

Antipresuppositions and the Projection of Conditional Presuppositions

Utterances of counterfactual conditionals are typically attended by the information that their antecedents are false, as in (1B):

- (1) A: I heard the party wasn't very good.
B: If John had been there, it would have been fun.

Arguments found in (Anderson 1951) and (Stalnaker 1975) demonstrate that this information is neither part of the truth-conditional content of the counterfactual, nor is it a presupposition. A question then arises: what is the source of this information?

In (citation removed (a)), the author derived this information as an antipresupposition. The counterfactual (1B) has no presupposition, while its competitor (2) has the same truth conditions but presupposes that its antecedent is epistemically possible:

- (2) If John was there, it was fun

From the assertion of the presuppositionally weaker alternative, hearers infer (under assumptions specified in (Chemla 2008)) that the speaker believes the presupposition of (2) to be false; that is, she believes that the antecedent is not epistemically possible.

This account raised concerns regarding the projection of the conditional presupposition and antipresuppositions arising from embedded conditionals. For example, the observed implicature accompanying an utterance of (3) is that none of the relevant students wrote the exam:

- (3) *Context: Students had to choose between writing a final exam or a term paper.*

Teacher: None of these students would have passed if they had written the exam. However, if presuppositions project universally under 'no' (as argued in (Chemla 2009)), the presupposition of the competitor (4) is that it is epistemically possible that every relevant student wrote the exam:

- (4) None of these students passed if they wrote the exam

The account of the antipresupposition of counterfactual antecedent falsity then predicts that an utterance of (3) should generate the antipresupposition that it is not epistemically possible that every relevant student wrote the exam. This is too weak.

Note, though, that if the conditional presupposition projects existentially under 'no', my account makes the right predictions. For in that case, (4) presupposes that it is epistemically possible that some relevant student wrote the exam. Then the predicted antipresupposition is that none of the relevant students wrote the exam. Thus we must establish whether the conditional presupposition projects universally or existentially under 'no'.

Data from (Chemla 2009) support the claim that the presuppositions triggered by definite descriptions, factive verbs, and change of state verbs project universally under 'no'. While I do not dispute Chemla's data, I demonstrated in (citation removed (b)) that we cannot assume that this extends to other presupposition triggers. Indeed, the projection behaviour of the conditional presupposition is yet to be examined. The projection behaviour of the conditional presupposition is interesting for two additional reasons. First, though there has been extensive discussion of the behaviour of presupposition triggers embedded in conditionals (the "proviso problem"), there has been, to my knowledge, no discussion of the projection behaviour of the presupposition triggered by conditionals. This is despite the fact that it has long been acknowledged that conditionals trigger presuppositions ((Stalnaker 1975), (Karttunen and Peters 1979), (von Stechow 1997)). Second, the embedding behaviour of indicative conditionals is oddly restricted, including

in some of the environments that we typically use to test for presupposition: negation, questions, and possibility modals. For example, it is not obvious that there are different readings/truth conditions for the conditionals in (5a) and (5b) examples below. Similar comments hold for indicative conditionals under negation and in questions.

- (5) a. Perhaps if he gets chemotherapy he will be cured.
b. If he gets chemotherapy he will perhaps be cured.

The novel research for this presentation will test this projection behaviour and discuss the results of the tests. My research design is a 4x2 across-subjects experiment. The participants in each group are presented with a short context followed by a brief dialogue and are asked to indicate which of the speakers in the dialogue was a non-native speaker of English. In every group the context is the same. It is as follows:

Susan and Mary are professors teaching a course together. There are 30 students in the class. For their midterm grade, students had to choose between writing an essay or an exam, but could not write both. Susan had to grade the papers, and Mary had to grade the exams.

Each dialogue was initiated by Susan. Susan's utterance is the first factor; she says one of four things: either "All 30 students wrote the paper", "25 of the students wrote the paper", "5 of the students wrote the paper", or "Not a single student wrote the paper". Note that all of Susan's utterances are unproblematic and grammatical in the context. Mary then responds by saying either, "I think the exam was very hard. None of the students passed if they took the exam" or, "I think the exam was very hard. None of the students would have passed if they had taken the exam".

I assume that if Mary's utterance is felicitous, then test subjects, when asked which speaker was non-native, will choose randomly between Mary and Susan. However, if Mary's conditional is inappropriate, then test subjects will more often indicate that Mary is the non-native speaker.

Assuming my account of the presuppositions of conditionals (counterfactuals presuppose nothing; indicatives presuppose that their antecedents are epistemically possible), *Universal Projection* predicts that if Mary's utterance of the indicative conditional is felicitous, then it is epistemically possible that all 30 students wrote the exam. So Mary's indicative conditional should be judged non-native more often than her counterfactual utterance in the 3 situations where Susan's utterance has eliminated that possibility. Under *Existential Projection*, it is predicted that if Mary's utterance of the indicative conditional is felicitous, then it is epistemically possible that at least 1 of the 30 students wrote the exam. So Mary's indicative conditional should be judged non-native more often than her counterfactual utterance in the one situation where Susan's utterance has eliminated that possibility.

Pilot data motivate me to continue with this design, though no results have yet been found. The final study will be complete by mid-July.

References Anderson, A. R. (1951). A note on subjunctive and counterfactual conditionals. Chemla, E. (2008). An epistemic step for anti-presuppositions. Chemla, E. (2009). Presuppositions of quantified sentences: experimental data. Karttunen, L. and S. Peters (1979). Conventional implicature. Stalnaker, R. (1975). Indicative conditionals. von Stechow, K. (1997). The presuppositions of subjunctive conditionals. (Citation Removed (a)). Presuppositions and Antipresuppositions in Conditionals. (Citation Removed (b)). Embedded Antipresuppositions in Counterfactuals.