

Presupposition Projection vs. Scope Ambiguity: Comments on Professor Simons' Paper

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THE MAIN plank of Professor Simons' thoroughly pragmatic account of presupposition is (SA) *that an utterance presupposes p if acceptance of p has to be attributed to the speaker by the audience in order for the audience to rationalize the speaker's making the utterance.* Since this criterion also lets in assertion and conversational implicature, Simons adds a secondary plank, (SB) *that the speaker does not intend to add p to the conversational record.* Before I address the details of this account, focussing on (SA), I think it might be useful to sketch an alternative approach for purposes of contrast. The alternative I have in mind is semantic: a semantic account explains presuppositions in terms of entailments of principles that govern the meanings of certain expressions and constructions, known as *presupposition triggers*. The principles in question might include devices like Russell's contextual definitions, stipulations that introduce the trigger into the language, and meaning-postulates which relate the trigger to other expressions. All such principles are the kind of thing that would be non-inferentially recognized as correct by anyone who understands the trigger and to whom they are presented in an intelligible way.

However, it's wrong to classify as a presupposition of p *anything* that follows from such principles applied to the trigger in p ; for instance, we do not want to say that 'the king of France is strange' *presupposes* that there are strange people.

In the literature, presuppositions are distinguished from implicatures, assertive content, and logical consequences of these, by their alleged ability to survive as entailments of sentences even when their triggers occur in *entailment-cancelling contexts* in those sentences.¹ So we find in (Soames 1989:556) the definition that a proposition p *logically* presupposes a proposition q iff any world verifying p verifies q and any world falsifying p verifies q ; equivalently (under natural assumptions), p presupposes q iff p entails q and the negation of p entails q .² Chierchia and McConnell-Ginet (2000:29–31) propose a generalized version of this, in which q has to follow – in some sense – from a family of statements based on p , in all of which the trigger is said to be in an entailment-cancelling context. The assumption that the trigger is in an entailment-cancelling context then generates the so-called projection problem: in such a case, how can it be that the presupposition nevertheless projects out of the context to the entire sentence, instead of getting cancelled?

According to the semantic approach, as I characterize it, there is usually no projection problem, because the trigger is, in most cases, not really within the scope of the canceller. The seminal example of ‘the’ illustrates this.

(1) The king of France gave me this watch

presupposes that France has a king, but the test that entailing ‘France has a king’ should survive the embedding of (1) within the scope of negation says that ‘France has a king’ is *not* a presupposition of (1), since it isn’t entailed by (2):

(2) It is not the case that the king of France gave me this watch.

1. Entailment-cancelling contexts include the scope of negation, modals, disjunction and conditionals. Thus, even if $p \models r$, we do not have $\neg p \models r$ or $p \vee q \models r$ or $\diamond p \models r$ or $p \rightarrow q \models r$.

2. These definitions are crafted to be neutral on whether the falsity of q requires the falsity of p (Russell) or merely the untruth of p (Frege-Strawson).

(2) is clearly true,³ just as (1) is clearly false, precisely because France has no king.⁴ To combine the presence of negation with the entailment that France has a king, we need

(3) The king of France did not give me this watch.

But there is no reason to think the trigger 'the' is within the scope of 'not' in (3). It certainly doesn't look as if it is, and the simplest explanation of why the trigger produces the entailment even in the presence of negation is that 'not' in (3) has narrow scope, leaving the indefinite NP free to generate the same entailments as it does in (1). So the projection problem is not a problem, at least for these examples.⁵

If we pursue a semantic account of presupposition within the framework of neo-Davidsonian (event-based) semantics, we can generalize the moral of the previous examples. For example,

(4) It wasn't Mary who threw the computer out the window

3. I am not just being dogmatically Russellian here. It seems to me to well-grounded in intuition that the proposition that the king of France gave me this watch is not the case.

4. It might be objected that (2), though true, is really the VP-negation of 'It is the case that the king of France gave me this watch', and 'it is the case', like 'it is true', is a bivalence-inducer (i.e., in a multivalent semantics, on any assignment of values to atomic sentences, it is either true or false that a given sentence acquires the value 'true'). Then the truth of (2) would be no proof of the falsity of (1). This leaves it something of a mystery how sentential negation is ever to be expressed and renders the criterion for logical presupposition apparently devoid of practical application (even in its first formulation, because of the difficulty of distinguishing falsifying p from falsifying *it is the case that p*). So while I agree that 'it is not the case' is the VP-negation of 'it is the case', I also take it to have a semantics of type *tt*, which sends \top to \perp and all non- \top values to \top . This is still consistent with (1) having a non-classical status, but it's only important to my argument that (2) should be true.

5. That there is a real difference between the negative contexts in (2) and (3) is borne out, e.g., by the licensing of negative polarity items (see Horn 2001:327 for a related point): "the king of France isn't bald at all" is fine, but 'it is not the case that the king of France is bald at all' is little better than 'the king of France is bald at all' (because (2)'s negation is too far away? - "It's not the case at all that..." is acceptable). See Gajewski (2007:308-10) for an ingenious derivation of non-licensing of NPI's in the scope of 'it is not the case/true that', but one based on the rather unlikely premise that 'it is true/the case that S ' converts the presuppositions of S into asserted content.

shares with the positive cleft sentence 'it was Mary who threw the computer out the window' the presupposition that someone threw the computer out the window. Suppose the semantics for (4) involves a restricted event quantifier, whose content is unasserted, and a scope. Then there will be a variety of specific semantic analyses that can be type-logically derived for (4), varying in what goes into the quantifier restriction, what goes into the scope, and where the negation is inserted. One of them is, very roughly,

- (5) (some e : e a throwing of the computer out of the window)[(the x who is agent of e)[not($x = \text{Mary}$)]].⁶

(5) is the reading of (4) on which all that is negated is the identification of Mary with the agent of the throwing; that there was a throwing, with an agent, is not itself negated. So the part of the cleft construction which implies that someone threw the computer out the window is outside the scope of the negation. But in (5), it isn't *asserted* that someone was agent of such a throwing. It's not even clear that it's asserted that there was a throwing, since the content of the restrictive relative clause 'which was a throwing of the computer out of the window' is not asserted.

We get the same kind of behavior with pseudo-clefts. "What Mary threw out the window wasn't the computer" merely asserts that the computer wasn't the theme of Mary's throwing, not that Mary wasn't agent of a throwing. In neo-Davidsonian, the natural analysis is

- (6) (some e : e a throwing out of the window by Mary)[(what x : x theme of e)
[(the y : computer(y))[not($x = y$)]]].

6. For neo-Davidsonian semantics in general, see (Parsons 1990). The generalized quantifier version is developed for a theory of focus in (Herburger 2000).

What makes (5) and (6) the *natural* analyses is that they are the most appropriate for the likely context. For example, if we utter (4) in a context where it's clear that someone threw the computer out the window, giving the negation a wider scope than it has in (5) would put material describing what we know to be the case within its scope. It would thus be akin to asserting $\neg(p \wedge q)$ in circumstances where it is clear that p and we wish to deny q . This is presumably a violation of Grice's Maxim of Manner. The semantic approach's main employment of pragmatic considerations is of this kind, to explain why the audience settles on a particular one of the derivable propositions expressed by the sentence in the context (though these considerations perhaps don't oblige the speaker to have really intended the proposition in question). In some examples, it may not be completely clear that there is a certain presupposition. The semantic approach explains this as the failure of pragmatic considerations to select one of the derivable meanings as the favorite for being the one expressed in the context.⁷

Pragmatics has other roles to play. For example, it's well-known that truth-functional compounds inherit their presuppositions in a systematic way. A disjunction's presuppositions are usually the union of those of the disjuncts, as in

(7) Either it was Mary who threw the computer out the window, or it was Sue

which, like both its disjuncts, presupposes that someone threw the computer out the window. Again, there are many different derivable readings, but among them is

7. Simons (2001) notes that "George didn't vote for Nader" is often taken to imply that George voted, even without stress on 'for Nader'. One derivable meaning for this sentence is (i) George is agent of a voting whose beneficiary was not Nader. This accounts for the implication, which, as Simons says, is easily defeated: "George didn't vote for Nader - he didn't vote at all". The pragmatic effect of the parenthetical is to promote the reading (ii) George wasn't the agent of a voting whose beneficiary was Nader, since it adds further information consistent with (ii) and inconsistent with (i). However, assuming the speaker is authoritative on George's behavior, "George voted" could just be a conversational implicature, since "George didn't vote for Nader" violates Quantity if the speaker knows George didn't vote.

- (8) (some e : e a throwing of the computer out of the window)[(the x who is agent of e)[$(x = \text{Mary})$ or $(x = \text{Sue})$]]

which, as with our treatment of negation, dissolves the projection problem for the entailment-cancelling disjunction operator: the part of the cleft construction that supports the entailment is not in the scope of the disjunction. Pragmatic considerations would then be enlisted to favor (8) as the interpretation of (7), in particular, the same kind of Gricean appeal to Manner that we proposed to justify (5) and (6): if it's clear that someone threw the computer out the window we would only list the candidates in the disjunction, not repeat what's clear with every disjunct.

But the simple union-of-presuppositions account fails for disjunctions when one disjunct rules out a presupposition of the other: that presupposition is not inherited by the disjunction. For example,

- (9) Either it was Mary who threw the computer out the window, or no-one did (the thing levitated out itself)

does not presuppose that someone threw the computer out the window, since this is inconsistent with the second disjunct, 'no-one did'. Nevertheless, we can still *derive* the following meaning for (9):

- (10) (some e : e a throwing of the computer out of the window)[(the x who is agent of e)[$x = \text{Mary}$] or (no y : person(y))[(some e' : e' a throwing of the computer out of the window)[y agent of e']].⁸

Here 'for some event such that it is a throwing of the computer out of the window'

8. 'For some throwing of the computer out the window, either Mary was its agent or no-one was agent of a throwing of the computer out of the window'.

is not in the scope of the entailment-cancelling 'or', so we get the presupposition that the computer was thrown out of the window, and so, by the principle that throwings have agents, that someone threw it out the window. Even though (9) is rather odd, (10) is certainly not an interpretation one would give it. We can explain why by appeal to pragmatic factors: typically, assertion of a disjunction conversationally implicates lack of knowledge of which of the three verifying distributions of truth-values across the disjuncts is the case, so the interpretation (10) is pragmatically incoherent for (9), since it presupposes a throwing, and since throwings require throwers, a thrower too, thereby eliminating the truth-value distributions $\{\top, \top\}$ and $\{\perp, \top\}$.

The fundamental semantic strategy, then, is to explain presupposition as arising from the application of meaning-governing principles to triggers which – perhaps contrary to appearances, perhaps not – are *not* within the scope of an entailment-canceller.⁹ Two pressing kinds of problem case for the strategy are therefore (i) one in which it's not obvious what the required scope-resolution is,¹⁰ and (ii) the kind, if there is one, where presupposition arises without there being any trigger and canceller to manipulate.

Simons presents a case that she argues is of the second kind. The example is that of a conversation between Ann and Bob, in which Ann asks 'Are we going to have a picnic?' and Bob replies "It's raining". Bob's reply conversationally implicates "No, we're not going to have a picnic", because Ann assumes that Bob is being co-

9. 'Maybe the king of France gave me this watch' is at first sight a case of a presupposition projecting past a wide-scope entailment-canceller. But I think that when we detect the presupposition that France has a king, this is because we are associating with the sentence a semantics in which 'maybe' has narrow scope.

10. A hard case for my view is something like 'if we go to Scotland ever again, we'll take warmer clothes'; this presupposes that we've been to Scotland, but if 'ever again' is a unit it is hard to see how the trigger 'again' can escape the scope of the canceller 'if', since 'ever' has to be within the scope of 'if' to be licensed. An analysis of 'again' in terms of repetition is strongly suggested.

operative and therefore not making some pointless remark about the weather. But if the remark has a point, Ann will reason, then Bob thinks the state of the weather bears on whether or not we're going to have a picnic. It's generally {agreed/known to be agreed} that picnics are unpleasant in the rain, and if Bob were deviating from this, co-operativeness would require him to announce it ("It's raining - but who cares?"). Since he doesn't, he intends to convey that we're not going to have a picnic. In short, by various aspects of co-operativeness, Ann is in a position to infer that Bob accepts the conditional "if it's raining, no picnic" if he asserts its antecedent, and Bob knows this, so he asserts the antecedent and leaves the rest up to Ann.

The assumption "if it's raining, no picnic" ('one does not picnic in the rain') is, Simons argues, very like a presupposition, so like one that it should be classified as such. It is not a conversational implicature, because Bob is not trying to get it across, but it remains in the background, is taken for granted, and even projects out of entailment-cancelling contexts. So it ought to fall under a theory of presupposition, and this, I imagine Simons would say, dooms the semantic approach, at least insofar as it claims to be comprehensive.

But in order to get across that there will be no picnic by uttering "it's raining", Bob doesn't actually have to assume that one does not picnic in the rain, and Ann doesn't have to attribute that assumption to him. Bob only has to assume that Ann accepts that one does not picnic in the rain, and Ann only has to assume that Bob is making this assumption about what she thinks; after all, Bob may himself be a Wilfred Thesiger type, for whom only a hurricane or severe blizzard would interfere with the pleasures of eating outdoors. Either way, Ann gets the message that there will be no picnic. A presupposition of an utterance, Simons says, is something the interpreter *must* take the speaker to accept in order to make sense of the speaker

producing exactly that utterance (my emphasis). But I would imagine that in no case is there anything that demands to be taken as *the* crucial explanatory hypothesis, as the current example shows.

More generally, however much the main hypothesis of an inference to the best explanation may resemble a presupposition in some respects, it still strikes me as decidedly odd to say, as Simons wants to, that's Bob's utterance of "It's raining" *presupposes* that one doesn't picnic in the rain (or whatever). An utterance is an event, and events are not normally said to have presuppositions. It is their explanations that have presuppositions; typically, an explanation presupposes that p if p is not made explicit in it but the explanation wouldn't work if p weren't true. Simons will have to maintain that there is a unitary concept employed in both of the following statements by Bob (changing the example very slightly) addressed to Ann:

- (11) My utterance of "I see that it's raining" in answer to your question presupposes that it's raining

and

- (12) My utterance of "I see that it's raining" in answer to your question presupposes that one doesn't picnic in the rain.

In (12) Bob seems to be adverting to the explanation of why he speaks as he does: the explanation ('I believe that if your attention is drawn to the weather you will have the answer to your question') presupposes one doesn't picnic in the rain. It's a questionable step to transfer the presupposition of the *explanans* to the *explanandum*. Your *explanation* of why the match lit when struck may presuppose that it was dry, but *the occurrence of the combustion* doesn't presuppose that the match was

dry.

I'm therefore sceptical that this case shows that we can have *linguistic* presupposition in the absence of any of the factors a semantic theory needs to gain traction. In other cases there are such factors, but I suspect that the main plank of Simons' account, that what's presupposed by an utterance is what the audience must suppose the speaker accepts to make the utterance intelligible (SA), will overgenerate in these cases, and her secondary plank, that presuppositions are not intended to be added to the conversational record (SB), won't cut down sufficiently.

Consider the following factive variant of the picnic case. Bob and Charles look out the window and see heavy rain, and each sees that the other sees it. Ann asks, from a room Bob knows to be windowless, 'Are we having a picnic?'. To explain Ann's question to Charles, Bob says

(13) Ann doesn't know it's raining.

Bob, or what he says, presupposes that it is raining. On the semantic approach, we detect this presupposition because we are attributing to (13) a semantics very roughly along the lines of

(14) There is a piece of knowledge to the effect that it's raining such that Ann doesn't possess it

or in a neo-Davidsonian rendering, with quantification over states,

(15) (some e : e a state of knowing and content(e , the proposition that it's raining))[not(in(e , Ann))].¹¹

11. For (15) to be an accurate analysis of (13), we require the states of knowing to be instantiable types (not token states with the identity of a knower built in) and that a state-type of knowing that p exists only if p . The analysis sounds better with 'the' in place of 'some'.

Here the presupposition trigger 'know' shows up well clear of the scope of the negation, so the projection problem is spurious again. But why settle on (15) as the right interpretation of (13) in this context? Once again it's a matter of Manner: since speaker and audience can see that it's raining and each knows the other sees it, the speaker does not wish to put the existence of knowledge that it's raining within the scope of the negation, since all he wants to say is that Ann doesn't possess that knowledge. And from (14) or (15) the factivity of 'know' generates the presupposition "it's raining", which (14) and (15) entail without asserting.

For Simons, the presupposition that it's raining must emerge purely pragmatically. Simons remarks that she finds Stalnaker's account of the details of cases that combine negation and factives 'quite plausible'. Stalnaker argues as follows (Stalnaker 1974:55). The four types of ground we have for attributing lack of knowledge that p to x are (i) p is false; (ii) x doesn't believe that p ; (iii) x believes that p , but for bad reasons; or (iv) something else that epistemologists have been trying to pin down for a long time. (ii)-(iv) may be collapsed into a single 'inappropriate epistemic state' condition, so when a speaker S attributes lack of knowledge that p to x , it's either because S takes p to be false, or because S thinks x is in an epistemic state inappropriate for knowing that p . It would therefore be 'gratuitously weak' (Stalnaker's phrase) to say that x doesn't know that p unless something about the context eliminates one of the possible grounds from contention. So in a context where it's obvious to all parties to the conversation that p , the first ground drops out, reducing 'x doesn't know that p ' to 'x is in an inappropriate epistemic state for knowledge that p ' and creating the presupposition that p is true.¹²

12. Stalnaker's account suggests that there ought to be symmetric cases, where it's obvious to all parties that x is in an epistemic state appropriate for knowing that p , so that S 's statement 'x doesn't know that p ' reduces to 'not p ' and generates the presupposition that x is in an epistemic state appropriate for knowing that p . Suppose, for example, that Ann is in the room with Bob and Charles,

The main difficulty for Simons is that this account of where the presupposition that p is true comes from is not the only piece of reasoning that the audience might come up with to rationalize Bob's utterance "Ann doesn't know it's raining". The audience, i.e., Charles, might reason

- (16) (a) since Ann asks if there's going to be a picnic, she doesn't know it's raining; (b) she doesn't know it's raining because she doesn't believe it's raining; and (c) she doesn't believe it's raining (and doesn't believe it's not raining) because she's in a windowless downstairs room from where rain on the roof sounds just like the upstairs central heating running.

This requires Charles to know that Ann's epistemic situation is inappropriate for knowing the current weather, and Bob to know that Charles knows this, but adding that does nothing to weaken the presupposition of Bob's remark, viz., that it's raining. And (16) makes for a perfectly adequate explanation of why Bob speaks as he does: his remark accounts for Ann's asking about the picnic on the further assumption that in Ann's situation, lack of information about the weather means that it's an open question for her whether or not there's going to be a picnic. But nowhere does the fact that it *is* raining play a role in Charles's rationalization of Bob's (13). So it seems that Simons' principle (SA) doesn't get us the presupposition that it's raining for (13) in this case, even though the presupposition is still surely there.

I said that I thought (SA) would overgenerate, even with (SB), but what I have

staring out the same window, Bob and Charles know that all is normal with her, and all three can see that the weather is fine and can see the others see it. In this situation, it may well be that one could infer from Bob's "Ann doesn't know it's raining" that it's not raining, but I don't think that there is any *presupposition* that Ann is in an epistemic state appropriate for knowing that it's raining. I also doubt that we can collapse (ii)-(iv) into a single condition, since we often say "He doesn't know that p ", usually with stress on 'know', to convey that he believes p for inadequate reasons, so the problem of gratuitous weakness re-arises. The semantic account predicts no other presuppositions in knowledge denials besides the truth of p , unless other presupposition-triggers are also present.

given is arguably a case of undergeneration, based on the possibility of competing equally good explanations. Overgeneration will occur when the alternative explanations lose the competition. Suppose that for some reason the Stalnaker-style story about (13) is better than all the others, so we predict the presupposition that it's raining. Won't it also be the case that (13), like the original "It's raining", presupposes that one doesn't picnic in the rain? There are, we may assume, many truths Bob knows that Ann doesn't. Why does he say to Charles that Ann doesn't know it's raining, as opposed to, for instance, that Ann doesn't know that the middle name of his first girlfriend was 'Jacqueline'? Charles will surely infer that Bob thinks that weather beliefs, or the lack of them, affect one's expectations of picnics. And this will be in turn because he thinks that bad weather rules out picnics, or thinks that Ann thinks this. So the main presupposition of "it's raining" that Simons identified also turns out to be a presupposition of "Ann doesn't know it's raining", in the context we have set up. This suggests to me that elevating hypotheses that are important to the best explanation of why someone says something into presuppositions will produce more presuppositions than the intuitive notion warrants.

Finally, Simons' view does not make any use of the notion of 'common ground', and it's natural to wonder if problems with her type of pragmatic approach dissolve if we switch to a more orthodox one, according to which what is presupposed by an utterance of a sentence σ in a context are the consequences of what is in the common ground of the context, including those propositions which are added to the common ground in order to accommodate σ . There is nothing in this bare-bones characterization of presupposition that motivates ruling out the premises of an inference to the best explanation as objects of accommodation, so if Simons' account overgenerates, I would expect more orthodox pragmatic theories to do so as well.

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