III. Indicative Conditionals I: the Ramsey test, triviality & truth-functional accounts

Two approaches to indicative conditionals

Indicatives have proved more contentious than subjective conditionals. There is no consensus as to which of two broad approaches should be taken.

Propositional accounts

One approach treats the assertion of a sentence containing an indicative conditional as broadly similar to the assertion of other declarative sentences. That is, the sentence is understood as expressing a proposition, with truth conditions, which the speaker straight-forwardly asserts. One way of developing this approach is to treat the indicative conditional as a truth-functional connective. If we take this path, the only plausible account sees it as the material conditional ‘⊃’ (or ‘→ ’, but note that Bennett uses this to abbreviate the English indicative conditional). This brings the familiar ‘paradoxes of the material conditional’. Grice and Jackson try to avoid those by pointing to various pragmatic constraints. The alternative way of developing this first approach is to see the indicative conditional as expressing a non-truth-functional proposition. That, after all, was the approach that we took with subjunctive conditionals. Stalnaker and Kratzer, amongst others, take this path.

Non-propositional accounts

The second approach denies that the assertion of a conditional involves the same kind of speech act as normal assertions. Rather it involves a ‘conditional assertion’. What is this? Various possible parallels: conditional bets; conditional promises; expressivist accounts of moral sentences. Whatever it is, it isn’t the simple assertion of a proposition. Indeed, the normal thought here is that there is no proposition expressed. Expressivism always seems like the last resort: after all, these look like propositions, they behave like propositions, there are familiar difficulties for any such account (Frege-Geach puzzles etc.). So why take it? To get a sense of that, we need a bit of background.

The Ramsey test

Ramsey suggested that in accepting an indicative conditional, one accepts that if one were to add the antecedent to one’s suppositions, one would conclude with the consequent. So that provides a test to see whether one accepts the conditional: try adding the antecedent to one’s suppositions and see if the consequent would follow.

There’s surely something right about this, but it is hard to formulate it. For instance, it can’t be formulated in terms of adding the antecedent to one’s beliefs; witness:

If my partner is cheating on me they’ll be hiding it so well that I will never notice.

So we need to stick with suppositions: I can suppose that my partner is cheating and that I don’t notice. We might try to broaden this into a probabilistic framework: add the antecedent to one’s suppositions and see if the consequent would be made probable. To think about this we need the idea of conditional probability: P(A|B), the probability of A conditional on B. Standardly (but not uncontroversially) this is given as P(A&B)/P(B). (Don’t think of A|B as a
proposition; the line combines with the initial probability operator to provide a single two-
place operator.

With that we can formulate two much discussed claims, first:

The Equation (or Stalnaker’s Thesis): \( P(\text{If } A \text{ then } B) = P(B|A) \);

and then, somewhat weaker and certainly vaguer:

Adams’ Thesis: If \( A \) then \( B \) is assertible iff \( P(B|A) \), is high (or, more generally, the assertibility of the indicative conditional is proportional to the value of the associated conditional probability).

(Beware: the former is often called ‘Adams’ Thesis’; and even when the two are distinguished, there is a great deal of uncertainty as to how the latter should be formulated. See Hajek. ‘The Fall of Adams’ Thesis’ and Rumfitt, ‘Old Adams Buried’ for discussion)

Much of the pressure for expressivism about indicative conditionals comes from a set of results (the ‘Triviality results’) that purport to show that The Equation is provably false; and hence that Adams’ Thesis is also along the wrong lines. Conclusion: given that the conditionals can’t be understood in terms of the propositions one would naturally assign them, those reflected in Adams’ thesis, they should not be understood in terms of propositions at all.

The first of these results is from Lewis; others purportedly simpler proofs have followed. They are all somewhat involved, and require a number of additional assumptions. Lewis’s works by showing that, given the Equation and various other assumptions, \( P(\text{If } A \text{ then } B) = P(B) \); hence the idea of triviality. To get a sense of them see Bennett, Ch. 5; and for some sceptical notes on the later versions, see Rumfitt.

But should we find either Adams’ Thesis or The Equation plausible in the first place? And hence should we use them to characterize how the indicative conditional should be understood if it were propositional? A worrying example, again from Rumfitt:

(1) If Goldbach’s conjecture is true, then \( 1 = 0 \).

That looks like a claim one might make in showing Goldbach’s conjecture to be false; if a mathematician could prove that \( 1 = 0 \) followed from Goldbach’s conjecture, that would certainly look like a proof of its falsity. But in this case \( P(1=0 | \text{Goldbach’s conjecture is true}) = 0 \); and, so if The Equation were true, \( P(1) = 0 \); and if Adams’ Thesis were true, (1) would not be assertible.

Perhaps then we should be cautious of understanding what seems right about the Ramsey test in this probabilistic direction. So let’s instead investigate the propositional accounts, starting with the truth functional. If the indicative is truth functional, then it is presumably the material conditional (what else can it be?). But how can we reconcile that with the standard ‘padoxes of the material conditional’: the mere truth of the consequent or the falsity of the antecedent don’t make the indicative conditional assertable; and moreover, in an assertable indicative conditional, the consequent and antecedent feel as though they should be somehow relevantly related to each other (the relevance constraint).
Grice

Basic idea: our assertions are governed by a general pragmatic rule ‘be helpful’. This breaks down into specific requirements: be appropriately informative, be truthful, be relevant, be orderly, brief, clear etc. We make sense of what people say on the supposition that they are meeting these rules. (Interesting question: could we have a society that didn’t live by such rules?)

So if someone asserts a disjunction they shouldn’t, normally, be in a position to assert either of the disjuncts. The disjunction would be less informative, and more complex than asserting the relevant disjunct. But then if a conditional is equivalent to a disjunction (¬a ∨ b), one shouldn’t assert it if one can assert either of the disjuncts. Perhaps this also helps to explain the relevance constraint: for why else would we be in a position to assert the disjunction where we are not able to assert either of the disjuncts? (Is that right?)

Problems for Grice
(i) cases in which I’m sure of the falsity of the antecedent: If Oswald didn’t shoot Kennedy, someone else did
(ii) cases in which I’m sure of the truth of the consequent: ‘I’m sure he means me well.’ ‘Even if it was him who persuaded them not to promote you?’ ‘Even then.’ (Bennett p. 31)
(iii) the non-equivalence of contra-positives: ‘Even if the Bible is divinely inspired, it’s not literally true’; ‘If the Bible is literally true, it’s not divinely inspired’. (Bennett p. 32). Does this work without the ‘Even’?
(iv) does it do well on the relevance constraint?

Jackson

Add the stronger requirement that the indicative conditional brings a conventional implicature that the consequent is robust with respect to the antecedent, by which he means that the probability of the consequent, conditional on the truth of the antecedent, is high (compare Adams’ Thesis).

Problems for Jackson
(i) the indicative conditional doesn’t seem to work like the other items which bring conventional implicatures: there is no bare true element left over once the implicature is denied;
(ii) should we believe in conventional implicature at all? It seems to leave use badly disconnected from meaning.

There is a general reason for being a little sceptical of truth-functional accounts. If the standard account of subjective conditionals is along the right lines, then they are clearly not truth functional. But if we want to insist that the conditional is broadly univocal across both indicative and subjunctive uses, then shouldn’t we expect neither to be truth-functional?