A Gricean Account of Subjunctives

Kenny Easwaran

December 26, 2004

Most theories of conditionals draw a distinction between indicative conditionals ("If Oswald didn't shoot Kennedy then someone else did") and subjunctive conditionals ("If Oswald hadn't shot Kennedy then someone else would have"). The fact that these two sentences intuitively have different truth values suggests that these two types of conditionals should be interpreted in different ways.[1] On most standard approaches, the truth of a subjunctive conditional depends on what is the case in some 'nearby possible worlds'. Exactly what the ontological status of these worlds is isn't generally a concern of the theories, but most candidates (plausible or implausible) create difficulties for the epistemology of subjunctive conditionals far beyond those merely involving the actual world. Thus, I think that a more linguistically-based theory can explain subjunctive conditionals better than a worlds-based theory.

To begin with, Bennett introduces some example sentences that he calls 'direct' conditionals. An example is "You may be right that 666 is a fascinating number, but stop calling it a perfect number. If it were one, it would equal the sum of its divisors."[2] He says that "in these cases, the speaker infers his conditional *directly*, with no detour through a possible history, from its basis in a generalization that he Trusts, that is, thinks is true and would remain so in a wide variety of circumstances, including those envisaged in the antecedent of his conditional."[3] He goes on to suggest that some conditional statements are intended in this direct way, while others are intended in a world-involving way. "The directly evaluated conditionals have to be noticed, lest they get between our legs and trip us up; but otherwise we can safely ignore them. Their use of the conditional form is mildly degenerate, and they are uninteresting - because unchallenging - as a philosophical topic."[4]

However, I think these conditionals pose somewhat more of a challenge than Bennett supposes, and that a theory that deals accurately with them will deal well with most other subjunctive conditionals as well, thus obviating the need for a possible worlds metaphysics. In addition, a single unified theory that deals with both is clearly preferable to a theory that deals only with one. While it's

[1] I will follow Bennett in symbolizing these two sentences as respectively $A \rightarrow C$ and $A > C$. I will use $A \supset C$ to denote the material conditional, when necessary.

[2] [1], p. 284

[3] [1], p. 284

[4] [1], p. 287

clear that the perfect number example can't be explained by means of a possible world in which 666 actually is perfect, I think it's also clear that Bennett's definition of a Trusted generalization doesn't apply either. Someone would have to be fairly strange to believe that perfect numbers are equal to the sum of their divisors, even if 666 were perfect. I think I (like most people) am more confident of the fact that 666 is not equal to the sum of its divisors than I am of the definition of a perfect number. So the generalization "all perfect numbers are equal to the sum of their divisors" can't be Trusted in Bennett's sense.

Thus, the condition of Trust that Bennett requires for these direct conditionals is too strong to properly account for them. However, a theory that gets closer is explained in Bennett's chapter on Support Theories.

> $A > C$ is true $\equiv$ There is a true proposition *Support* meeting certain constraints such that C is entailed by A&*Support* in conjunction with *Laws*, that is the conjunction of the causal laws reigning at the actual world.

I think it is not too much to modify this theory so that *Laws* doesn't have to be the *full* set of causal laws at the actual world, but rather *some* set of (not necessarily causal) laws. Leaving aside temporarily the question of just what it means to be a law, we can see that this theory adequately explains the perfect number conditional. While "all perfect numbers are the sum of their divisors" may not exactly be Trusted in Bennett's sense, it seems clear that it should count as a law, in whatever sense will be required. In this particular case, no value of *Support* is necessary, though in general one might be.

To see some implications of this theory for the assertibility of counterfactual conditionals, consider Grice's second maxim of quality: "Do not say that for which you lack adequate evidence"[5]. In most cases, to have adequate evidence for truth under the Support Theory, there will be a particular value of *Support* for which one has evidence and a particular value of *Laws* that one knows to be a law. If these values aren't in mind at the time of assertion, then the speaker has most likely done something wrong, in that she has asserted something for which she doesn't have particular justification. Thus, it seems that one should follow Bennett's take on Chisholm and require that the speaker must have some value of *Support* (and *Laws*) in mind.

Bennett objects to requiring that the value is intended, saying, "I am quite sure that if I had pressed the button again, the red light would have gone on again; yet I know none of the facts about the wiring that make the conditional true."[6] But it seems to me that a theory on which *Support* and *Laws* are required to be in mind actually can deal with this. After all, although I don't know "the wires are in configuration X" for any particular X, I do have good evidence to believe (and in fact know) "the wires are connected in a fashion such that whenever the button is pressed, the red light is on". While having this fact in mind may not be necessary for the literal truth of the statement (which is what Bennett is talking about), it may be necessary for its assertibility.

[5] [5], p. 46
[6] [1], p. 306

Bennett also objects to the idea that merely being intended and true is sufficient to be a value of *Support*. However, I believe this can also be dealt with on Gricean grounds. Bennett suggests a series of constraints on *Support*, such as that it be logically compatible with A, that its truth not be caused by the truth of $\neg A$, and that the 'simple propositions' that are its truth-functional components not be entailed or caused by various other propositions. However, I think that compatibility with A would be guaranteed by Grice's maxim of quantity, because an incompatible presupposition would render the content of the consequent irrelevant, and thus make the whole statement pointless. I would suggest that such a conditional isn't necessarily *false*, just that it is most definitely not assertible. This parallels Grice's suggestion for allowing the truth conditions of the indicative conditional to be those of the material implication, with the apparent extra conditions being imposed by conversational rules.

My proposal for subjunctive conditionals is in some senses stronger and in others weaker than this suggestion for indicatives (which I don't necessarily endorse). On my account, subjunctives are stronger because they require entailment for truth, rather than just material implication. However, they are weaker, because they allow the extra statements *Support* and *Laws* to play a role in the entailment. As I have suggested above, *Support* and *Laws* should both be compatible with A, so that $A > C$ isn't trivially true.[7] If A is actually true, then (since *Support* and *Laws* must be true for $A > C$ to be true) the entailment guarantees that C is true. So if A is known to be true, and *Support* and *Laws* should be as well for the conditional to be assertible, then C should be easily recognized to be true. As a result, C is an actually true statement that is known to be compatible with A, and thus is an acceptable value for *Support*, making the conditional trivially true. In such a case, C alone is a shorter statement than $A > C$, which is also known to be true, and is stronger than what can be gathered merely from knowing that $A > C$ is true, and thus Gricean principles prohibit the statement of subjunctive conditionals in which the antecedent is known to be true, which agrees with actual practice. I believe Bennett's account of Support Theories never explains this fact, though the Worlds Theory does by virtue of the fact that the closest A world is the actual world in such a case.

However, the more important restrictions that Bennett took such great pains to impose will come from the fact that *Laws* is taken to be a conjunction of true law statements about the world. What it means to be a law is not entirely clear, and I think an explanation of this would solve some of Bennett's problems.

In the paper criticized by Bennett, Chisholm[8] gives three possible accounts of what it might mean for a certain statement to be a law statement. The first is that all non-logical terms appearing in it be universal, which Chisholm rightly

[7]The fact that *Support* isn't required to be the full set of all true particular facts about the world allows for what Bennett calls "zero-tolerance" (p. 229), so that the antecedent can be false. Depending on how many of the actual laws need to be included in *Laws*, this theory may be able to explain counterlegal conditionals, or perhaps some aspect of what Bennett calls "impossibility-intolerance" in the same passage.

[8]pp. 99-100

rejects through certain counterexamples, like "Everyone who drinks from this bottle is poisoned". The third suggestion, which he also rightly rejects, is that a law statement is one that appears in scientific deductions. However, I think the second suggestion is closer to the mark. "In order to *know*, or to have good evidence or good reason for believing, that a given nonlaw statement is true, it is necessary to know that all of its instances have in fact been observed; but in order to know, or to have good evidence or good reason for believing, that a given law statement is true, it is *not* necessary to know that all of its instances have been examined." However, as Goodman mentioned in his groundbreaking paper on subjunctives, "a solution to the problem of counterfactuals would give us the answer to critical questions about law, confirmation, and the meaning of potentiality."[9] While I want to use laws and confirmation to analyze subjunctives (and in particular counterfactuals), it would be best not to involve modality, as Chisholm mentioned in his argument against this second analysis of law.

However, I think this analysis of law will work better to classify statements based on whether they are *held as* laws than to decide whether they *actually are* laws. If the statement $\forall x(Fx \supset Gx)$ is held as a law, then evidence that a is an F will generally be grounds for the agent to believe that a is a G. On the other hand, if it is held merely as an extensional generalization, then evidence that a is an F will be grounds for the agent to believe that $\neg\forall x(Fx \rightarrow Gx)$, if a is not an object that was already known to be an F. I will use this general fact as a characterization of law, so that a law is a universal generalization of the form $\forall x(Fx \supset Gx)$, where evidence of the form Fa for some previously unknown object is taken to be evidence for Ga rather than for the negation of the generalization.[10] Thus, the generalization above about the wiring of a button and a light could easily become a law, if pressing the button a few times convinces me that further presses will also be accompanied by the lighting of the light.

These tendencies can't be interpreted as counterfactual belief changes, on pain of circularity. Instead, they must be seen merely as facts about actual agent behavior and subjective conditional probability. Note that this makes facts about just what is a law subjective and contingent, rather than absolute. Exactly what sorts of justifications *should* make an agent hold a generalization as a law is beyond the scope of this paper. However, it does seem reasonable

[9] [4], p. 113

[10] Compare this to Goodman's claim on p. 124 that a law "is accepted as true while many cases of it remain to be determined, the further, unexamined cases being predicted to confirm it. [Non-law generalizations], on the contrary, [are] accepted as a description of contingent fact *after* the determination of all cases." I have weakened the criterion slightly to discuss merely the support of acceptance given by a single piece of evidence, rather than the sum of all possible evidence. Goodman points out that his analysis leaves problems both of determining when evidence *should* relate to statements in this way (which I avoid by making the condition subjective rather than objective) and of what happens to a law when all instances observed. In my case, since the condition is subjective, I can deal with the agent's probability conditional on discovery of a further instance, since in many cases it is unlikely that the agent ever knows that no further instances can be discovered.

that whatever counts as a law should not be disconfirmed by the observation of another object to which it might potentially apply. Since confirmation is most easily explained in terms of personal subjective probabilities, this suggests that the notion of law may be at least somewhat subjective. However, if an objective account of confirmation can be achieved, then this will also (on my account) make the notions of law and subjunctivity more objective.

Note that on this account, law statements aren't merely causal. So the statement "All dimes are silver" would count as a law for most of us, provided we lived in the appropriate time period.[11] However, as Goodman suggests[12], "Everything in my pocket is silver" does not have this property, which is as it should be. In addition, while Goodman needed to extend his definition of law to deal with cases like "Everything that is in my pocket or is a dime is silver"[13], it seems that my explanation can deal well with it, because discovery of a further item that either is in my pocket or is a dime could very easily reduce my subjective probability of the original generalization. Now that this analysis of laws has been provided, I will return to the analysis of subjunctives, and show how this notion of law provides further consequences for their assertibility.

When a subjunctive conditional is stated, the speaker should have a justification. In general, this means that there are particular known values of *Support* and *Laws* that ensure the necessary entailment. As argued above, these values can be assumed to be compatible with A, and in many cases, the listener will be able to infer just what values are being used. Thus, if I assert, "If Shakespeare hadn't written Hamlet, no one else would have", my listener can take me to be affirming something like the law-like generalization that a play is not written by anyone other than its actual author. In fact, I think that in many cases, the point of asserting the subjunctive is to draw attention to *Support* and *Laws*, and in particular to the fact that *Laws* is a collection of statements that are believed *as laws*, and not merely with high unconditional probability.

If the point is to call attention to a law, it seems plausible at first that the speaker should always just state the law instead of the subjunctive conditional. However, in many cases, the applicability of the law to the particular situation is far from obvious. Thus, when someone keeps calling 666 a perfect number, I would say "If 666 were a perfect number then it would be the sum of its divisors." The law statement supporting the subjunctive conditional is that all perfect numbers are the sum of their divisors. By stating the conditional, I implicate this statement, and also that it is a law, so that new perfect numbers can also be assumed to be the sums of their divisors. Another implicature of the subjunctive mood is that 666 is *not* a perfect number. Because I have suggested that 666 is not a perfect number and that perfect numbers are the sums of their divisors, I have drawn attention to the fact that 666 is not the sum of its divisors, and thus that the person's earlier statements were misguided. If instead of the conditional I had said "Perfect numbers are the sums of their divisors", then

[11] See [4], p. 127 to see that Goodman did in fact write in such a time.

[12] p. 125

[13] p. 126

the second implicature would have been less clear.[14] The other person could think I was implicating that 666 actually *is* the sum of its divisors, rather than implicating that their speech was misguided. Thus, using a subjunctive instead of the associated statements *Support* and *Laws* allows me to convey more information more quickly.[15]

I will now return to Bennett's arguments for requiring further conditions on *Support* (and *Laws*) than merely that they be true and intended by the speaker. Bennett's principal example for this point involves several seemingly contradictory counterfactuals that are all licensed by Chisholm's theory.[16] Given the four statements "All gold is malleable", "Nothing is both malleable and not malleable", "That is not gold", and "That is not malleable", one can justify several subjunctive conditionals. Using the first and second, one could state "If that were gold, then it would be malleable." Using the second and fourth, one could state "If that were gold, then some gold would not be malleable." And using the first and fourth, one could state "If that were gold, then something would be both malleable and not malleable." Bennett claims that these latter two statements are both clearly false, but I would like to suggest that they are instead true, but highly unassertible for various Gricean reasons.

In the third case, *Support* is "That is not malleable" and *Laws* is "All gold is malleable." However, these two statements are together clearly not consistent with A - "That is gold." Thus, it is not helpful to draw attention to particular consequences these three statements may have together, so there is absolutely no need to state this conditional. In the second case, *Support* is "That is not malleable", and there is no need for *Laws* at all. Since I believe that the main reason to state subjunctive conditionals is to call attention to the law that supports one's statement, this subjunctive would have very little justification. In this case, it would almost certainly be simpler to merely state "That is not malleable", unless the status of the generalization "All gold is malleable" were up for debate at this point.

Goodman presents a similar pair of seemingly contradictory conditionals in his paper.

> If New York City were in Georgia, then New York City would be in the South.
>
> If Georgia included New York City, then Georgia would not be entirely in the South.[17]

Goodman points out that these two statements rely on different values of *Support* and *Laws*, and I think that this is the right explanation for the seeming truth of

[14] For another example of a subjunctive conditional with many more implicatures than the associated law, consider the sentence this footnote is attached to!

[15] This is a direct contradiction of Bennett on p. 324, when he says that "Subjunctive conditionals are useful to us largely because we can have reason to believe them without having so much as an opinion about what their factual basis is." I think that in fact, conveying their factual basis is *exactly* why we state subjunctive conditionals.

[16] See [1], pp. 306-7.

[17] [4], p. 121

both. In some fashion, the ordering of the terms in the antecedent makes one of the sentences "New York City is not in the South" and "All of Georgia is in the South" more salient than the other. In an unrelated example, describing two contradictory conditionals whose truth depends on what sort of Worlds Theory one uses, Bennett says, "If such a case arose, the sensible reaction would be to ask the speaker what he had in mind."[18] But I think that is also the reasonable response here. Depending on the context, if either of these sentences were uttered, the speaker would probably want to convey the relevance of one of these particular pieces of information, but since the situation is unknown, it is not totally clear which of the two is more likely relevant, and therefore which of the two is more likely to be actually uttered.

If this analysis is correct, then the importance of subjunctives is to communicate certain law statements, and also to impart *that* these statements are taken to be laws. Based on the earlier assertion that law statements are generalizations not just with high prior probability, but also with high probability conditional on discovering a new example of the class to which it applies. This suggests a parallel with Bennett's analysis of indicative conditionals. In the first several chapters of his book, he suggests that assertibility of indicative conditionals corresponds to the probability of the consequent conditional on the antecedent. While this analysis of subjunctive conditionals is necessarily different (because corresponding subjunctives and indicatives often have different truth or assertibility values), the fact that both are connected strongly to concerns of conditional probability suggests a connection between these analyses.

However, a disanalogy is that Bennett takes indicatives not to have truth values, but merely assertibilities. One can extend this parallel to my explanation of subjunctives by taking these Gricean assertibility conditions described here to be basic, and not derived from underlying truth values. But a parallel can be drawn to a very different account of indicatives that *is* truth value based.

To summarize the view of DeRose and Grandy[19], indicative conditionals are taken to be conditional assertions that assert C in case A turns out to be true. That is, the assertion has a truth value only if A is true, in which case it agrees with the truth value of C. In most cases, the hedging of the assertion of C is to avoid violating Grice's maxim of quality, in that the grounds for asserting C aren't sufficient unless A also happens to be true. However, in other cases, like the "biscuit" conditionals they discuss ("There are biscuits on the sideboard, if you want some"), the hedge is there because an assertion of C would violate the maxim of relevance unless A happens to be true. This marks a significant improvement over both Bennett's theory and a purely Gricean attempt to reform the material conditional, because in either case, the consequent of a biscuit conditional is at least as assertible as the conditional. "A defender of one of the leading theories might plausibly argue that they are trying to account for normal indicative conditionals, and since the abnormal, biscuit conditionals are quite different from the normal ones, any attempt to accommodate the latter in

[18] p. 327
[19] In [3]

their theory would be a mistake."[20] This is just what Bennett tries to do with both 'direct' and 'independent' subjunctives. Since his division is tripartite, it seems even more questionable, and if a single theory can take care of all three types, then the resulting savings will be even greater than in the indicative case.

For subjunctives, the assertion involved is clearly not conditional on the antecedent, because in most cases, this would result in no assertion at all, and the speaker even knows that A is false! Thus, subjunctives must have a different interpretation. I take it that if the truth condition for $A > C$ is the existence of a true statement that supports the inference from A to C, and the conventional implicature is that this statement is a law, then I can explain most of the use of subjunctives. The point of any assertion of a subjunctive would then be to implicate a particular law statement. The reason that the subjunctive is used instead of the law statement is that the subjunctive is much more clearly relevant to the matter at hand than the law statement is.

Thus, I believe that the use of subjunctive conditionals rather than law statements is dictated by Gricean considerations, just as DeRose and Grandy suggest that the use of indicative conditionals rather than direct assertions often is. While the truth conditions of the two types of conditional are radically different, they share similarities in terms of their Gricean motivations. In addition, both are connected to the material conditional, though in radically different ways. In both cases, the material conditional needs to be true to make the actual conditional assertible. In the indicative case, when the assertion is made conditional because of lacking evidence for the truth of the consequent, then the material conditional is the strongest statement that can be made. In the subjunctive case, there are some presuppositions relative to which the antecedent implies the consequent logically, which is just a strengthening of the material conditional. Thus, this account of both conditionals is far more unified than the ones given by Bennett.

References

[1] BENNETT, JONATHAN, 2003. *A Philosophical Guide to Conditionals,* New York: Oxford University Press.

[2] CHISHOLM, RODERICK M., 1955. "Law Statements and Counterfactual Inference," *Analysis* **15** 97-105.

[3] DEROSE, KEITH, AND RICHARD E. GRANDY, 1999. "Conditional Assertions and "Biscuit" Conditionals," *Noûs* **33:3** 405-420.

[4] GOODMAN, NELSON, 1947. "The Problem of Counterfactual Conditionals," *Journal of Philosophy* **44:5** 113-128.

[5] GRICE, H. PAUL, 1975. "Logic and Conversation," in COLE, PETER AND JERRY MORGAN, 1975 *Syntax and Semantics 3: Speech Acts,* pp. 41-58. New York: Academic Press.

[20] [3], p. 407