## 1.3.3. Implication and implicature

The third sort of complication mentioned in 1.3.1 was that information is often conveyed by sentences using devices other than the expression of propositions. We will not be able to set aside this feature of language once and for all. Instead, we will now begin to develop means for dealing with it, and we will apply and further extend these ideas at several points later in the course.

In cases where a conclusion is drawn from a single assumption, the term *implies* serves as a good ordinary English synonym for our technical term *entails*. Thus we can say that the sentence *My class was taught this morning* implies *A class was taught*. The philosopher H. Paul Grice employed the term *implicates* to capture a different idea that is sometimes expressed by the ordinary use of the term *implies*. It is not uncommon for information to be suggested by a sentence even though it is not entailed and thus is not part of what the sentence literally says. For example, my assertion of the sentence *My class was taught this morning* would, in most contexts, suggest that I did not teach the class myself. However, this is not part of what I said, so *My class was taught this morning* implicates *I did not teach my class this morning* but does not imply it.

The term *suggest*, which is used here as a contrast to *say*, could be misleading. It is not intended to convey the idea of subjective association. What a sentence implicates can be as much the product of rules of language as what it implies; but the rules leading to implicature are not (or are not only) rules assigning truth conditions. To see what they might be, let us consider an extension of our simple model of language use that accommodates implicature; in its outlines, it is due to Grice.

Although we are often exhorted to listen critically, language would scarcely serve us if we did not assume in most cases that people know what they are talking about and that they speak honestly. To employ a term that has come to be used in this connection, we **accommodate** our beliefs to what people say. For example, according to the model of language described in [1.2.4], when someone makes an assertion, we assume that the actual world is among the possible worlds in which that assertion is true. To account for implicature, we extend the scope of accommodation to include not only the truth of assertions but also other features assertions ought to have. The maxim *Speak the truth!* is no doubt the key rule governing assertions, but other maxims, such as *Be informative!* and *Be relevant!*, also play a role. Someone who assumed I

was obeying all maxims of this sort when I said, "My class was taught this morning," might reason as follows:

Although Helman's assertion *My class was taught this morning* would be perfectly true if he had taught his class, it would be a strange thing to say. The proposition expressed by *I taught my class this morning* would have contained more information and information that is equally relevant. So if he had taught his class, he ought to have said so; and I will therefore assume he did not teach the class.

Let us adopt some further current terminology and say that an assertion is *appropriate* when it is in accord with all maxims governing language use and that it is otherwise *inappropriate*. An assertion could be inappropriate even though true, and we usually accommodate our beliefs about the world to the assumption that the assertions others make are not only true but appropriate for the context in which they are made.

These ideas can be used to state contrasting definitions for implication and implicature. We know already how to define implication because we know how to define entailment. Applying our definition of entailment to the case of a single premise and restating it somewhat to help in giving a parallel definition of implicature, we have this:

 $\phi$  implies  $\psi$  if and only if  $\phi$  cannot be true when  $\psi$  is false.

To define implicature, we employ the more general concept of appropriateness.

 $\phi$  implicates  $\psi$  (in a given sort of situation) if and only if  $\phi$  cannot be appropriate (in that sort of situation) when  $\psi$  is false.

That is, while implications are conditions necessary for truth, implicatures are conditions necessary for appropriateness. (Here we follow the grammatical pattern of *implication* and use the term *implicature* for the things a sentence implicates as well as for the relation between a sentence and these things.) When it is defined as it is above, implicature subsumes implication: a sentence implicates whatever it implies though it may implicate things that it does not imply. This is a convenient way of relating the two ideas, but there is no consensus about using the terms in this way. Many would use *implicature* more narrowly to cover only those conditions necessary for appropriateness that are *not* necessary for truth.

In the example used to introduce the idea of implicature, the implicature was a product of the context in which the sentence was used. For, if it

was well known that I had made a bet that I could avoid using the word *I* for the next 24 hours, no one would have been misled by my failure to refer to myself as the teacher of the morning's class. But there are cases where the implicature attaches to particular words in a way that makes it unavoidable. Consider, for example, this bit of dialogue:

Q: Was the movie any good? A: Yes. Even John was laughing.

The assertion *Even John was laughing* has a number of implicatures that depend on the conversational setting (e.g., that John was at the movie and, perhaps, that it was a comedy), but it also has one that derives from presence of the word *even*. This implicature is easier to recognize than to state, but it comes to something like the claim that it is hard to make John laugh.

Implicatures attaching to particular words can be especially troublesome because they have the same sort of independence of context that holds for the implications we want to study. One test that can be used to distinguish them from implications is to ask a *yes-no* question. When asked Was even X laughing? about someone X who had laughed at the movie but who laughed easily, we would not answer with a simple "No" but rather say something like, "Yes, but he'll laugh at anything." Such yes-but answers indicate that the sentence we were asked about is true but inappropriate. Other qualified affirmative answers can play a similar role and we will refer to them also as *yes-but* answers. To simply answer "Yes" in cases where a sentence is true but has a false implicature could mislead our audience into thinking that the sentence is entirely appropriate and thus that the implicature is true. Indeed, a true sentence with a false implicature could be described as "true but misleading." Yes-but answers acknowledge the truth of such a sentence while correcting its misleading suggestions. (There are further tests that can be used to distinguish implicatures and implications, and we will consider some others in 4.1.2.)

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