

If So, If Yes, and Hypothetical Commitments

While an ‘if so’ conditional is an acceptable response to an assertion, an ‘if yes’ conditional is not.

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| (1) A: This law is unconstitutional!
B: If so , it will be repealed! | (2) A: This law is unconstitutional.
B: #If yes , it will be repealed. |
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In this paper, I use this pattern to argue that conditional antecedents do not simply introduce hypothetical content but rather create *hypothetical attitudes*. An *attitude* is a commitment, refusal, or any other mark on the conversational scoreboard which relates a speaker to a piece of content. An attitude is hypothetical if it lives not on the actual scoreboard but rather on a temporary pretend one of the sort used in Kaufmann’s (2000) *stack model*. In the proposed system, examples like (2) are infelicitous because they create an incoherent set of hypothetical attitudes.

Yes versus so. ‘Yes’ and ‘so’ are both widely treated as propositional anaphors (Needham, 2012; Krifka, 2013). Where they differ is in the kinds of commitments they allow towards their antecedents. While ‘so’ precludes any commitment (Needham, 2012), ‘yes’ has been argued to create a *self-sourced commitment* or in other words a commitment made on the basis of a speaker’s private state. This kind of commitment contrasts with a *dependent commitment* which is made merely on the basis of another agent’s word (Gunlogson, 2008). Hence, the contrast between ‘if yes’ and ‘if so’ must arise from the requirements these expressions place on their speakers’ commitments.

Questions versus assertions. A second layer to this problem is that the analogous contrast does not arise with ‘if so’ and ‘if yes’ conditionals used in response to questions:

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| (3) A: Is this law unconstitutional?
B: If so , then it will be repealed. | (4) A: Is this law unconstitutional?
B: If yes , then it will be repealed. |
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This fact once again points to attitudes as the culprit behind our puzzle, since ‘if yes/so’ conditionals pragmatically signal a *refusal* of a preceding assertion but not of a preceding question. To see how this is so, observe that while ‘yes’ and ‘so’ are anaphoric to the content of an assertion, they are anaphoric to the positive answer to a polar question.

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| (5) A: Sally is coming to the party.
B: Yes.
↪ B accepts A’s assertion | (6) A: Is Sally coming to the party?
B: Yes.
↪ B accepts the positive answer to A’s question
✗ B accepts (i.e. agrees to entertain) A’s question |
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Because of the pragmatic effects of conditional antecedents, this difference between questions and assertions yields the following contrast with ‘if so’ replies:

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| (7) A: Sally is coming to the party.
B: If so , then it will be fun.
↪ B can’t unconditionally accept A’s assertion | (8) A: Is Sally is coming to the party?
B: If so , then it will be fun.
↪ B can’t unconditionally answer A’s question
✗ B can’t unconditionally entertain A’s question |
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Hence ‘if yes/so’ conditionals signal a refusal of the previous discourse move only if that discourse move is an assertion. Thus, it seems that the infelicity of B’s reply in (2) arises from the interaction between this refusal and the self-sourcedness of the speaker’s hypothetical commitment.

A commitment-based stack model. To make the idea of a hypothetical attitude explicit, I propose a formal system which combines Kaufmann’s (2000) *stack model* of conditionals with Roelofsen and Farkas’s (2015) model of discourse. In the stack model, the true state of conversation is defined not by a single context but rather by a *macro-context*, i.e. a stack of contexts. An utterance of ‘if φ ’ extends the macro-context by pushing a temporary hypothetical context where the discourse effects brought about by φ hold. While this context is active, it serves as the target for updates, with bits of those updates *percolating* back to the actual context. Intuitively, the idea

is that conditionals are like thought experiments, where one learns in the actual context by seeing what would happen from updates to a hypothetical one.

Previous work in the stack framework has identified contexts with Stalnakerian (1978) context sets, i.e. with information states. However, in order to capture the idea that conditionals can be used to create hypothetical commitments, I propose a variant of the stack model in which contexts contain (among other things) *attitude structures*, i.e. lists of all the attitudes that agents have accepted towards the contents of each others’ utterances. Following Gunlogson (2008), I assume that attitude structures list each agent’s self-sourced commitments and dependent commitments, but I also assume that they list each agent’s *refusals* and *objections*. By a refusal, I mean a public display of one’s unwillingness to commit. By an *objection* I mean a weaker negative attitude which merely signals that a proposition is in tension with one’s private mental state.

Updating stacks. For an ordinary sentence S , an utterance of S by speaker a updates a macro-context by adding the proposition $\llbracket S \rrbracket$ to a ’s self-sourced commitments in the active context (while percolating the result down). An utterance of ‘yes’ by a creates a self-sourced commitment for a to P in the active context, where P is either the content of a preceding assertion or the positive answer to a preceding polar question. ‘So’ works like ‘yes’ except that the commitment it creates is dependent.¹ Then, for any sentence S , ‘if S ’ pushes a hypothetical context where the discourse effects brought about by S hold. Finally, a speaker can silently commit as source, commit dependently, object to, or refuse a previous utterance.

Conditionals as replies. We are now in a position to understand the role conditionals play in the puzzle. Because the attitude which a conditional semantically creates must be hypothetical, a conditional can never directly bring about a reaction to a previous discourse move. Hence, if a conditional reply is part of a coherent discourse, we must understand it as following the speaker silently adopting an actual attitude towards the previous utterance. As such, when ‘if φ ’ occurs as a reply to S , it pushes a context with not just one but crucially *two* new attitudes: the attitude semantically created by φ and whatever actual attitude the speaker is understood as adopting towards $\llbracket S \rrbracket$. As a result, an ‘if’-clause is only felicitous as a reply if these attitudes can coexist.

Explaining the puzzle. In this system, B’s reply in (2) is parsed as creating a hypothetical context where B has two attitudes towards the content of A’s assertion: a self-sourced commitment and some other attitude. This predicts that (2) is infelicitous, since a self-sourced commitment cannot coexist with any other attitude towards the same proposition. To see why, let’s run through the possibilities. First, if an agent has a self-sourced commitment towards a proposition, they clearly cannot also refuse to commit to it. Second, if an agent has a self-sourced commitment towards a proposition, that means that it follows from their private state and so they cannot object to it. Finally, notice that if a speaker were to have both a self-sourced commitment and a dependent commitment, that would mean that at some point, they chose to accept a commitment on the basis of another agent’s say-so despite the fact that they could have drawn on their own mental resources. Hence, this pairing of commitments towards a single piece of content also signals bad faith at best. As a result, the dialogue in (2) has no acceptable parse and so we predict that it is infelicitous.

This problem does not arise for (4) since in that dialogue, B’s silently-adopted attitude is not towards the same content that ‘yes’ targets, since a polar question makes its positive answer available for anaphora instead of its own content. Similarly, this problem does not arise for (1), since ‘if so’ creates a hypothetical dependent commitment rather than a hypothetical self-sourced one, and a dependent commitment can coexist with an objection.

Conclusion. In sum, if we assume that ‘if’-clauses create hypothetical attitudes, intuitive restrictions on which attitudes can coexist derive the contrast between ‘if so’ and ‘if yes’.

¹This pragmatically derives Needham’s (2012) restriction, at least in the case of conditionals.