2. Jackson, Adams' Thesis, & Conventional Implicature

I Problems for Grice

(i) Suppose that the speaker is sure of the falsity of the antecedent of an indicative conditional; then, on Grice's account, they shouldn't be able to assert that conditional. But consider again:

> (1) If Oswald didn't shoot Kennedy, then someone else did.

Surely I can say that, even if I am certain that Oswald *did* shoot Kennedy.

(ii) Likewise, if the speaker is sure of the truth of the consequent of an indicative conditional, it may still be assertible, and least for future conditionals:

> (2) If we don't stop burning fossil fuels, global temperatures will rise by more than 2 degrees. In fact if we stop burning fossil fuels today, global temperatures will (still) rise by more than 2 degrees.

(iii) How does Grice's explain the relevance constraint, the issue we were left with last week? Perhaps typically we would only assert a disjunction if there were some connection between the two disjuncts, but it seems much weaker than that involved in an indicative conditional. Moreover, the connection in an indicative conditional seems to have direction: it matters which is the antecedent and which is the consequent, unlike with a disjunction. This comes out in a further feature:

(iv) indicative conditionals don't always contrapose; that is, unlike the material conditional of logic, you don't always get an equivalent conditional if you negate both antecedent and consequent and reverse the direction. Return to the second half of (2):

> (3) If we stop burning fossil fuels today, global temperatures will rise by more than 2 degrees.

is not the same as

> (4) If global temperatures will not rise by more than 2 degrees, then we won't stop burning fossil fuels today.

and it doesn't help if we make the grammar more acceptable:

> (5) If global temperatures don't rise by more than 2 degrees, then we won't stop burning fossil fuels today.

2. The Ramsey Test

In addressing these worries, we'll start by focussing on the issue of the typical connection between the antecedent and the consequent of an indicative conditional. Ramsey suggested

that we can think of this in terms of a kind of *update rule*: in accepting an indicative conditional, one accepts that if one were to add the antecedent to one's suppositions, one would then add the consequent to one's suppositions. That makes the indicative conditional rather different to a disjunction: I can accept (p v q) because I accept p, but it doesn't follow that if I came to accept not-p I'd then accept q. Moreover it is *directional* in the right sort of way. It's not equivalent to: If I added the negation of the consequent to my suppositions, I'd add the negation of the antecedent.

We can phrase Ramsey's point as a test of whether one accepts a conditional:

> *The Ramsey test*
> Try adding the antecedent to one's suppositions and see if as a result you'd add the consequent.

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:

> (6) 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 self-standing proposition whose probability you are assessing; the line combines with the initial probability operator to provide a single two-place operator $P(\_ \mid \_)$ that is completed with two propositions.)

With that we can formulate:

> *Adams' Thesis*
> An indicative conditional 'If A then B' is assertible iff $P(B|A)$ is high.

3. Jackson

Jackson wants to add the feature described by Adams' Thesis to the information that is communicated by an indicative conditional. But he doesn't want to do this by making it part of the truth conditions of the conditional. Rather, using another device from Grice, he argues 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.

Let's take this in parts.

Conventional implicatures share with conversational implicatures that they are *not part of the truth conditions*. But unlike conversation implicatures, they are *part of the meanings of the words involved*, rather than being derived from general conversational rules. So, to take an example from Grice, the sentence:

(7) She was poor but honest

brings a (highly objectionable) suggestion that her honesty is surprising given her poverty. But is that actually part of the truth conditions? Grice argues that it isn't. He argues that the truth conditions are the same as

(8) She was poor and honest

The implicature somehow lurks in the background, rather than being part of what is said in the most straightforward sense. (Why think that? Suppose that someone asserted (7), and you objected to the suggestion that poverty typically brings dishonesty. You would be unlikely to say 'No she wasn't'; you'd be more likely to say something like, 'She was indeed both poor and honest, but that's a very misleading way to put it'.)

Jackson wants to say that the indicative conditional brings a conventional implicature that expresses Adams' Thesis: to use the indicative conditional is to conventionally implicate that the conditional probability of the consequent on the antecedent is high. So he amends the original Equivalence Thesis to something like:

> *Jackson's Equivalence Thesis*: the indicative conditional of ordinary English is equivalent in its truth conditions to the material conditional, $(P \rightarrow Q)$, of propositional calculus, but it adds the conventional implicature that $P(Q|P)$ is high.

This answers the third and fourth problems raised above: we now see how the antecedent and consequent need to be connected. Perhaps it helps with the first two too: the reason that those conditionals are assertible is that the associated conditional probability is high. In general then, we deny the conversational implicatures that Grice proposed: those don't hold because the indicative conditional is different in meaning, though not in truth conditions, to a disjunction. In their place we have Jackson's conventional implicatures.

4. Problems for Jackson

(i) Other words that bring conventional implicatures have corresponding terms that lack them: we saw that 'but' has 'and' playing that role. Does the indicative conditional have something that plays this role? If Jackson's theory is correct, 'or' should do so. But are ordinary speakers likely to accept that indicative conditionals are truth functionally equivalent to disjunctions in the way that they allegedly accept that 'but' and 'and' are?

(ii) Should we believe in conventional implicature at all? The intuitions on which Grice's case was based seem rather fragile. A number of theorists have argued that there are no conventional implicatures: Kent Bach's 'The Myth of Conventional Implicature' is the most influential piece here; he argues that 'but' expresses a *secondary* but still *truth conditional* proposition (but see Potts 'The Logic of Conventional Implicatures' for a response).

(iii) If the standard account of *subjunctive* conditionals is along the right lines, then they are clearly not truth functional: they are to be understood in terms of possible world or the like. If that's right, then, given Jackson's account, indicative and subjunctive conditionals behave in

very different ways. So it seems to be just a coincidence that they are both marked in English with the word 'if'; these are just unrelated homonyms, like the two senses of 'bank' or 'bear'. But in turns out that this isn't just a feature of English: indicative and subjunctive conditionals are represented in most languages in very similar ways — in French with 'Si', in German with 'Wenn', and so on, even across very different languages. That makes it much less plausible that it is just a coincidence in English. But then wouldn't we want both types of conditional to be explained in broadly similar ways? A number of theorists — Robert Stalnaker is one — argue that both indicative conditionals and subjunctive conditionals should be understood as non-truth functional in rather similar ways: very roughly, on Stalnaker's account, the latter makes you consider worlds that you know to be non-actual, whereas the former makes you consider worlds that you are supposing could be actual. At the very least, Jackson owes us an account of why many different languages use the same sorts of construction for such different roles.