

# Handout 13: Stalnaker's 'Indicative Conditionals'

Philosophy 691: Conditionals  
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## OVERVIEW

1. In this paper, Stalnaker:
  - (a) Draws a distinction between 'entailment' and 'reasonable inference'
  - (b) Sets up a theoretical framework for discussing what goes on in a conversation, and give definitions of entailment and reasonable inference within that framework
  - (c) Uses the framework to distinguish between indicative and subjunctive conditionals in such a way that their difference is 'pragmatic', and not 'semantic'
  - (d) Uses the framework to argue that 'or-to-if' (Jackson's 'passage principle') can be accounted for in terms of reasonable inference, not entailment
  - (e) Uses the framework to diagnose the error in a puzzling argument for fatalism
2. Stalnaker's 'Y-shaped' analysis of conditionals is, in my opinion, the most beautiful of all such analyses.
3. The paper is at least as important for the theoretical framework it sets out as it is for the account of conditionals it contains; that framework has been *very* influential.

## REASONABLE INFERENCE

1. Reasonable inference is a relation between assertions, not propositions (this is what Stalnaker means when he says it is 'pragmatic'). A "rough informal definition" (!): "an inference from a sequence of assertions or suppositions (the premises) to an assertion or hypothetical assertion (the conclusion) is *reasonable* just in case, in every context in which the premises could appropriately be asserted or supposed, it is impossible for anyone to accept the premisses without committing himself to the conclusion."
2. An important question: what does Stalnaker mean by 'accept' and 'commit'? They can't mean 'assert' for reasons that will become obvious. On the other hand, if they mean 'believe', then other problems emerge. I think we should understand these terms as being synonymous with his later use of 'presuppose'.
3. If  $A$  entails  $B$ , then there should be a reasonable inference from  $A$  to  $B$ . But on Stalnaker's framework the converse doesn't hold. His explanation for why the equivalence can break down is initially quite abstract, but is made more clear by his discussion of or-to-if. Are there other examples not involving conditionals of reasonable inferences that are not entailments to be found in natural language? These two might be:

"P."  $\leadsto$  but  $\not\equiv$  "I know that P."

"The book might be in my office."  $\leadsto$  but  $\not\equiv$  "I do not know that the book is in my office."

## STALNAKER'S FRAMEWORK FOR THINKING ABOUT WHAT GOES ON IN CONVERSATION

1. There are two basic elements: *possible worlds*, and *presuppositions*.
2. In a conversation (and in rational inquiry more generally), speakers are attempting to *rule out* certain possible worlds; put somewhat differently, they are attempting to reduce the number of candidates for actuality. The notion of distinguishing among possible worlds is absolutely central to Stalnaker's overall theory of intentionality and rationality:

Possible worlds theory, as an explanatory theory of rational activity, begins with the notion of an alternative way that things may be or might have been (which is all that a possible world is) not because it takes this notion to be unproblematic, but because it takes it to be fundamental to the different activities that a theory of rationality seeks to characterize and relate to each other. The notion will get its content, not from any direct answer to the question, what is a possible world? or from any reduction of that notion to something more basic or familiar, but from its role in the explanations of such a theory. Thus it may be that the best philosophical defense that one can give for possible worlds is to use them in the development of substantive theory.

See Stalnaker's 'Possible Worlds' (*Noûs*, 10:1, 1976) for similarly sensible reflections on possible worlds.

3. Stalnaker defines *propositions* as functions from possible worlds to truth-values. I don't think this needs to be regarded as a substantive metaphysical claim about what propositions are. The idea is rather that the definition captures the role of propositions in a general theory of rational activity (this idea may lead, via some auxiliary premises, to a metaphysical claim about what propositions are, but that's another matter).
4. Unfortunately, this simple definition makes propositions too coarse-grained to do the theoretical work they need to do. For example, we want to be able to distinguish beliefs by distinguishing their propositional contents. Here are two *prima facie* problems the possible-worlds definition faces in accomplishing this task:
  - (a) If sentences  $P$  and  $Q$  are logical truths, then they are true at all possible worlds; on the possible worlds definition, then,  $P$  and  $Q$  should express the same proposition. But I can believe some logical truths while not believing others.
  - (b) If  $a = b$  then  $\Box(Fa \leftrightarrow Fb)$ ; thus if  $a = b$ ,  $Fa$  and  $Fb$  are true at exactly the same possible worlds and so should express the same proposition. But I can believe that Mark Twain = Mark Twain without believing that Sam Clemens = Mark Twain, etc.

On the first problem, see Stalnaker's 'The Problem of Logical Omniscience, I' (*Synthese*, 89:3, 1991). In his paper 'Assertion' (1978; reprinted in *Context and Content*, Oxford University Press, 1999; see also 'Two Notions of Necessity', *Philosophical Studies* 38, 1980), Stalnaker develops what's come to be known as a 'two-dimensional framework' for addressing the second problem. Putting things *very* roughly: in the 2-D framework a sentence is not (merely) associated with a proposition (i.e., a function from worlds to truth-values) but also what Stalnaker calls a 'propositional concept', which is a function from possible worlds to propositions; intuitively, the value of sentence  $S$ 's propositional concept for a world  $w$  is the proposition that would be expressed by  $S$  at  $w$ . Intuitively, the propositional concept associated with 'Mark Twain = Mark Twain' takes us to a true proposition at every world, whereas the propositional concept associated with 'Sam Clemens = Mark Twain' takes us to false propositions at some worlds. Not knowing precisely which world is actual, we don't always know which proposition is expressed by  $S$ , and so we can (rationally) take different attitudes toward sentences even when they express the same proposition. There's much more to be said about this, obviously!

5. The other key element of Stalnaker's framework is that of a *presupposition*. A presupposition is a proposition that is part of "the presumed common ground of the conversation," where the presumed common ground consists of "whatever the speaker finds it convenient to take for granted, or to pretend to take for granted, to facilitate his communication." If  $A$  is presupposed by all participants in the conversation, then it is in some sense not an open question in the conversation whether  $A$ ; participants are treating  $\neg A$  as already ruled out.

6. The presuppositions of a conversation determine a set of possible worlds “not yet ruled out” by the presuppositions. This is the *context set*. A proposition is ‘compatible with’ the context set iff nothing that entails that it is false is being presupposed; it is ‘entailed by’ the context set iff something that entails that it is true is being presupposed; it is ‘incompatible with’ the context set iff something that entails that it is false is being presupposed.
7. The framework suggests a definition of assertion; here is a quote from ‘Assertion’ (p. 86):
 

“To make an assertion is to reduce the context set in a particular way, provided that there are no objections from the other participants in the conversation. The particular way in which the context set is reduced is that all of the possible situations incompatible with what is said are eliminated.”
8. Reasonable inference, characterized in terms of the framework: suppose an assertion of *A* is appropriate only when condition *C* is met, and any context that satisfies *C* and entails *A* also entails *B*. Then there is a reasonable inference from *A* to *B*, since any context in which an assertion of *A* is appropriate (i.e., satisfies *C*) and accepted (and thus entails *A*) will entail *B*. This phenomenon does not require that *A* entail *B*. We’ll see an example in a moment.

#### INDICATIVE CONDITIONALS

1. The basic idea:  $A \rightarrow C$  is true at  $w$  iff at  $s\langle A, w \rangle$ ,  $C$ .
2. We’ve already seen three constraints on the selection function (Handout 9). Intuitively,  $s\langle A, w \rangle$  is the ‘closest’ world to  $w$  where  $A$  is true. But, the semantic framework itself doesn’t say anything about what ‘closeness’ is; it is appealing to think that different selection functions can be assigned in different contexts.
3. Here Stalnaker introduces an additional constraint on the selection function; let’s call it  $C$ :

$C$  “[T]he world selected must, if possible, be within the context set [...] In other words, all worlds within the context set are closer to each other than any worlds outside it” (199).

Given the existing requirement that at  $s\langle A, w \rangle$ ,  $A$  is true, constraint  $C$  implies that  $A$  should be compatible with the context set.

4. A counterfactual conditional is simply one for which  $s\langle A, w \rangle$  takes us to a world outside the context set; when we express a counterfactual, constraint  $C$  is suspended. We make a  $C$ -violating selection function salient by using the subjunctive mood, which has the effect of “temporarily suspending” constraint  $C$ .
5. Stalnaker discusses two cases of subjunctives that, while not naturally thought of as counterfactuals, because they are appropriately asserted in contexts where the antecedent is not presupposed to be false. The first is:

The murderer used an ice pick. But if the butler had done it, he wouldn’t have used an ice pick. So the murderer must have been someone else.

We don’t want to say that the conditional is a counterfactual: here it is appropriately asserted before the context set rules out ‘The did it’. But for the conditional to be true, we need a selection function that takes us to a world outside the context set, since acceptance of the first premise means that the conditional’s consequent is incompatible with the context set. (I find the second example more puzzling.)

6. Something Stalnaker doesn’t discuss, but which constraint  $C$  gives us a nice way of talking about, are indicatives with antecedents presupposed to be false. Given constraint  $C$ , interpreting such indicatives as felicitous requires sacrificing some presuppositions. This is not the same as choosing a selection function that reaches outside the context set. Consider the famous Adams pair:

IND If Oswald didn’t kill Kennedy, then someone else did.

SUB If Oswald hadn’t killed Kennedy, then someone else would have.

Interpreting IND seems to require suspending the presupposition that Oswald killed Kennedy, while interpreting SUB does not.

## OR-TO-IF

1. Stalnaker argues that the inference from  $A \vee C$  to  $\neg A \rightarrow C$  is reasonable: whenever  $A \vee C$  is appropriately asserted and accepted, the context set entails  $\neg A \rightarrow C$ . But  $A \vee C$  does not entail  $\neg A \rightarrow C$ .
2. First, we show that  $A \vee C$  does not entail  $\neg A \rightarrow C$ . Suppose that  $A$  and  $\neg A$  are both compatible with the context set, but  $C$  is not. Now let  $w$  be a world in the context set where  $A$  is true. Since  $A$  is true at  $w$ ,  $A \vee C$  is true at  $w$ . Is  $\neg A \rightarrow C$  true at  $w$ ? No: by constraint  $C$ ,  $s(\neg A, w)$  is in the context set, and  $C$  is false at all worlds in the context set. So  $\neg A \rightarrow C$  is false at  $w$ .
3. But the inference is reasonable, on the following grounds. First, a claim about when it's appropriate to make a disjunctive assertion:

DA A disjunctive assertion  $A \vee B$  is appropriate only when  $A \& \neg B$  and  $B \& \neg A$  are both compatible with the context set.

Stalnaker says that he is “sure [DA] is derivable from more general conversational principles of the kind Grice has discussed” (201) but does not attempt the derivation. The basic idea is that to assert  $A \vee B$  when you presuppose that  $A$  is false, or that  $B$  is false, is to be less informative than you could be, and hence misleading.

Suppose that  $A \vee C$  is appropriately asserted and accepted. Because it is accepted, all  $\neg A \& \neg C$  worlds are excluded, but given DA, there are still  $C \& \neg A$  worlds in the context set. Pick an arbitrary world  $w$  in the context set. By constraint  $C$ ,  $s(\neg A, w)$  is in the context set. But at every  $\neg A$  world in the context set,  $A \vee C$  is true, so  $C$  is true, hence  $\neg A \rightarrow C$  is true at  $w$ . Since  $w$  was an arbitrary world in the context set,  $\neg A \rightarrow C$  is entailed by the context set.

## THE ARGUMENT FOR FATALISM

1. The argument: “Either I will be killed in the raid or I won’t be. Suppose that I will. Then even if I take precautions I will be killed, so any precautions I take will be ineffective. Suppose that I won’t. Then even if I take no precautions I won’t be killed, so any precautions I take will be unnecessary. Either way, any precautions I take will be either ineffective or unnecessary, and so pointless” (204):
  1.  $K \vee \neg K$
  2. Suppose  $K$ .
  3.  $P \rightarrow K$
  4. So, precautions are pointless.
  5. Suppose  $\neg K$ .
  6.  $\neg P \rightarrow \neg K$
  7. So, precautions are unnecessary.
  8. So, precautions are pointless or unnecessary.
2. Dummett’s resolution requires saying that the two conditionals are of different kinds, and so the argument is invalid. But Stalnaker responds: to be convincing, we need evidence that there are distinct kinds of conditionals of the relevant sort, and he thinks that evidence is wanting.
3. Stalnaker’s response. Supposing  $K =$  fixing the context set to entail  $K$ . Then there is a reasonable inference from  $K$  to  $P \rightarrow K$ . (All  $P$ -worlds in the context set are  $K$ -worlds, so for any world  $w$  in the context set,  $s(P, w)$  is a  $K$ -world, thus the context set entails  $P \rightarrow K$ . Likewise, supposing  $\neg K =$  fixing the context set to entail  $\neg K$ . By the same reasoning, there is now a reasonable inference from  $\neg K$  to  $\neg P \rightarrow \neg K$ .

But when we drop the suppositions, we’re in a context compatible with  $K$  and  $\neg K$ . The fact that there are reasonable inferences from  $K$  to 4 and  $\neg K$  to 7 doesn’t show that there’s a reasonable inference from  $K \vee \neg K$  to 8. If the conditional arguments were *valid*, then the argument from 1 to 8 would be valid, too. “So it is a confusion of validity with reasonable inference on which the force of the argument rests” (205).