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Preliminaries

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5 Semantics, pragmatics, and meaning relations

Few grammars even attempt to describe the ways in which sentences are formed without making reference along the way to meaning and how sentences express it. After all, few would take it to be controversial that a human language such as English is in some sense a system for framing thoughts and making meaningful messages expressible, and this would make it a natural supposition that meaning and grammar would be to some extent intertwined. This grammar, while not attempting a full and detailed semantic description of the language (which would be an unrealistically large and difficult enterprise), touches on the topic of meaning frequently. But as we will explain, we do not treat meaning as a unitary phenomenon.

6 The semantics/pragmatics distinction

We treat the analysis of meaning as divisible in the first instance into two major domains. The first deals with the sense conventionally assigned to sentences independently of the contexts in which they might be uttered. This is the domain called semantics. The second

¹⁵ Our definition omits the reference to recipients in the traditional definition because this will appear in the definition of indirect object - a grammatically distinct subtype of object characteristically expressing the recipient.

deals with the way in which utterances are interpreted in context, and the ways in which the utterance of a particular sentence in a certain context may convey a message that is not actually expressed in the sentence and in other contexts might not have been conveyed. This is the domain called **pragmatics**.

Truth-conditional and non-truth-conditional aspects of semantics

Within semantics we then make a further division between those aspects of the meaning of sentences that have to do with truth and those that do not. Consider the sentence:

[1] *I have just had a letter from the tax inspector.*

The most important thing that speakers of English know about the meaning of this sentence is the conditions under which it could be used to make a true statement. But there is certainly more to meaning than that. For one thing, the meaning of *Have you just had a letter from the tax inspector?* is such that it cannot be conventionally used to make a statement at all, so we cannot describe its meaning by specifying the conditions under which it would be used to make a true statement. Truth conditions are nonetheless important to specifying meaning exactly. In the brief survey that follows, we begin with truth-conditional meaning, then consider other aspects of sentence meaning, and finally turn to pragmatics, to the interpretation of sentences in context.

5.1 Truth conditions and entailment

a Sentences vs propositions

Sentences as such are not true or false: they do not themselves have **truth values**. It makes no sense to ask whether [1], considered as a sentence of English, is true or false. The question of true or false arises only with respect to its use on particular occasions, for this question depends crucially on who utters the sentence, and when. This is why we said above that knowing the meaning of this sentence involves knowing the conditions under which it could be used to make a true statement - more succinctly, it involves knowing its **truth conditions**. The speaker, whoever it might be, must have received a letter from the tax inspector a short time before uttering the sentence.

The abstract entities that do have truth values we call **propositions**. We say, then, that declarative sentences can be used in particular contexts to **assert** propositions. And it is clear from what has been said that sentence [1] can be used to assert indefinitely many different propositions, depending on who says it and when. To describe the truth conditions of [1] is to say what conditions would have to be satisfied in order for the proposition it was used to assert in particular contexts to be true. Having made this general point, however, we will follow the widespread practice of talking of a sentence as being true under such-and-such conditions as a shorthand way of saying that the proposition asserted by the sentence under those conditions would be true.

If two sentences have different truth conditions they necessarily have different meanings. Consider the two pairs in:

- [2] i a. *The UK is a monarchy.* b. *The UK has a queen as sovereign.*
 ii a. *The committee approved of my plan.* b. *The committee approved my plan.*

At the turn of the twenty-first century the propositions asserted by saying [ia] and [ib] were both true. But clearly that could change: the succession of a male sovereign to the

throne would allow [ia] to continue to assert a true proposition, but [ib] would assert a false proposition under those circumstances. The sentences accordingly have different truth **conditions**: circumstances could obtain under which one would express a truth and the other a falsehood. Similarly, though perhaps less obviously, in [ii]. For [iia] to be true, it is sufficient for the committee to feel broadly favourable to my plan, but for [iib] to be true it is necessary that they actually took some action to give my plan the go-ahead signal. The conditions under which the first would be true are not quite the same as those under which the second would be true, so the meanings differ.

Entailments

One way of describing truth conditions is in terms of **entailments**. An entailment is defined as follows (the definitions in this chapter use \Leftarrow to symbolise the relation ‘is by definition equivalent to’):

[3] X entails Y = If X is true, then it follows necessarily that Y is true too.

In the first instance, entailment is a relation between propositions, since it is propositions, strictly speaking, that have truth values. But we can apply the concept derivatively to sentences, as illustrated in:

[4] i <i>Kim broke the vase.</i>	[entails [ii]]
ii <i>The vase broke.</i>	[entailed by [i]]
iii <i>Kim moved the vase.</i>	[does not entail [ii]]

If the proposition asserted by [i] in any context is true, then the proposition asserted by [ii] in that same context must also be true. The first proposition entails the second, and sentence [i] entails sentence [ii]. If X entails Y , then it is inconsistent to assert X and deny Y . It is inconsistent, for example, to say **Kim broke the vase but the vase didn't break* (the \Leftarrow symbol indicates that what follows is grammatical but semantically or pragmatically anomalous). In the case of [hi] and [ii] there is no such inconsistency: *Kim moved the vase but the vase didn't break*. And [iii] of course does not entail [ii]: it is perfectly possible for [iii] to be true and [ii] false.

We can state entailments in a variety of equivalent ways: we can say that *Kim broke the vase* entails that the vase broke, or that it entails “The vase broke”, or that it entails *The vase broke*. Whichever mode of presentation we adopt, it follows from the definition given in [3] that if X entails Y then X cannot be true unless Y is true. And that is to say that Y is a condition for the truth of X . So to give the entailments of a sentence is to give its truth conditions.

Closed and open propositions

A refinement of our notion of proposition is called for in discussing certain constructions. What we have described so far as propositions could be described more precisely as **closed propositions**. They are closed in the sense of not leaving anything available to be filled in: a proposition like “Sandy showed me that at the office last week” identifies what was done, who did the showing, what was shown, where it happened, and when this occurred. There are also **open propositions**, which have a place left open. Consider the meaning of *What did Sandy show you at the office last week?*: it could be represented informally as “Sandy showed you x at the office last week”, where x is a placeholder, or **variable**, for a piece of information not supplied. The point of open interrogative sentences like *What*

did Sandy show you at the office last week? is typically to present an open proposition to the addressee in the guise of a request that the missing piece of information be supplied in response. An open proposition yields a closed proposition when the necessary extra piece of information is provided to fill the position of the variable.

5.2 Non-truth-conditional aspects of sentence meaning

Illocutionary meaning and propositional content

In making the point that there is more to sentence meaning than truth conditions we invoked the distinction between declaratives and interrogatives. Compare, then, such a pair as:

[5] a. *Kim broke the vase.* b. *Did Kim break the vase?*

We do not use [b] to make a statement. It therefore does not have truth conditions or entailments. Nevertheless, it is intuitively obvious that [a] and [b] are partially alike and partially different in both form and meaning. As far as the form is concerned, they differ in what we call **clause type**, with [a] declarative, [b] interrogative, but in other respects they are the same: [b] is the interrogative **counterpart** of [a]. The semantic correlate of clause type is called **illocutionary meaning**. The illocutionary meaning of [a] is such that it would characteristically be used to make a statement, while [b] has the illocutionary meaning of a question.

What [a] and [b] have in common is that they express the same proposition. We use 'express' here in a way which is neutral between statements and questions: [a] can be used to assert the proposition that Kim broke the vase, and [b] to question it, but in both cases the proposition is expressed. A distinctive property of questions is that they have answers, and the answers to the kind of question we are concerned with here are derivable from the proposition expressed, "Kim broke the vase", and its negation, "Kim didn't break the vase." While they differ in illocutionary meaning, we will say that [a] and [b] are alike in their **propositional meaning**, that they have the same **propositional content**.

M Conventional implicature

Sentences with the same illocutionary meaning may have the same truth conditions and yet still differ in meaning. Consider the following pairs:

[6] i a. *She is flying up there and taking the train back.* b. *She is flying up there but taking the train back.*
 ii a. *Max agreed that his behaviour had been outrageous.* b. *Even Max agreed that his behaviour had been outrageous.*
 iii a. *Eve just realised I've got to work out my sales tax.* b. *Eve just realised Eve got to work out my bloody sales tax.*

Take first the pair in [i]. Both [ia] and [ib] are true provided that she is flying up there and coming back on a train. They have the same truth conditions, the same entailments. There is, in other words, no context in which the statement made by one would be true, while that made by the other would be false. They therefore have the same propositional meaning. Yet we do not perceive them as entirely synonymous, as having entirely the same meaning. We would use [ia] in neutral cases and reserve [ib] for cases where there

is some relevant contrast related to the second coordinate - perhaps one would have expected her to use a return flight and she is acting counter to that expectation, or it might be that although she will be going up there at air travel speed she will have much more time for reading on the slow return trip, and so on. The precise nature of the contrast is not made explicit, but the use of *but* rather than the neutral coordinator *and* indicates that the two parts are being presented as involving some sort of contrast. As we have said, this extra meaning contributed by the choice of *but* rather than *and* is not part of the propositional meaning: it would not be legitimate for you to respond to [ib] by saying, *That's false, though I concede that she is flying up there and taking the train back.*

Similarly with [6ii], except that here the two sentences differ not in the choice of one word rather than another, but in the presence or absence of a word, namely *even*. *Even* conveys that it is somehow noteworthy that the property of having agreed that his behaviour was outrageous applies to Max: it is less expected that Max should have agreed than that the others who agreed should have done so. Again, this is not part of the propositional meaning. The truth conditions of [iia-iib] are the same: there is no context where one could be true and the other false. But it is intuitively clear that the sentences do not have exactly the same meaning.

The same applies in [6iii]. *Bloody* serves in some rather vague way to express anger or ill will towards sales tax reporting regulations, or towards the idea of having to work out sales taxes, or something of the sort. But the anger or ill will is not expressed as part of the propositional meaning: the truth conditions for [iib] are exactly the same as those for [iia].

We will handle the non-propositional meaning conveyed by items such as *but*, *even*, and *bloody* in these examples in terms of the concept of **conventional implicature**. In uttering [6ib], I indicate, or **implicate**, that there is some kind of contrast between her taking the train back and flying up there, but I do not actually state that there is. And analogously for the others. Unlike entailments, conventional implicatures are not restricted to sentences that are characteristically used to make statements. *Is she flying up there but taking the train back?*, *Did even Max agree that his behaviour had been outrageous?* and *Have you ever had to do a bloody sales tax report?* carry the above implicatures even though they do not themselves have truth conditions.

5.3 Pragmatics and conversational implicatures

Pragmatics is concerned not with the meaning of sentences as units of the language system but with the interpretation of utterances in context. Utterances in context are often interpreted in ways that cannot be accounted for simply in terms of the meaning of the sentence uttered.

Let us again illustrate the point by means of a few representative examples:

- [7] i *Do you think I could borrow five dollars from you?*
- ii *If you agree to look after my horses after I die, I'll leave you my whole estate.*
- iii *Some of the audience left the room before the first speaker had finished.*

Imagine that Sue and Jill are at the cash register in a cafeteria buying sandwiches. Jill has \$20 in her hand. Sue finds she only has a few cents in her purse, and utters [i]. As far as the literal meaning of the sentence is concerned, this is a question as to whether or not

Jill thinks Sue could borrow five dollars from her. It has two possible answers: “Yes” (i.e. “I do think you could”) and “No” (i.e. “I don’t think you could”). But for Jill to respond *Yes, I do* would seem strange and uncooperative in this context. It would force Sue to be more direct: *Well, lend it to me then, right now, because I can’t afford to pay for this sandwich.*

What would normally be expected of Jill would be to act on the basis of the following reasoning. We both have to pay for our sandwiches. Sue has reached the cash register and, after finding her purse almost empty, is asking whether in my opinion it would be possible for me to extend a \$5 loan. Sue can see that I have \$20, and sandwiches only cost about \$5, so I could obviously afford it. Sue must see that the answer to the question is “yes”. Why am I being asked for my opinion about my financial status? What is the point of this question? The only reasonable conclusion is that Sue actually wants me to advance such a loan, right now.

The message “Please lend me \$5” is thus indirectly conveyed by a question that does not itself actually express it. A cooperative addressee will understand the speaker’s intention immediately, without consciously going through the process of reasoning just sketched. But for the student of language it is important to see: (a) that “Please lend me \$5” is not the semantic meaning of sentence [zi], but the pragmatic meaning of an utterance of [i] in a certain range of contexts; (b) that the pragmatic interpretation can be derived in a systematic way from the interaction between the sentence meaning and the context.

Semantics is thus concerned with the meaning that is directly expressed, or encoded, in sentences, while pragmatics deals with the principles that account for the way utterances are actually interpreted in context. A central principle in pragmatics, which drives a great deal of the utterance interpretation process, is that the addressee of an utterance will expect it to be relevant, and will normally interpret it on that basis.

This principle of relevance was very evident in our first example: the relevance of Sue’s question was that she needed Jill to lend her the money. It is equally important in deriving the pragmatic interpretation of [zii]. This sentence does not actually make the statement that you won’t get the estate if you don’t agree to look after my horses: that is not part of the sentence meaning. A proposition of the type “if P then Q” does not require “P” to be true in order for “Q” to be true.¹⁶ We therefore need an explanation for this fact: anyone who is told *If you agree to look after my horses after I die then I’ll leave you my whole estate* will always assume that the bequest will not be forthcoming without the agreement to look after the horses. Why? Because otherwise it would not have been relevant to mention the horses. If that part of the sentence had some relevance, it must be as a necessary condition for getting the bequest, and we normally try to find an interpretation for an utterance that makes everything in it relevant. The semantics of the sentence does not tell us that the horse care will be a precondition for the bequest, but the pragmatics of interpreting the utterance certainly does.

¹⁶If this is not obvious, consider the sentence *If a house collapses directly on me I will die*. This does not entail that provided no house falls on me I will be immortal. Eventually I will die anyway. Or consider *If you need some more milk there’s plenty in the fridge*. This does not state that there is plenty of milk in the fridge only if you need some. If there is milk in there, it will be there whether you need it or not. A sentence meaning “if P then Q” will often strongly suggest “if not P then not Q”, but that is not part of the semantic meaning.

Consider, finally, example [zii], as uttered, say, in the context of my giving you an account of a weekend seminar I recently attended. You will infer that not all of the audience left the room before the first speaker had finished. But again that is not part of the meaning of the sentence. *Some* does not mean “not all”. The “not all” interpretation can be accounted for by pragmatic principles. I am describing an event at which I was present, so I presumably know whether or not all of the audience left before the first speaker had finished. Suppose I know that all of them left. Then I would surely be expected to say so: such a mass walkout would be much more worth mentioning than one where only part of the audience left. So the natural assumption is that I said *some* rather than *all* because it would not have been true to say *all*: what other reason could I have for making the weaker statement?

Compare this with the case where you ask *Have all the questionnaires been returned?* and I reply *I don't know: some have, but I can't say whether they all have*. If *some* meant “not all” this would be incoherent, but clearly it is not. This time my reason for saying *some* rather than *all* is not that it would be false to say *all*, but merely that I do not have enough knowledge or evidence to justify saying *all*.

We will again invoke the concept of implicature in describing the above interpretations of utterances of [7i-iii], but we will classify them more specifically as **conversational implicatures**. We will say, for example, that an utterance of [7iii] in the context described conversationally implicates “Not all of the audience left before the first speaker had finished”.

s Relation between entailment and the two kinds of implicature

The differences between entailment, conventional implicature, and conversational implicature are summarised in [8].

[8] ENTAILMENT	semantic	truth-conditional
CONVENTIONAL IMPLICATURE	semantic	non-truth-conditional
CONVERSATIONAL IMPLICATURE	pragmatic	non-truth-conditional

Implicatures are distinguished from entailments in that they are not truth conditions; hence they are not restricted to sentences that can be used to make statements. The two types of implicature are distinguished according to whether they are part of the conventional meaning of sentences or derive from the interaction between the sentence meaning and the context of utterance by means of general principles of conversational cooperation. In this book we will be much more concerned with conversational implicatures than with conventional ones, as they play a larger part in the interpretation of discourse; we will take them to represent the default case, therefore, and when the term implicature is used without qualification it is intended to be understood in the conversational sense in the absence of indications to the contrary. The verb corresponding to ‘implicature’ is **implicate**; in addition, we will use the term **convey** in a way which is neutral between entail and (conventionally or conversationally) implicate.

Conversational implicatures are not part of sentence meaning at all. They are suggested to the hearer by the combination of the sentence meaning and the context, but they are not part of what is said. Nevertheless, many of them are of very general application, so that we can say that such-and-such an implicature will normally accompany the utterance of a given sentence unless special factors exclude that possibility. In such cases

it is convenient to talk about the sentence normally implicating something - e.g. that [jiii] normally implicates that not all of the audience left before the first speaker had finished. This is to be understood as a shorthand way of saying that an utterance of the sentence in a normal context would carry that implicature in the absence of factors which exclude it. We will therefore apply the term to sentences in the following sense:

- [9] *X normally **con conversationally implicates** $\neg X$ does not entail Y but in saying X the speaker makes an implicit commitment to the truth of Y in the absence of indications to the contrary.*

When such ‘indications to the contrary’ are present, we will say that the implicature is cancelled. Take, for example:

- [10] *Some if not all of the delegates had been questioned by the police.*

Without the underlined sequence, *some* would again trigger a “not all” implicature - that not all of the delegates had been questioned by the police. This implicature, however, is inconsistent with *if not all* which explicitly allows for the possibility that all of the delegates had been questioned. The implicature is therefore cancelled, i.e. is here not part of the interpretation. A context where the request-to-borrow implicature of [fri] could be cancelled might be one where I’m concerned with the legality of borrowing: perhaps I’m the treasurer of some institution and am uncertain whether I am permitted to go into debt.

The possibility of cancellation is an essential feature of conversational implicatures. If something conveyed by an utterance were an invariable component of the interpretation of the sentence, whatever the context, it would be part of the sentence meaning, either a conventional implicature or an entailment. Some conversational implicatures, however, are very **strong** in the sense that it is not easy to imagine them being cancelled - and these run the risk of being mistaken for components of sentence meaning. But it is important to make the distinction. It would be impossible, for example, to give a satisfactory account of quantification in the noun phrase if the “not all” component in the interpretation of *some were* not recognised as merely a conversational implicature.

5.4 Pragmatic presupposition

Finally, we consider the relation of **presupposition**, exemplified in:

- | | | |
|---|---|-----------------------|
| <p>[11] i <i>She has stopped trying to secure her son's release.</i>
 ii <i>She hasn't stopped trying to secure her son's release.</i>
 iii <i>Has she stopped trying to secure her son's release?</i>
 iv <i>She formerly tried to secure her son's release.</i></p> | } | [all presuppose [iv]] |
|---|---|-----------------------|

Presupposition has to do with informational status. The information contained in a presupposition is backgrounded, taken for granted, presented as something that is not currently at issue. In [11] all of [i-iii] presuppose that she formerly tried to secure her son’s release: what is at issue is not whether she tried to secure his release in the past but whether she is doing so now.

This example brings out an important property of presupposition, namely that it is generally unaffected by negation or questioning. When a sentence is negated, the negation characteristically applies to that part of the content that is presented as being at

issue. If she in fact never tried to secure her son's release, [ii] is strictly speaking true, but it would normally be a very inefficient or misleading way of conveying that information. A simpler, more direct and more explicit way of doing so would be to say *She never tried to secure her son's release*. The fact that I didn't say this but said [ii] instead will lead you to infer that the negation applies to the stopping, so that [ii] implicates that she is still trying. Similarly with questioning. If I didn't know, and wanted to find out, whether she formerly tried to secure her son's release, I would be expected to ask *Did she try to secure her son's release?* If I ask [iii] instead, the natural inference will be that I am trying to find out about the present state of affairs.

The kind of reasoning just described is similar in kind to that invoked in discussing conversational implicatures, reflecting the fact that both phenomena are pragmatic.¹⁷ Like conversational implicature, presupposition applies in the first instance to utterances, but we can apply it derivatively to sentences with the same 'normally' qualification as before:

- [12] *X normally presupposes Y = in saying X the speaker, in the absence of indications to the contrary, takes the truth of Y for granted, i.e. presents it as something that is not at issue.*

Again, then, we allow that in special circumstances a presupposition may be cancelled. Consider, for example, the following exchange:

- [13] A: *Have you stopped using bold face for emphasis?*
 B: *No I haven't {stopped using bold face for emphasis}; I've always used small caps.*

A's question presupposes that B formerly used bold face for emphasis. But suppose it turns out that A was mistaken in believing this. B answers the question with a negative, and since this reflects the form of the question it too would normally presuppose that B formerly used bold face for emphasis. But in the context given here that presupposition is cancelled.

The presupposition associated with the verb *stop* coincides with an entailment when *X* is positive and declarative, as in [ni], but with a conversational implicature when *X* is negative or interrogative, as in [nii-iii]. You cannot stop doing something that you have never done before, so [ni] cannot be true unless [1 liv] is true. This gives the latter the status of an entailment. But it is not an entailment of the negative [nii], as evident from the example in [13]. Nevertheless, if I say [ilii] I will normally be taken to have implicitly committed myself to [niv], and the latter therefore counts as a conversational implicature. Likewise with the interrogative [11 iii], which does not have entailments.

This represents the most usual pattern for presuppositions. For the most part they are entailed if *X* is positive and asserted to be true, and otherwise they are conversationally implicated. But this is not a necessary feature of presuppositions: we will see that they do not always follow this pattern.

¹⁷An alternative view is that presupposition is a logical or semantic concept. On one version of this account, a presupposition is a proposition that must be true if the presupposing proposition (or the sentence expressing it) is to be either true or false. In the case of [11]»for example, in a context where [iv] was false, where she had never tried to secure her son's release, [i-ii] would be neither true nor false: they would simply lack a truth value (or would take a third truth value distinct from both truth and falsity). We do not adopt that concept of presupposition here, and take the view that if a proposition is not true, then it is false.