CHAPTER 2

SEMANTICS AND PRAGMATICS

II SEMANTICS AND PRAGMATICS

Overview:

Semantics and pragmatics are the domains in linguistics that investigate meaning. When people use language their main goal is of course to convey a message. Some thought emerges within someone's mind and it is then "transmitted" to someone else's mind by acoustic or visual means (i.e. sounds, writing, or signs in sign language). This transmission is possible because the acoustic or visual signals correspond to a certain meaning. Semantics and pragmatics thus deal with the very substance of language and it is therefore not surprising that the aspects of language studied in semantics/pragmatics have received a lot of attention for a long time, in particular also among philosophers. Here we cannot go into all the details of the philosophical debate on meaning in language. Instead, we will simply provide a basic introduction to some of the main issues that arise when we study meaning. We start by looking at lexical semantics, the study of word meaning.

1. LEXICAL SEMANTICS (WORD MEANING)

Part of our knowledge of a language is the knowledge of the meanings of words. The goal of lexical semantics is to determine how we can best describe and analyze this type of knowledge.

1.1. Meaning relations

An important insight in lexical semantics is that the meanings of words form a system. Words are not isolated units with separate meanings of their own but they connect to each other in highly intricate relationships of meaning. Knowledge of word meanings allows speakers of a language to have an implicit understanding of meaning relationships such as the following:

- **Synonymy**
  Synonymy is generally defined as **identity in meaning**. Examples of pairs of synonyms are: *couch – sofa*, *stubborn – obstinate*. However, a note of caution is in order here. That the meanings of two words are strictly identical to the point that we can always freely pick one or the other is extremely rare. What is much more common is approximate identity, leading to what we can call **partial synonymy**. But note that the term 'synonymy' is often used rather loosely such as to include partial synonymy as well, and this is the way we will use the term 'synonymy' here.

There are various reasons why two different words can hardly ever be considered as entirely identical from the point of view of their meaning. Generally, there is some nuance which distinguishes the two or there is a context in which one word can occur but not the other. Some illustrations are given in (1).

(1) a. It is a very wide/broad street.
There is a wide/*broad gap.
They were wide/*broad apart.
It is five miles wide/*broad.
b. There were several youths near the entrance. –
There were several youngsters near the entrance.
c. He is an insane man. – He is a loony man.
d. I had a sandwich. – I had a butty.
He likes autumn. – He likes fall.

The meanings of *wide* and *broad* are very similar as the first example in (1a) shows where we can use both words to express the same meaning. However, in the remaining sentences in (1a), only *wide* is possible whereas *broad* is impossible. This suggests that whether we can use *broad* or not depends on the context in which it occurs. For example, *broad* can occur with *street* but not with *gap*. Habitual juxtapositions or associations of a word like *broad* with other words like *street* are called **collocations**. Thus, although *wide* and *broad* have a very similar meaning and can therefore be considered as synonyms, they show collocational differences (see also section 2.1.1 below).

Another aspect which may distinguish words with similar meaning is their **connotation**. Connotations are feelings, attitudes or opinions evoked by certain words. For example, the word *winter* may evoke thoughts of snow or bitter cold for many people. However, these associations are not part of the basic meaning of the word *winter*. Even if there is neither snow nor bitter cold, we can still use the word *winter* to refer to the period between December and March because the year might be mild or the period could be spent in Hawaii or Crete. The relevance of this for synonymy is that synonyms can sometimes show connotational differences. This is what we can observe in (1b). *Youth* in the first sentence in (1b) has a less pleasant connotation than *youngster* in the second sentence. Another example of two words with similar meaning but different connotations would be *plan* and *scheme*. Both words refer to a project, but the former suggests careful foresight and the latter deviousness or manipulation. Although connotations are generally shared by the majority of speakers, they can sometimes also be very personal, based on the experience of a specific individual.

Now consider (1c). Again, we have two sentences with words that are synonymous (*insane*, *loony*). But what distinguishes the two words here is their **style** or **register**. A register is a stylistic variant which is appropriate to a particular social setting. For example, the word *loony* is informal in style and its use in a formal setting would therefore be inappropriate. *Insane*, however, can be used in both a formal or an informal context. The words *salt* and *sodium chloride* provide another illustration of a register difference between

two synonymous words. Whereas *salt* is the term used in everyday language, *sodium chloride* is part of the scientific register.

Finally, in (1d), we have another case where two words have similar meanings. But here the words are distinguished by a regional difference (**dialect**). For example, the terms *sandwich* and *butty* can both be heard in Britain, but the latter is used only in northern varieties. In the second sentence in (1d), the difference is one between British English and American English (*autumn* BE; *fall* AE). It should be pointed out that the pairs in (1d) may not have exactly the same status as those in (1a) to (1c). As mentioned in chapter 1 (p. 12), our linguistic description and analysis in this course generally focuses on Standard British English. Contrary to *broad*, *wide*, *youth*, *youngster*, *insane* or *loony* in (1a) to (1c), *fall* or *butty* in (1d) are not words that belong to the vocabulary of Standard British English. They are therefore part of a different semantic system (in the same way that French *automne* is part of a different system than English *autumn*). Some linguists would therefore be reluctant to use the term 'synonymy' to describe the pairs in (1d). Others, however, do consider for example *autumn* and *fall* as synonyms, as for example Crystal (1995:164).

As our discussion has shown, perfect synonymy in the sense of the occurrence of pairs of words which can substitute for each other in all possible contexts may be very hard to find. Small differences between words that are very similar in meaning are often due to factors related to collocation, connotation, register or dialect. To conclude, we can note that it may not be entirely surprising that pairs of words with exactly the same meanings are rather rare. To have two words with exactly the same meanings within a linguistic system means that there is redundancy, and language tends to be economical in the sense that redundancies are avoided.

- **Opposites**

  Pairs of words can have opposite meanings. Three main types of meaning opposites can be distinguished:

  (i) *Non-gradable antonyms*

  Examples: *true – false*; *alive – dead*.

  Non-gradable antonyms have the following properties:

  (a) They are complementary, i.e. the negation of one term is equivalent to the other term. For example, the negation of *alive* (i.e. *not alive*) has the same meaning as *dead*. Vice versa, a being that is *not dead* must be *alive*. Due to this property, non-gradable antonyms are sometimes also called **complementary pairs**.

  (b) They are generally incompatible with comparison. Non-gradable antonyms can therefore not co-occur with *more* or *less* or the comparative ending *–er* (except for humorous purposes). For example, someone cannot be *more alive* or *less alive* than someone else.

(ii) *Gradable antonyms*

Examples: *old – young*; *hot – cold*.

Gradable antonyms have one or several of the following properties (but not necessarily all of them):

(a) They are not complementary, i.e. the negation of one term is not equivalent to the other term. For example, something that is *not hot* is not necessarily *cold*. Similarly, something that is *not cold* is not necessarily *hot*.

(b) The interpretation of the words is fuzzy, i.e. not entirely fixed. For example, it is not possible to state the meaning of the word *big*, a gradable antonym of *small*, in absolute terms. *Big* refers to a different size when it is used in the description of a mouse as compared to when it is used for an elephant. Similarly, the notion of richness in the pair of gradable antonyms *rich*/*poor* does not have a clear-cut boundary (i.e. what does one have to possess exactly to be described as *rich*?).

(c) They can be modified by *very*.

(d) They are often part of a continuous scale of words. In the case of the gradable antonyms *hot*/*cold*, there are other words describing properties between the two and we obtain the following continuous scale: *hot – warm – tepid – cool – cold*.

(e) We can sometimes observe a distinction between a marked and an unmarked member of a pair of gradable antonyms. This distinction can be identified on the basis of questions in which the gradable antonyms are used. Consider for example the pair of gradable antonyms *tall*/*short*. If we want to get information regarding a person's height, the usual question to ask is: *How tall is she?* A question using *short* (*How short is she?*) would only be used in a restricted context, i.e. when, in the previous conversation, it has already been established that the person is short. Given that the natural way to ask a question in a neutral context involves *tall* rather than *short*, *tall* is the unmarked member of this pair of gradable antonyms whereas *short* is the marked one.

(iii) *Relational opposites*

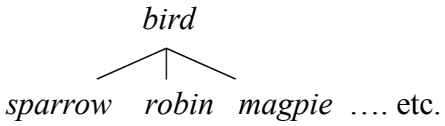
Examples: *employer – employee*; *lend – borrow*.

Relational opposites (sometimes also called converses) involve a kind of reversal in meaning. Basically the same concept is expressed by both terms except that the point of view is different (reversed). This leads to a certain symmetry when we use these terms, i.e. the same entities are involved but simply in a different order. For example, if *X is Y's employer*, then *Y is X's employee*. Or if *X lends Y to Z*, then *Z borrows Y from X*.

- **Hyponymy**

Hyponymy is a semantic relation of logical inclusion. The test for whether a word X is a hyponym of the word Y is whether you can say "X is a kind of Y". Hyponymy relations order words hierarchically, as shown in (2).

(2)

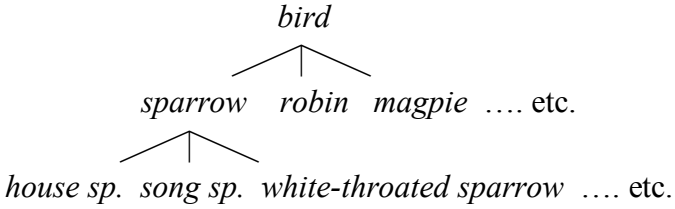


Sparrow is a **hyponym** of *bird*, and *bird* is a **superordinate** term (or: hypernym) of *sparrow*. *Sparrow, robin, magpie* etc. are called co-hyponyms of *bird*.

Co-hyponyms are part of the same **semantic field**. Within a semantic field, speakers generally identify some **prototypes** which typically represent the superordinate term. For example, certain birds seem 'birdier' to speakers than others. If asked to name a bird, English speakers generally name a *sparrow*, a *robin* or a *magpie* but hardly ever an *ostrich* or a *penguin*, which, on the basis of their biological properties, would both be hyponyms of *bird* as well.

It should be pointed out that hyponymy hierarchies can of course consist of more than two levels because hyponyms can be superordinate terms as well. For example, there are different kinds of sparrows, such as house sparrows, song sparrows or white-throated sparrows. Thus, we can add an additional level to the semantic hierarchy in (2).

(3)



(3) shows that *sparrow* is a hyponym of *bird* but also a superordinate term of e.g. *house sparrow*.

Note finally that the hyponymy relation is of particular importance in lexicography because it is the core relationship within a dictionary. The best way to define a word in a dictionary is to provide a superordinate term and some distinguishing features.

- **Homophony**

Homophony is the **absence** of a meaning relation despite **identical pronunciation**. Some examples of homophones are: *bark* [covering of wood] vs. *bark* [harsh sound uttered by a dog], *swallow* [to ingest] vs. *swallow* [type of bird], *tale* [narrative] vs. *tail* [posterior extremity of an animal]. As the example *tale*/*tail* shows, the term homophone refers to identity in pronunciation and not necessarily in writing. Notice that some authors may also use the term **homonymy** to describe the phenomenon illustrated by the examples above.

Homophones can create **ambiguity**. A word or a sentence is ambiguous if it can be interpreted in more than one way. As the following examples show, homophony is a good source of (intended but sometimes also unintended) humour.

(4) a. Committee: a group that takes minutes and wastes hours.
b. Marriage is a great institution, but I'm not ready for an institution yet. (Mae West)
c. Drunk Gets Nine Months in Violin Case.

In (4a), it is the word *minutes* that is ambiguous because it can refer to a period of time but also to the record of a meeting. The ambiguity in (4b) is due to the fact that *institution* can mean 'custom, usage, social practice' but also 'establishment of general utility, e.g. hospital, asylum etc.'. Finally, the unintended humour in the newspaper headline in (4c) is the result of homophony related to the word *case*. *Case* can refer to a legal case (the intended meaning in the headline according to which someone was sentenced to nine months in prison in connection with a crime involving a violin), but it can also refer to a container (the unintended interpretation according to which the culprit was sentenced to spend nine months in a container for a violin).

As we will see in section 2 of this chapter, sentences can also be ambiguous even if the words contained in the sentence are not ambiguous. We therefore have to distinguish two types of ambiguity. Ambiguity that arises due to homophony as in (4) is called **lexical ambiguity**.

- **Polysemy**

  The final meaning relation to be discussed here is polysemy. Like homophony, polysemy involves identical pronunciation and different meanings. In contrast to homophony, however, the meanings are not entirely distinct, but they are **related**. Consider for example the word *head*. *Head* refers to a body part of a person or an animal (e.g. *John's head*), and this is the meaning that we probably think of first when we hear the word in isolation. But *head* can also refer to a river source (*Here stands a pillar which marks the head of the river Ouse.*), to a part of an object (*They stood at the head of the bed.*) or to the leader of an institution (*Mary is the new head of the history department.*). What is common to all these uses is that the word *head* refers to the top part of something. Thus, although the meanings are different, they are related. This is not the case with homophony. For example, there is no relation whatsoever between the meaning 'to ingest' for *swallow* and the bird referred to as a *swallow*.

  Certain words can give rise to both polysemy and homophony. The word *bear* has different but related meanings such as 'to tolerate', 'to carry' or 'to support'. Hence, it is polysemous. But *bear* can also have an entirely different meaning when it refers to an animal. We therefore have a case of homophony here. To this, we can add an additional homophone, namely the word *bare* which is spelt differently but pronounced the same as *bear* and which has another unrelated meaning.

You can now do exercises 1 to 5.

1.2. Semantic properties and features

In the previous section, we saw that the words of a language are not isolated entities. Instead, their meanings are related in various ways, and we identified different types of meaning relationships among words. Whereas it is important to identify and classify phenomena as we did in section 1.1., linguists generally do not stop there but they also try to see how these phenomena can best be analyzed. So in our case the question is how we can account for the

different semantic links between words in a coherent way. An important proposal that has been made to deal with this question is to assume that the meaning of a word can be decomposed into a set of semantic properties or **semantic features**.

1.2.1. *Semantic decomposition*

Consider for example the word *woman*. The meaning of this word corresponds to a combination of properties such as human, adult and female. Similarly, the meaning of the word *man* includes the properties human, adult and male. This way of viewing word meaning can be represented in terms of binary features (i.e. features with two values, + and –):

(5) a. woman: [+human, +adult, +female]
b. man: [+human, +adult, –female]

Note that instead of taking 'female' as a feature with two values, we could of course also have chosen 'male', with a negative value in (5a) and a positive value in (5b).

The same contrast of feature values as in (5) also accounts for a number of other opposites: e.g. *ram – ewe*, *bull – cow*, *stallion – mare*. These words also illustrate the option where the feature 'human' has a negative value. An additional feature then has to distinguish between the different types of animals, e.g. 'equine' for *stallion*/*mare*.

(6) a. mare: [–human, +adult, +female, +equine]
b. stallion: [–human, +adult, –female, +equine]

In (5), we can also change the value of the feature 'adult'. This is shown in (7).

(7) a. girl: [+human, –adult, +female]
b. boy: [+human, –adult, –female]

Similarly, we can change the value for 'adult' in (6) and we obtain (8):

(8) a. filly: [–human, –adult, +female, +equine]
b. foal: [–human, –adult, –female, +equine][1]

A desirable consequence of the use of features for the analysis of word meaning is that they allow us to define the different meaning relations discussed in the previous section in a coherent way. We can give the following general definitions:

- *Synonymy*: (nearly) identical features.
- *Antonymy*: opposition with respect to one semantic feature.

[1] But note that although the *Oxford English Dictionary* says that a *foal* is "*properly* … of the male sex", the word is often also "used where the sex is not specified". Thus, *foal* can also have the following set of semantic features: [–human, –adult, +equine].

- *Hyponymy*: a subset of features is shared (the superordinate term having fewer features; e.g. the features of *bird* form a subset of the features of *sparrow*).
- *Homophony, lexical ambiguity*: different sets of features.
- *Polysemy*: different (but related) sets of features.

Thus, the meaning relationship between a word A and a word B can be established by comparing the semantic feature content of A and B.

Apart from allowing a coherent account of meaning relationships among words, semantic features have some additional desirable properties. We will discuss these in sections 1.2.5. and 2.3.2. below. For the time being, however, we will focus on some further aspects of the feature analysis of word meaning, and more particularly on general semantic features found with nouns and verbs.

1.2.2. *Features of nouns*

An important distinction among the nouns of a language has to do with whether a noun is countable or whether it is uncountable. Members of the former category refer to individual countable entities, and they are called **count nouns**. Members of the latter category refer to an undifferentiated mass rather than to countable entities, and they are called **mass nouns**. This two-way distinction can be expressed in terms of a semantic feature [+/–count]. For example nouns like *woman*, *book*, or *dream* are count nouns, i.e. [+count], whereas nouns like *weather*, *furniture*, or *equipment* are mass nouns, i.e. [–count]. The value of the feature [+/–count] has important consequences on the way a noun can be used within a sentence. Consider the following contrasts:

(9) a. I saw furniture / *book.
b. I saw *a furniture / a book.
c. I saw *furnitures / books.
d. I saw *two furnitures / two books.

A [–count] noun like *furniture* can occur in the singular form without a preceding article, as shown in (9a). This option is not available for [+count] nouns, hence the ungrammaticality of *book* in (9a). In the contexts shown in (9b), (9c) and (9d), however, we can only have count nouns but not mass nouns. Thus, only count nouns can be preceded by an indefinite article, and only count nouns can occur in the plural form without a preceding article or in the plural form following a numeral whereas mass nouns are ungrammatical in these contexts.

Whereas the noun *furniture* is always [–count] and *book* is always [+count], it should be pointed out that quite a large number of nouns can be both. This is illustrated in (10).

(10) a. I don’t like sausage.
b. We have three sausages left.
c. Let’s play football.
d. She wants two footballs for Christmas.

In (10a) and (10c), the nouns *sausage* and *football* occur in the singular without a preceding article. They are therefore [–count] (cf. 9a). However, in (10b) and (10d), the two nouns are preceded by a numeral. They must therefore be [+count] in these uses (cf. 9d). Thus, we have a case of **polysemy** here. *Sausage* and *football* have two different but related meanings. For example *sausage* can refer to a food substance in general, but also to an individual unit consisting of this substance. The former meaning is characterized by the feature [–count] and the latter by the feature [+count].

The [+/–count] distinction can occasionally raise difficulties for second language learners. Although the feature value for [+/–count] basically corresponds to a semantic property (i.e. whether the referent of the noun is countable or not), the attribution of this feature is not always entirely explainable in terms of the noun's intrinsic meaning. Thus, some nouns are considered as [–count] in some languages whereas their equivalents in other languages are considered as [+count]. This contrast is shown in (11) for English and French.

(11) a. *I have two informations to give you.
a'. J'ai deux informations à te donner.
b. *I can give you two advices.
b'. Je peux te donner deux conseils.

In English, the words *information* and *advice* have the feature [–count]. This is why they cannot be preceded by a numeral like *two* in (11a) and (11b). The French equivalents, however, can co-occur with a numeral, as shown in (11a') and (11b'). They must therefore be specified as [+count]. We can only express the meaning in (11a') and (11b') in English if we add another noun (typically *piece*) which is [+count]. This is shown in (12).

(12) a. I have two pieces of information.
b. I can give you two pieces of advice.

Another noun feature that has a semantic basis but whose use can vary across languages is **gender**. In English, gender is generally determined by the semantic features [+/–female/male] or [+neuter]/no specification. Thus, when we use the noun *woman* and later refer to the noun by a pronoun, we use *she* or *her*. Similarly, we use *he/him/his* when referring to the noun *man* or *it/its* when referring to a *ladder*. In French, however, we have **grammatical** gender features in addition to purely semantic features. For example, there is nothing in the meaning of the word *échelle* that would require a semantic feature [+female], but referring to *échelle* we have to use the pronoun *elle* or *la*. Gender is therefore sometimes said to be grammaticalized in French.

1.2.3. *Features of verbs*

Verbs can be distinguished along a number of general semantic dimensions. Some of the most important ones are:

- [+/–stative]
  This feature recognizes whether the situation denoted by the verb involves a change ([–stative]) or not ([+stative]). [+stative] verbs can be described as expressing emotional, cognitive, and physical states, conditions or qualities. [–stative] verbs are sometimes also called **dynamic** verbs and they generally express a situation that requires the input of energy. Examples of [+stative] verbs are *know*, *like*, *desire*, whereas verbs like *walk*, *study* or *observe* are [–stative].

  The feature [+/–stative] accounts for differences in usage of a given verb. In contrast to [–stative] verbs, verbs with the feature [+stative] cannot:
  (i) be used to answer the question *What happened?* (13a);
  (ii) occur in the progressive (13b);
  (iii) be used in the imperative (13c);
  (iv) occur in the pattern *what X did was …* (13d);
  (v) be modified by the adverb *quickly* (13e).

(13) a. What happened? *They knew his parents. vs. They walked home.
  b. *They are knowing his parents. vs. They are walking home.
  c. *Know his parents! vs. Walk home!
  d. *What John did was know English. vs. What John did was walk home.
  e. *They quickly knew his parents. vs. They quickly walked home.

Note however that the constructions in (13) can occasionally be used to add a dynamic factor to the basic stative meaning of [+stative] verbs. Consider for example the progressive use of the stative verb *love* in (14).

(14) They're loving every minute of it.

Huddleston and Pullum (2002:170) observe that in (14) "the progressive yields an activity reading: we interpret *love* here as equivalent to dynamic *enjoy*." This dynamic meaning is imposed by the context of the sentence since the progressive's intrinsic meaning indicates an ongoing and changing situation. Thus, the dynamic aspect of (14) is not related to the word meaning of *love*, but to the way the meanings of different elements in a sentence combine (cf. section 2). However, the combination of the progressive and a [+stative] verb is felicitous only under very restricted circumstances.

Apart from simple verbs like *know*, constructions with the verb *be* are also [+stative]. This gives rise to distinctions like *He is dead* ([+stative]) and *He died* ([–stative]) (vs. French where *Il est mort* is both [+stative] and [–stative]).

- [+/–telic]
  An additional semantic distinction that can be made among verbs is the one between **telic eventuality** ([+telic]) and **activity** ([–telic]). In contrast to an activity, a telic eventuality has a natural end or termination. This distinction can be determined on the basis of patterns of the type 'It took X an hour/year to …' (possible with [+telic], impossible with [–telic]):

(15) a. It took the water an hour to *evaporate*. [+telic]
b. It took the snow an hour to *melt*. [+telic]
c. *It took John an hour to *read*. [–telic]
d. *It took John an hour to *run*. [–telic]

The verbs *evaporate* and *melt* in (15a/b) have a natural end point as they describe a change from one state to another and this activity is necessarily complete when the second state is reached. *Evaporate* and *melt* are therefore [+telic] verbs. The activities described in (15c) and (15d), however, do not have a natural end point. John can always carry on *reading* or *running*. These verbs are therefore atelic ([–telic]).

Anticipating again slightly the discussion of phrase and sentence meaning in the following sections, it should be pointed out that additional issues related to telicity arise once we look at the contexts in which a verb occurs. Consider for example the sentences in (16).

(16) a. It took John an hour to *read* the book.
b. It took John an hour to *run* a mile.

In (16), *run* and *read* can occur in the 'It took X an hour/year to …' construction. The reason for this is that the verbs are followed by an object, and due to the presence of the object the activities obtain a natural end point (e.g. in (16a) the moment when the final word of the book was read). In other words, the overall interpretation of the sentence is [+telic] here. Thus, basically [–telic] verbs (cf. 15c/d) can become [+telic] in a larger context, and the feature [+/–telic] is therefore often used to describe the meaning of entire verb phrases rather than just individual verbs. But note that with some verbs, the context has no influence on telicity. Verbs like *evaporate* and *melt* are always [+telic].

- [+/–causative]
Many verbs have the semantic property of **causation**. This property can be expressed in terms of the semantic feature [+/–causative]. Some illustrations are given in (17).

(17) a. The bear killed the ant. (=cause to die)
b. John flattened the metal. (=cause to become flat)
c. This amendment weakened the proposal. (=cause to become weak)
d. This text enables a student to study independently. (=cause to be able)
e. I will clarify the situation for you. (=cause to become clear)
f. We will regularize your position. (=cause to become regular)

If we look at these verbs in more detail, we can observe that the feature [+causative] often corresponds to a certain part of the verb. (17b) can be divided into *flat* and *–en*, and (17c) into *weak* and *–en*. Thus, the feature [+causative] seems to be expressed by *–en* whereas the first part of the word contributes the rest of the meaning (i.e. the additional semantic features). Other examples could be added, such as *darken* or *deepen*. With *enable* in

(17d), causative *en* occurs at the beginning of the word, as for example also in *endanger*. Finally, in (17e) the causative meaning seems to be related to the *–ify* part of the verb (cf. also *to solidify*), whereas in (17f) it is *–ize* which expresses [+causative] (cf. also *to modernize*). Although the [+causative] feature often corresponds to a part of the word, this is obviously not a necessary condition for the expression of causation. The word *kill* in (17a) cannot be divided into two parts where one would correspond to the feature [+causative].

Whereas we can relate the feature [+causative] to specific parts of the verbs in (17b) to (17f), the feature [+causative] can also sometimes occur independently on a separate word.

(18) a. I got the wording changed.
b. I had the wording changed.
c. I made him change the wording.

The verbs *get*, *have*, and *make* all contribute a causative meaning to the sentences in (18). Thus, the feature [+causative] occurs in three forms: (i) as a part of a set of semantic features of an unanalyzable word (17a); (ii) as a semantic feature linked to a part of a word (17b-f) (thereby contributing to the set of semantic features of that word); (iii) as an independent verb (18).

Some verbs show an alternation between activity and causation. This is shown in (19).

(19) a. The officer marched the prisoners round the courtyard.
b. The prisoners marched round the courtyard.

In (19a), the verb *march* has a causative meaning. The officer causes the prisoners to march. This causative meaning is absent in (19b). Instead, the verb simply refers to an activity. The contrast between (19a) and (19b) can be expressed by means of the feature [+/–causative]. The meaning of *march* is specified as [+causative] in (19a) while *march* in (19b) has the feature [–causative]. We thus have a polysemy involving the feature [+/–causative]. The [+/–causative] polysemy can be observed with several other verbs such as *open* (*John opened the door.* vs. *The door opened.*) or *break* (*John broke the glass.* vs. *The glass broke.*).

You can now do exercises 6 to 9.

1.2.4. *Semantic features and cross-linguistic variation*

The inventories of words vary across languages. Thus, one language may have a word to express a certain meaning while such a word is missing in some other language. Such mismatches can sometimes be related to different uses of semantic features and more particularly to the fact that one language uses additional semantic features to express a more specific meaning within a semantic field than the other language. Such mismatches can

obviously raise problems to learners of a foreign language. As a brief illustration of this point in the context of a native speaker of French learning English, let us consider some words where the use of semantic features does not exactly match in the two languages.

- English *teach*, *learn* vs. French *apprendre*.
  Teach and *learn* are words related to the same activity and they therefore share semantic features. But they are distinguished by the semantic property of "giving instruction". While *teach* involves "giving instruction", *learn* does not involve "giving instruction" (hence *Mary taught/*learnt Peter this skill* (or: *Mary taught/*learnt this skill to Peter*) and *Peter learnt/*taught this skill from Mary*). With French *apprendre* the property of "giving instruction" is not specified in the meaning of the word, i.e. we can use the word in both ways. But French does of course also have a word which is specified for the property of "giving instruction", i.e. the word *enseigner*.
- English *take*, *bring* vs. French *apporter*.
  The two English words can again refer basically to the same activity but *bring* includes the property "motion towards the place where the speaker/listener is, or is supposed to be" whereas *take* refers to motion in the opposite direction. No such distinction is made with the French word *apporter*.
- English *mutton*, *sheep* vs. French *mouton*.
  Mutton and *sheep* share semantic properties (the animal referred to), but what distinguishes them is the semantic property "flesh, used as food". Whereas *mutton* has this property and only refers to food, *sheep* does not have this property and therefore does not refer to food but to the animal. In French, no such semantic distinction is made and we only have a single word, *mouton*, whose semantic features are less specific than those in English.
- English *river* vs. French *rivière*, *fleuve*.
  Whereas the two French words have semantic properties distinguishing between "joining a river" and "joining the sea". No such distinction is made in English.

1.2.5. *Further evidence for semantic features*

In the previous subsections, we saw that semantic features allow us to capture basic aspects of word meaning and to account for meaning relations in a coherent way. Thus, the postulation of semantic features provides us with a useful analytical tool in lexical semantics. But semantic features have some further advantages, in particular the fact that they allow us to give simple explanations of certain phenomena of language use.

- *Slips of the tongue*
  Speakers sometimes unintentionally substitute words in their speech (slips of the tongue). What has been observed in studies of speech errors is that words are generally not exchanged randomly. This is illustrated in (20).

(20) a. *intended utterance*: bridge of the nose *actual utterance*: bridge of the neck
b. *intended utterance*: he came too late *actual utterance*: he came too early

The substitutions in (20) involve semantically related words. The words *nose* and *neck* in (20a) share the semantic property "body part (in the area of the head)" while *late* and *early* in (20b) are antonyms referring to "time". This suggests that word meanings are not unanalyzed units in a speaker's mind/brain but that they are decomposed into smaller units, i.e. semantic features. The speakers uttering speech errors like those in (20) retrieve the word correctly as far as some basic semantic features are concerned, but the error then occurs in connection with one or more additional features.

- *Language acquisition*
  Some evidence for semantic features can also be found in child language acquisition. During the acquisition process, children sometimes seem to add semantic features to word meanings over time. For example, some children use the word *doggie* to refer to all hairy, medium-sized beasts for a while and they seem to add more specific features defining this word later. Similarly, a linguist reports that her three-year-old son announced "*I have a headache*" and, when asked where the pain was, he answered "*In my tummy*". For this child the word *headache* simply has the general semantic property of "pain". The more specific feature related to the location of the pain is acquired later.

- *Aphasia*
  Aphasia is an acquired language deficit due to brain damage (e.g. after an accident or a stroke). It can affect various aspects of a person's linguistic ability. What is interesting to observe in our context is that some aphasic patients have difficulties finding correct words. Sometimes this is a very general problem, but in other cases the impairment can be extremely selective. For example, one patient is reported to have difficulties naming objects that belong to the semantic categories "fruit" and "vegetable" but not with other words. Other patients systematically produce semantically related word substitutions of the type discussed above for slips of the tongue (e.g. substituting *boy* for *girl* or *bird* for *sparrow*). These deficits thus again suggest that our mental lexicon is organized in terms of subcomponents of meaning, i.e. semantic features.

1.2.6. *Semantic features – some problems*

Although many desirable results can be obtained if we analyze word meaning by means of semantic features, such an approach also raises certain problems, in particular the following two:

(i) What are the basic semantic features? For example, is the feature [+equine] in our definitions *stallion* and *mare* in (6) a basic semantic feature? If so, how can we define the meaning of the word *equine*? If not, what other features would be necessary?

(ii) More importantly, there is a large number of words for which it is not easy to see what semantic features could define them. Consider for example the words *red* or *apple*:

(21) a. red: [+color, +??]
b. apple: [+fruit, +??]

It seems extremely difficult to come up with precise features which could fully define the meanings of these two words (and many others).

The observations in (i) and (ii) suggest that semantic features may not be entirely sufficient to describe the knowledge of the meaning of words that speakers have. An alternative or additional way to account for word meaning that has been pursued by linguists (and philosophers) is to say that words are linked to **concepts**, i.e. mental representations which are not purely linguistic entities but are related to our experience of the world. In the context of an introductory course on linguistics, it would lead us too far afield to pursue these proposals in any detail here, and we continue our discussion by looking at meaning at the levels above the word.

2. PHRASE AND SENTENCE MEANING

Individual words and their meanings on their own are not sufficient yet to communicate thoughts. Words combine to form phrases and sentences. The English term *phrase* should not be confused with the French word *phrase*. In English, *phrase* refers to a subunit of a sentence. For example, the subject of a sentence forms such a subunit. Similarly an object is a phrase. The verb and its object also form a phrase. There are many additional subunits within a sentence, and these will be discussed in more detail in chapter 5 (syntax). For the time being, it is sufficient to know that a phrase is a subunit within a sentence. So the question we will address in this section is what the semantic properties of phrases and sentences are.

We can start with a very general observation: Phrase and sentence meaning is **compositional**. This observation is expressed by the Principle of Compositionality given in (22).

(22) *The Principle of Compositionality*: The meaning of a phrase or sentence depends both on the meaning of its words and how those words are combined.

(22) expresses the fact that the meaning of each word makes a contribution to the meaning of the entire phrase or sentence.[2] But the way the words are combined plays an important role as well. As we observed in chapter 1 already, there is of course a substantial difference between the headline *Dog Bites Man* and the headline *Man Bites Dog* although the words used are exactly the same ones.

The remainder of this section looks at some more specific issues arising for the analysis of phrase and sentence meaning. We will start by looking at properties of units containing a

[2] A notable exception here are idioms. In idiomatic expressions, the compositional meaning does not reflect the meanings of the individual words. For example, the idiom *to kick the bucket* means 'to die', a meaning which does not logically follow at all from the meanings of the individual words.

noun, then we will turn to aspects of meaning related to verbs and finally we will focus on sentence meaning.

2.1. Noun-centred meaning

In this subsection we will consider two aspects of noun-centred meaning: (a) compositional meaning in noun phrases, and (b) the relation between meaning and reference to objects in the world.

2.1.1. *Nouns and compositionality*

Nouns typically combine with articles and adjectives. This is illustrated in (23).

(23) *the red balloon*

The red balloon is a phrase, i.e. it can function as a subunit of a sentence (e.g. as the subject in *The red balloon is nice*). The noun *balloon* is the central element of this phrase. We therefore call this phrase a noun phrase. The overall meaning of the noun phrase in (23) is a straightforward case of compositionality. We obtain the meaning directly from the meanings of the different parts: *balloon* refers to a specific type of object, *red* provides additional information concerning this object (its colour) and the use of the definite article *the* means that we are considering a particular instance of a balloon. Thus, the compositional meaning of (23) is: 'a particular instance of a balloon that is red'.

However, compositionality can have less trivial effects when a noun and an adjective are combined. Consider (24).

(24) *the* + *large* + *balloon*

Large is a gradable antonym of *small*. As we observed in section 1.1, one of the properties of gradable antonyms is that their interpretation is not entirely fixed. If we combine *large* with a noun like *balloon*, its exact meaning is determined. *Large* is understood as 'large for a balloon', which may of course be small for a house, but huge for an ant.

In (24), the noun determines the exact meaning of the adjective that modifies it. In some other cases of adjective-noun combinations, it is the adjective that has an influence on the meaning of the noun. This is illustrated in (25).

(25) *the* + *alleged* + *murderer*

Whereas the noun *murderer* on its own refers to 'a person guilty of murder', the combination of *murderer* with *alleged* weakens the contribution of the semantic properties of *murderer* to the interpretation of the entire phrase. The result of combining the meanings in (25) is that we are not certain whether we are dealing with a murderer or not.

A final type of interaction between adjectives and nouns that we will discuss here has to do with restrictions as to which nouns and adjectives can combine to express a certain meaning. We have already come across an illustration of this phenomenon in example (1b), repeated here as (26).

(26) There is a wide/*broad gap.

Although *wide* and *broad* have a very similar meaning, it is only *wide* that can be combined with *gap*. Such restrictions give rise to what are called **collocations**. Certain sequences of words occur naturally together in a language (collocations), whereas others do not. It is as if one item "called up" another one in the mind of speakers. Here is another illustration of this type of interaction between words: While it is entirely natural to combine *monumental* with *ignorance* to get *monumental ignorance*, it would be odd to say *monumental brilliance*. Thus, compositionality in meaning is sometimes restricted by collocational constraints.[3]

2.1.2. *Sense vs. reference*

Phrases with nouns often refer to objects in the real world. For example *the red balloon* in (23) could refer to a specific red balloon that a speaker and a hearer see. But the same object could probably also be described in some other ways. Suppose that the red balloon belongs to Mary and that I gave this balloon to Mary. Instead of *the red balloon* we could then also say for example *Mary's balloon* or *the balloon that I gave Mary*. All these noun phrases can describe the same object, i.e. they have the same **referent**. The reference of a noun phrase is sometimes also called its **extension**. However, even though the different noun phrases refer to the same object, we would not want to say that they have the same meaning. For example *Mary's balloon* contains information concerning the owner which is not contained in *the red balloon*. We therefore introduce an additional notion, the notion of **sense** (sometimes also **intension**). Sense is the inherent part of a phrase's meaning and it allows us to identify its referent. The precise meaning of a noun phrase can then be considered as a combination of sense and reference.

(27) Meaning of a noun phrase = sense (intension) + reference (extension)

The standard textbook example illustrating the distinction between sense and reference is the following: The *evening star* is the bright star seen in the west after sunset. The *morning star* is the bright star seen in the east before sunrise. We are clearly dealing with two different basic meanings here. However, it turns out that the actual astronomical object is exactly the same one in both cases, namely the planet Venus. Thus, the terms *evening star* and *morning star* have the same reference, but a different sense.

[3] Collocations are of course not restricted to adjective-noun combinations. They can also involve other word classes such as verbs. For example, the verb *commit* naturally co-occurs with *a murder* as in *He committed a murder*. However, native speakers of English would generally not say something like *He committed a task* even though the meaning of 'carry out' would make perfect sense in this sentence. See also *English Vocabulary in Use – Advanced*, pp. 12-13, for further illustrations of collocations.

It should be stressed that (27) does not imply that a noun phrase must have both sense and reference in order to have meaning. There are indeed noun phrases that seem to have only one or the other. Consider (28).

(28) a. *Peter Smith*
b. *the king of Switzerland*

Proper names like *Peter Smith* of course refer to entities in the world, i.e. to persons. So they have reference. But they generally do not have any independent semantic content, except possibly for the feature [+male] with a first name like *Peter*. Thus, proper names are largely devoid of sense. (28b) is an illustration of the opposite scenario. Switzerland has never had a king, so the noun phrase *the king of Switzerland* cannot possibly have a referent. Nevertheless, we can understand what *the king of Switzerland* means and we can imagine what the world would have to be like for such a person to exist. So this noun phrase clearly has sense, but it does not have reference. The examples in (28) thus show that it is sufficient to have one ingredient of meaning in (27). Furthermore, the examples of course also confirm our earlier conclusion that the distinction between sense and reference is important to account for the meaning of noun phrases.

2.2. Verb-centred meaning

Let us now turn to aspects of meaning involving verbs. Verbs play a central role for the meaning and structure of sentences. In particular, their meaning strongly influences what other elements can occur in the same sentence. This is shown in (29).

(29) a. # Cubism admires Mary.
b. Mary admires cubism.
c. Cubism appeals to Mary.

(29a) is semantically odd. This is indicated by the symbol #. The reason for the oddness of (29a) is the fact that the verb *admire* selects a [+human] subject and the abstract noun *cubism* is [–human]. This semantic requirement on the subject is met in (29b). The same restriction does not apply with a verb like *appeal* and the abstract noun *cubism* can be the subject in (29c).

The data in (29) show that the meaning of a verb constrains certain semantic properties of other elements within a sentence. A way to describe these meaning relations between the verb and other elements in a sentence is by means of **thematic roles** (or: **theta roles**). Thematic roles refer to the part played by a particular element in the event described by the verb. Verbs are said to *assign thematic roles* to other parts of a sentence.

The kind of thematic role assigned by a verb depends on the verb's meaning. Linguists have identified a considerable number of thematic roles. However, for our purposes, it is sufficient to simply mention a few of them. Consider the following examples:

(30) a. **John** was walking.
Agent
b. **The horse** hit **Peter**.
Agent *Theme*
c. **The teacher** gave **Sue** **the book**.
Agent *Goal* *Theme*

In (30a), we have the verb *walk*. The subject of *walk* is the entity which performs the action described by the verb. It is therefore said to bear the thematic role of **agent**. An agent is also present in (30b). In addition, the meaning of *hit* implies that there must also be an entity that undergoes the activity described by *hit*. This thematic role is generally referred to as the **theme** (sometimes also **patient**). Finally, the event described by the verb *give* involves three participants. Apart from an entity performing the action (the agent *the teacher*) and an entity undergoing the action (the theme *the book*), there is also an entity towards which the activity is directed, i.e. *Sue*. *Sue* is assigned the thematic role of **goal** in (30c). An additional thematic role can be identified if we reconsider example (29b). The subject in (29b) does not actively perform an action in the way the subjects of verbs like *walk*, *hit* and *give* in (30) do. Instead, the subject is experiencing some psychological state (admiration) and the thematic role assigned to the subject is therefore referred to as the **experiencer** role.

Thematic roles can account for the restriction illustrated in (29a/b). Only animate entities can experience something. Inanimate entities (as referred to for example by an abstract noun) cannot experience a psychological state and they can therefore not be assigned an experiencer thematic role. Hence the oddness of the example in (29a). A human being can of course experience a psychological state and hence be assigned an experiencer role (29b). Similarly, in the sentences in (30), the subject must be of a certain type. *Cubism* would again not be an appropriate subject because abstract nouns cannot perform activities. They can therefore not be assigned an agent thematic role.

The observations concerning the thematic role of the subject in (29b) and the subjects in (30) show that a specific position within a sentence is not always related to a specific thematic role. In (29b), an experiencer thematic role is assigned to the subject of the sentence and in (30) it is an agent thematic role. But other thematic roles can occur in the same position (31a/b) and sometimes the subject position is even filled by something that does not bear a thematic role at all (31c/d).

(31) a. **Peter** was hit **by the horse**.
Theme *Agent*
b. **Sue** was given **the book**.
Goal *Theme*
c. **It** seems that the horse hit Peter.
d. **It** is raining.

(31a) is the passive form of (30b) with the theme in the subject position, and (31b) is the passive form of (30c) with the goal in the subject position. In (31c/d), the pronoun *it* does not refer to an entity involved in the event described by the verb. For example we do not interpret (31d) as meaning that something referred to as *it* somehow performs or causes the event of

raining. *It* does therefore not bear a thematic role at all in (31c/d). The data in (29) to (31) clearly show that specific positions within a sentence are not directly linked to a particular type of thematic role. Conversely, types of thematic roles are not linked to specific positions as is shown for example by the fact that the agent occurs in a position before the verb in (30) but in a position after the verb in (31a). Nevertheless, there is a certain tendency for agents to occur in the subject position and for themes to occur in the object position.

As we have seen, the types of thematic roles that occur in a sentence depend on the meaning of the verb. Similarly, the number of thematic roles in a sentence also depends on the meaning of the verb. The activity described by the verb *hit* necessarily involves two participants, whereas the activity described by the verb *give* involves three. Sometimes a single verb can have different meanings, and this difference can lead to a change in the number of thematic roles assigned by the verb. Compare for example (30a) above (*John was walking*) and (32).

(32) John was walking the dog.

In (30a), *walk* assigns only one thematic role (agent) whereas in (32) the same verb assigns two (agent and theme). This variation is due to the fact that *walk* is polysemous (cf. section 1.1). In (32), *walk* has a causative meaning while in (30a) the causative meaning is absent. We therefore conclude that by adding the feature [+causative] to the meaning of *walk* in (32) we also add one thematic role that the verb assigns. The same observation can be made for other [+/–causative] pairs such as example (19) in section 1.2.3: *The prisoners marched round the courtyard.* vs. *The officer marched the prisoners round the courtyard.* Here, the presence of the [+causative] feature again goes together with the assignment of an additional thematic role.

However, variation with respect to the number of phrases with a thematic role is not restricted to cases where a verb has different meanings. This is shown in (33).

(33) a. **The children** are eating **lunch**.
b. **The children** are eating.

The meaning of *eat* is basically the same in (33a) as in (33b), but in (33a) two thematic roles seem to be assigned (agent and theme) and in (33b) only one (agent). But we can observe that (33b) still implies that the children are eating ‘something’. The second thematic role of *eat* therefore seems to be implicitly understood but not overtly expressed in the sentence. This is possible when a speaker producing a sentence with *eat* does not want to specify what is being eaten. We should point out though that the omission of a thematic role is not possible with all verbs. For example the verb *devour*, which is semantically very close to *eat*, requires the overt presence of a phrase to which the second thematic role can be assigned.

(34) a. **The children** are devouring **their food**.
b. * **The children** are devouring.

Whether an element with a particular thematic role can remain implicit or not does not just vary among verbs (e.g. *eat* vs. *devour*), but variation can also be found across languages. This variation can be problematic for second language learners. For example the following contrasts between French and English with verbs followed by the *to*-infinitive often cause difficulties for native speakers of French learning English.

(35) a. L'accord **nous permettait** de travailler de manière indépendante. (theme: *nous*)
b. The agreement **allowed one** to work independently. (theme: *one*)
c. L'accord **permettait** de travailler de manière indépendante. (no overt theme: ✓)
d. * The agreement **allowed** to work independently. (no overt theme: *)

(36) a. Ceci **amène les gens** à conclure ce qui suit. (theme: *les gens*)
b. This **leads people** to conclude the following. (theme: *people*)
c. Ceci **amène** à conclure ce qui suit. (no overt theme: ✓)
d. *This **leads** to conclude the following. (no overt theme: *)

Speakers of French may be led to produce the ungrammatical sentences in (35d) and (36d) because the corresponding sentences with an omitted theme are grammatical in their native language.

The data in (35) and (36) should not be interpreted as meaning that English always disallows the omission of the theme in this type of construction. That this is not the case is shown by the grammatical (37b).

(37) a. He **promised her** to be on time.
b. He **promised** to be on time.

You can now do exercise 10.

2.3. Sentence meaning

Having discussed meaning in noun phrases and meaning relations between the verb and other elements in a sentence, let us now turn to some aspects of the meaning of entire sentences. The basic question that arises here is: What does it mean to know the meaning of a sentence? One approach to sentence meaning that has been very influential in linguistics and in philosophy of language is the approach referred to as **truth-conditional semantics**.

2.3.1. *Truth-conditional semantics*

The basic idea of truth-conditional semantics is the following. A sentence can be either true or false of a certain state of affairs. To know the meaning of a sentence is to know what the world would have to be like for that sentence to be true. In truth-conditional semantics, sentence meaning is therefore defined in terms of the necessary and sufficient conditions for

the truth of a sentence. These conditions are called **truth conditions**. An illustration of this approach is given in (38).

(38) a. John Smith is a bachelor.
b. *True if*:
- There is some male human being called John Smith.
- John Smith has never been married.

According to truth-conditional semantics, to know the meaning of (38a) is to know the truth conditions in (38b). It is important to note that (38b) might actually be false in the actual world. However, we know what the world would have to be like for (38a) to be true. That truth conditions and truth in the actual world do not have to go together is further illustrated by the sentence in (39).

(39) The king of Switzerland is bald.

Sentence (39) is not true in the real world and has never been true simply because *the king of Switzerland* has no referent. Nevertheless we can understand this sentence. This is because we know what the world would have to be like for (39) to be true, i.e. we know that there would have to be a country called Switzerland, that this country would have to have a king and that the king of this country would have to be bald. In other words, we know the truth conditions of this sentence.

2.3.2. *Meaning relations between sentences*

As with individual words (cf. synonymy, homonymy etc. in section 1.1), we can also identify meaning relationships between entire sentences. Several of these can be captured in terms of truth-conditional semantics.

- **Paraphrase**
  Two sentences are paraphrases if they have the same meaning. In terms of truth conditions, this relation can be expressed as follows: Two sentences are paraphrases if they have the same truth conditions.

  There are different ways to obtain paraphrases. For example the replacement of one or more words by a synonym creates a pair of paraphrases.

(40) a. Fillings for teeth contain *mercury*. - Fillings for teeth contain *quicksilver*.
b. Philip *purchased* an *automobile*. - Philip *bought* a *car*.

But paraphrases can also be obtained by changing the structure of the sentence, as shown in the examples in (41).

(41) a. Ellen is unmarried. – *Paraphrase*: Ellen is not married.
b. The general marched the soldiers around the stadium. –
Paraphrase: The general made the soldiers march around the stadium.
c. Laura fired Bill. – *Paraphrase*: Bill was fired by Laura.

In the paraphrase in (41a), the sentential negator *not* is introduced to express what is part of a word in the first sentence (i.e. the negative marker *un-* in *unmarried*). In the paraphrase in (41b), the [+causative] feature of *march* is removed, the causative verb *make* is added, and the noun phrase *the soldier* precedes rather than follows the verb *march*. Finally, the paraphrase in (41c) is the passive version of the first sentence.

As in our discussion of synonymy, a note of caution is in order here. Strict identity of meaning with two sentences is rare. Generally, we are rather dealing with approximate identity of meaning.

- **Entailment** (sometimes also "implication")
One statement entails another when the second is a logically necessary consequence of the first. Expressing this in truth-conditional terms, we get the following: A sentence A entails a sentence B if the truth of A guarantees the truth of B. Note that in terms of this definition truth conditions are at the same time entailments.

Illustrations of entailments are given in (42).

(42) a. Alan lives in Toronto. *entails* Alan lives in Canada.
b. Bill gave Laura a bunch of roses. *entails* Bill gave Laura a bunch of flowers.
c. Mary bought a cat. *entails* Mary bought a pet.

The examples in (42) show that entailments often arise from word meaning and more specifically from hyponymy relations. *Rose* is a hyponym of *flower*, and *cat* is a hyponym of *pet*. If we take a sentence A and replace an expression by its superordinate term, then the resulting sentence B will be an entailment of A. This is the case because the meaning of the superordinate term is defined by a subset of the semantic features of the hyponym. Given a hyponym with the semantic features X, Y and Z and a superordinate term with the features X and Y, a sentence containing the superordinate term is by definition true if the sentence containing the hyponym is true. Semantic features thus help us account for a meaning relationship between sentences.

Note that the generalization made in the previous paragraph (i.e. hyponymy as the source of entailments) breaks down in certain circumstances, in particular when a sentence contains negation or an adjective that is part of a pair of gradable antonyms.

(43) a. Mary did <u>not</u> buy a cat. *does* ***not*** *entail* Mary did <u>not</u> buy a pet.
b. Mary has bought a <u>big</u> cat. *does* ***not*** *entail* Mary has bought a <u>big</u> animal.

In each example in (43), we have replaced a word by its superordinate term. Nevertheless, no entailment relation holds here. For example in (43a), Mary could have bought a dog or a parrot.

Finally, returning to the previous point on paraphrases, we can observe that paraphrases are actually **mutual entailments**. Two sentences are paraphrases if they have the same truth conditions. The truth of one sentence therefore guarantees the truth of the other sentence and vice versa.

- **Presupposition**

  What is assumed beforehand by an utterance, or what is taken for granted, is said to be presupposed. This aspect of sentence meaning is illustrated in (44).

(44) a. Mary saw John again.
  b. Mary had seen John before.

(44b) is a presupposition of (44a). As in the case of entailment, a relation of implication seems to hold between the pair of sentences in (44). If (44a) is true, (44b) must be true as well. At first sight, we might therefore conclude that (44) is a further illustration of the entailment relation. Yet, the relation in (44) is not identical to the one in (42). This can be shown for example if we compare sentences with and without negation. An entailment that holds for an affirmative (i.e. non-negative) clause like (45a) below is not maintained if the sentence is negated (45a'). However, when we compare an affirmative sentence that has a presupposition (45b) with the corresponding negative sentence (45b'), we can see that exactly the same presupposition still holds in the negative sentence.

(45) a. Mary bought a cat. *entails* Mary bought a pet.
  a'. Mary <u>didn't</u> buy a cat. ***does not** entail* Mary bought a pet.
  b. Mary saw John again. *presupposes* Mary had seen John before.
  b'. Mary <u>didn't</u> see John again. *presupposes* Mary had seen John before.

We therefore have to distinguish the entailment relation from the presupposition relation.

If one is uncertain whether a relation between two sentences should be classified as an entailment or as a presupposition, the test shown in (45), i.e. the behaviour with negation, provides the answer. Presupposition is **preserved under negation**, entailment is not. Another test that can be used is question formation. A presupposition is maintained after question formation whereas an entailment is generally lost. Compare (45a) to (46a) and (45b) to (46b).

(46) a. Did Mary buy a cat? ***does not** entail* Mary bought a pet.
  b. Did Mary see John again? *presupposes* Mary had seen John before.

Two additional illustrations of the notion of presupposition are given in (47).

(47) a. Tom will have another cup of tea. *presupposes* Tom has already had a cup of tea.
b. My sister has just arrived. *presupposes* I have a sister.

Both examples pass the negation and question tests and are therefore cases of presuppositions. If we say *Tom won't have another cup of tea* we still presuppose that *Tom has already had another cup of tea*. Similarly, if someone says *Has my sister just arrived?*, there is still a presupposition that the speaker has a sister.

- **Contradiction**
  A contradiction is a negative entailment. If one sentence is true, the other one must be false.

(48) a. Bill gave Laura a bunch of roses. *contradicts*
Bill didn't give Laura a bunch of flowers.
b. John is a baby. *contradicts* John is an adult.

Contradictions arise from word meaning and more specifically from incompatible semantic features. Semantic features thus again contribute to the analysis of a meaning relationship between sentences (cf. also entailment). For example the word *baby* has the semantic feature [–adult], whereas *adult* is specified as [+adult]. This clash in semantic features leads to a contradiction.

The term 'contradiction' is also sometimes used to refer to a relationship between elements within a sentence rather than to a relationship between two sentences as in (48).

(49) a. John killed Bill, who remained alive for many years after.
b. My sister is my godson's father.

The source of the semantic problem in (49) is again the incompatibility of semantic features. For example *sister* in (49) has the feature [+female] and we therefore expect another [+female] noun (or a noun which is unspecified for gender) after the copula verb *is*. This is not the case since *father* has the feature [–female].

Another term used to describe sentences like (49) is **semantic anomaly**. This term refers to any type of sentence containing elements with incompatible semantic features (cf. also e.g. *Colorless green ideas sleep furiously* in exercise 4 of chapter 1) but also to sentences containing nonsense words (cf. e.g. *He took his <u>vorpal</u> sword in hand* in Lewis Carroll's "Jabberwocky"). Writers sometimes use semantic anomaly in order to create poetic effects.

- **Ambiguity**
  Like words, sentences can also be ambiguous. That is, a sequence of sounds forming a sentence may have more than one meaning. In terms of truth conditions, we have an ambiguity at the sentential level if we have one sentence but two sets of truth conditions.

A sentence can be ambiguous because it contains an ambiguous word. This phenomenon was illustrated in example (4) of section 1.1, and we referred to this type of ambiguity as **lexical ambiguity**. However, ambiguous words are not the only source of ambiguity. The following sentences are ambiguous although they contain no words that have more than one meaning.

(50) a. The mother of the boy and the girl will arrive soon.
b. Frank spotted the man with a telescope.

(50a) can be interpreted as (a) 'The boy's mother and the girl will arrive soon' or as (b) 'The mother who has a boy and a girl will arrive soon'. (50b) can be interpreted as meaning either (a) 'Frank spotted the man by using a telescope' or (b) 'Frank spotted the man who has a telescope'. We call the type of ambiguity illustrated in (50) **structural ambiguity**. The ambiguity arises from the way the words are grouped together in the sentence. In (50a) for example we take the sequence *the mother of the boy* and join it together with *the girl* (giving rise to interpretation (a) above) or we first join *the boy* and *the girl* and the group *the boy and the girl* together with *the mother* (giving rise to interpretation (b) above). In other words, the different interpretations are due to different sentence structures. Sentence structure is a topic studied in syntax, and we will therefore discuss the issue of structural ambiguity in more detail in the chapter dealing with syntax (chapter 5).

You can now do exercises 11-15.

2.3.3. *Some problems for truth-conditional semantics*

Truth-conditional semantics allows us to account for the basic meaning of a sentence and the meaning relations between sentences. But there are certain issues of sentence meaning that truth-conditional semantics does not seem to be able to deal with in a satisfactory way:

(i) The meaning of non-declarative sentences. Non-declarative sentences are questions (*Did Mary buy a cat?*) or imperatives (*Close the door, please!*). It is difficult to see what the conditions could for a question to be true, or what the conditions could be for an imperative sentence to be true.

(ii) Certain sentences are necessarily true due to the meanings of the words they contain (**analytic sentences**; cf. exercise (11.i)). Example: *Boys will be boys*. The question that such a sentence raises for truth-conditional semantics is: What would the world have to be like for this sentence to be false? There do not seem to be any conditions under which such an analytic sentence can be false. So what is the meaning of such a sentence?

(iii) Sentences often have additional (implicit) meaning which cannot be captured by truth conditions.

(51) A: Would you like a drink?
B: I am driving.

The implicit answer by B is 'no'. We conclude this because our knowledge of the world tells us that it is not a good idea to drink if one has to drive. However, the implicit answer 'no' in (51B) cannot be expressed by the truth conditions of 'I am driving'.

Certain approaches to **pragmatics** address the problematic issues in (i) to (iii).

3. PRAGMATICS

Word and sentence semantics as discussed so far cannot account for all aspects of sentence interpretation. As observed above, B's reply in (51) would have to be interpreted as 'no'. But *I am driving* does not always imply 'no', so there is nothing intrinsic in this sequence of words that requires a negative interpretation. (51) raises an additional issue. Who is *you* in A's question and who is *I* in B's reply? The basic meaning of *I* expressed in terms of semantic features is [+human, +singular, +1st person] (i.e. the person speaking) but we do not know who *I* actually is in the real world. For a listener to interpret a sentence uttered by a speaker, more than semantic knowledge is needed. Information from the **context** has to be taken into account as well. The 'context' includes the following:

(i) The linguistic context. E.g.: A's question in example (51).
(ii) The non-linguistic context. E.g.: Who is present when the exchange in (51) is taking place? This determines who *I* refers to.
(iii) The encyclopaedic knowledge, i.e. general knowledge of the world. E.g. in (51): drinking and driving do not go together.

Aspects of sentence interpretation that involve the context as defined in (i) to (iii) are studied in **pragmatics**. The distinction between semantics and pragmatics can then be summarized as follows.

(52) **Semantics**: What words/sentences mean independently of context.
Pragmatics: What speakers mean in the context of a specific utterance.

Given the definitions in (52), a distinction is sometimes made between **word and sentence meaning** on the one hand (analyzed in semantics) and **utterance meaning** on the other hand (analyzed in pragmatics). An utterance is the realization of a sentence in a concrete context.

In the following subsections we will examine how the context determines both explicit and implicit aspects of utterance meaning.

3.1. What is explicitly said

3.1.1. *Reference assignment and deixis*

In a discourse, we refer to objects and intend our audience to recognize our reference to those things. The listener's task is therefore to assign the appropriate referent to phrases within an utterance. Some examples of referring expressions are given in (53) in italics.

(53) a. *A plant* needs watering.
b. *I* watered *the plant*.
c. *Ben* watered *your plant*.
d. *He* is here.
e. *That plant* needs watering.

Among the referring expressions in (53), we can distinguish different types: (i) proper names (e.g. *Ben*); (ii) indefinite/definite noun phrases (e.g. *a plant, the plant*); (iii) pronouns (e.g. *I, he*); (iv) demonstratives (demonstrative articles as in *that plant*, *this book*; demonstrative pronouns like *that, this* in e.g. *That needs watering*). These types of referring expressions have different properties when it comes to reference assignment:

- *Proper names*. Reference assignment is based on shared knowledge between speaker and listener (or what the speaker thinks is shared knowledge). If we use a proper name like *Ben* as in (53c), we assume that the listener also knows someone with that name and that the use of the first name is sufficient to identify the referent in the given context.

- *Indefinite/definite noun phrases*. The definite article *the* is used to indicate that the referent of a noun phrase is agreed upon by speaker and listener, either because the referent has already been introduced earlier in the discourse or because it is taken to be known independently of previous introduction. No such assumption accompanies the use of the indefinite article *a*. That is, the referent has not been introduced into the discourse yet, so we have a general description of a referent rather than a reference to a particular individual.

- *Pronouns*. Reference assignment with pronouns always depends on the context. There are two scenarios we have to distinguish here:
  - **Anaphora**: The referent is determined by the linguistic context. For example, if (53c) and (53d) are part of the same discourse, we can conclude that *he* refers to *Ben*. This type of reference assignment is possible only with 3rd person pronouns (*she, he, it, they*).
  - **Deixis**: Reference assignment depends on the situational (i.e. non-linguistic) context. 1st and 2nd person pronouns are always deictic (*I, you, we*). 3rd person pronouns are sometimes also used deictically. This is the case for example when someone utters the sentence *I don't know him* while looking or pointing at someone.

- *Demonstratives*. The use and interpretation of demonstratives often depend on the location of the speaker and/or the listener within a particular setting. Thus, as with certain personal

pronouns, the situational context of the utterance can be crucial for the interpretation of demonstratives, and demonstratives can therefore also be **deictic** expressions. For example, imagine a situation where Peter and John are sitting across from each other at a table. Each would refer to a plate directly in front of him as *this plate* and to a plate in front of the other person or a plate distant from both as *that plate*. So reference assignment for *this plate* or *that plate* depends on the location of the speaker with respect to the object in a specific situation. However, demonstratives can also be used to refer to entities introduced in the previous linguistic context (**anaphoric** use; e.g. *The music stopped, and that upset everyone*.).

The notion of **deixis** plays a role in reference assignment with personal pronouns and demonstratives. However, there are other expressions that are deictic. For example, the adverbs *here* and *there* can also be given a precise interpretation only if we know the situation in which they are uttered. As in the case of demonstratives, the interpretation of *here* and *there* has to take the location of the speaker into account and these cases of deixis are therefore all called **place deixis**. But sometimes it is the time of a given utterance that is crucial for the interpretation of certain elements. This is the case for expressions like *now*, *next week*, or *yesterday*. For example, the exact interpretation of *yesterday* is different in a sentence uttered on 28 November (i.e. 27 November) than in a sentence uttered on 29 November (i.e. 28 November). In such cases, we are speaking of **time deixis**. Note finally that **verbs** can also have deictic properties. Consider for example the contrast in (54).

(54) a. The bear is going into the tent!
b. The bear is coming into the tent!
c. I'm coming over.

The use of *go* in (54a) implies movement away from the speaker. The situation with *come* is more complex. The use of *come* with a third person subject as in (54b) suggests movement towards the speaker. But *come* with a first person subject as in (54c) implies movement towards the listener. What is common to all these cases is that the use and interpretation of the verbs depend on the location of the speaker and the listener in the situation in which the sentences are uttered. We thus have again a case of place deixis. Other verbs of this type are *take* and *bring* discussed above in section 1.2.4.

3.1.2. *Disambiguation*

To determine the meaning of an utterance, the listener sometimes also has to disambiguate potentially ambiguous statements. Again, the context is generally essential for this. Whereas there is no reason to choose one of the two meanings of *bank* in (55a), the linguistic context in (55b) suggests that *bank* refers to a financial institute rather than a river bank.

(55) a. Ann went to the bank yesterday.
b. Ann needed some financial advice, so she went to the bank yesterday.

The context used for disambiguation can also be non-linguistic. This is shown in (56).

(56) John to Paul during a cricket game: *Look at that bat*.

(56) is lexically ambiguous. *Bat* can either refer to a flying rodent or to a wooden implement used for cricket or baseball. In (56), the most salient interpretation is the second one given that the word is uttered during a cricket game.

You can now do exercise 16.

3.2. What is implicitly said

The phenomena discussed so far involve issues of explicit communication. Even though the exact referent of the pronoun *he* in (53d) can only be determined on the basis of the context, the speaker explicitly refers to some male person. However, many sentences also have implicit meaning. Such implicit meanings are called **implicatures**. Implicatures arise in two main contexts.

3.2.1. *Non-literal communication*

Sometimes when we speak, we can communicate something other than what our words mean from a purely semantic point of view. Consider the examples in (57).

(57) a. Bill is the nicest person there is.
b. Boy, this food is terrific!
c. Kim is a block of ice.

Given a certain context, the examples in (57) illustrate different types of non-literal communication:

- *Hyperbole*. Hyperbole is an overstatement. The utterance in (57a) may of course be used literally if the speaker really thinks that there is no nicer person than Bill. However, very often, a speaker may utter something like (57a) to express something weaker, such as 'Bill is a very nice person'.

- *Irony, sarcasm*. As (57a), (57b) can be used with a literal meaning if the food is indeed very good. However, a different context can be imagined. Suppose that the food is terrible and someone then utters (57b). The speaker's statement is then a case of irony or sarcasm, i.e. a statement meaning the opposite of what the sentence uttered literally means.

- *Metaphor*. In (57c), it is clear that if Kim is alive she cannot literally be a block of ice. So (57c) must mean something else. A possible implicature would be something like 'Kim is

cold and unresponsive'. (57c) is a case of a metaphor, i.e. a case in which an expression that designates one thing is used to mean something else. We generally think of metaphors as a literary device mainly used by poets. However, our every-day language is full of metaphors. (57c) is an illustration of a rather common metaphor. Another illustration would be the way we talk about time. The word *time* refers to an abstract entity. However, we often treat time metaphorically as a concrete commodity like money or gold in utterances like the following.

(58) a. You're wasting my time.
b. This gadget will save you hours.
c. How do you spend your time these days?
d. I have invested a lot of time in that project.

Thus, we waste, save, spend or invest time just like concrete commodities.

What distinguishes common metaphors like those in (57c) and (58) from more creative metaphors like those often found in literature is the fact that while the interpretation of the metaphors in (57c) and (58) is fairly straightforward, literary metaphors can give rise to a wide range of (sometimes weak) implicatures.

3.2.2. *Indirect communication*

A different kind of implicit communication is illustrated in (51) above and in the following example.

(59) A: Would you like some coffee?
B: Coffee would keep me awake.

Like (51A), (59A) is a yes/no question. But B does not answer with 'yes' or 'no'. Instead, B answers the question indirectly. The interpretation of (59B) depends very much on the context. Suppose that it is midnight and B still has to finish an essay for the next day. The listener would then conclude that B's answer is 'yes'. But suppose that B is just about to go to bed. In this case, the more likely answer is 'no'.

Example (59) is similar to those in (57) in that some extra-meaning is communicated which is not actually expressed by the semantic content of the words used. But in contrast to (57), the literal meaning is maintained in (59), i.e. the speaker also literally means what (59B) expresses (the fact that coffee would keep him or her awake).

You can now do exercise 17.

3.3. How does context-dependent interpretation work?

For a listener to obtain the intended interpretations of sentences like (51) and (53) to (59), he/she has to draw certain conclusions based on the context. We therefore conclude that

communication involves **inferential** (non-linguistic) **processes**. Inference starts from some premises and leads to a certain conclusion. In our case, the premises are the sentence uttered by the speaker and the context (as defined in (i) to (iii) at the beginning of section 3) and the conclusion is the interpretation.

A central question that arises then in pragmatics is how these inferential processes work, i.e. how a speaker can assume that on the basis of his/her utterance the listener draws the right conclusions and how the listener proceeds to draw these conclusions. Two main issues arise: How is the context chosen? And: How are the inferences chosen?

One influential pragmatic theory addressing these issues is the theory of conversation by Herbert Paul Grice. Grice's basic assumption is that conversation is a rational co-operative social activity and that there is therefore an accepted purpose and direction which all participants agree with. Grice compares conversation to baking a cake or mending a car together. He proposes that in a conversation speakers follow what he calls the **Co-operative Principle** (CP).

(60) *The Co-operative Principle* (CP): Make your conversational contribution such as is required by the accepted purpose or direction of the talk exchange in which you are engaged.

This general idea is made more precise in some more specific maxims of conversation that speakers follow:

(61) a. Maxim of *quantity*: Say neither more nor less than the discourse requires.
b. Maxim of *relevance*: Be relevant.
c. Maxim of *manner*: Avoid obscurity, ambiguity etc. – be clear and orderly.
d. Maxim of *quality*: Make your contribution one that is true.

It is important to stress that the CP and the maxims are not meant to be prescriptive rules (despite the use of the imperative). Instead, they simply describe what speakers seem to be doing. If two or more people are involved in a conversation, they have a common goal, namely to communicate successfully. To achieve this goal each speaker tacitly agrees to follow the CP and the maxims and assumes that the others do so, too. Of course, a speaker could decide to be uncooperative. Yet, doing this too often might mean that he would soon run out of people wishing to enter a conversation with him.

Let us briefly see how the CP and the maxims work in cases of implicit communication by reconsidering example (51): A: *Would you like a drink?* B: *I am driving*. How can A interpret B's reply? The inferential process required for interpreting B's statement would look roughly as follows:

- A's question is a yes/no-question about a drink. B says neither 'yes' nor 'no', nor does B refer to the drink. So at first sight, the CP and, more particularly, the maxims of quantity and relevance seem to be violated.
- Assuming that B does not deliberately violate the CP and the maxims, there must be a way of interpreting B's utterance which is consistent with them. An inference:

(i) If someone is driving, he/she should not drink alcohol. (context – encyclopaedic knowledge)
(ii) B is driving. (literal meaning of B's utterance)
(iii) Conclusion: B does not want to have a drink.

As this example shows, the listener must make certain hypotheses when trying to retrieve the full meaning of an utterance. However, hypothesis formation can of course be subject to errors. The CP and the maxims are therefore not precise rules that guarantee successful interpretation. As a consequence, misunderstandings can occur in communication. As an illustration, reconsider (59): A: *Would you like some coffee?* – B: *Coffee would keep me awake*. As observed above, B's reply can be interpreted in two ways, either as 'yes' or as 'no', depending on the context. It could happen that A and B do not share the same contextual assumptions (e.g. A thinking that B will stay up, while B is planning to go to bed), and that A therefore incorrectly interprets B's reply as 'yes' while B intended 'no'.

Other linguists have developed and modified Grice's theory of conversation, proposing a theory called "Relevance Theory". In this theory, pragmatics is not viewed as a social, co-operative enterprise but in terms of a general theory of cognition. The basic assumption is that human cognition is relevance-oriented. In other words, we pay attention to information that seems relevant to us. Because every act of communication starts out as a request for attention, it therefore creates an expectation of relevance. The notion of relevance in the context of communication is defined as follows: An utterance is relevant if (i) it achieves enough effects to be worth the hearer's attention (adequate effects), and (ii) it puts the hearer to no unjustifiable effort in achieving those effects (minimal effort). The main proposal of Relevance Theory is then that the hearer chooses an interpretation (i.e. a context and resulting inferences) which makes an utterance relevant to him.

You can now do exercise 18.

3.4. Speech acts

An additional aspect of language use in a given context is the fact that one can sometimes do things when speaking. Consider (62).

(62) a. I promise that I will be on time.
b. I warn you that this is dangerous.

Simply by uttering these statements, the speaker performs an action, such as promising or warning. Such speech acts can be explicit (as in 62) due to the presence of a **performative verb**. Performative sentences have three main properties:
(i) The verb is in the first person (the speaker is the subject).
(ii) The verb is in the present tense.
(iii) The verb can co-occur with *hereby*. (e.g. *I hereby promise that I will be on time.*)

But speech acts can sometimes also be implicit (**indirect speech act**). The actual communicative intention often depends on the context, as can be shown on the basis of example (63).

(63) I'll be there tonight.

The utterance in (63) could be a simple prediction. But under certain circumstances, it could also be meant to be a promise or a threat. The communicative intention of an utterance is referred to as the **illocutionary force**.

Note finally that in principle every utterance not containing a performative verb is some kind of an implicit speech act. For example the statement *He opened the window* constitutes an act of stating: *I state that he opened the window*. Similarly, the question *Did he open the window?* can be interpreted as an implicit speech act: *I ask if he opened the window*. And finally an imperative *Open the window!* implies the speech act *I order you to open the window*. This way of viewing questions and imperatives has sometimes been adopted in order to propose a possible way to address problem (i) in section 2.3.3, i.e. the fact that questions and imperatives do not seem to have truth conditions, but they nevertheless have meaning. Turning these non-declarative clauses into declarative clauses by adding a performative verb like *ask* or *order* may solve this problem.

You can now do exercise 19.

Recommended further reading:

Fromkin, Rodman and Hyams (2003), chapter 5.

References cited:

Crystal, D. 1995. *The Cambridge Encyclopedia of the English Language*. 1st edition. Cambridge: Cambridge University Press.

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CHAPTER 2 – TP EXERCISES

1. LEXICAL SEMANTICS

Section 1.1.

1. Ambiguity

Explain the semantic ambiguity of the following sentences by providing two or more sentences that paraphrase the multiple meanings. Example: *She can't bear children* can mean either *She can't give birth to children* or *She can't tolerate children*.

a. He waited by the bank.
b. Is he really that kind?
c. The proprietor of the fish store was the sole owner.
d. The long drill was boring.
e. When he got the clear title to the land, it was a good deed.
f. It takes a good ruler to make a straight line.
g. He saw that gasoline can explode.

2. Opposites

There are several kinds of antonymy. By writing a *c*, *g*, or *r* in column C, indicate whether the pairs in columns A and B are complementary, gradable, or relational opposites.

A	B	C
good	bad	
expensive	cheap	
parent	offspring	
beautiful	ugly	
false	true	
lessor	lessee	
pass	fail	
hot	cold	
legal	illegal	
larger	smaller	
poor	rich	
fast	slow	
asleep	awake	
husband	wife	
rude	polite	

3. Homophony and polysemy

(i) For each definition below write in the first blank the word that has that meaning and in the second (and third if present) a differently spelled homophone that has a different meaning. For example: "A pair": t*wo* t*oo* t*o*

a. "Naked": b_____ b_____
b. "Base metal": l_____ l_____
c. "Worships": p_____ p_____ p_____
d. "Eight bits": b_____ b_____ b_____
e. "One of five senses": s_____ s_____ c_____
f. "Several couples": p_____ p_____ p_____
g. "Not pretty": p_____ p_____
h. "Purity of gold unit": k_____ c_____
i. "A horse's coiffure": m_____ m_____ M_____
j. "Sets loose": f_____ f_____ f_____

(ii) Give two meanings of the following homophones:

a. rock 1_____ 2_____
b. file 1_____ 2_____
c. sack 1_____ 2_____
d. fast 1_____ 2_____
e. flat 1_____ 2_____

(iii) For each word, decide whether it illustrates a case of *homophony* or a case of *polysemy*:

a. *grass* (herbage used for grazing animals; marijuana)
b. *leech* (a bloodsucking worm; a hanger-on who seeks advantage)
c. *race* (act of running competitively; people belonging to the same genetic grouping)
d. *spell* (to name or write the order of letters in a word, a magical word, a period of time)
e. *key* (an instrument used to open a lock; an answer sheet for a test or assignment)
f. *horn* (a structure projecting from the head of an animal; a musical instrument)

4. Synonymy

(i) Fill in the gaps below with the appropriate synonym. In each case the first word is of English origin and the second word is of French or Latin origin. Can you make a general statement about the connotations of the two classes of words?

a. feed - _____
b. _____ - conceal
c. _____ - people

d. begin - _____
e. _____ - aid/assist
f. mistake - _____
g. _____ - labor
h. _____ - vision
i. _____ - altitude

(ii) To determine whether the following pairs are real or near synonyms place them in sentences: (i) in which they can both appear; (ii) where you can have one but not the other (if they are near synonyms).

a. happy/glad ……
……
b. chamber/room ……
……
c. answerable/responsible ……
……
d. assassin/murderer ……
……
e. deep/profound ……
……
f. ripe/mature (adjectives) ……
……
g. sofa/couch ……
……

5. Hyponymy

(i) Identify the superordinate term in each set.

a. house, shed, building, garage, cottage, hut
b. plate, saucer, soup bowl, dish, serving bowl
c. car, vehicle, truck, bus, van, tractor
d. glance, peep, stare, leer, look (at), view, watch
e. hurricane, tornado, gale, storm, typhoon

(ii) Fill in the missing slots:

a. pig — sow
b. virtue — honesty
c. tree — beech
d. strike — slap
e. emotion
f. pleasant

Section 1.2.

6. Semantic properties/features

(i) Taking words from the following list, form groups of words according to semantic criteria.

handyman
tigress cleaning lady
mare
wife baby
bachelor
puppy tiger
husband plumber
doctor professor

(ii) For each group of words given below, state what semantic property or properties distinguish between the classes of (a) words and (b) words. If asked, also indicate a semantic property shared by both the (a) words and the (b) words.

Example: (a) widow, mother, sister, aunt, maid
(b) widower, father, brother, uncle, valet
The (a) and (b) words are "human".
The (a) words are "female" and the (b) words are "male".

A. (a) bachelor, man, son, paperboy, pope, chief
(b) bull, rooster, drake, ram
The (a) and (b) words are _____
The (a) words are _____
The (b) words are _____

B. (a) table, stone, pencil, cup, house, ship, car
(b) milk, alcohol, rice, soup, mud
The (a) words are _____
The (b) words are _____

C. (a) book, temple, mountain, road, tractor
(b) idea, love, charity, sincerity, bravery, fear
The (a) words are _____
The (b) words are _____

D. (a) pine, elm, ash, weeping willow, sycamore
(b) rose, dandelion, aster, tulip, daisy
The (a) and (b) words are _____
The (a) words are _____
The (b) words are _____

E. (a) book, letter, encyclopaedia, novel, notebook, dictionary
(b) typewriter, pencil, pen, crayon, quill, charcoal, chalk
The (a) words are _____
The (b) words are _____

F. (a) walk, run, skip, jump, hop, swim
(b) fly, skate, ski, ride, cycle, canoe, hang-glide
The (a) and (b) words are _____
The (a) words are _____
The (b) words are _____

G. (a) ask, tell, say, talk, converse
(b) shout, whisper, mutter, drawl, holler
The (a) and (b) words are _____
The (a) words are _____
The (b) words are _____

H. (a) absent – present, alive – dead, asleep – awake, married – single
(b) big – small, cold – hot, sad – happy, slow – fast
The (a) and (b) words are _____
The (a) words are _____
The (b) words are _____

I. (a) alleged, counterfeit, false, putative, accused
(b) red, large, cheerful, pretty, stupid
(Hint: Is an alleged murderer always a murderer? Is a pretty girl always a girl?)
The (a) words are _____
The (b) words are _____

7. Semantic features and language change

Language change: Every aspect of language can change over time, including the meanings of words. Consider the following data from Old English (OE) and Middle English (ME), and their equivalents in Modern English (ModE). Can the semantic shifts from OE/ME to ModE be explained in terms of semantic features?

a. ME: 'dogge': specific breed of dog → ModE: dog
ME: 'companion': person you share bread with → ModE: companion

b. ME: 'meat': food → ModE: meat
ME: 'deer': animal (cf. German 'Tier') → ModE: deer
ME: 'hound': dog (cf. German 'Hund') → ModE: hound
ME: 'girl': young person of either sex → ModE: girl
OE: 'steorfan': to die (cf. German 'sterben') → ModE: starve

c. OE: 'silly': happy → ModE: silly
OE: 'nice': ignorant → ModE: nice

8. Features of nouns

Are the following nouns [+count] or [–count]?

a. evidence
b. fish
c. sheep
d. nation
e. rice
f. equipment
g. coffee
h. cat
i. harm
j. injustice
k. change

9. Features of verbs

Are the verbs in the following sentences [+stative] or [–stative] and [+telic] or [–telic]?

(a) The skaters are practicing.
(b) She skated around the ring.
(c) He is happy with the results.
(d) He studied for the test.
(e) Julia's mother was crying.
(f) Pam has a cold.

2. PHRASE AND SENTENCE MEANING

Section 2.2.

10. Thematic roles

Identify the thematic roles (agent, theme, goal, or experiencer) of each noun phrase in the following sentences.

a. John baked scones.
b. The cake is baking.
c. Max showed Nina the book.
d. Peter likes pizza.
e. He was awarded the Nobel Prize in medicine.
f. Peter was reading.

Section 2.3.

11. Truth conditions

(i) Some linguists and philosophers distinguish between two kinds of truthful statements: one follows from the definition or meaning of a word; the other simply happens to be true in the world as we know it. Thus, *kings are monarchs* is true because the word *king* has the semantic property "monarch" as part of its meaning; but *kings are rich* is circumstantially

true. We can imagine a poor king, but a king who is not a monarch is not truly a king. Sentences like *kings are monarchs* are said to be **analytic**, true by virtue of meaning alone. Write *A* by any of the following sentences that are analytic, and *S* for "situational" by the ones that are not analytic.

a. Queens are monarchs.
b. Queens are female.
c. Queens are mothers.
d. Dogs are four-legged.
e. Dogs are animals.
f. Cats are felines.
g. Cats are stupid.
h. George Washington is George Washington.
i. George Washington was the first president.
j. Uncles are male.

(ii) The opposite of *analytic* (see previous exercise) is **contradictory**. A sentence that is false due to the meaning of its words alone is contradictory. *Kings are female* is an example. Write a *C* by the contradictory sentences and *S* for situational by sentences that are not contradictory.

a. My aunt is a man.
b. Witches are wicked.
c. My brother is an only child.
d. The evening star isn't the morning star.
e. The evening star isn't the evening star.
f. Babies are adults.
g. Babies can lift one ton.
h. Puppies are human.
i. My bachelor friends are all married.
j. My bachelor friends are all lonely.

12. Paraphrase

Are the following pairs of sentences **paraphrases** of one another? Answer yes or no and provide some arguments to justify your answers.

a. Bachelors prefer redhaired girls.
   Girls with red hair are preferred by unmarried men.
b. John sold the book to a grandson of W.B. Yeats.
   A grandson of W.B. Yeats bought the book from John.
c. John is the parent of James.
   James is the child of John.

d. John is the parent of James.
   James is the parent of John.
e. My father owns this car.
   This car belongs to my father.
f. Some countries have no coastline.
   Not all countries have a coastline.

13. Entailment

Look at the following examples and say whether the **entailment** is correct or not.

a. John killed Bill. *entails* Bill is dead.
b. John cooked an egg. *entails* John boiled an egg.
c. John boiled an egg. *entails* John cooked an egg.
d. I saw a boy. *entails* I saw a person.
e. John stole a car. *entails* John took a car.
f. His speech disturbed me. *entails* His speech deeply disturbed me.
g. Mary and John are twins. *entails* John and Mary are twins.
h. John and Mary are twins. *entails* Mary and John are twins.

14. Presupposition

The following sentences make certain presuppositions. What are they? (The first one has been done for you.)

a. The police ordered the minors to stop drinking.
   Presupposition: *The minors were drinking.*
b. Please take me out to the ball game again.
   Presupposition: _____
c. Valerie regretted not receiving a new T-bird for Labor Day.
   Presupposition: _____
d. That her pet turtle ran away made Emily very sad.
   Presupposition: _____
e. The administration forgot that the professors support the students. (Compare *The administration believes that the professors support the students*, in which there is no such presupposition.)
   Presupposition: _____
f. It is strange that the United States invaded Cambodia in 1970.
   Presupposition: _____
g. Isn't it strange that the United States invaded Cambodia in 1970?
   Presupposition: _____
h. Disa wants more popcorn.
   Presupposition: _____

i. Why don't pigs have wings?
   Presupposition: _____
j. Who discovered America in 1492?
   Presupposition: _____

15. Ambiguity

The following sentences are all ambiguous. For each give two paraphrases which are not paraphrases of each other.

a. The chicken is ready to eat.
b. They passed the port at midnight.
c. We saw her duck.

Discuss the following statements. Only one of them is correct.

(A) All sentences which contain one or more ambiguous words are ambiguous, and every sentence which contains no ambiguous words is unambiguous.
(B) Some sentences which contain ambiguous words are ambiguous while others are not, and some sentences which contain no ambiguous words are ambiguous while others are not.
(C) Some sentences which contain ambiguous words are ambiguous while some are not, but all sentences that contain no ambiguous words are unambiguous.
(D) All sentences which contain ambiguous words are ambiguous, but some sentences that contain no ambiguous words are also ambiguous while others are not.

Now place the (a) to (c) sentences in the following table.

	Ambiguous sentence	Unambiguous sentence
Sentence containing one or more ambiguous words		
Sentence containing no ambiguous words		

Do the same with the following sentences:

d. Semantics is a subdiscipline of linguistics.
e. Semantics is a branch of linguistics.
f. John and Peter saw rotten branches off the trees in the park.
g. Cinderella watched the colourful ball.
h. I said I would file it on Thursday.

3. PRAGMATICS

Section 3.1.

16. Deixis

(i) Circle any deictic expression in the following sentences. (Hint: Proper names and noun phrases containing *the* are not considered deictic expressions. Also, all sentences do not include deictic expressions.)

a. I saw her standing there.
b. Dogs are animals.
c. Yesterday, all my troubles seemed so far away.
d. This flower is called a monkey orchid.
e. The Declaration of Independence was signed in 1776.
f. The Declaration of Independence was signed last year.
g. Copper conducts electricity.
h. The treasure chest is under your feet.
i. These are the times that try men's souls.
j. There is a tide in the affairs of men which taken at the flood leads on to fortune.

(ii) Decide in which of the following sentences the deictic verbs *bring* and *take* are used appropriately. On the basis of these data, try to give a description of the deictic properties of *bring* and *take*. For this you may have to distinguish between direct speech and indirect speech (direct speech: (a) to (n); indirect speech: (o) to (t)).

a. Take it here.
b. Bring it there.
c. I will bring it to you.
d. I will take it to you.
e. I will bring it to John.
f. I will take it to John.
g. You will take it to me.
h. You will bring it to me.
i. You will bring it to John.
j. You will take it to John.
k. John will bring it to you.
l. John will take it to you.
m. John will bring it to Mary.
n. John will take it to Mary.
o. John told me he would bring it to you.
p. John told me he would take it to you.
q. Did John tell you he would bring it to me?
r. Did John tell you he would take it to me?
s. John told me he would bring it to Mary.
t. John told me he would take it to Mary.

Section 3.2.

17. Implicature

(i) In the following examples, determine whether the sentence in italics is a presupposition (P), an entailment (E), or an implicature (I). Explain your choice.

a. It is significant that the criminal was sentenced.
The criminal was sentenced.

b. A: What did you think of the film? B: Well, the supporting actor was great.
The film wasn't that great.
c. When Lesley was ill, Jane deputized for her on the committee.
Lesley was ill.
d. She finished her degree and she got married.
First she finished her degree and then she got married.
e. Peter lives in Geneva.
Peter lives in Switzerland.
f. (A and B in a restaurant, A saying to B after the meal) A: I've lost my wallet.
A doesn't have any money, B must pay.

(ii) Examine the following sets of sentences, each of which includes words or phrases used metaphorically. For each set of sentences: (i) Identify the words or phrases that are used metaphorically in each sentence. (ii) Determine the basis for each of these metaphor sets. Use the pattern: "The metaphors in (x) describe _____ in terms of _____."

a. She gave him an icy stare.
He gave her the cold shoulder.
He exudes a lot of warmth towards people.
They got into a heated argument.
b. I let my manuscript simmer for six months.
She concocted a retort that readers will appreciate.
There is no easy recipe for writing effective business letters.
c. His opponents tore his argument to pieces.
My reasoning left them with no ammunition.
The others will never be able to destroy this argument.
Members of the audience besieged him with counterarguments.
d. I am looking forward to it.
I can remember back to when I was two years old.
He drags up old conflicts.
You must plan ahead for retirement.

Section 3.3.
18. Grice's maxims

Each of the following conversational fragments is to some degree odd. To what extent can the oddness be explained by reference to Grice's Cooperative Principle and maxims?

a. A: What did you do yesterday?
B: I had a swim, changed into my swimming trunks, and went to the beach.
b. A: Can you tell me where Mr Smith's office is?
B: Yes, not here.

c. A: Would you like some coffee?
   B: Mary's a beautiful dancer.
d. A: Has the postman been here?
   B: He leant his bicycle against the fence, opened the gate, strode briskly down the path, stopped to stroke the cat, reached into his bag, pulled out a bundle of letters and pushed them through our letter-box.
e. A: Have you seen Peter today?
   B: Well, if I didn't deny seeing him, I wouldn't be telling a lie.

Section 3.4.

19. Speech acts

A criterion of performance utterance is whether you can begin it with *I hereby*. Notice that if you say sentence (a) aloud it sounds like a genuine apology, but to say sentence (b) aloud sounds funny because you cannot perform an act of knowing.

a. I hereby apologize to you.
b. I hereby know you.

Test whether the following sentences are performance sentences by inserting *hereby* and seeing whether they sound right. Circle the letter of any that are performance sentences.

c. I testify that she met the agent.
d. I know that she met the agent.
e. I suppose the Yankees will win.
f. He bet her $2500 that Kerry would win.
g. I dismiss the class.
h. I teach the class.
i. We promise to leave early.
j. I owe the IRS $1,000,000.
k. I bequeath $1,000,000 to the IRS.
l. I swore I didn't do it.
m. I swear I didn't do it.

Analysis of your own data – Task 2

On the basis of an example taken from your speech sample, explain and illustrate:

- ONE concept in semantics.

AND:

- ONE concept in pragmatics.

Your answers should consist of explicit and coherently written paragraphs (one paragraph of approximately 75-100 words per concept).

Exercises 1, 2, 3.i, 6.ii, 11, 14, 16.i and 19 from Fromkin, Rodman and Hyams (2003), chapter 5. Exercises 16.ii and 18 from: Cruse, A. 2004. *Meaning in Language. An Introduction to Semantics and Pragmatics.* 2nd edition. Oxford: Oxford University Press.