>
</tr>
<tr>
<td>ewe</td>
<td>vixen</td>
<td>girl</td>
<td>woman</td>
</tr>
</tbody>
</table>

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 |

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 *italics* 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 "fertility." 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. "Fe-

male" 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.

darken cause to become dark
kill cause to die
uglify cause to become ugly

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

the following table:

<table>
<thead>
<tr>
<th>Semantic Property</th>
<th>Verbs Having It</th>
</tr>
</thead>
<tbody>
<tr>
<td>motion</td>
<td>bring, pull, plot, walk, run. . .</td>
</tr>
<tr>
<td>contact</td>
<td>hit, kick, touch. . .</td>
</tr>
<tr>
<td>creation</td>
<td>build, imagine, make. . .</td>
</tr>
<tr>
<td>sense</td>
<td>see, hear, feel. . .</td>
</tr>
</tbody>
</table>

For the most part 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 walk from plood by a property such as "purposeful."

The form 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 in 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 seman-
tic categories may imply others. For example, the property "human" implies "an-
imate."

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:

<table>
<thead>
<tr>
<th>woman</th>
<th>father</th>
<th>girl</th>
<th>mare</th>
<th>walk</th>
</tr>
</thead>
<tbody>
<tr>
<td>+female</td>
<td>+male</td>
<td>+female</td>
<td>+female</td>
<td>+motion</td>
</tr>
<tr>
<td>+human</td>
<td>+human</td>
<td>+human</td>
<td>+human</td>
<td>+slow</td>
</tr>
<tr>
<td>+young</td>
<td>+parent</td>
<td>+young</td>
<td>-young</td>
<td>+principle</td>
</tr>
<tr>
<td>. . .</td>
<td>. . .</td>
<td>. . .</td>
<td>. . .</td>
<td>. . .</td>
</tr>
</tbody>
</table>
Intersectional classes share the same features, such as the class of human females, which are marked "+sex" 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:

\[ [+human] \rightarrow [+abstract] \]
\[ [+slow] \rightarrow [+fast] \]

**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 \( [-\text{concrete}] \).) Similarly,

\( (x) \text{ open} \rightarrow \neg (x) \text{ closed} \)

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
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 unintended word, reveal semantic classes. Consider the following word-substitution errors that some speakers have actually produced:

<table>
<thead>
<tr>
<th>Intended Utterance</th>
<th>Actual Utterance (Error)</th>
</tr>
</thead>
<tbody>
<tr>
<td>bridge of the nose</td>
<td>bridge of the neck</td>
</tr>
<tr>
<td>when my gums bleed</td>
<td>when my tonguee bleed</td>
</tr>
<tr>
<td>he came too late</td>
<td>he came too early</td>
</tr>
<tr>
<td>Mary was young</td>
<td>Mary was early</td>
</tr>
<tr>
<td>the lady with the</td>
<td>the lady with the</td>
</tr>
<tr>
<td>Duchess</td>
<td>Volkswagen</td>
</tr>
<tr>
<td>that's a horse of</td>
<td>that's a horse of</td>
</tr>
<tr>
<td>another color</td>
<td>another color</td>
</tr>
<tr>
<td>he has to pay her</td>
<td>he has to pay her</td>
</tr>
<tr>
<td>alimony</td>
<td>rent</td>
</tr>
</tbody>
</table>

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." Duchess 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 hydrogens 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 Hatter, turning to Alice and looking at her. "It is a long one, certainly," said Alice, looking with wonder at the Hatter's tail, "but why do you call it so?"

Lewis Carroll, *Alice's Adventures in Wonderland*

We said above that knowing a word means knowing its sound and meaning. Both are necessary, for the same sounds can sometimes mean different things. *Homo-
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 many acres under the law?"
"I know that!" Alice cried eagerly.
"You take some flowers..."
"Where do you pick the flowers?" 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 the 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 homonyms.
our 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.

Items 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:

```
  VP
     /\  VP
      /  \
     to screw in light bulb

  VP
     /\  NP
      /  \
     to screw in a light bulb
```

Situ 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 hat or a cap?
Does he sleep on a mattress, a bed or a mat, or a Cot?
The Aoud of Swat?
Can he wipe a letter concisely clear?
Without a speck or a smudge or smear or Bloom?
The Aoud of Swat?
Edward Lear, "The Aoud 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:
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 "manlike" qualities of the boy.

Offer a word with several meanings, called a polysemous word, will share one of its meanings with another word. Thus nature 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 score is the same as a bad score. 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 wears it hot.
Always warning 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 comparisons 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/give, 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
pairs. Pairs of words ending in -er and -er 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:
(x) gives (y,z) = (y) receives (x,z)
(x) teacher (y) = (y) pupil (x)

Comparative forms ofgradable 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 indistinguishable 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 adject-
ives, but big is in the semantic class involving size, whereas red is a color. On the
other hand, big and total 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 an-
tonyms. Consider:
(¬married) → (¬single) (¬single) → (¬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.”

In English there are a number of ways to form antonyms. You can add the
prefix un:
likely/unlikely able/unable fortunate/unfortunate
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or you can add non:

entity/conentity  conformist/nonconformist

or you can add as:

tolerant/intolerant  discreet/discreet  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 Liz. But everyone knew her as Nancy.

John Lennon and Paul McCartney, "Rocky Raccoon"?

TUMBLEWEEDS

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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 *forgiveness*, not to mention *brave* and *think*.

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

Dias Karis 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 that three boys, meaning three people named Bob, but they are special locations 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 a simple phrase a red house is a more specific description than simply a house; but what proper names refer to is already completely determined down, so modification by adjectives seems peculiar. Again, as in all these cases, extraneous 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 wizard 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 in 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, "or else—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 ask is the same thing as I ask 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 synonymous; 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.


Take care of the sense, and the sound 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 bold. 
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 balloonness." 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 meaning 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 roles 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 need 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

A.C. Johnny Hart

"STICKER PRICE"

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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 book in the boy found the red brick is called the agent or "doer" of the action or 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 0-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 entities 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 -si is a case ending that means "directional source." Thus koulasi means "from the school." Similarly, kouluaan (koulu + an) means "to the school."
min its truth, even if you had memorized an encyclopedia. You may not know the truth of

The Mecklenburg Charter was signed in 1776.

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 1776.

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 “social/linguistics” (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 heart of maxims preaching down a daughter’s heart.

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

POLO: What do you read, my lord?
HAMLET: Words, words, words.
POLO: What is the matter, my lord?
HAMLET: Between who?
POLO: I mean, the matter that you read, my lord.
HAMLET: Shakes, sir; for the sardonic 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 honestly 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.¹ 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 6.
³These maxims were first discussed by H. Paul Grice in the William James Lectures, delivered at Harvard University in 1967.
It is assumed that a certain boy is being discussed. No such assumption accompanies

I saw a boy.

which is more of a description of what was seen than a reference to a particular individual.

Often a discourse will begin with the use of indefinite articles, and once everyone agrees on the referents, definite articles start to appear. A short example illustrates this transition:

I saw a boy and a girl holding hands and kissing.

Oh, it sounds lovely.

Yes, the boy was quite tall and handsome, and he seemed to like the girl a lot.

This example also illustrates that the use of pronouns is often discourse-dependent. The use of he to refer to the boy in the final clause is necessary to avoid the stilted-sounding:

Yes, the boy was quite tall and handsome, and the boy seemed to like the girl a lot.

There are rules of discourse, which may be considered performance rules, that determine when a pronoun can be used in the place of a more complete expression.

Anaphora

When two expressions refer to the same thing, they are said to be coreferential. Discourses are filled with pronouns that are coreferential with other expressions, their antecedents. Rules of discourse determine when a pronoun can or should be used instead of a longer expression. The process of replacing a longer expression by a pronoun or another kind of "pro-form" is called anaphora. Here are three examples of the use of anaphoric expressions, or pro-forms:

I love Dina and Jack loves Dina too.

I love Dina and Jack loves her too. (Pronoun)

Emily hugged Cassidy and Zachary hugged Cassidy too.

Emily hugged Cassidy and Zachary did too. (Pro-verb phrase)

I am sick and my being sick makes me sad.

I am sick, which makes me sad. ("Pro-sentence")

Performance discourse conventions permit us to "violate" in regular ways many of the rules of grammar. For example, the rules of syntax would not generate as a well-formed sentence My uncle has, too, but in the following discourse it is perfectly acceptable:

First speaker: My aunt has been dieting strenuously.

Second speaker: My uncle has, too.
The second speaker is understood to mean "My uncle has been dis-
ously." The missing part of the verb phrase is understood from con-
ent sentences may be "filled in" this way:

First speaker: My aunt has been dieting strenuously, and she has
dealt with weight.
Second speaker: My mother has too.

The second speaker is understood to have meant "My mother has 1
strenuously, and she has lost a good deal of weight." Rules of discours
provide the missing parts of the verb phrase, but provide it with a sense
meaning.

Much discourse is "telicographic" in nature. Verb phrases are not
mentioned, entire clauses are left out, pronouns abound, "you know
where. People still understand people, and part of the reason is that rul
and rules of discourse combine with contextual knowledge to fill
gaps and make the discourse coherent.

Pragmatics

We have referred to the "context" of a sentence or discourse, and the im-
context in interpreting language. The general study of how context inf
way sentences convey information is called pragmatics.

Pragmatics is as complex a subject as syntax or semantics. The term
ome comes from the field of semiotics, or the study of signs. Linguistics is
kind of sign, which we have examined in this book. Within semiotics, sy
"the way signs are arranged." Semantics means: "what signs mean or sig
pragmatics means "the relationship between signs and their users."

Pragmatics has to do with people's use of language in contexts, so
of what we have been calling linguistic performance.

Speech Acts

Apparently, a cat had killed some birds. [a cat was smoking.]

*Some speakers would say the reply is ambiguous: it may or may not mean that the mother
The point is, it can be interpreted with the "missing" sentence in place.

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You can do things with speech. You can make promises, lay bets, issue warnings, change boats, place names in nomination, offer congratulations, or swear testimony. By saying I warn you that there is a sleeping dog in the closet, you are not only saying 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.
1 challenge you to a match.
1 dare you to step over this line.
1 fine you $50 for possession of marijuana.
1 move that we adjourn.
1 nominate Batman for mayor of Gotham City.
1 promise to improve.
1 request!

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 performative 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), mention of hereby would be unacceptable. As the context at the beginning of this section shows, Snoopy is aware that using hereby will ensure that his statement is taken as an act of desiring.

Actually, every utterance is some kind of speech act. Even when there is no explicit performative verb, as in I have no money, we recognize an implicit performance of saying. On the other hand, If it rains we perform a performance of questioning, just as Leave us is a performance of ordering. In all these instances we could ask, 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 sleeping dog 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 that purpose—a warning, a promise, a threat, or whatever—the documentary 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 (vacant) intention 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. 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 gravely.
"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-

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

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:

<table>
<thead>
<tr>
<th>now</th>
<th>then</th>
<th>tomorrow</th>
</tr>
</thead>
<tbody>
<tr>
<td>this time</td>
<td>that time</td>
<td>seven days ago</td>
</tr>
<tr>
<td>two weeks from now</td>
<td>last week</td>
<td>next April</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>here</th>
<th>there</th>
<th>this place</th>
</tr>
</thead>
<tbody>
<tr>
<td>that place</td>
<td>this ranch</td>
<td>these towers over there</td>
</tr>
<tr>
<td>this city</td>
<td>these parks</td>
<td>yonder mountains</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>behind</th>
<th>left/right</th>
<th>front/back</th>
</tr>
</thead>
<tbody>
<tr>
<td>behave</td>
<td>let/right</td>
<td>from/bakc</td>
</tr>
</tbody>
</table>

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

**May I come to your house?**

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

The correct verb is *hai, "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 theorician's rules
Teach nothing but to norm 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 wordchoice meaning; and idiom, in which the meaning of an expression may be unaligned to the meaning of its parts.

Anomaly: No Sense and Nonsense

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

William Per

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 semantic redundancy role 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
Cowerless 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 manxman for he sought—
So rested he by the Tumtum tree,
And stood awhile in thought.

Without knowing what vorpal meant, 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 es-\(^6\)Noam Chomsky. 1957. *Syntactic Structures*. Mouton. The Hague.
means. You decide by assuming that the semantic properties of *verbal* 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 this case one would parse it thus: nominative he, dative, him, possessive, his' n.

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

- a week ago
- an hour ago
- a century ago
- *a table ago*
- but not *a dream ago*
- *a mother 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 subjective suffixes twitch
a man . . . wearing a round jot for a hat
children building this mansion 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 treason,

*Shakespeare*
Walls have ears.

Ceramics

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

Frances William Boodleton

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 smooth 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 slaugtherer 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

Jekyll is a butcher.
Jack is a pansy.

does not have a different meaning than

Jack is a tiger.

requires knowledge that the metaphorical meaning of each sentence does not depend on the syntactic structure: "Jack is a pansy." Rather, the 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

Knowing a language includes knowing the metephenes, single 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:
Each sentence does not depend on the properties of these two tivity at its highest. Nevertheless, knowledge about words, us that all speakers possess.

Charles M. Schulz:

\[ \begin{align*}
\text{A boy was wounded.} & \\
\text{And possum.} & \\
\text{O, the possums!} & \\
\text{A it?} & \\
\end{align*} \]

n simple words, compound ing fixed phrases, consisting inferred from the meanings of combining meanings do not ages contain many idiomatic

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 one of it
 cut it out
 hit it off
 get it off
 bite your tongue
 give a piece of your mind

Idioms are similar to 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 his 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 opposition.

There are antonymous pairs that are complementary (alive/dead),gradable (hot/cold), and relational opposites (busy/sell, employ/employ).

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, coherence, rhetorical force, topic/whopping 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 **locutionary force** of the utterance. For example, use of a performative verb like *bequeath* 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 subjective clauses twitched and The stone ran an anomalous. Other sentences are uninterpretable because they contain "words" without meaning, such as An arish shack blocked nobody.

Many sentences have both a literal and metaphorical or interpretative meaning. 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 discourse 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.

**References**
