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Requiem for Presupposition
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The term "presupposition" is an honorable one, with a respectable, if controversial, history in philosophy and philosophical logic. Such important figures as Frege and Strawson have found it essential to make presupposition a basic notion in their theories. In view of this fact, it is not surprising that linguists should have fastened on this concept when they began to describe those aspects of sentences which seem to be preconditions for successful use or functioning of the sentences in speaking. Beginning with Paul and Carol Kiparsky, a number of linguists have isolated features of sentences that contain certain lexical items or syntactic constructions and identified them as presuppositions of the sentences, propositions which the sentence is not primarily about but which have to be established prior to an utterance of the sentence in order for communication to go smoothly.

In the first part of this paper, we will illustrate with examples some of the range of different things that have been called presuppositions by various linguists. Then we will briefly discuss two kinds of proposal about what it is for a proposition to be presupposed by a sentence, namely semantic presupposition and pragmatic presupposition as they are commonly called. After that we will pick out three of the illustrative cases that we present in the first part of the paper, and show how they actually have quite different properties so that no single notion of what a presupposition is and what laws govern presuppositions could successfully account for all of them. In each case we will try to show what sort of phenomenon is involved and relate these cases to other kinds of phenomena that require some account in a full theory of language.

In their seminal (1970) paper, the Kiparskys identify a class of verbs and adjectives which they say give rise to a presupposition that the sentential complement of the verb or adjective is true. According to them, anyone who says *John realizes that Mary is here* assumes already that Mary is here, as is shown by the fact that denying what this sentence asserts--i.e., asserting *John doesn't realize that Mary is here*--also indicates or assumes that Mary is here. The underground circulation of their paper, which was not published until a number of years after it was written, stimulated widespread interest in finding similar instances to those the Kiparskys described. It wasn't long before other authors had identified certain predicates as counterfactual predicates.

For instance Lakoff (1970) states that *Irv is pretending that he is sick* presupposes Irv is not sick. Likewise Lakoff states that subjunctive conditional sentences, also known as counterfactual conditionals, presuppose the falsity of their antecedent clause, a view shared by D. Lewis (1973,p.3). For instance, the sentence *If it were raining outside, the drumming on the roof would drown out our voices* presupposes that it is not raining out-

side.

A commonplace example of presupposition is that illustrated by the slight variant of a hackneyed example *Have you stopped beating your wife?* Givón (1972) presents an extensive discussion of presuppositions which are traceable to aspectual verbs such as *stop* and *begin*.

Fillmore, in his well-known (1971) paper on verbs of judging, discusses a new and different kind of presupposition associated with a class of evaluative verbs that can be used for reporting what a person said or thought about some situation. He states, for instance, that a person who says *John accused Harry of writing the letter* presupposes that there was something blameworthy about writing the letter, and a person who says *John criticized Harry for writing the letter* presupposes that Harry is responsible for the letter. As evidence, he cites that *John didn't criticize Harry for writing the letter* presupposes Harry's having written the letter like the affirmative sentence does.

Karttunen (1971) identified a class of verbs he called implicatives, which he said have interesting and varied presuppositions that are very difficult to formulate exactly. He says that *John managed to swim ashore* and *John didn't manage to swim ashore* both presuppose that John made an effort to swim ashore, though they have different implications for whether he ever reached there.

Other idiosyncratic presuppositions arise from words such as *even* and *only*, discussed in Horn (1969). Horn says that *Only John loves Mary* presupposes that John loves Mary, witness the fact that *Does only John love Mary* also presupposes this proposition. And he also says that *Even John loves Mary* presupposes that people other than John love Mary and John is among the least likely people to love Mary.

Lakoff (1971) says that the conjunction *but* signals a presupposition that the two conjuncts are semantically opposed or that one would not expect that both conjuncts could be true. For example, *John is tall but Bill is short* presupposes that tallness is opposed to shortness, while *John is rich but he is dumb* presupposes that one would expect John not to be dumb if he is rich.

As our final illustration of the range of phenomena that have been called presupposition, we note that Fillmore has said imperative sentences presuppose that the person to whom they are addressed is able to perform the action ordered. For instance, *Please shut the door* presupposes that the addressee is in a position to shut the door.

Now in a very general way, all of the different phenomena we have just listed do appear to be cases where the speaker takes something for granted as he performs an illocutionary act of asserting, asking, or ordering something. This common feature of all these cases encouraged many linguists to look for a single, unified account of all these different kinds of presupposition, to look for one set of laws that govern all the cases we have mentioned and which explain the behavior of these presupposition-

triggering morphemes and constructions in simple and complex sentences. Certain principles are agreed upon by most authors. For instance, interrogative sentences presuppose everything that the corresponding declarative sentence presupposes, plus perhaps additional things. Likewise, negative declarative sentences presuppose, at least on one reading, everything that the corresponding affirmative sentence presupposes.

There has also been interest in giving an account of what presupposing is, and how it differs from asserting, implying, etc. Two main approaches have been taken to specifying what it is to presuppose something; both answer the question in terms of the consequences that result from failure of a presupposition. Gazdar gives a very good summary of these two approaches in his (1976) dissertation. Roughly speaking, on the semantic notion of presupposing, truth of the presuppositions is a necessary condition for a declarative sentence to have a determinate truth value, either truth or falsehood, or to be usable for a statement-making speech act. This notion, which is adopted by a number of linguists including G. Lakoff, E. L. Keenan, and others, involves certain empirical commitments, for instance that presupposing is a transitive relation, a fact not realized by all the scholars who adopted this notion. The other notion, often called pragmatic presupposition, makes belief in the presupposed propositions by the speaker, or by the speaker and the addressee, a necessary condition for normal, or sincere, or felicitous utterance of the presupposing sentence.

We do not intend to argue which of these is a better notion of presupposition, because in our view it was a mistake to think that all the different cases that linguists have called presuppositions are instances of one single phenomenon, as Karttunen pointed out in (1975). Kempson (1975) has given an extensive discussion of why the semantic account cannot cover all the cases. Nor can any version of the pragmatic notion provide an adequate reconstruction of them all, as will follow from our argument. In order to support the position that the collection of phenomena which have been called presupposition in the linguistic literature cannot be given a unified treatment (a position which Boër and Lycan (1976) also hold) we shall focus on three types of case and show both how they differ from one another and why none of them can be regarded either as semantic or as pragmatic presupposition. Beyond this, we will show how each of these cases is an instance of another more general kind of phenomenon: particularized conversational implicature, generalized conversational implicature, or preparatory condition on felicity of utterance. This is important because it demonstrates that real progress in understanding phenomena that have been called presupposition can be made by recognizing the various cases for what they really are, and sorting them out into groups consisting of instances of a more general phenomenon into which insight has been achieved, such as conversational implicature, preparatory conditions, and also conventional implicature. A moral which follows from this is that it can be a mistake to leap from the observation that speakers know a

certain fact about their language to the conclusion that this fact must be recorded in a grammar, an account of their linguistic competence, since conversational implicatures need not be dealt with in the grammar of a language.

We take up first the case of subjunctive conditional sentences. One thing which needs to be pointed out immediately about examples such as

- (1) If it were raining outside, the drumming on the roof would drown out our voices

is that one need not appeal to a counterfactual presupposition in order to explain how the sentence indicates that the speaker believes the antecedent to be false. Note, to begin with, that whenever sentence (1) is asserted, it will be readily apparent to any listener who understands the sentence that the consequent clause is false. Just by hearing the words clearly, the addressee will immediately recognize that the speaker's voice is not being drowned out. The falsity of the antecedent clause then follows straightforwardly, assuming that the conditional sentence is true. For it is clear, even without going into details about the truth conditions of subjunctive conditional sentences, that such a sentence cannot be true under conditions where its antecedent is true and its consequent is false. For this reason the speaker of (1), by overtly committing himself to the truth of what he says, implicitly indicates his belief that his surroundings are free of rain just by choosing such an obviously false consequent clause to utter.

A second important fact about the subjunctive conditional construction is that, besides it being unnecessary to postulate a counterfactual presupposition for a sentence such as (1), it would be incorrect to postulate a general rule to the effect that a subjunctive conditional sentence presupposes its antecedent clause is false. As a case in point, consider (2).

- (2) If Mary were allergic to penicillin, she would have exactly the symptoms she is showing

This sentence would, if anything, normally tend to suggest that its antecedent clause is true, in contravention of any principle that this construction carries a counterfactual presupposition. We will shortly come to other examples which can suggest that the antecedent clause is true, and these examples together with sentence (2) clearly show that subjunctive conditionals do not as a rule presuppose that their antecedent is false, in any sense of presupposing which can be formalized as a part of grammatical theory.

Before taking up these other examples, though, let us briefly note why sentence (2) suggests that **its** antecedent is true. Unlike sentence (1), (2) has a consequent clause which is obviously true. Therefore falsity of the consequent clause does not prevent sentence (2) and its antecedent from both being true. Moreover,

subjunctive conditional sentences are well fitted by their truth conditions for use in giving explanations of known facts, for explaining them on the grounds that the fact stated as the consequent clause follows from the hypothesis stated in the antecedent clause. (See Stalnaker (1968) and Lewis (1973) for extensive discussion of these truth conditions.) Of course, the known fact is explained only if the hypothesis from which it follows is also true. Therefore if sentence (2) is offered as an explanation of the obvious fact that Mary has exactly the symptoms she is showing, this has to indicate a belief on the speaker's part that the antecedent clause of (2) is true. Similarly if sentence (2) is offered merely as a conjecture as to why the known fact is true, it indicates that at least the speaker does not know the antecedent to be untrue.

Let us now consider some subjunctive conditional sentences whose consequent clause is neither as blatantly false as that of (1) nor as obviously true as that of (2), for instance (3).

- (3) If Shakespeare were the author of Macbeth, there would be proof in the Globe Theater's records for the year 1605.

Certainly it is possible to indicate one's belief that Shakespeare did not write Macbeth by uttering this sentence in a context where the Globe Theater's records for the year 1605 have just been searched and found to lack any evidence of Shakespeare's authorship. The existence of this possibility can be explained in a fashion parallel to the explanation we gave of why sentence (1) normally indicates that its antecedent is false. But sentence (3) does not as a rule indicate that Shakespeare is not the author of Macbeth. Such indication occurs only when the sentence is uttered in a particular kind of setting, one where there is reason to believe that the consequent of (3) is false. In a different sort of context, the sentence may indicate that its antecedent could well be true. For example, if sentence (3) is uttered in the course of speculating about how the authorship of Macbeth could be established, where it is not known that the antecedent is false, the sentence indicates that the speaker does not know whether or not Shakespeare did write Macbeth. In such a context, this sentence behaves somewhat like sentence (2). Incidentally, one should not confuse the latter sort of context with one where it is already agreed that Shakespeare did not write Macbeth, and sentence (3) is uttered as a way of suggesting how further evidence could be gathered to support this agreed-upon proposition. In this sort of context, it is not the uttering of (3) which indicates that Shakespeare did not write Macbeth; rather that proposition has been agreed to before sentence (3) is produced and so this kind of context provides no evidence for saying that (3) requires the presupposition that Shakespeare did not write Macbeth.

The now-you-see-it-now-you-don't behavior of the supposed counterfactual presupposition is reminiscent of another kind of phenomenon which is by now familiar from the work of Grice, namely conversational implicature. In the cases where an utterance of a subjunctive conditional sentence indicates that the antecedent

clause is false, this conclusion on the hearer's part is necessitated by the need to reconcile the fact, evident in the context of utterance, that the consequent clause is false with the assumption that the speaker is observing Gricean maxims of conversation-- in particular the maxim which says "Speak the truth!" And on the other hand, in the cases where uttering the subjunctive conditional sentence in a given context indicates the speaker's belief that the antecedent is true, or at least might be true, that conclusion is required if the hearer is to reconcile the assumption that the speaker is observing the Gricean maxim which says "Be relevant!" with what is known about the truth of the consequent clause of the sentence uttered.

Now certain further consequences flow from our tentative conclusion that no rule associates with subjunctive conditional sentences a presupposition that the antecedent is false, or for that matter that it is true, that instead the utterance of such sentences conversationally implicates in some contexts that the antecedent is false and in other contexts that the antecedent is or could be true. Since particularized conversational implicatures like these are highly context dependent, it should be possible to make them come and go by working alterations in the context surrounding utterance of the sentence. In some cases, these conversational implicatures can be made to disappear by explicitly disavowing them. For instance, a doctor who elaborates on (2) by saying

- (4) If Mary were allergic to penicillin, she would have exactly the symptoms she is showing. But we know she is not allergic to penicillin.

does not implicate that Mary is, or even might be, allergic to penicillin. His disavowal of that proposition makes it clear that in uttering the subjunctive conditional sentence he is simply running through the possible causes of Mary's symptoms, not offering an explanation of them. Likewise, a person who expanded on (3) by saying

- (5) If Shakespeare were the author of Macbeth, there would be proof in the records of the Globe Theater for the year 1583. So we had better go through them again more carefully until we find that proof.

makes it clear that he is not willing to accept that the consequent clause of the subjunctive conditional sentence is false, and in that way cancels what might otherwise have been implicated. Moreover, if a subjunctive conditional sentence is embedded as the complement of a higher verb, then even if that higher verb is what Karttunen (1973, 1974) has called a hole to presuppositions the erstwhile counterfactual implicature may be cancelled. If I say, for instance,

- (6) It is unlikely that, if it were raining outside, the drumming on the roof would drown out our voices

I in no way suggest that I think it is not raining outside. But the context

- (7) It is unlikely that --

is a hole to presuppositions; *It is unlikely that John realizes that Mary is here*, for instance, presupposes that Mary is here just as much as *John realizes that Mary is here* does. In the case of the subjunctive conditional sentence, the reason for the disappearance of the counterfactual implicature when (1) is embedded in the context (7) is, of course, that the speaker can perfectly well be speaking the truth despite the obvious falsehood of the consequent clause of the embedded conditional sentence, even if the antecedent clause is true, since sentence (6) does not commit the speaker to the embedded conditional sentence being true.

In summary then, the supposed counterfactual presupposition of subjunctive conditional sentences is neither present with all subjunctive conditional sentences -- e.g. (2) -- nor does it follow the same laws for projecting presuppositions to complex sentences as the factive presupposition of *John realizes that Mary is here* does. The supposed counterfactual presupposition cannot, therefore, be classified in the same group with all other presuppositions. However, it behaves exactly as we would expect a particularized conversational implicature to behave, which therefore we conclude that it is.

Before leaving the topic of subjunctive conditionals, let us say one further thing to avoid a possible misunderstanding of our views. We recognize that there is a distinct difference between

- (8) If John were going our way, he would give us a ride

and the indicative

- (9) If John is going our way, he will give us a ride.

This could conceivably be due to something like a presupposition contributed by the subjunctive mood, but whatever that presupposition is, it is not that the antecedent is false. Perhaps the difference between (8) and (9) is also due to some characteristic of indicative conditionals which is lacking in their subjunctive counterparts. By saying (9) I indicate that I think there is a reasonable chance the antecedent might turn out to be true, i.e., that there is no good reason to think John is not going our way. In a situation where it is evident or agreed upon that the antecedent clause is false, only the subjunctive conditional can be used. Correspondingly, in a situation where it is evident or agreed upon that the antecedent clause is true, only the indicative conditional is acceptable. If we have already accepted the

hypothesis that John is going our way, then we must use the indicative conditional (9) rather than the subjunctive conditional (8) to lay out further consequences of that hypothesis. This suggests to us that indicative and subjunctive conditionals are related to each other in the manner shown in (10) and (11).

- (10) "If A then B" in the indicative mood presupposes (conventionally implicates) that it is (epistemically) possible that A.
- (11) "If A then B" in the subjunctive mood presupposes (conventionally implicates) that it is (epistemically) possible that not-A.

In addition, it may well be the case, as Lewis (1973) has argued, that the two kinds of conditionals also have different truth conditions. But that is another matter, which we cannot go into here.

We turn next to the verbs of judging which Fillmore has described. It will only be possible to discuss one of these verbs in the available space. We select *criticize* for this purpose and leave it to you to apply similar treatment to the others.

As was the case with subjunctive conditionals, the presupposition of a sentence like

- (12) John criticized Harry for writing the letter

is not so firmly attached to the sentence that it cannot be cancelled. One need only think about sentence sequences like

- (13) John criticized Harry for writing the letter. Since the letter was written by Mary, it was quite unfair of John

to realize that this presupposition too has the feature of cancellability which is so characteristic of conversational implicatures. In the case of verbs of judging, we want to argue that the so-called presupposition is in fact a generalized conversational implicature, not a particularized one as with the subjunctive conditionals. We will see presently why this makes a difference.

How might this generalized conversational implicature arise? To answer that question one needs to know what kind of speech act criticizing is, namely the kind that Searle calls expressive. The essential condition for the performance of an act of criticizing is that the speaker's utterance count as an expression of disapproval of the addressee's involvement in a certain situation. Illocutionary acts of this kind have in general the preparatory condition that the thing towards which the speaker is expressing an attitude must, in fact, be the case. So in particular, a speech act in which John criticizes Harry for writing the letter has as a preparatory condition that Harry wrote the letter.

Now the verb *criticize* has a meaning which makes the verb useful for reporting speech acts of just this kind. (Unlike some other verbs of judging, it cannot be used performatively for

making speech acts of the same kind as it can be used to report. This is merely an idiosyncrasy of the lexical item *criticize*.) Now how does it come about that when we report a speech act such as John performed -- he may have said to Harry, perhaps in a disapproving tone of voice, *You wrote the letter* -- that we usually indicate that Harry did in fact write the letter? The explanation is to be found in what Lewis (1969) has described as a convention of truthfulness and trust prevailing among speakers of a language. Roughly this says that speakers ought to perform only those illocutionary acts as meet all conditions of felicity, and that listeners can trust speakers generally to obey this injunction. Assuming that this convention prevails in a community of speakers, if I report John's speech act by saying (12), then in the absence of further qualifications the principle of trust justifies the assumption on the part of my addressee that John's speech act was felicitous. And if it was felicitous, then its preparatory condition had to have been met, i.e. the object of John's criticism had to have been responsible for the situation which John was expressing disapproval of. Thus my utterance of sentence (12) will usually convey that Harry did write the letter.

Of course the convention of truthfulness and trust can be violated on occasion, and if I know that John did violate it, even inadvertently and unintentionally, by criticizing Harry for something which Harry was not responsible for or which never in fact happened, then if I am to conform to the convention of truthfulness and trust, it is incumbent upon me to add that John's criticism was misplaced so that you won't by trusting me derive a mistaken impression that John's criticism was justified. As a general matter, therefore, you can take it from my saying (12) that Harry wrote the letter, unless I clearly indicate otherwise.

The generation of this conversational implicature is not dependent on particular characteristics peculiar to certain contexts of utterance, as the implicatures associated with subjunctive conditional sentences were. That is what makes this one a generalized rather than a particularized conversational implicature. It exhibits another feature too that one would expect of a generalized conversational implicature, namely nondetachability. Other verbs which report speech acts differing from that reported by *criticize* just in the strength of disapproval expressed, to wit *chide* and *condemn*, also give rise to the same generalized conversational implicature as *criticize*. Compare *John chided Harry for writing the letter* and *John condemned Harry for writing the letter*. These sentences are rough paraphrases of (12), they say roughly the same thing, and since the conversational implicature associated with (12) is a generalized one, it ought to attach also to these sentences, as indeed it does.¹

Turning very quickly to some other cases, the so-called pre-suppositions arising from implicative verbs such as *manage(to)* and *fail(to)* are in fact conventional implicatures, as we argued in (Karttunen and Peters 1975). Conventional implicatures, not being cancellable, are a different breed of animal than either of the two species of conversational implicature we have been dis-

cussing. In our earlier paper, we presented a mechanism for assigning to sentences their respective conventional implicatures. The supposed presuppositions of genuine factive verbs such as *forget(that)* and *take into account* as well as those associated with *even, only, too/either,* and *but* are likewise conventional implicatures. (For an analysis see, e.g., Karttunen and Karttunen 1977.) And there are a host of other cases that have been called presupposition which are in fact instances of this phenomenon. It is in these cases of conventional implicatures that the notion of there being a rule of the language which associates a presupposition with a morpheme or grammatical construction was on the right track.

As our final case study in this paper, let us look at what Fillmore called the presupposition of imperative sentences that the addressee is in a position to perform the action ordered or requested. This requirement is, in Searle's terms, a preparatory condition of any directive illocutionary act, the kind of act which imperative sentences are specially adapted for the performance of. Actually, the condition is not associated with imperative sentences but rather with directive speech acts. So, *You are to shut the door*, when used to give an order, shows the same so-called presupposition that *Please shut the door* carries. This presupposition, being truly rule governed, is unlike the cases of conversational implicature we have discussed; it is not cancellable without producing infelicity. Neither the discourse *You are in no position to shut the door. Still, please shut the door* nor *You are in no position to shut the door. Still, you are to shut the door* is felicitous. However, in these cases the so-called presupposition is not a part of the sentences' semantic content; so these also differ from cases of conventional implicature.

We close by drawing a moral from the criticisms we have directed at the notion that all kinds of so-called presupposition are alike. In all the cases mentioned in this paper, including subjunctive conditionals and verbs of judging, presupposition theorists have been stimulated by certain facts that speakers of English clearly do know about sentences of their language -- for example, that sentence (1) indicates that its antecedent is false and that sentence (12) suggests that Harry wrote the letter in question. We have seen, though, that it can be a mistake--and in these cases it is a mistake--to leap from the observation that speakers know a certain fact about their language to the conclusion that this fact must be recorded in a grammar, a description of their linguistic competence. Sometimes a fact is to be explained not directly in terms of a rule of the language stating that it is a fact, but indirectly by reference to principles guiding the use of language in communication. One should not be too quick to postulate semantic rules which record everything that speakers know about the force or meaning of a sentence. Alternative ways of accounting for part of that force need to be thoroughly explored.

We have divided up the rather heterogeneous collection of phenomena that various linguists have at one time or another called presupposition, and put certain particular cases into other cate-

gories of phenomena about which some things are beginning to be known. In this way one can actually explain some of the diverse behavior of different things that have been called presupposition. Once we recognize for what they are the instances that are particularized conversational implicatures, many of their peculiarities make sense. The same remark applies to the cases that are generalized conversational implicatures, the others that are conventional implicatures, and the group that are preparatory conditions on illocutionary acts. So there is a gain to show for the price paid in abandoning the simple idea that all so-called presuppositions are instances of the same phenomenon. This is a happy consolation and we are lucky to have it. For it was really rather naive of us to imagine that there was only one kind of pre-condition on the smooth functioning of communicative acts.

Footnote

1. One remaining problem is to explain Fillmore's observation that *John didn't criticize Harry for writing the letter* presupposes just as much as its affirmative counterpart (12) does that Harry is responsible for the letter. The same seems to be true of *Did John criticize Harry for writing the letter, John may have criticized Harry for writing the letter*, and *If John criticized Harry for writing the letter, then Harry is likely to be angry*. In all of these cases, the so-called presupposition is cancellable, just as it is in the case of sentence (12). This leads us to conjecture that we are dealing with a generalized conversational implicature in these cases too, but we are presently unable to explain how it arises.

Bibliography

- Boër, Steven E. and William G. Lycan (1976) "The Myth of Semantic Presupposition."
- Fillmore, Charles J. (1971) "Verbs of Judging: An Exercise in Semantic Description," in Fillmore, C.J. and D.T. Langendoen, eds. *Studies in Linguistic Semantics*, Holt, Rinehart, and Winston, Inc. New York, N.Y.
- Gazdar, Gerald (1976) *Formal Pragmatics for Natural Language: Implicature, Presupposition and Logical Form* Unpublished Ph.D. Dissertation, University of Reading.
- Givón, Talmy (1972) "Forward Implications, Backward Presuppositions, and the Time Axis of Verbs," in Kimball, John P. *Syntax and Semantics*, Volume 1. Seminar Press, New York, N.Y.
- Horn, Lawrence (1969) "A Presuppositional Analysis of *only* and *even*," in CLS 5: Papers from the Fifth Regional Meeting. Chicago Linguistic Society, Chicago, Illinois.
- Karttunen, Lauri (1971) "Implicative Verbs," *Language* 47, 340-58.
- Karttunen, Lauri (1973) "Presuppositions of Compound Sentences," *Linguistic Inquiry* 4, 169-193.
- Karttunen, Lauri (1974) "Presupposition and Linguistic Context," *Theoretical Linguistics* 1, 181-194.

- Karttunen, Lauri (1975) "On Pragmatic and Semantic Aspects of Meaning," *Texas Linguistic Forum* 1. Department of Linguistics, University of Texas, Austin, Texas.
- Karttunen, Frances and Lauri (1977) "Even Questions" in NELS VII: Proceedings of the Seventh Annual Meeting of the North Eastern Linguistic Society, Department of Linguistics, MIT, Cambridge, Mass.
- Karttunen, Lauri and Stanley Peters (1975) "Conventional Implicature in Montague Grammar," BLS 1: Proceedings of the First Annual Meeting of the Berkeley Linguistics Society. Department of Linguistics, University of California, Berkeley, California
- Kempson, Ruth (1975) *Presupposition and the Delimitation of Semantics*, Cambridge University Press, Cambridge, England.
- Kiparsky, Paul and Carol (1970) "Fact," in Bierwisch, M. and K. Heidolph, eds. *Progress in Linguistics*, Mouton, The Hague, Holland
- Lakoff, George (1970) "Linguistics and Natural Logic," in Davidson, D. and G. Harman, eds. *Semantics of Natural Language*, D. Reidel, Dordrecht, Holland.
- Lakoff, Robin (1971) "If's, And's and But's about Conjunction," in Fillmore, C.J. and D.T. Langendoen, eds. *Studies in Linguistic Semantics*. Holt, Rinehart, and Winston, New York, N.Y.
- Lewis, David K. (1969) *Convention*, Harvard University Press, Cambridge, Mass.
- Lewis, David K. (1973) *Counterfactuals*. Harvard University Press, Cambridge, Mass.
- Peters, Stanley (1975) "Presuppositions and Conversation," *Texas Linguistic Forum* 2, Department of Linguistics, University of Texas, Austin, Texas.
- Searle, John R. (1977) "A Classification of Illocutionary Acts" in Murphy, John P. and A. Rogers, and R. Wall, eds. *Performatillo Papers*. Center for Applied Linguistics, Washington, D.C.
- Stalnaker, Robert (1968) "A Theory of Conditionals," in N. Rescher, ed. *Studies in Logical Theory*, Blackwell, Oxford, England.