Heim 1983: presupposition projection

1. The king has a son.
2. The king's son is bald.
3. If the king has a son, the king's son is bald.

Puzzle: (2) presupposes (1). (3) contains (2), yet (3) does not presuppose (1). Somehow, saying that the king has a son in the antecedent prevents (this one of) the presuppositions triggered by the consequent from projecting to the sentence as a whole.

Karttunen and Peters: stipulate that *if* is a presupposition filter:

4. The presuppositions of *If A then B* are the presuppositions of A conjoined
   with the presupposition that the content of A entails the presuppositions of B.

Then the presuppositions of (3) are that there is a king, and that the proposition that

the king has a son	entails that	the king has a son.
[content of A]		[presupposition of B]

Heim [Gazdar]: insufficiently explanatory. Assume a dynamic view as sketched above.

Then the presupposition projection behavior falls out from adopting the following denotation for the conditional construction:

c + *If A then B* = c - ((c + A) - ((c + A) + B))

Recipe for computing the updated context: First, update the start context c with the information in A. (If c fails to satisfy A's presuppositions, this operation is undefined–presupposition failure.) Next, update again with B. Eliminate all the evaluation points (worlds) in which the antecedent is true but the consequent is not.

Soames/Schlenker: but there are logically equivalent update formulas that do not

deliver the correct presupposition projection.

==========