Foundational Issues in Presupposition
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This essay provides a brief introduction to the topic of presupposition, and then discuses three major approaches to this phenomenon, focusing on the answers which each approach gives to two foundational questions: What is presupposition? And how, or why, does it arise?

1. The phenomenon

Consider sentence (1):

(1)   Jane has stopped drinking coffee in the evening.

Among other things, this sentence entails:

(2)   Jane has stopped drinking coffee after 10pm.

Unsurprisingly, the negation of sentence (1), shown in (3), does not share this entailment. Neither does the yes/no question formed from this sentence. Similarly, if we add a possibility modal to the sentence, or construct a conditional of which (1) is the antecedent, the resulting sentences do not share the entailment of the original, as we see from the examples below:

(3)   Jane hasn't stopped drinking coffee in the evening.
(4)   Has Jane stopped drinking coffee in the evening?
(5)   Jane might've stopped drinking coffee in the evening.
(6)   If Jane has stopped drinking coffee in the evening, she is probably sleeping better.

In other words, sentences (3)-(6) illustrate entailment-cancelling embeddings of sentence (1).
   Now consider another entailment of our original sentence (1):

(7)   Jane used to drink coffee in the evening.

A speaker who utters any of the sentences in (3)-(6), sentences which are not expected to preserve any of the entailments of (1), remains committed to the truth of the proposition in (7). This proposition, entailed by (1) and implied in some sense by the related sentences (3)-(6), is considered a *presupposition* of all of them.
   What does it mean to say that these propositions are presuppositions? That is the central question in the study of this topic. A significant literature on presupposition exists in both linguistics and philosophy. Yet, as Kripke (1990) observes: "to some degree Justice Stewart's comment about pornography holds here: we all recognize it [the presupposition relation] when we see it [but] we can't say exactly what it is" (p.1).

Let's begin by looking at some of the standard examples of the phenomenon we are interested in. There is a long list of such examples: what follows is merely an illustrative sample. For a more complete list, see Levinson (1983, ch.4).

(8)   *Referential expressions/definite descriptions*
       The King of France has/hasn't talked to Jane.
           Presuppose: There is a King of France, Jane exists.

(9)   *Factives*
       Jane regrets / does not regret that she insulted the Provost.
           Presuppose: Jane insulted the Provost.

(10)   *Cleft sentences*
       It was/wasn't Jane who laughed.
           Presuppose: Someone laughed.

(11)   *too*
       Jane laughed / didn't laugh too. [emphasis on *Jane*]
           Presuppose: Someone other than Jane laughed.

(12)   *Implicative verbs*
       Jane forgot / didn't forget to lock the door.
           Presuppose: Jane intended to lock the door.

As this list shows, presuppositions are sometimes associated with a particular word or construction; in other cases, whole classes of items – such as factives, or definite descriptions – are associated with a particular type of presupposition. The nature of this "association" between lexical items and presuppositions is a matter of debate; we return to this issue below.

In addition to survival under entailment-cancelling operators, illustrated above, presuppositional implications are generally noted to have a cluster of further properties. The classical claim about presuppositions concerns truth value judgments: If a person believes any presupposition of an assertion to be false, she will consider it to be truth valueless; or at any rate, will consider that the issue of truth or falsity of the assertion "does not arise" (see Strawson 1956). However, truth value judgments are not robust, and have lost currency in the current literature as a way of identifying presuppositions. (For discussion of this topic, see von Fintel 2004.)

One characteristic of presuppositions is that the speaker of a presupposing utterance seems to "take the presupposition for granted." A good deal of the theorizing about presupposition amounts to spelling out just what that means; as a starting point, we might say that to produce an utterance with presupposition p is to indicate that p is noncontroversial for you and your interlocutors. Indeed, the standard line on presupposition is that utterance of a presupposing sentence is conversationally appropriate only if its presuppositions indeed are noncontroversial for you and your interlocutors.

On the other hand, it has been well documented that a speaker *can* use presuppositions to give new information to an addressee. The following, for example, is a very natural case:

(13)   Ann: The new guy is very attractive.
       Bob: I'm sure his wife thinks so too.

We can easily understand Bob's utterance as intended to inform Ann, in an indirect way, that the new guy has a wife. The utterance can be used in this way even if Ann has been assuming that the new guy is unmarried. Lewis (1979) puts the point in this way: "it's not as easy as you might think to say something that will be unacceptable for lack of required presuppositions. Say something that requires a missing presupposition, and straightway that presupposition springs into existence, making what you said acceptable after all."

Related to the point about noncontroversiality, it is observed that the presuppositions of an utterance are usually *backgrounded*, that is, are not part of the main point of the utterance; but in cases where the presupposition is *not* noncontroversial in the relevant sense, then it may well be precisely the main point of the utterance, as in the example above. There is thus a certain conflict of intuitions concerning presupposition: on the one hand, the intuitive notion of presupposition seems clearly related to givenness and background information; yet it is entirely natural, in ordinary conversation to "fill in" the presuppositions of one's interlocutors, even when these presuppositions constitute new information.

Much of the literature on presupposition deals with what has come to be known as the *projection problem*. Projection concerns the inheritance by complex sentences of the presuppositions normally associated with their constituent clauses. When the presupposition of a constituent clause is inherited, it is said to *project*; and it has been observed that there are typical patterns of projection and non-projection of presuppositions. The basic projection facts were first characterized by Karttunen (1973).[1] He observed that, for example, a conjunction *A and B* inherits all of the presuppositions normally associated with *A* and with *B* – except for any presupposition of *B* which is entailed by *A* (possibly in conjunction with background propositions). So, for example, while sentence (14) inherits from its second conjunct the presupposition that Harry has a wife, sentence (15) does not. The latter merely entails this proposition.

(14)   Harry is remorseful, but his wife is no longer living with him.
(15)   Harry is married, but his wife is no longer living with him.

Conditionals show a parallel pattern. A sentence of the form *If A, then B* inherits all of the presuppositions of *A* and of *B* except for those presuppositions of *B* entailed by *A*. Consider:

(16)   If Harry looks crestfallen, then his wife is no longer living with him.
(17)   If Harry is married, then his wife is no longer living with him.

Since the original work by Karttunen, many further observations have been made about the complexities of projection: see Beaver (1997) for a summary.

But it is not only in cases such as these that the usual presuppositions of a particular sentence type fail to surface. The (non-entailed) presuppositions of a sentence can be explicitly denied, as in:

(18)   The King of France isn't bald — there is no King of France!

Additionally, if the normal presupposition of a sentence is incompatible with conversational implicatures or with other assumptions in the context of utterance, the presuppositions may simply be suppressed. (Not all presuppositions, though, are equally easy to over-ride in this way.) Consider, for example, utterance of sentence (19) in a context where speaker and hearer both know that the speaker does not know Maud's whereabouts, but both know that Harold is looking for her.

(19)   If Harold discovers that Maud is in New York, he'll be furious.

As we will see in the discussion that follows, different theoretical approaches offer different accounts of these characteristic properties of presupposition.

   As Soames (1989) observes, there are two types of question raised by presupposition. One set of questions is descriptive. Given the assumption that "we know it when we see it," we can ask what presuppositions are associated with particular sentence-types or expressions, and what the patterns of projection and non-projection of presuppositions are. A good deal of work, particularly in the linguistics literature, has addressed these questions. My concern here, however, will be with the foundational questions concerning presupposition: What is it, and why, or how, does it arise? In this discussion, I will review three major approaches to the phenomenon of presupposition, emphasizing what answers these approaches give to these questions, and how the approaches might ultimately complement one another.

2.   A starting place: the Stalnakerian view of presupposition and the common ground

Stalnaker's work on presupposition is probably the most influential in the current literature. As I have noted elsewhere (Simons 2003), Stalnaker's views are complex and nuanced, and the nuance is often lost in presentations of his views, both by his supporters and his detractors. I will compound this failing by sketching here only a simplified version of his view, which goes as follows:

   Presupposition is a property of speakers, not of sentences. A speaker's presuppositions are, roughly, those propositions which she believes to constitute the accepted background information for the conversation in which she is engaged: the common ground. Presupposition as a property of sentences is a secondary notion: To say that a sentence has a presupposition p is to say — again, roughly — that the use of that sentence is appropriate only if the speaker's presuppositions entail p. Thus, on this view, the sentence:

(20)   Harry's wife no longer lives with him.

can be used appropriately only by a speaker who believes that the common ground entails that Harry has a wife.

   How then do we account for the fact noted in section 1, that speakers can, and frequently do, use presuppositional sentences, knowing that the required presuppositions are not in fact part of the common ground? Stalnaker suggests that we think of them as involving exploitation of a conversational rule. A hearer, knowing that the requirement is in force, and assuming that the speaker intends her utterance to be acceptable, will, if she is willing to go along with the presupposition, adjust her beliefs in the necessary way – say, by adopting the belief that Harry has a wife – in order to bring the common ground in line with the requirements imposed by the utterance. Concomitantly, a speaker, knowing that an interpreter will behave in this way, can knowingly and appropriately use sentences whose presuppositions are not already common ground, as long as the content of these presuppositions is adequately uncontroversial, and she can thus assume that they will be common ground immediately following her utterance.[2]

   Lewis (1979), reconstructing Stalnaker's account, proposes that this phenomenon is governed by what he calls the *Rule of Accommodation for Presupposition*:

   > If at time *t* something is said that requires presupposition P to be acceptable, and if
   > P is not presupposed just before *t*, then – ceteris paribus and within certain limits
   > – presupposition P comes into existence at *t*. (172)

Since Lewis, any case where an interpreter "fills in" a presupposition which was not previously part of the common ground is called "accommodation."

What, then, of the second foundational question: Where does presupposition come from? What *are* the reasons why a sentence would be inappropriate unless a speaker presupposed a particular proposition? Stalnaker has repeatedly insisted that there is no single answer to this question, and that in this sense, presupposition is *not* a homogenous phenomenon. In some cases, "one may just have to write presupposition constraints into the dictionary entry for a particular word" (1974:212). But throughout his work, Stalnaker has "conjectured that one can explain many presupposition constraints in terms of general conversational rules without building anything about presuppositions into the meanings of particular words or constructions" (1974: 212). So, while Stalnaker is committed to the heterogeneity of sources of presupposition, he emphasizes the attractiveness, and plausibility, of accounts of presuppositional constraints in terms of general conversational principles.

We can thus reduce Stalnaker's views about presupposition to two fundamental claims. The first concerns the *what it is* question: presuppositions, in his view, are *constraints* imposed by sentences on the *context* in which they are uttered: for Stalnaker, the relevant notion of context is the beliefs of the speaker about the common ground. The second fundamental claim concerns the *where it comes from* question. Here, the answer is that in many cases at least, presuppositional requirements are consequences of general properties of rational conversation.

3. Dynamic Semantics

Dynamic Semantics (henceforward, DS) frameworks[3] give almost the same answer to the first foundational question as does Stalnaker[4]: Presupposition is characterized as a condition imposed by a sentence S on the context to be updated by S. The interest of DS frameworks for the study of presupposition lies in their implementation of this idea in formal systems.

Stalnaker has focused a good deal of attention on how the relevant notion of context should be characterized (see, for example, his 2002). In contrast, the DS literature describes the relevant context simply as an information state, leaving the construal of this notion more or less open. Information states could be identified with the epistemic state of the interpreter. But they might also be taken as representations of what is believed by the interpreter to be the common ground of the interlocutors, bringing the proposal closer to the Stalnakerian picture. Various other construals are possible. The point here is that the "constraints on context" view of presupposition is not tied to any particular construal of context; it is an interesting and open question what notion of context is best suited for this role.

Two of the central assumptions of DS frameworks are taken directly from Stalnaker. The first is that the function of an assertion is to "update" the context, so that the result of making an assertion is to add its content to the context, and to eliminate whatever is incompatible with that content. the second assumption is that presuppositions impose constraints on the very same context which is updated by the content of assertions.

Let's make this concrete by considering the expression of these ideas in Context Change Semantics. In this framework, contexts (information states) are construed as sets of possible worlds. The basic update rule for an atomic sentence S is this: Let c be an arbitrary context. Then the result of updating c with S is the set of all worlds in c at which S is true, i.e. $c+S = c \cap \{w: S \text{ is true at } w\}$.

The presuppositions of S limit the contexts which may be updated by S. The rule is this: for any context c and atomic sentence S, c may be updated with S only if c entails the presuppositions of S. If not, $c+S$ is undefined.[5] Thus, presuppositions are construed as inviolable conditions on the definedness of context update: in essence, on the admissibility of assertions.

When presuppositions are viewed as inviolable, two questions immediately arise: How can an assertion whose presuppositions are not part of the context ever succeed? And why do presuppositions sometimes appear to be cancelled, or suppressed? To answer the first question, DS theories simply mechanize Lewis's rule of accommodation. If a required presupposition is missing, it can simply be added, subject to consistency and other constraints (see Beaver 2002 for a summary). The answer to the second question lies in the dynamics of context update, combined with a central assumption: that presuppositions "project" only when they impose a condition on the starting context. We will illustrate the idea with the case of conjunction.

Conjunctions, like other complex sentences, are assumed to update a context incrementally.[6] To update a context c with a sentence *A and B*, we first update c with *A*. Hence, the presuppositions of *A* constrain the starting context c. We then update the *result* of this process with *B*. The context required to entail the presuppositions of *B* is thus not c itself, but c updated with *A*, i.e. c+*A*.

In the ordinary case, where there is no logical relation between the content of *A* and the presuppositions of *B*, this requirement will be satisfied only if c entails the presuppositions of *B*. So in the ordinary case, the presuppositions of *A* and the presuppositions of *B* both impose constraints on the starting context c. This is what gives rise to the intuition that the presuppositions of both conjuncts "project" to the conjunction as a whole: all are constraints on the starting context.

But in the special case in which the presuppositions of *B* are entailed by *A*, the context to which *B* is added will satisfy its presuppositional requirements whatever the content of c. The starting context is thus unconstrained by the presuppositions of A. Hence the intuition that in such cases, the presuppositions of *B* do not become presuppositions of the conjunction as a whole. In other words, the apparent cancellation or suppression of presuppositions is explained as involving satisfaction of the presuppositional requirements of an embedded clause by an intermediate context.

Satisfaction of presuppositions can also be achieved via accommodation. Consider the following example from Beaver (2002):

(21)   If Butch is barking, then Mary realizes that Butch is awake.

The consequent clause carries the presupposition that Butch is awake. Beaver points out that there are three options for accommodating this presupposition. Let's consider just two of them. The presupposition may be accommodated into (i.e. added to) the starting context. In this case, the overall informational impact of update will be to convey: "Butch is awake, and if he is barking then Mary realizes that he is awake." But it can also be accommodated into the intermediate context to be updated by the consequent, in which case the informational impact of update will be: "If Butch is barking, then he is awake and Mary realizes it." Roughly speaking, we can say that in the latter case, the presupposition does not become a commitment of the speaker, and we again have the intuition that the presupposition is suppressed.

This example illustrates that the combination of accommodation and incremental update results in a powerful and elegant system for generating interpretations, a system which has proved highly successful from a descriptive point of view. However, the example also illustrates how accommodation, as formalized in DS, has become disconnected from the intuitive concept first formulated by Stalnaker and explained in terms of cooperative behavior of discourse participants. I think it likely that the DS notion of accommodation can be grounded in an explanation of this sort, especially given the fact that the procedure is governed by heuristics such as consistency and informativity – standard constraints on conversational inferences. But this work has not been attempted (to my knowledge) in the DS literature.

To summarize so far, then, DS gives us a detailed implementation of the view of presuppositions as constraints on the context in which an utterance is made. We turn now to the second foundational question: Where do presuppositions come from? Here, DS diverges radically from Stalnaker. All presuppositions are assumed to be "built in" to the lexical content of particular items, and hence come to be part of the conventional content of atomic clauses containing these items. The possibility that presuppositional constraints might result from general properties of conversation is not considered within this framework.

There is something rather unsatisfactory, however, about claiming that all presuppositions are merely conventional constraints randomly attached to particular lexical items. First and foremost is the fact that in the majority of cases, there is a straightforward relationship between the ordinary content of an atomic sentence and its presupposition(s): the latter are entailments of the former. Moreover, many cases of presupposition seem intuitively explicable in terms of the conversational function of the items that trigger them. For example, it seems not implausible that the existential presupposition associated with referential expressions arises simply because of a *ceteris paribus* assumption that a person who uses such an expression intends to refer to something. It has admittedly proven hard to spell out such explanations in full detail, but they remain (at least for some) too tantalizing to give up in favor of stipulating presuppositions as part of conventional content.

Another reason to be skeptical about conventional specification of presuppositions is that large classes of items behave in the same way. As just noted, all referential expressions give rise to existential presuppositions. All factive predicates give rise to factive presuppositions. And so on. If we invent a new word which falls into one of these classes, it will automatically carry the relevant presupposition. This again suggests that presuppositions should be explicable in terms of the ordinary content of expressions. The point is reinforced by the observation that the presuppositional behavior of these classes of expressions is the same across languages.

Finally, observe that many – although not all – presuppositions show the standard properties associated with conversationally generated inferences. (The same point is made by Levinson 1983, ch.4; see also Atlas 2005, ch.4.) One of these standard properties is cancelability, a property we have already demonstrated. The second property is what Grice 1967 called *nondetachability*. To say that a particular implication is nondetachable is to say that it arises due to the expression of a particular content in a particular conversational circumstance, regardless of the form of expression used. (Nondetachability, in other words, is nondetachability from a particular content.) Nondetachability of presuppositions is illustrated by noting that, for example, the following sentences all have the same presuppositions:

(22) a. Jane didn't stop/quit/cease laughing.
      b. Jane did not discontinue her laughter.
(23) a. Jane didn't leave/quit/go out of/exit/depart from the house.

In a sense, this simply reiterates the point made above, that presuppositions are (often) general to the semantic class. But the point acquires further significance in light of the fact that nondetachability, together with cancelability, is indicative of conversationally derived inferences. So when presuppositions turn out to have these properties, as they do in very many cases, there is a strong case to be made for explaining them in terms of conversational inference.

4. Reductionist views

Swayed by considerations of the sort adduced above, a number of researchers have argued that presuppositional phenomena can be explained in terms of other notions, primarily entailment and various kinds of conversational inference. Advocates of this view reject the claim that there is any special presuppositional content, or that there is any special relation of presupposition. Thus, these reductionist views might be seen as radical elaborations of the second strand of Stalnaker's view. The primary advocates of reductionism include Atlas (1977 and elsewhere), Kempson (1975), Wilson (1975), Boër and Lycan (1976), Wilson and Sperber (1979) and Atlas and Levinson (1981). Grice (1981) offers a reductionist account of the presuppositions associated with definite descriptions.

Reductionist proposals have been made in a variety of frameworks, but the general idea in each case is more or less the same. First, the point is made that the presuppositions of affirmative sentences are always entailments. Thus, there is no need to explain why utterances of the sentences imply these propositions; all that needs to be explained is why they are backgrounded. Then, for the related sentence forms which are observed to share the presupposition of the affirmative (e.g. the negation, or the question), an explanation is given as to why an utterance of that sentence would generate a conversational inference to the observed presupposition.

On these views, presupposition is primarily the result of inference. Consequently, accommodation becomes the normal case, the basic notion around which an account of presupposition should be built (see Atlas 2005). This contrasts with the way accommodation is understood given the constraints-on-context view: there, accommodation involves some kind of exploitation by a speaker, with concomitant "fixing" of the context by an interpreter. Similarly, cancellation is very differently understood on the two views. On the constraints-on-context view, particularly as elaborated in DS, cancellation can only be the result of local satisfaction of a presupposition. Once presuppositions are viewed as conversational inferences, so-called cancellation is simply a case where the conversational circumstances are such that the inference does not arise.

Here is an example of the sort of explanation one might give for presuppositional inferences. Consider sentences (24)-(25), which presuppose that Louise is in love:

(24)   Jane knows that Louise is in love.
(25)   Jane doesn't know that Louise is in love.

A conversational account of this presupposition might go as follows[7]: Suppose a speaker were to utter (24), intending to convey, as her main point, that Louise is in love. Then the addition of the extra information contained in the main clause would be a distraction, a violation of the conversational requirements not to provide more information than is currently relevant (Grice's second Maxim of Quantity), and to be perspicuous (Maxim of Manner). So, the knowledge claim must be the main point of the utterance, and the entailment, that Louise is in love, must be backgrounded. The speaker, though, is obviously committed to the truth of that entailment.

Now consider sentence (25). Suppose the speaker intends to convey that Jane doesn't know that Louise is in love because it is not true, and her main point is to convey that it is not true. Then (a) the information that Jane doesn't know it is redundant (failure of Quantity) and (b) there is an obvious alternative formulation which conveys what the speaker means directly and unambiguously (failure of Manner). Hence, an interpreter who wants to take the speaker as being fully conversationally appropriate will, first, assume that the denial of the knowledge claim is the speaker's main point and, second, that the knowledge claim is *not* denied on the grounds that the

embedded clause is not true. This gives us an implication to a backgrounded assumption that Louise is in love.

This is an example of a conversational account which relies solely on standard Gricean conversational principles. Other reductionist accounts involve broader proposals concerning conversational inference, semantic representation, or the semantics-pragmatics interface. For example, Wilson and Sperber (1979) propose that semantic representations should be enriched with sets of ordered entailments; syntactic or prosodic features of the utterance then serve to select one such set as relevant for the interpretation of the utterance, and divide this set into a foreground and background. Presuppositions are identified with background entailments. In a very different kind of account, Atlas and Levinson (1981) propose a neo-Gricean treatment of the presuppositionality of *it*-clefts; but their account relies on their view that Gricean inference is sensitive to the logical form of utterances, and on the particular logical form which they attribute to *it*-clefts.

What these proposals share is the underlying view that presuppositional phenomena are integral to processes of interpretation, and provide insight into these processes; hence, we should develop views of semantics, pragmatics, and their interface which take these phenomena into account. On this view, presuppositional phenomena should fall out of our general account of meaning construction, without requiring any additional, special stipulations. This same sort of view is seen to some extent even in DS frameworks, where the context update rules for complex sentences are constructed so as to correctly predict facts about presupposition projection (and also possible anaphoric relations). But in DS, as we have seen, presuppositionality itself is treated as a special, conventional property, not derivable from anything else.

There is a sense in which DS theories of presupposition and reductionist theories are theories of different things. Reductionist theories aim to explain how presuppositions originate in atomic clauses. Although such theories generally do try to explain the presuppositionality of complex sentences, the first step is always to explain why some particular entailment E of the atomic sentence acquires presuppositional status. DS theories, on the other hand, are theories of presupposition projection. The DS assumption that presuppositions are conventionally associated with atomic clauses might just be taken as shorthand for an assumption that presuppositions are attached somehow or other to atomic clauses, with no real commitment about the processes involved. Ideally, we would like to be able to achieve a synthesis of the two kinds of theory: to take the descriptive model of presupposition projection provided by DS algorithms, and use proposals made in the reductionist literature to give this model content, to say why it works the way it does. But this is only possible if there is a way to reconcile the DS reliance on local attachment of presuppositions to clauses, with a conversational account of the inferences.

One possible way to do this is to think about how atomic propositions contribute to the communicative effect of an utterance. For example, consider the modal sentence:

(26)   Jane might have stopped smoking.

It seems reasonable to say that an utterance of this sentence will generally serve as a 'comment' on, or evaluation of the plausibility of, the proposition that Jane has stopped smoking. Suppose then that we can give a principled explanation for the fact that a speaker who comments on proposition P in just this way takes on some commitment to the presuppositions of P. Then we can sensibly talk about the presupposition of the atomic clause projecting to the modal sentence, while still grounding the whole thing in a pragmatic account. The DS algorithms for projection might then turn out to be exactly the right model of how the (conversationally derivable) presuppositions of atomic clauses are (conversationally) projected to complex sentences which contain them.

5. Types of reductionism

The authors cited at the beginning of the previous section are *explanatory reductionists*: their view is that presupposition can ultimately be *explained* in terms of other processes or mechanisms involved in interpretation. Some may also be *phenomenological reductionists*: this view would deny that there is even any descriptive advantage to characterizing certain implications as presuppositions. But there is an intermediate position, exemplified by Stalnaker (and others). As we have seen, Stalnaker surmises that many presuppositional phenomena can be explained in conversational terms, but not all (so he is a *partial explanatory reductionist*). But he maintains also that there is a collection of phenomena which share some fundamental property, and so can usefully be drawn together under the term "presupposition."

This position allows us to make sense of the intuition that phenomena which are different in their specifics are all cases of the same general phenomenon. In this section, we've been focusing on cases of presupposition which are conversationally derivable. But some cases of presupposition indeed do appear to be due to the conventional content of particular lexical items. I have in mind the presuppositions associated with *even*, *too*, *again*, and the like, as they occur in sentences like:

(27)   Even a two year old could work that machine.
(28)   Henry failed his driving test too.
(29)   Henry failed his driving test again.

What is special about these items is that their sole function is to introduce a presupposition. They can be taken out of the sentence, arguably without changing its truth conditions; and the modified sentence of course does not bear the same presupposition as the original. Let's say, just for the sake of argument, that the presuppositions introduced by these expressions are constraints on the common ground: so, for example, (29) is appropriately uttered only if the proposition that Henry has failed his driving test before is in the common ground (or will be at the appropriate time). Let's say also that we have independently provided an argument that sentence (30):

(30)   Henry hasn't stopped smoking.

is conversationally appropriate only if the proposition that Henry previously smoked is part of the common ground. Then we can give content to the intuition that both (29) and (30) are presuppositional: both impose constraints on the common ground, albeit for very different reasons.

At the other end of the conventional/conversational scale stand cases of what I call "conversational presupposition." (See Simons 2004.) Suppose at the beginning of a meeting which I am chairing, I look at my watch and say "OK, it's 3 o'clock." The relevance of my remark presumably derives from the fact that the meeting is supposed to start at 3:00; so my remark is a way of letting everyone know that it's time to start. In making my remark, I'm presupposing that 3 o'clock is the starting time. And in the right circumstances (say, you don't know anything about this meeting but happen to be in the meeting room talking to a colleague), you could probably infer that I am presupposing this; that is, you could accommodate the presupposition. Moreover, these sorts of conversational presuppositions exhibit "projection behavior" closely parallel to sentence presuppositions. For example, suppose that at 2:55pm, someone suggests that we get started. I might say: "It's not 3:00 (yet)." This utterance presupposes that 3 o'clock is the meeting time, just as does the affirmative, in the situation envisaged. So the presupposition is shared by the affirmative and negative forms of the sentence, just as in standard cases. So, here is a case of presupposition which

is in no way tied to any conventional properties of the sentence, but which arises only by virtue of the use made of the sentence in the particular conversational context.

Again, the advantage of being (for some cases) an explanatory reductionist, but still admitting the existence of the phenomenon of presupposition, is that it allows us to package these things together, without requiring that everything that is a presupposition be explicable in the same terms. In my view, this kind of approach offers the best chance for arriving at a theory of presuppositional phenomena which is both explanatorily satisfying and descriptively adequate.

Endnotes

1. Karttunen's paper takes as its starting point earlier proposals by Langendoen and Savin (1971) and Morgan (1969).

2. Stalnaker (2002, fn.14) remarks: "The timing of [the beliefs concerning common ground] is a delicate matter. Exactly when must [the speaker] have the relevant beliefs...in order to be speaking appropriately?...The relevant time is a (perhaps somewhat idealized) point after the utterance event has taken place, but before it has been accepted or rejected."

3. The best known DS frameworks are Discourse Representation Theory (known as DRT; Kamp 1981, Kamp and Reyle 1993) and Context-Change Semantics (known as CCS; Heim 1982, 1983 1992); treatments of presupposition within these frameworks were originally proposed by Heim (1983, for CCS) and van der Sandt (1992, for DRT). These proposals have been developed extensively by others. (For CCS, see in particular Beaver 2001; for DRT, see Geurts 1995, 1999). For a detailed overview of the formal systems, see Beaver (1997).

4. Heim (1992) describes her framework as a "radical elaboration of ideas of Robert Stalnaker." While the treatment of presupposition in DRT may have a different inspiration, there is a transparent similarity.

5. In Kamp's Discourse Representation Theory, information states are given structured representations. Update rules specify changes to these representations, and presuppositional constraints are likewise formulated in terms of the representations themselves. For simplicity, I limit the discussion in the main text to the more straightforward framework of CCS. For details on DRT, see the references given in endnote 3.

6. This idea goes back at least to Stalnaker (1973). The first detailed formal proposal along these lines was made, independently, by Karttunen (1974).

7. This is a version of a proposal made in Simons (2004).

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