1. **What is presupposition?**

Presupposition is best introduced by example. Consider the following sentence:

Jane knows that Bob is a USC fan.

This sentence could not be felicitously uttered in a context in which it was a matter of dispute whether Bob was a USC fan.

This might, however, seem less than surprising; after all, the sentence entails that Bob is a USC fan and, in general, one can’t simply assert claims which trivially entail propositions which are at issue in a conversation.

The interesting thing is that this relationship between the sentence and the proposition survives various transformations of our original sentence, including:

- **negation:** Jane doesn’t know that Bob is a USC fan.
- **question:** Does Jane know that Bob is a USC fan?
- **conditional:** If Jane knows that Bob is a USC fan, then she will avoid him at all costs.

None of these entail that Bob is a USC fan; but, still, none could be felicitously uttered in a context in which it was a matter of dispute whether Bob was a USC fan.

This might remind you of some of the examples of pragmatic implicatures we have discussed; e.g., the example of the letter of recommendation writer, or ‘You are the cream in my coffee.’ But note that those examples are highly context-dependent, and that they don’t survive the sorts of transformations exemplified above.

Here are a few more examples:
Jane stopped drinking wine for breakfast. (presupposes: Jane used to drink wine for breakfast)

It was Bob that organized the cheating ring. (presupposes: Someone organized the cheating ring.)

Bob’s children are obnoxious. (presupposes: Bob has children)

Smith returned to the scene of the crime. (presupposes: Smith had been at the crime scene before)

2. PRESUPPOSITION ACCOMMODATION

This is all pretty suggestive of some pervasive linguistic phenomenon; but it would be good to have a more precise characterization of what that phenomenon is. A natural suggestion is something like the following. Let’s use the term common ground as a name for the collection of propositions that all parties to a conversation take for granted. Then we might say:

S presupposes a proposition P iff S can only be felicitously uttered in a conversation if P is part of the common ground of the conversation.

The problem — sometimes called the problem of informative presuppositions — is that this simply does not fit the cases listed above. The following conversation is perfectly felicitous even if the first speaker does not know that Bob has children:

“Bob seems really exhausted.”
“Well, part of the problem is that Bob’s children are really obnoxious.”

Here the second sentence does not rely on this proposition being part of the common ground; on the contrary, it appears to be an attempt to add this proposition to the common ground. This is sometimes called presupposition accommodation.

This phenomenon poses an immediate problem for our characterization of presupposition; and this is bad, because we want a clear description of the phenomenon for which we will try to give a theoretical explanation. A plausible suggestion is something like the following:

S presupposes a proposition P iff S can only be felicitously uttered in a conversation if either (i) P is part of the common ground of the conversation or (ii) participants in the conversation would be willing to add P the context set without objection.
(Strictly, we should distinguish between what a sentence presupposes, and what a particular utterance of a sentence presupposes. We won’t worry about this distinction for present purposes.)

We can thus think of presupposition accommodation as having an effect on the common ground. We can make this explicit by (following Stalnaker and others) thinking of the common ground as the set of worlds consistent with everything that everyone in the conversation takes for granted (and takes the others to take for granted). We can call this world the context set. Then we might make the following prediction:

If S presupposes P, then if S can be felicitously uttered, one of the following must be the case:

(i) P is true in every world in the context set
(ii) participants in the conversation are willing to add P to the common ground, in which case the utterance of S eliminates all worlds in which P is not true from the context set

Hence, whether or not we have a case of accommodation, the result of uttering S is that all the worlds in the context set are worlds in which P is true.

An interesting possible application of this model: it explains the otherwise puzzling fact that both sentences which predicate racial slurs of individuals, and the negations of those sentences, are offensive. This might be explained in terms of the fact that negations of sentences carry the presuppositions of those sentences, plus the claim that slurs are offensive because of the presuppositions they carry.

This is a rough gloss of the standard model for thinking about presupposition. We’ll now go on to explore some further complications in understanding the phenomenon.

3. THE PROJECTION PROBLEM

It is worth recalling again the contrast between presupposition and cases like ‘You are the cream in my coffee.’ It appears that, in at least many cases, a given utterance’s presuppositions are largely independent of the context; ‘Bob’s children are obnoxious’ seems to presuppose that Bob has children no matter what the purposes of the conversation. Further, speakers seem to be able to recognize this fact just on the basis of their linguistic knowledge.

This suggests — by argument parallel to our original argument for the existence of a compositional semantics — that we ought to be able to give something like a compositional treatment of the presuppositions of sentences. That is, we ought to be able to explain the presuppositions of complex sentences in terms of the presuppositions of their parts. For, if there were no such explanation, it would be mysterious how speakers
could figure out the presuppositions of the indefinitely many complex sentences for which they have this ability.

The problem of computing the presuppositions of complex sentences on the basis of the presuppositions of their parts is called the *projection problem for presuppositions*.

An attractively simple attempted solution to the projection problem is:

All complex sentences inherit all of the presuppositions of their parts.

This fits the cases discussed earlier, but does not fit every case. Consider, for example, the following complex sentences, both of which contain the simple sentence ‘Jane knows that Bob is a USC fan’:

- Jane *doesn’t* know that Bob is a USC fan.
- **Sam said that** Jane knows that Bob is a USC fan.

As we have seen, the first (like the simple sentence) carries the presupposition that Bob is a USC fan. The second, however, does not. It seems that while negation lets the presuppositions of the simple sentence through to the complex sentence, ‘said’ somehow blocks the presuppositions of the simple sentence. Terms which are like negation are called *holes* (because they let presuppositions through), and terms which are like ‘said’ are called *plugs*.

If all we had were plugs and holes, things would be pretty simple. But we don’t; we also have *filters*: expressions which sometimes do, and sometimes do not, let presuppositions through. If-then statements are paradigm cases here. Consider the difference between the following two sentences:

- If Jane has met Bob, then Jane knows that he is a USC fan.
- If Bob is a USC fan, then Jane knows that he is a USC fan.

The first carries the presupposition of its consequent — that Bob is a USC fan. But the second does not. This is the kind of thing that an answer to the projection problem must explain.

In the case of if-then sentences, a standard view is that something like the following generalization is correct:

A sentence ‘if S1 then S2’ carries the presuppositions of S2 unless those presuppositions are entailed by S1.
'Jane met Bob’ does not entail that Bob is a USC fan, which is why the first sentence above carries that presupposition; ‘Bob is a USC fan’, however, does (trivially) entail that Bob is a USC fan, which is why the presupposition is blocked in the second sentence above.

(This rule for ‘if-then’, by the way, doesn’t seem to fit very well with the view, mentioned above, that the offensiveness of racial/ethnic slurs is explained by the presuppositions they carry.)

So far, this is just a story about one particular filter: ‘if-then.’ To give a satisfactory solution to the projection problem, it seems that we would have to, at least, sort all expressions in to plugs, holes, and filters and, for each filter, give generalizations like the one we just gave for ‘if-then.’

But even if we could do this, it is plausible that we would still lack a real understanding of the phenomenon of presupposition. This is because we would simply be tacking on to our semantic theory extra rules to capture this phenomenon. What we should really want is an account of why these expressions have the presupposition-related properties that they have. Ideally, this would be a theory which explains why expressions with a certain intension (or character) give rise to the presuppositions that they give rise to.

One possible stumbling block for this explanatory program is the apparent existence of expressions with the same intension, but different presupposition-related properties. One example is ‘but’ and ‘and.’ Many have thought that these share an intension, and yet the following seem to differ in their presuppositions:

She is poor and honest.
She is poor but honest.

4. COMPLICATIONS WITH CONTEXT SETS

A different sort of complication in the standard story about presupposition and context sets can be brought out by considering uses of ‘too.’ (The following is based on some examples from Kripke, ‘Presupposition and anaphora.’) This expression seems to carry presuppositions. For consider a situation in which we are debating whether anyone is going to go to the bar. If I then say,

I’m going to the bar, too.

My utterance is infelicitous in just the way that utterances typically are which presuppose something which is a matter of dispute. The presupposition carried by ‘too’ in this case seems to be that people besides me are going to the bar.
But now consider a different case. Suppose you ask me what I’m going to do tonight, and I say:

I’m going to North Dining Hall for dinner tonight, too.

Suppose that North Dining Hall has not been mentioned yet in the conversation. Here my utterance seems bizarre. But it is puzzling why it should seem bizarre. What it presupposes is that people other than me are going to to North Dining Hall for dinner tonight. But this surely is a part of the common ground of our conversation; both of us believe this to be true, and know that the other person believes it to be true. (And even if we did not believe this, it is obvious that it is true, so at the least we should have accommodation; but we don’t in this case.)

‘Too’ seems to require us to complicate our story about context sets above. It seems that we have to distinguish between an active and a passive context set — where the former includes the information on which we are actively focusing, and the latter also includes information which we jointly take for granted, but aren’t focusing on right now. ‘Too’ seems to place constraints on the active context set, and not just the passive context set.

(Note, by the way, that the active context set is not just a matter of the utterances made in our conversation; if I utter the above sentence about NDH in a situation in which we’ve both just seen a bunch of students hurrying into North Dining Hall for dinner, then the utterance seems fine even if none of us say anything about North Dining Hall.)

But this sort of phenomenon might also force us to complicate our view of context sets as sets of worlds. Consider ‘again’, which is similar in some ways to ‘too’ in requiring something of the active context set rather than merely of the passive context set. (Even if we know that Bob, like most people, eats dinner every night, this fact alone is not enough to make an utterance of ‘Bob is eating dinner again’ felicitous.)

Suppose we’re in a situation in which part of the active context set is the proposition that everyone walked to the dining hall earlier today. Now suppose, looking at Bob sitting in a chair, I say without further stage-setting:

Bob’s left foot is in front of his right foot again.

This seems bizarre. But why? The sentence seems to presuppose that at some earlier time, Bob’s left foot was in front of his right foot. But given our assumption that the proposition that everyone walked to the dining hall earlier is a salient topic and part of the common ground, all of the worlds in the active context set are worlds in which at some earlier time Bob’s left foot was in front of his right. This should suffice to make the above utterance felicitous; but it doesn’t.
The problems here are analogous to the problems we encountered with attitude ascriptions; to give an adequate treatment of the context set (whether active or passive) we seem to need a more fine-grained conception of the information which is comprises the common ground than that which is given by sets of worlds.

For more on this sort of issue, see Soames, ‘Kripke on presupposition and anaphora’, available at:

http://www-bcf.usc.edu/~soames/forthcoming_papers/Kripke_on_Presupposition.pdf