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THE CONSEQUENT-ENTAILMENT PROBLEM FOR *EVEN IF*

Any adequate theory of *if* needs to account for *even if*. Any adequate theory of *even if* needs to illuminate what Lycan (1991) has dubbed 'the consequent-entailment problem'. This is the task of providing an explanation in terms of an independent theory of *even* and an independent theory of *if* of why an utterance of *Q even if P* can sometimes signal the speaker's commitment to *Q*. This paper begins by criticising Lycan's (1991) proposed solution which states that *Q even if P* entails the assertibility of *Q* just in case *even* focuses on *P*. In Section 1, I show that even's focusing *P* is neither sufficient nor necessary for the assertibility of *Q* to be signaled. In Section 2, I argue that there is a class of *even if*s signaling the assertibility of their consequents where *even* focuses *if* itself. Theories of conditionals treating *if* as a connective or as an operator forming an adverbial clause (Lycan 1984, 1991) or as a quantifier restricter (Kratzer 1986) cannot account for these *if*-focus cases. I argue that a similar problem arises for *especially if* and *only if*. A theory of conditionals which is compatible with focus on *if* in association with *even* (and *especially* and *only*) is sketched. The theory treats *if P* in *Q if P* as a constituent signaling that *P* is supposed and proposes that in asserting *Q if P* a speaker asserts *Q* conditionally on *P*.

1.

According to Lycan *if* is an operator forming an adverbial clause which contains a universal quantifier. *Q if P* is analysed: *All situations e in which P holds are such that Q holds in e*, where *e* ranges over *situations* in a class *R* which are relevant and real possibilities on the occasion of utterance. Two conditions are placed on *R*: *R* must contain at least one situation in which the antecedent is true, and all actual situations are members of *R*, envisioned by the speaker or not – the Reality Requirement.

Lycan views *even* as a focus sensitive universal quantifier. *Even* is focus sensitive because an *even*-sentence *S* signals that a class of 'neighbor' sentences S_j are true which are derived from *S* minus *even* – call this S^*

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– by replacing the focus in S^* by a constituent of the same kind. S^* is signaled by *even* to be more informative than the S_js. As for the quantificational element, Lycan offers two alternative theories. Let *Even* (. . . ϕ . . .) be S where ϕ is the focus. The two theories are:

> *The Inclusion Theory:* S is true iff all x in a contextually determined reference class G which includes the object O which is the *extension* of ϕ and objects of the same type as ϕ are such that (. . . x . . .) is true.[1]
>
> '*Plus*' *Theory:* S is true iff all x in G such that (. . . x . . .) is expected to be true are such that (. . . x . . .) is true, and in addition (. . . ϕ . . .).

(By *extension* of ϕ I mean ϕ's referent if ϕ is a singular term, propositions or situations if ϕ is a sentence, and so forth.)

Most theorists of *even if* agree that different readings of Q *even if* P are determined (partly) by different focus assignments of *even* to a constituent of *if* P. Not all focus assignments lead to readings in which commitment to Q is conveyed. Thus *George will get drunk even if he drinks an* ***ounce*** does not imply that George will get drunk. In terms of Lycan's theory of *if* and his inclusion theory of *even* this sentence is analysed: *All amounts x of alcohol (including an ounce) are such that all situations e (of R) in which George drinks x are such that George gets drunk in e*. The analysis predicts correctly that commitment to Q is not entailed. (Matters hold similarly in applying the 'plus' theory to this sentence.)

Some readings of Q *even if* P do signal commitment to Q. A speaker U might assert (1) below signaling thereby that they intend to leave:

(1) I'll leave even if you leave.

Lycan's claim, in effect, is that these cases are just those in which *even* focuses on the antecedent P. Consider how this is meant to work on the inclusion theory. Where *even* focuses *you leave* in (1) Lycan claims that (2) is the resulting interpretation:

(2) I'll leave in any situation e (of R) including ones in which you leave.

(2) entails that *you leave* holds in all situations in R and so (1) expresses

[1] In Barker (1991) a version of the inclusion theory is defended according to which *even* supplies a conventional implicature that a universal quantification whose instances are S^* and S_j is true. *Even* itself is not a quantifier.

a commitment by the speaker to Q. However, in the course of his paper Lycan expresses reservations about the Reality Requirement on R. If it is dropped *Q even if* ***P*** does not entail Q as such. But because Q holds in all real and relevant possibilities as far as the speaker is concerned a commitment to Q is nevertheless expressed. (See pp. 138–139).

It is quickly shown that Lycan is wrong to claim that (2) is the interpretation that (1) has when P is focused. In (1) *even* takes a conditional as scope. By the inclusion theory (1) is a universal quantification with open conditional as matrix where the quantification is over a class G of entities which are the extensions of sentences, i.e., situations. So (1) has the form (3) which according to Lycan's theory of *if* is (4):

(3) Every situation f in G, including *your leaving*, is such that (if f obtains, I'll leave).

(4) Every situation f in G, including *your leaving*, is such that I'll leave in any situation e of R in which f obtains.

(4) is not equivalent to (2). If however we make the further assumption that G includes R then (4) will be equivalent to (2). It seems that in deriving (2) as the P-focus case this is what Lycan has tacitly done. On this specific interpretation (1) might convey *I will leave no matter what; even if* ***you leave***, and thus the assertibility of *I shall leave* is conveyed. But (1) does not have to be interpreted so that G includes R. Consider: *If anyone does something I don't like, I'll leave. If Mary starts arguing with me, I'll leave. If Fred starts screaming, I'll leave. Even if* ***you leave***, *(though I always detested having you around), I'll leave.* Here the class G comprises situations which will irritate me under the circumstances. It is not necessarily probable that an element from G will obtain, so the assertibility of *I will leave* is not entailed. Other antecedent focus *even if*s not signalling their consequents are discussed in Barker (1991, p. 15).

Lycan's application of his 'plus' theory to *Q even if* ***P*** is similarly flawed. Lycan thinks, assuming the 'plus' theory, that *Q even if* ***P*** means *In all expected situations Q; plus any in which (unexpectedly) P.* Thus *Q even if* ***P*** entails that Q is expected to happen. Again it is difficult to see how this result can be arrived at by systematic application of the 'plus' theory, for applying it to *Q even if* ***P*** yields:

> Every situation x such that it is expected that (Q if x), is such that (Q if x); plus (Q if P).

This sentence does not entail that Q is expected. Thus let Q = *Granny will get drunk.* It may be that every situation x such that I expect that if x happens Granny will get drunk, is such that if x happens Granny will

get drunk, i.e., I'm right about what conditions x will induce inebriation in Granny. But from this fact it does not follow that I expect that Granny will get drunk, for I may also believe that she is an abstainer and that nobody is about to slip some vodka into her tea and so forth.

We have shown that antecedent focusing is not sufficient to generate a signal that the speaker is committed to Q. It is also not necessary as (5a) and (b) show:

(5)a. Don't worry, the party will be fine even if Basil **does** turn up.
b. You will get a scholarship, even if you **don't** get an A.

In (5a) the focus is the stressed auxiliary *does*. The communication is *Either way, whether Basil turns up or not, the party will be fine*. (a) does not have a *no-matter-what* interpretation. The speaker is not communicating *The party will be fine, no matter what, even if* ***Basil turns up***. So (a) is not explicable on either of Lycan's original analyses or my revised analysis. In Barker (1991, pp. 22–26) an explanation of this pattern is given through the claim that where the focus of *even* is the auxiliary *does* the natural grammatical replacement generating the neighbor S_j is *does not*. So S^*, *Q if P*, has one S_j, *Q if* $\sim P$. Note why the replacement of *does* is *does not*. The auxiliary *does* in a sentence *A does F* signals predication of F of A, so *does* is associated with the *truth* of a claim that F holds of A. For this reason the natural replacement for *does* is *does not*, for the latter in the sentential context *A does not F* is associated with the falsity of the claim that F holds of A, and falsity is clearly the natural contrast to truth. In (5a) the reference class G has two members P and $\sim P$ and the universal quantification intended, assuming the inclusion theory, is *Either case x* (*P or* $\sim P$) *is such that if x obtains, Q*, which entails Q. Therefore a *whether-or-not-P* interpretation is signaled. (Similar comments hold for (5b) and *don't*).

The even *if*s in (5) are not only counterexamples to the necessity claim but also raise a difficulty for Lycan's inclusion and 'plus' theories of *even*. In neither (5a) nor (b) does the focus ϕ of *even* have a referent or extension which is an object in G—I assume that although *does* and *do not* have some sort of semantic value, they do not have extensions in the way that singular terms refer or sentences express situations. However, the inclusion and 'plus' theories as stated above assume that ϕ has an extension and that it is in G.

In response to this charge it might be claimed that the focus of *even* in (5a) is not *does* but is in fact the antecedent P after all. On this theory P gets to be focused by *even* though *focus projection*. Focus projection is a phenomenon in which constituents become focus items by virtue of sub-

constituents being focused – say by stress. (See Stechow and Uhman (1986) for a discussion of theories of the phenomenon and governing rules thereof.) So in (5a) *P* becomes the focus of *even* via focus projection from the stressed sub-constituent *does*. If that is correct, neither Lycan's necessity claim nor his theories of *even* are threatened.

Other putative cases of focus projection, (6a) and (b) below, might be invoked to support this contention:

(6)a. There has never been even **prima facie evidence of** a miracle
b. Even Mary's **youngest** child laughed.

In (a) *prima facie evidence of* is stressed and thus focused, but it is arguable that *prima facie evidence of a miracle* is the focus relevant to *even*. Likewise in (b) *youngest* is stressed but *Mary's youngest child* it might be claimed is *even*'s focus.

The question at hand, rephrased in general terms, is whether we should identify *even*'s focus ϕ with the stressed constituent of S which is replaced in generating S_j's – call this Σ – or with the constituent of S whose *extension* (in my sense) is an object in G – call this Γ.[2] A little reflection on the nature of focus will show that Σ is our candidate. Focus is understood in contrast to presupposition. The focused constituent is the constituent associated with new information. In (6b), the S_js are determined by replacement of Σ (*youngest*). Thus, each S_j contains *Mary's . . . child* signalling that the universal quantification is *All Mary's children laughed*, which (6b) conveys. In other words, G contains children of Mary and Γ is *Mary's youngest child*. The 'presupposed' or given information, however, is that a class of S_js of the form *Mary's x child laughed* are true. The informativeness is associated with *youngest* (Σ) rather than *Mary's youngest child* (Γ), for *youngest* is the constituent not present in any S_j.

If we identify ϕ with Σ, the quantificational commitment of *Even* (. . . ϕ . . .) must be expressed in terms of Γ rather than ϕ. In the case of the inclusion theory we have:

> All x in the reference class G which includes the extension O of Γ and objects of the same type as O are such that (. . . x . . .) is true.

What of the relation between ϕ and Γ? An *even*-statement signals a universal quantification whose instances are S^* and S_js. The universal quantification is precisely that one which is the most informative about

[2] Bennett (1982, p. 408) identifies the focus ϕ of *even* with Σ. Lycan (1991, p. 122) identifies it with Γ.

what the S_js are. Given that it is constructed from S^* by replacing Γ by a variable, its informativeness about the S_js is secured by making Γ the smallest extension possessing constituent containing ϕ.

2. Focussing on *if*

It was noted above that a *whether-or-not-P* interpretation of *Q even if P* can be produced by focus on a stressed auxiliary in *P*. It seems that there are other ways of producing the same interpretation. For example, instead of asserting (5a), *U* in turning to the scenario in which Basil turns up, might have asserted:

(7) But even **if** Basil turns up – which is highly unlikely – it is very improbable that he will cause any trouble, so the party won't be ruined.

This *even if* has a *whether-or-not-P* interpretation, but there is no auxiliary or comparable element stressed, rather *if* is stressed. The following also fall into this category:

(8)a. The conference was good, even if most of the papers went on too long and few pleased the crowd.

b. Women have always kissed women, even if more cynical males describe the process as being reminiscent of prize fighters shaking hands. (*The Australian Magazine*, Dec 1993, p. 12)

c. She spoke to him clearly even if somewhat bluntly.

In (8) stressed auxiliaries could be inserted to achieve the same effect – in the case of (8b): *Women have always kissed women, even if more cynical males **do** describe the process as being reminiscent of prizefighters shaking hands*. The *even-ifs* in (8) differ from ones like (7), however, in an important respect: not only is there a signal that *Q* is true but that is also a signal that *P* is true – the *even if P*-clause is used explicitly to communicate that *U* has some belief that *P*. So the over all communication is: *Q whether or not P, though I think that P*, or in other words, *Q although P*.[3]

It would appear that the focus of *even* in (7) and (8) is *if*. In Barker (1991) it is suggested that when *even* focuses *if* the replacement for S_j is

[3] In asserting *Q even if P* as in (8), *U* signals that *P* implies probably not *Q*. One salient reason for *U* to introduce an *if*-clause in this way is that *U* suspects that *P* and so *Q* is potentially threatened. So there is a conversational implicature that *P*. For some reason, *even-if*-conditionals which are open 'future indicatives' like (7) never signal their antecedents. My guess is that this is because the issue of the truth of the antecedent for these conditionals – being about the future – cannot really arise. Here I follow Dudman (1989).

if . . not. Note that nothing prevents a replacement of *if* being *if . . . not* just as focus on *do* signals a replacement by *do not* where the rest of the antecedent is held constant. Consequently, *Q even* ***if*** *P*, as with the focused auxiliary case, has one neighbor *Q if* $\sim P$. Given that S^* is *Q if P* and S_j is *Q if* $\sim P$, the *whether-or-not-P* interpretation follows.

The theory that *even* can focus on *if* generating a *whether-or-not-P* reading is confirmed by the behaviour of *especially if*. *Especially* is a focus sensitive particle. Let *Especially* (. . . ϕ . . .) be an *especially*-sentence where (. . . ϕ . . .) is the sentence in *especially*'s scope, ϕ is its focus and (. . . ϕ . . .)'s main verb *V* can express a degree of some property – *V* might be *want*, *like*, *ought to go*, etc.. *Especially* (. . . ϕ . . .) signals:

(i) (. . . ϕ . . .) is true, where the property corresponding to *V* holds to a high degree,

(ii) For all *x* in some contextually determined class *G* such that $x \neq \Gamma$, (. . . *x* . . .) is true, where the *V*-property holds to a lesser degree than the ϕ-case. (Here Γ is defined as for *even*).[4]

A non-conditional case: *This will affect everyone, especially* ***the child*** = *It will affect* (*strongly*) *the child but less so x*, where $x \neq$ the child and *x* is in *G*. A conditional case: *Alison will want to dance especially if* ***Ang*** *is her partner = She will want to dance* (*strongly*) *if Ang is her partner. She will want to dance* (*less strongly*) *if x is her partner*, where $x \neq$ Ang and *x* is in *G*.

There are readings of *Q especially if P* analogous to *whether-or-not-P* readings of *even if*: Consider:

(9) Elisha will want to marry him, especially if he likes housework.

(9) can be read as signaling *She will want* (*strongly*) *to marry him if he likes housework*, *She will want* (*less strongly*) *to marry him if he does not.* An *if*-focus hypothesis explains the reading: focus on *if* in *Q if P* signals a unique neighbor *Q if* $\sim P$, so *Q especially if P* conveys *Q* (*strongly*) *if P* and *Q* (*less strongly*) *if* $\sim P$.

Before we examine the implications of an *if*-focus hypothesis in (7), (8) and (9) it should be asked if there is an alternative.[5] It might be suggested – in the style of Bennett (1982) – that in (7) and (8) *even*'s focus is the

[4] General cases do not seem to require such a verb *V*. Thus take;

It makes you sick especially if you haven't had anything to eat.

[5] König (1986) proposes that in indicatives like (7) and (8) the focus of *even* is *P*. In the light of the discussion of *P*-focus cases above this seems rather dubious, for focus on *P* would introduce a broader reference class *G* of situations.

whole *if*-clause. Bennett claims that where *if P* is *even*'s focus S_j is Q: S_j is derived from Q *if P* by replacing *if P* by a *null part*. As the move from $S_j - Q -$ to $S - Q$ *even if P* – introduces conditionality, Bennett dubs this reading of Q *even if P* an 'introduced-*if*' reading.

This theory has a number of problems but the main one as noted in Barker (1991, p. 15) and Lycan (1991, pp. 120–121) is this: *even* introduces a reference class G of objects x which can be arranged with regard to the informativeness of the claim that S^* minus Γ satisfies an x. The zero-replacement hypothesis in the case of Q ***even if P*** flouts this condition: In the case of S^*, Γ is presumably P. But in the case of $S_j(Q)$ there is no constituent picking out an entity in G. We have lost the element of comparison.[6]

The consequences of ignoring the comparison class are particularly obvious in the case of *especially if*. On an introduced-*if* theory applied to *especially if*, the neighbor of Q *especially* ***if P*** is Q, so (9) signals (*S*) *She will want* (*strongly*) *to marry him if he likes housework*, and (S_j) *She will want* (*less strongly*) *to marry him*. The neighbor S_j is defective, for the element of comparison has disappeared.

It seems then that an *if*-focus account of the sort sketched above is needed for (7) to (9). That account states that the natural replacement for focused *if* is *if . . . not*. We need to ask why this is so, for although *if* does not have an extension in my sense, it must nevertheless, being a focused constituent, have some linguistic value which determines the replacement generating S_j. Theories which treat *if* as a two place connective $\rightarrow$ will encounter a difficulty here. On standard theories Q *even if P* has the form *even* $(P \rightarrow Q)$, $\rightarrow$ being the focused item. The S_js signalled by *even* are sentences derived by replacing $\rightarrow$ in $(P \rightarrow Q)$ by similar constituents. It would seem then that the replacements should be other connectives, the S_js having the form $(P \,\&\, Q)$, $(P \vee Q)$. Focus on *if* is also a problem for Lycan's theory which states that *if* is a type of quantifier determiner. Stress on *if*, so understood, should signal that the class of S_js contain other quantifiers. Kratzer's (1986) theory treats *if* as a restricter of a quantifier. How *if* so construed can be contrastively focused at all is not evident.

The failure of current theories of conditionals to explain how *if* can be

[6] Lycan (1991, p. 122) directs this type of argument against any zero-replacement thesis, e.g., assigning focus to *prima facie evidence of* in (6a). But if we make the distinction between ϕ and Γ there is no problem with assigning focus to *prima facie evidence of* in (6a). Γ in (6a) is *prima facie evidence of a miracle*. So, S^* minus Γ is *There has never been x*. Hence the S_j – *There has never been a miracle* – which is derived by zero-replacement from S^*, has a term *a miracle* corresponding to an object in G.

focused by *even* or *especially* may seem to dis-confirm the *if*-focus hypothesis. Another thought is that it tells against these theories. Dudman (1989) criticises accounts of conditionals which treat *if* as a binary connective, arguing for the view that *if* is a monadic operator taking P as scope forming an expression *if* P which then couples with Q. It is a short step from this grammatical picture to a theory which explains focusing on *if*. Let the linguistic contribution of the monadic operator *if* be this: *if* combined with P provides a conventional implicature that P is being *supposed* by the speaker. There are then two hypotheses about the significance of combining *if* P with Q:

(i) Combining *if* P with Q signals that U is asserting a conditional proposition $(P \rightarrow Q)$

(ii) Combining *if* P with Q signals that U is asserting Q conditionally on P, i.e., U's assertion is partly based upon supposition of P

Theory (i) states that U in uttering *if* P, Q asserts a conditional proposition $(P \rightarrow Q)$ but there is an added implicature – provided by *if* P – that P is supposed. (i) is not far removed in spirit from Jackson's (1987) bi-partite account, which attributes both a semantic content – material implication – and a conventional implicature content – conditional probability – to 'indicative' Q *if* P. Theory (ii) holds that the semantic content of *if* P, Q is just Q; Q is asserted conditionally on P. Conditional assertion theories of conditionals have been canvassed from time to time in the philosophical literature but not recently pursued.[7] In terms of the linguistic literature, the conditional assertion proposal resembles most closely Haiman's (1978) conception of *if*-clauses as *topics*: we might say a conditional clause's role is to introduce a topic – introduce P as treated as true or supposed – upon which the consequent clause then comments.[8]

Leaving aside for a moment the question of which of the above interpretations is correct, it is easily shown that the suppositional theory of *if* – *if* P signals supposition of P – accounts for *if*-focused *even* and *especially if*. The natural contrast to supposing P, if we think of supposing P as entertaining P as *true*, is supposing P, i.e., entertaining P as *false*. Hence, focus on *if* signals a replacement of *if* by *if* . . . *not* in much the same way as focusing on the auxiliary *do* signals a replacement by *do* . . . *not*. In both

[7] The sort of theory sketched here in terms of supposition and supposition-based assertions is developed and defended in detail in Barker (1994).

[8] However, the account that Haiman ends up giving towards the end of his paper is a propositional interpretation of the intuitive idea.

cases the focus is on a constituent associated with *truth*. Thus in *Q even if P*, the S_j signaled is *Q if* $\sim P$ and the universal quantification is *In either case, P or* $\sim P$, *Q*.

As indicated above, we have two distinct theories of the pragmatic/semantic structure of conditionals (i) – the propositional theory – and (ii) – the conditional assertion theory. I shall argue now that *if*'s interaction with the focus sensitive particles *only* and metalinguistic negation not only confirm the suppositional theory of *if* but indicate in particular that the conditional assertion interpretation of it is the correct one.

1. *Only* has much in common with *even* (see Horn 1969, Lycan 1991). Roughly *Only S* generates a class of neighbors derived by replacing the focus in *S* by similar constituents. The difference with *even* is that *only* entails the negations of the neighbors – *Only* ***Ang*** *voted* generates the neighbors: *Tanya voted*, *Norbert voted*, etc., and entails their negations: *Tanya did not vote*, *Norbert did not vote*, etc.. Roughly, *Only* (. . . ϕ . . .) corresponds to a universal quantification: *For all x in the class G such that* $x \neq \Gamma$, $\sim$(. . . x . . .). (Again Γ is defined as for *even*.)

A theory of *only if* has to explain in terms of *if* and *only* the fact that (10) holds:

(10) *Q only if P* conveys $\sim$*Q if* $\sim$*P*.

It is argued in Barker (1993), in effect, that the conditional assertion theory (ii) is required to explain (10). *Only* in *Q only if P* primarily focuses on *if* so that *Q only if P* generates, assuming the suppositional theory, the neighbor *Q if* $\sim$*P*. *Only* signals the negations of its neighbors. According to the conditional assertion theory, utterance of *Q if P* is a conditional assertion of *Q* on *P* – the semantic element in *Q if P* is just *Q*. In which case *only*'s negation applies to *Q*, with the result that the negated neighbor is $\sim$*Q if* $\sim$*P*. So *Q only if P* signals $\sim$*Q if* $\sim$*P*. In contrast the propositional theory (i) holds that the semantic content of the neighbor *Q if* $\sim$*P* is $(\sim P \rightarrow Q)$. Hence the negated neighbor is $\sim(Q \text{ if } \sim P)$. (10) can only be explained if we assume that $\sim(Q \text{ if } \sim P)$ entails $\sim$*Q if* $\sim$*P*. But the latter is an unattractive thesis in conditional logic. Stalnaker (1981) attempts to defend this thesis in a limited form – namely, for conditionals with consistent antecedents – but how successfully is open to question.[9]

2. The conditional assertion theory interpretation is also confirmed by certain negations of *Q if P* which are 'metalinguistic' in Horn's (1989)

[9] Lycan (1991, p. 126) claims to have a compositional account of *only if*. Some indications are given in Barker (1993, p. 259 fn. 5) that this is not the case. A full consideration of the matter goes beyond the bounds of this paper.

sense. A speaker *U* might assert, *Everything is permitted, if God is dead.* A hearer *H* might reply:

(11) It's not that everything is permitted, **if God is dead**. Everything is permitted – period/as things stand.

H is denying the implicature arising from the first speaker's assertion of *Q if P* that (*P*) *God is dead* needs to be supposed in order to entertain as true the proposition (*Q*) that everything is permitted for *Q* is already independently assertible, as the second sentence shows.[10] *H* is not disputing the truth of the utterance, for the non-acceptability of an independent assertion of *Q* is not a condition of truth of *if P, Q*. The implicature denied is associated with use of *if P* – for this is focused – confirming a suppositional treatment of *if P*. But the conditional assertion interpretation is also confirmed. Metalinguistic negation does not dispute the propositional content commitment of an utterance. Rather it disputes the manner of assertion of that content. As indicated in (11), the preferred form is simply a straight non-conditional assertion of *Q*. That suggests that the propositional commitment of the original utterance of the conditional is just *Q*, as the conditional assertion theory proposes.

Conclusion

A comprehensive theory of *even if* needs to account for consequent 'entailing' *even if*s and in particular those of the *if*-focused variety. This is where the theory of *even if* ceases to be neutral between conditional theories. I have argued that *if*-focused *even if*s, *especially if* and *only if* can only be accounted for through the suppositional theory of *if*. Furthermore, a particular interpretation of this theory – the conditional assertion theory – is needed to account for *only if* and a type of metalinguistic negation of *Q if P*. We therefore have evidence that the currently accepted approaches to conditionals are basically wrong about the semantic forms they attribute to *if P, Q*.[11]

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[10] The implicature denied in the metalinguistic negation (11) has been identified in the literature before. It has been described as the signal that *if* $\sim P$, $\sim Q$ which utterance of *if P, Q* can sometimes generate. See Geis and Zwicky (1971).

[11] I would like to thank anonymous referees from *L & P* for useful comments on an earlier draft of this paper.

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