

## 14. Reflections on Legality

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### 85. The Primacy of Law

-We have seen that, on Bennett's account, in analyzing a subjunctive conditional  $A > C$  the closest A-worlds must be causally legal from the time of the fork onwards.

-This condition on similarity is necessary to capture many subjunctive conditionals we intuitively regard as being true. In particular, this condition allows us to deal with those conditionals of the form  $A > \text{Big Difference}$ . If the similarity relation was not constrained by the demands of causal legality but was based on all-in similarity no conditional  $A > \text{Big Difference}$ , that we intuitively regard as being true, would come out as such on our account, for any A-world in which the consequent was false would be overall more similar to our world than any A-world in which the consequent was true. However, we do think that many conditionals of the form  $A > \text{Big Difference}$  are true- for example 'If Stauffenberg had placed the bomb a foot to the right Hitler would have been killed'- and the reason that we think this is that we believe that with the antecedent in place there exist causally sufficient conditions for the consequent to be the case.

-This latter point highlights a more general reason for the requirement of legality. Our subjunctive conditionals, for the most part, concern events, where it is assumed that had a certain event occurred, a different event would also have occurred at a different time, and in order to get from one event to the occurrence of another we need, as Bennett puts it, "the cement of the universe", causation".(pp. 222)

- Nicholas Rescher, in "Belief-Contravening Suppositions", gives an account of counterfactual conditionals (he considers only subjunctive conditionals whose antecedents are false) that tries to explain why we take certain counterfactual statements to be true, and others false.

-Bennett claims to have little sympathy for this account, and levels three objections against it. It will be worth our time to briefly go over Rescher's account, for I think it may provide some further illumination for why we require that the closest worlds be ones that conform to our causal laws.

-On Rescher's account counterfactual conditionals fall into two categories:

1)Nomological conditionals

2)Purely hypothetical conditionals

Nomological conditionals are ones whose consequent follows from the antecedent as a matter of general law. So, to take an example of Rescher's: "If Smith had eaten an ounce of arsenic, he would have died." This is true, according to Rescher, in virtue of a general law to the effect that all people who eat an ounce of arsenic die.

With purely hypothetical conditionals, on the other hand, no laws tell us whether given that the antecedent is true the consequent is also true. To take a hackneyed example: “If Bizet and Verdi had been compatriots, Verdi would not have been Italian”. According to Rescher this is not true because the relevant general law: “All compatriots are from the same country”, does not allow us to choose between this conditional and its competitor “If Bizet and Verdi had been compatriots, Bizet would not have been French.”

What is common between these two cases, on Rescher’s picture, is that we have, to begin with, a set of relevant facts. In the Bizet/Verdi case the relevant facts are:

- 1) Bizet and Verdi were not compatriots.
- 2) Bizet was French by nationality.
- 3) Verdi was Italian by nationality.
- 4) Compatriots are persons who share the same nationality.

In the arsenic case the relevant facts are:

- 1) Smith did not eat an ounce of arsenic.
- 2) Smith did not die.
- 3) All persons who eat an ounce of arsenic die.

Now, in both cases we suppose one of these facts to no longer be the case, and ask if, on this supposition, another fact would also have failed to obtain. In the Bizet/Verdi case, our counterfactual conditional comes out false because we cannot adjudicate between two mutually exclusive possibilities, i.e., between rejecting 2, or rejecting 3. In the arsenic case, however, the same problem does not appear to arise. Note, however, that this is not because there aren’t mutually exclusive possibilities. In assuming that 1 is not the case we automatically assume that 2 is not the case, because that follows from 3. But it is possible that we could assume that 1 fails to hold and reject 3. Thus, we would have, “If Smith had eaten an ounce of arsenic, then it would not be the case that all people who eat an ounce of arsenic die.” This is a counterfactual conditional that stands to our original arsenic conditional as “If Bizet and Verdi were compatriots, then Verdi would not have been Italian” stands to “If Bizet and Verdi were compatriots, then Bizet would not have been French”. The fact that this conditional does not call into question the truth of our original arsenic conditional simply means that we do not seriously consider “If Smith had eaten an ounce of arsenic, then it would not be the case that all people who eat an ounce of arsenic die” a viable option when formulating counterfactual conditionals.

-Rescher argues that the reason that we do not consider such counterfactuals to be viable options is that we take laws to be “...generalization[s] so secure that we are willing to retain [them] at practically all costs, and to let all else revolve about [them] when a belief-contravening supposition is made.”(191) The point here is that faced with a choice between rejecting a particular fact and rejecting a general law we will reject the particular fact since our degree of credence in the general law is much higher than in any given particular fact.

-Bennett naturally takes exception to this explanation of our use of counterfactual conditionals in

terms of levels of credence, i.e., in terms of the adjustment of our belief structure in the light of a new belief, for of course he takes such an explanation to be appropriate for indicative conditionals, and he holds that indicative and subjunctive conditionals require separate explanations.

-Be that as it may, I don't think that the question of *why* in our use of subjunctive conditionals we hold certain statements fixed as true is all that important for a proper analysis of subjunctive conditionals. What is important is that we recognize the existence of such a class and the role that this class plays in our assessment of the truth of subjunctive conditionals. (I think, then, that we can ignore Bennett's first two objections to Rescher as being possibly correct but immaterial.) What Rescher's examples show is that our assessment of the truth and falsity of subjunctive conditionals appears to be guided by the existence of a class of statements, normally called laws, a class whose members, in order to determine the truth and falsity of such conditionals, are held to be unrevisable in the face of counterfactual suppositions. Rescher's case examples thus clearly illustrate the privileged status of lawlike statements in our assessment of subjunctive conditionals and show why in assessing such conditionals we should restrict ourselves to worlds whose laws are the same as ours- because in assessing a counterfactual we simply do not consider the cases where the lawlike statements fail to hold, i.e., we ignore the nomologically impossible worlds.

-It is worth noting that in one respect Rescher's account is much more general than Bennett's, for Rescher's account says that the truth or falsity of our subjunctive conditionals depends on whatever the relevant nomological features of the universe are, regardless of whether such laws are causal, logical or other. Bennett's account, however, has no story about the role that logical laws play in the assessment of subjunctives- thus, he gives no story about "independent conditionals. Bennett's account is specifically concerned with causal laws.

-Bennett's third objection is interesting and worth spending some time on. On Rescher's picture, as we have seen, a counterfactual conditional is true if its consequent follows from its antecedent on the basis of general laws. This is a claim about the semantics of counterfactual conditionals. Rescher also holds, however, that such laws (or at least our beliefs about what such laws are) act as guides in our determination of the truth or falsity of such counterfactuals. Thus: "...in the case of nomological counterfactuals the situation is relatively simple in that we do here have the necessary guidance needed for the reconstruction of our residual beliefs in the face of the belief-contravening supposition represented by the antecedent of the counterfactual. We have this guidance because we treat the covering law as immune to rejection." (191) This is an epistemological claim about how we come to have certain beliefs, and what justifies these beliefs. In Rescher the semantic and the epistemological theses are somewhat conflated.

While Bennett is inclined to agree with Rescher that the semantics for counterfactuals do depend on nomological features of our universe, he does not think that having (justified) beliefs

about these features is necessary for having (justified) beliefs about what counterfactual conditionals are true. Thus, he says that “...we often affirm subjunctive conditionals while having no idea of the laws by virtue of which they are true.”(223)

It is hard to know how to assess this claim, as a criticism of Rescher. If it is simply an empirical claim that people do assert counterfactual conditionals without thinking about a law in virtue of which it is true, then it is certainly true. I take it, however, that Rescher’s point is concerned with what it is that justifies our assertions of counterfactual conditionals. Rescher’s claim is I think simply that someone who asserts a counterfactual conditional, when pressed to justify the assertion will appeal to some belief about a relevant law. This seems plausible to me—indeed, I think that it is this fact that explains the privileged status of laws in our semantic analyses of such conditionals.

- I think that Bennett ought to accept Rescher’s point here that what justifies a counterfactual conditional is a relevant nomological feature of our world. Since Bennett’s theory ties the truth of subjunctive conditionals to nomological facts, this, I think, puts science in a normative position concerning our assertions of subjunctive conditionals. Upon acceptance of such a theory, science becomes the arbiter of what subjunctive conditionals one ought to assert and what ones one ought not assert, and it is, thus, to science that we should look if we are to justify a particular subjunctive conditional.

I don’t actually want to press this point too hard, since, as Branden has assured me, questions concerning justified assertion quickly lead into murky epistemological waters, through which I am in no position to navigate. I do think, however, that if one is to claim that we can justifiably affirm a subjunctive conditional while having no knowledge of the relevant laws that would make it true, one must give some other account of what evidence might justify us in making such an assertion.

-One of the upshots of Rescher’s analysis of counterfactual conditionals is that our use of such conditionals demands of us that we give a coherent account of the notion of law, as opposed to accidentally true generalization. Bennett notes that Nelson Goodman worried that the concept of law might not provide a firm foundation for the analysis of subjunctive conditionals for he could see no way to characterize a law except with reference to subjunctive conditionals. Bennett notes that the demand for a noncircular characterization is one that must be faced also by Lewis, as well as Stalnaker and Davis.

- Bennett somewhat shirks off the problem that an independent characterization of the notion of law poses. He notes that this problem “...seems to have lost its urgency.”(223), and speculates that this is due to “...the loud enthusiasm that many philosophers have for the concept of causation (and thus, with most of them, for the concept of law)”(223)

-While it may be true that many (if not most, for all I know) philosophers think that the notion of

causal law is unproblematic there are still strong voices of dissent. Van Fraassen, for example, wrote a whole book, *Laws and Symmetry*, that sought to call into question the coherence of the notion of a law of nature. It is probably worth, then, taking a minute to highlight some of the apparent problems of trying to characterize laws without recourse to subjunctive conditionals.

-Consider the following examples (due, I think, to Reichenbach):

1) All solid spheres of enriched uranium (U235) have a diameter of less than one mile.

2) All solid spheres of gold (Au) have a diameter of less than one mile.

Let us assume that both of these are true. We might accept 1 as a law of nature, since it is a fact that follows given the critical mass of uranium. 2, on the other hand, is, if true, surely a matter of contingent fact. How are we to account for this difference between these two statements? We cannot say that 1, but not 2, is capable of supporting counterfactual statements, i.e., by noting that the statement if x were a sphere of gold, then it would be less than one mile in diameter is not true, for we are trying to give an independent characterization. An appeal to generality or universality will certainly be of no avail- both of these we are assuming are true universal statements. Nor can we appeal to any other syntactic or semantic facts, for these two statements have the exact same syntactic form, and do not differ with respect to any relevant semantic feature.

What we appear to need is an appeal to some modal notion. The obvious candidate is physical possibility. We might try to characterize a law, such as 2, as being a universal generalization that is true at all physically possible worlds. The problem with this is that the notion of physically possible world (or physical possibility) is not clear antecedent to the determination of what are the actual physical laws. All of this is simply to point out that there does not appear to be any obvious, noncircular characterization of physical law.

## 86. Miracles

-Bennett notes that some writers have objected to Lewis's use of miracles in his analysis of counterfactual conditionals.

-The reasons that miracles appear to be a useful device in analyzing counterfactual conditionals are:

1) The way we use counterfactuals indicates that we do not think that the antecedent becomes true abruptly, out of the blue, e.g., we reject as absurd "If there had been no cars on the road when the avalanche began, people would have been shocked and astonished".

2) In asserting a counterfactual we do not assume that the world history leading up to the antecedent is radically different from that of our world.

3) We assume, as we have seen, that the laws of our actual world are operational.

In order to reconcile these demands it appears then that we require a small, insignificant deviation from the history of the actual world that will lead smoothly, in accordance with the

laws of our world, to the event stipulated in the antecedent.

-Nonetheless, Bennett notes that there are those who have argued that as an analysis of what one means when one asserts a counterfactual, the use of miracles commits one to a counter-intuitive and possibly incoherent view. For, it is not clear what the metaphysical status of a world with a single tiny miracle is, i.e., a world that is completely causally governed except for a single point (or small set) in space-time. One might argue, therefore, that if the only way that we can make sense of our use of counterfactuals is to commit us, in making such utterances, to the existence of worlds in which miracles occur, this might indicate that we should refrain from making such statements, just as we might conclude if the only way that we could make sense of our use of counterfactuals was by committing ourselves to the existence of wizards and magic. And, of course, if there are other ways of making sense of our use of counterfactuals that do not entail such a commitment, then we ought to avert to those explanations instead.

-It is worth noting, before continuing to discuss this objection, that it is a potential problem for Bennett and Lewis because they take themselves to be giving a metaphysical account of what one is committed to in making certain assertions. I don't think, however, that such an objection would be relevant to, say, Stalnaker, who simply takes himself to be giving a semantic analysis of subjunctive conditionals. For, what is at issue here is the metaphysical coherence of certain types of worlds, not the usefulness of such worlds in capturing our intuitions about the truth and falsity of certain linguistic utterances.

-The objection I have outlined is in large part an elaboration on what Mark Lance says in the passage quoted by Bennett. Thus: "If we take [counterfactual conditionals] fundamentally to be reporting what goes on in worlds that we can make no sense of, it appears quite mysterious why we would do this. Indeed, if I became convinced that this was what I was doing, I would resolve to stop." (226) Lance's point in the passage quoted in Bennett, is not, however, that we should stop using subjunctive conditionals. Instead he is concerned to argue that in providing an analysis of such conditionals we should not simply look for an account that will square with our intuitions about the truth and falsity of given conditionals, but that we should try to provide a plausible account of what it is that we are actually asserting when we assert such conditionals. That is, we ought to be concerned with "...explaining what is being understood with subjunctives and why they are important to rational practice." (226)

-I am inclined to agree with Lance. I think that if a theory commits us, in making such utterances, to certain questionably coherent states of affairs, we ought to either look for a better theory or, if we are intent on keeping the theory, argue for the coherence of such a state of affairs.

-Bennett does not agree with this. In fact he does not see any tension inherent in the acceptance

of the following two theses:

(1) When an ordinary person accepts a counterfactual conditional he or she has a thought which, when pressed down on hard and seriously, may imply that some world exactly matches  $\alpha$  up to some time when it forks away through the occurrence of a small miracle.(226)

(2) No coherent account can be given of the nomological structure of a world that exactly matches  $\alpha$  up to some time when it forks away through the occurrence of a small miracle.(226)

His argument for this is that “[w]hen we think  $A > C$ , with the thought that a small miracle might have been needed for  $A$  to have obtained, why *should* we be committed to any view about the deep-down world-long metaphysics of this?”(226) The only answer that I can give to this question is, I think, the obvious one: because we are responsible for the coherence of what we assert. This is, I think, just a basic fact about our practice of assertion- it is subject to normative constraints, one of which is that one should only assert things that are conceptually coherent. If then a theory, such as Bennett’s, claims that in asserting a subjunctive conditional one is committed to the existence of a *prima facie* questionably coherent state of affairs, it is incumbent upon this theory to explain why our acceptance of it should not deter us from making such assertions (if, indeed, it is not the aim of such a theory to deter people from making such assertions) .

- At one point, Bennett appears to simply deny that in giving an account of subjunctive conditionals we are saddling a person who makes such assertions with any metaphysical commitments. Thus, he says: “When we ask what the forks might be like, any answers we think up are merely resources for the plain person to appeal to when trying to put flesh on the bones of his ‘If it had *somehow* come about that  $A$ , then...’. It would be unrealistic to pin him down to any of them...”(225)

If Bennett were consistent on this point we might simply accept that he takes himself to be providing a semantic analysis. He immediately goes on to say, however: If we are too squeamish to allow [miracles] as something the plain person might include in his meaning or fall back on when challenged, then we condemn him to having to rely on two other kinds of fork- indeterministic, and deterministic exploding difference. That would put our conditional user into dire straits: he could not possibly believe  $A > C$  unless he had good reason to believe there are close worlds at which  $A$  comes to obtain through a fork of one of those two kinds. How could he have reason to believe *that*? We have put an unbearable burden upon him; we should lighten it...This involves allowing that one of his possibilities...is that  $A$  comes to obtain through a small miracle.(225)

This is an extremely strange argument. It betrays, I think, an admission that Bennett does take himself to be doing metaphysics. Moreover, I think it betrays an acknowledgment of the suasive force of the objection that we are considering.

We have, according to Bennett, three options on the table for analyzing a subjunctive conditional: indeterminism, exploding difference and miracles. Bennett argues that if we discard

the last of these three options then we will be in trouble, for then we will be committing the asserter of a conditional to the existence of one of the two other types of worlds, and, Bennett asks “[h]ow could [a person asserting such a conditional] have reason to believe *that?*”(225) But it is hard to see how adding a third seemingly implausible possible commitment could lighten the load. For then, according to Bennett’s own argument, we would simply be committing the person asserting such a conditional to the existence of one of three types of implausible worlds, and one might still ask, in line with Bennett, “[h]ow could [a person asserting such a conditional] have reason to believe *that?*”(225) This is, of course, the very question that those who doubt the coherence of miracles would like to have answered.

## 87. Counterlegals

-As we have seen, Bennett’s analysis of subjunctive conditionals requires that the closest A-worlds be ones that obey the laws of  $\alpha$  from the time of the fork onwards, and a fortiori from the time of the antecedent onwards. Given this stipulation, Bennett’s analysis thus precludes so called counterlegal subjunctive conditionals, i.e., subjunctive conditionals whose antecedents are themselves contrary to the laws of  $\alpha$ .

-Bennett notes that some counterlegal conditionals pose no problem, either for his theory or any other. For example a counterlegal  $A > C$  in which A entails C, is unproblematic, for C is true at every A-world, since it follows as a matter of logic. Bennett is naturally unconcerned with such conditionals since they are of the dull independent conditional family. Another group of unproblematic counterlegals are those of the form  $A > (A \text{ miracle occurs})$ , i.e., counterlegals that state if A were the case then something contrary to the laws of  $\alpha$  would occur, since these follow from the antecedent and the laws of  $\alpha$  alone.

-The interesting and problematic counterlegals, according to Bennett, are those whose consequents occur at some causally impossible worlds but not all. As Bennett notes, the problem in assessing such conditionals is that we need a way of selecting from amongst the causally impossible worlds.

-Bennett canvasses one possible way of going about doing this. Our assessment of counterfactuals with causally possible antecedents consists in seeing how things stand at a subset of causally possible A-worlds. Bennett suggests that this might be seen as a special case of a more general procedure of analyzing subjunctive conditionals by looking at “...a subset of *A-worlds that are nomologically more similar to  $\alpha$  than are any other A-worlds.*”(227) In the case where the antecedent is causally possible then all the A-worlds will be legal. In the case of counterlegals, however, we would look for the closest causally impossible A-worlds, and Bennett suggests that this might be done by looking for those A-worlds that are most similar to



$\alpha$  in nomological structure.

-The problem with this approach, according to Bennett, is that there does not exist a clear criterion of nomological similarity.

-John Pollock has a theory that tries to provide an analysis of counterfactual conditionals. On this theory one assesses a counterfactual conditional  $A \rightarrow C$  by seeing if  $C$  holds in the worlds that one reaches through a “minimal change” in the laws that obtain in the actual world as necessitated by the supposition  $A$ . Here “minimal change” means deleting as few of the members of the set of basic laws as possible. Bennett notes that this becomes problematic once we ask what is to count as a “basic law”?

The point here is that the basic laws are those that we take as the starting point in our axiomatic theories. One can, however, have two deductively equivalent sets of axioms. If one deletes an axiom from one set, there will not necessarily be an axiom that one can delete in the other that will result in an equivalent theory. Depending, then, on the axiomatic formulation of the theory that one chooses, one will get radically different results for what will count as a minimal change in the basic laws.

As a result of the discrepancies that result from different axiomatic formulations, attempts have been made to try to define a canonical axiomatic formulation for particular theories. Such a formulation would, indeed, help Pollock. Unfortunately, it is not clear that there is such a thing as a canonical axiomatization.

-Bennett states that Pollock needs “...an objective way of individuating laws, determining what counts as one law rather than more than one (a conjunction in disguise) or less than one (a disjunction in disguise)...”(228) He suggests that such a determination can only come about “...through the physicists’ telling us things about the nomological structure of the actual world, as distinct from the propositional structure of their favorite theory.”(228) I’m not sure how coherent this latter suggestion is, for it requires a scientific account of the nomological structure of the universe that is *not* couched in terms of a particular theory. What exactly would such an account be?

## 88. Two Kinds of (In)tolerance

-Bennett’s account of subjunctive conditionals, as we have seen, does not support counterfactuals. Bennett takes himself, therefore, to be defending an analysis of subjunctives that makes them “impossibility-intolerant.”

-Naturally, of course, this does not mean that subjunctive conditionals are “zero-intolerant” as Bennett takes their indicative cousins to be. Indeed, most subjunctive conditionals that we utter have antecedents that we know to be false- thus, the term “counterfactual”. As a result of their

“zero-tolerance” Bennett notes (echoing Jackson) that “...there is nothing logically or semantically wrong with saying ‘If the river were to stay at its present level for the next two days, things would work out differently from how they actually will.’”(230) The indicative cousin, on the other hand doesn’t appear to make any sense: “If the river stays at its present level, things will work out different from how they actually will”.

-Apparently Dudman doesn’t quite see the contrast. Bennett assures us, however, that we can ignore Dudman’s arguments since “[his] ear for these matters is unreliable.”(230) In this case I’m inclined to agree.

-Bennett contends that “[b]ecause a subjunctive conditional is zero-tolerant, one can properly accept it while knowing that one would not be willing to use it in Modus Ponens.”(230) I find this very confusing. On Bennett’s account, I believe, there is no world that is closer to our world than our world itself (although there may be ones that are as close). Assume then that a conditional  $A \supset C$  is true. If this is true then it must be the case that if A is true at our world, then C must also be true at our world, for if not there would be an A-world as close to our world as any other in which C failed to hold, and thus, contrary to hypothesis,  $A \supset C$  would be false. But this reasoning indicates that one can use  $A \supset C$  in Modus Ponens.

Bennett provides an argument for his assertion that, in the mouth of Bennett, I also find very confusing:

Last year I went to Spain; I am pretty sure that *If I had not visited Spain last year, I would have visited France*. However, if I consider the implications of my discovering to my amazement that I did not visit Spain, they do not lead to the conclusion that I went to France. On the contrary, if I add ‘I did not visit Spain last year’ to my belief system with its multitude of memories and other evidences of my having done so, the resulting system makes me unwilling to have any opinion about what I did last year. (230)

This is clearly a very strange argument for Bennett to make, because the correct Bennettian response to this is, of course: who cares about your belief system- what you are describing is the Ramsey test, and that is something that is only relevant to indicative conditionals. Indeed, as we recall, Bennett, earlier in this chapter, criticized Rescher’s account of counterfactual conditional because it was couched in terms of levels of credence.

-Bennett goes on to say that “[t]he reason that one can accept  $A \supset C$  , while fully realizing that one would drop it if A turned out to be true...is just a fact about the use of ‘would’ that it includes in its meaning a kind of permission to drop the conditional if its antecedent turns out to be true.”(231) I don’t quite know what to make of this claim, since it itself is not actually an argument but a declaration, and the only argument that Bennett does offer relies (illegitimately by his own lights) on facts about his belief system. My intuitions tell me that in asserting  $A \supset C$ , I am committing myself not only to the truth of C at other A-worlds, but also at this world if indeed it is one in which A holds. But if this is true then I do not have license to simply drop the

conditional if A turns out to be true, although I would drop the conditional if it turned out that A was true and C was not.

-In closing off this chapter Bennett notes how the following uses of the subjunctive conditional support its zero-tolerance and its impossibility-intolerance:

1)Diagnostic:

“If they had been at home, then the lights would have been on. The lights are off, therefore they are not home.” Incidentally, this use highlights, an, I think, obvious connection between subjunctive conditionals and material conditionals such that  $A \supset C$  entails  $\neg C \supset \neg A$ , which of course means that  $A \supset C$  entails  $A \supset C$ , which is simply to say that  $A \supset C$  should be capable of being used in Modus Ponens.

2)Moral assessment:

“If you had helped when I asked, we wouldn’t be in this situation.”

3)Reporting facts about the causal structure of the world:

“If the Pacific Ocean had been cooler last year, there would have been fewer hurricanes.”

4)Sharpening our sense of regret/elation:

“If only I had been kinder, I might have gotten more of the inheritance.”

-The reason, I assume that Bennett thinks that these uses support zero-tolerance and impossibility-intolerance is that they all concern facts of which we are certain that they did not occur, but which are/were in within the realm of possibility.