INFELICITOUS CONDITIONALS AND KK

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ABSTRACT. Kevin Dorst (2019) uses the 'manifest unassertability' of conditionals of the form 'If I don't know p, then p' as a new motivation for the KK thesis. In this paper we argue that his argumentation is misguided. Plausible heuristics offer compelling and nuanced explanation of the relevant infelicity data. Meanwhile, Dorst relies on tools that, quite independently of KK, turn out to be rather poor predictors of the infelicity of indicative conditionals.

1. INTRODUCTION

Kevin Dorst (2019) presents two lines of thought in favor of the KK thesis. Both of them turn on the unassertability of a particular sort of conditional, those of the form

If I don't know *p*, then *p*.

Dorst calls these "abominable conditionals". Dorst contends that those who deny KK cannot explain why abominable conditionals are unassertable.

In section 2 we will explore some general tools for evaluating the assertability of conditionals. In section 3 we will apply these tools to abominable conditionals, arriving at an explanation of their infelicity which does not require KK. In section 4 we will critique Dorst's contention that these conditionals would be assertable if KK were false.

2. Some Guides to Infelicity

We begin by introducing some extant (and, we believe, promising) ideas about the assertability of conditionals.

The first idea—defended at length in Williamson (2020)—is that the main heuristic used to assess indicative conditionals is suppositional development.¹ That is, we suppose the antecedent and what other attitudes would emerge given that supposition; these conditional attitudes then govern our attitudes towards conditionals.

Suppositional Rule: Take an attitude unconditionally to 'If A, then C' just in case you take it conditionally to C on the supposition that A. (Williamson, 2020)

¹It is not, however, the only heuristic used. More on this shortly.

Williamson's empirical conjecture is that the Suppositional Rule is our primary way of prospectively assessing conditionals, both indicative and counterfactual.² But only the application to indicative conditionals concerns us here.³

The second idea is that we employ a knowledge norm of assertion (for both unconditional and conditional assertions).⁴ The norm tells us that we should not assert things unless we know them. Even trying our best, we sometimes violate this norm, and assert things we think we know when we don't actually know them. But—trying our best—we won't assert things that we don't think we know. So a reasonable person might say, "I'm meeting Bob for lunch at Gerard's Place tomorrow. We'll be back by 2:00." even when—unbeknownst to them—Gerard's Place is about to suffer a plumbing problem that will shutter them for a week. But a reasonable person will never say anything like, "The number of stars in the Milky Way galaxy is not divisible by 10." because it is perfectly obvious that they don't know any such thing.

These implications make for some pretty good predictions. Suppose, for example, you hold the standard view that you don't know that there is a barn in front of you when looking at a barn in fake barn country.⁵ Let us imagine you are standing in front of a real barn. If you suppose you are in fake barn country, then—conditional on that supposition—you will suspend judgment on whether you are looking at a real barn (since conditional on that supposition you will be very unsure about whether you are looking at a real barn). Guided by the suppositional heuristic, you will then suspend judgment on:

If I am in fake barn country, that is a real barn.

And given that we are not comfortable asserting claims we suspend judgment on (since we will not think we know such claims) we predict that we will not feel comfortable asserting that conditional. And indeed this conditional does sound like an odd speech (especially to those of us that think that fake barn country is knowledge-depriving).

²Williamson names this "the suppositional conjecture" (Williamson, 2020, p. 20). Williamson effectively acknowledges that the rule is stated a little too generally, as when it comes to factive emotives we do not reason in accordance with it. Conditional on Kim being a spy, one might be saddened/surprised/impressed that she is one. But one will hardly be saddened/surprised/impressed that if Kim is a spy, Kim is a spy. See also (Williamson, 2020, p. 29) for a brief discussion of the case of 'surprise'. For a fuller treatment of the role of emotions in suppositional development see Dietz (nd). The relevant qualification on the Suppositional Rule should not affect the discussion here, which will only apply to mundane doxastic attitudes like belief and doubt.

³As Rothschild (2021) notes, Williamson's deployment of suppositional procedure in providing an account of our mode of evaluating conditionals is part of a long tradition beginning with Ramsey (1931). Rothschild is highly sceptical of Williamson's material conditional semantics for indicative conditionals in natural language, in part because he thinks that such a semantics does little to explain our recourse to that suppositional procedure. For our own part, we do not endorse Williamson's semantics (indeed, we are inclined to reject it). But for the purposes of this paper we are officially neutral on whether that semantics is correct.

 ⁴For more on the knowledge norm in unconditional settings, see Williamson (2000).
⁵See Goldman (1976).

Someone might suggest that what is infelicitous about this conditional is that it suggests that being in fake barn is positively relevant to the thing's being a real barn. For example, the sentence

If he tries his hardest, he'll fail.

suggests that there's some special problem with him trying his hardest, that maybe if he tried a little less hard he could succeed. But here we can exploit a point that Dorst himself makes in a different context⁶, namely that if this was all that was infelicitous about the plain indicative conditional then switching to an "even if" indicative conditional⁷ would fix the problem.⁸ After all, "even if" conditionals manifestly do not suggest that the antecedent is positively relevant to the consequent. Thus the sentence

Even if he tries his hardest, he'll fail.

carries no such positive implication. However, the "even if" indicative

Even if I am in fake barn country, that is a real barn.

is not an improvement over its plain indicative counterpart.

Now to another case. One is looking at two balls, Lefty and Righty, both of which are red and which look exactly the same. One then supposes that Lefty isn't red (despite the fact that it looks red). On that supposition, one takes seriously such hypotheses as that the room has trick lighting, that one's eyes aren't working properly, and so on. Because one takes such hypotheses seriously conditional on that supposition, one also—conditional on that supposition—suspends judgment on whether Righty is red. After all, supposing that there is trick lighting or that one's visual system isn't working properly, it is doubtful that one knows that Righty is red. The suppositional rule then predicts that one will have qualms about the conditional:

If Lefty is not red, Righty is red.⁹

And that seems exactly right.¹⁰

¹⁰Supposing the antecedent, why can't we use our knowledge of the material conditional

Lefty is not red \supset Righty is red

⁶See (Dorst, 2019, p. 1231).

⁷These "even if" constructions lack the fake past tense, which is the standard diagnostic of counterfactuality. It therefore seems fair to consider both sorts of constructions to be indicatives. We remain netural regarding the truth-conditions for these conditionals. For more about "even if" indicatives, see Gomes (2020) and Barker (1994). For more on the counterfactuality test, see Iatridou (2000). ⁸Following Dorst, we'll use the term "indicative conditional" broadly, encompassing both plain indicative conditionals and "even if" indicative conditionals. Again following Dorst, we'll consider abominable indicative conditionals of both sorts.

⁹Again, shifting to an "even if" construction doesn't help.

to obtain knowledge of the consequent (under the supposition of the antecedent) by modus ponens? Any such puzzlement relies on ignoring the fact that on the supposition that Lefty is not Red, one will take oneself not to know that material conditional and so will not avail oneself of that material conditional in the relevant suppositional development.

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3. DORST'S ABOMINABLE CONDITIONALS

What Dorst calls 'abominable indicative conditionals' are conditionals of the form

If I don't know *p*, then *p*.

Dorst takes it as a datum that conditionals of this form are bad to assert, and uses this as the basis for two arguments in favor of KK. We shall turn to those arguments in a moment. But before we do, note that we already have the resources to explain why the relevant conditionals are unassertable. If we suppose that we don't know p and develop that supposition then we will not be willing to assert p conditional on that supposition, assuming that a knowledge norm controls our conditional willingness to assert. We thus find ourselves unwilling to assert the consequent conditional on supposition of the antecedent and, by the heuristic encoded in the Suppositional Rule, are unwilling to assert the conditional.

Interestingly, Dorst anticipates something in the spirit of this explanation. He considers explaining the unassertability of abominable conditionals using a Local Knowledge norm:

Local Knowledge: You may assert 'If q, r' only if: on the supposition that q, you know that r.

But he rejects the Local Knowledge norm on the grounds that it would predict that the conditional

If no one knows anything, then I don't know anything.

is unassertable, whereas it clearly is assertable.

We think this rejection of the Local Knowledge norm is overhasty. Here we advert to another theme from Williamson (2020), namely that while the method of suppositional development is the primary way of prospectively evaluating conditionals, there are secondary ways. One such procedure—the one we believe is at play in the case above—is "mediated by amateur or professional theorizing about conditionals in logical, semantic, pragmatic or other terms" (Williamson, 2020, p. 20). In this case, it's obvious that the consequent is entailed by the antecedent, and so the little logician that lives in each of us takes charge and approves the conditional. And this is not the only alternative procedure. Another is to receive a conditional by testimony (that is, someone you trust just tells you the conditional, and you believe them). So the full picture is not fully captured by the Local Knowledge norm; there is no single, all-purpose heuristic for evaluating conditionals. But the principles of suppositional development and the knowledge norm of assertion may still be at play in many cases, and provide a plausible explanation for the unassertability of abominable conditionals in those cases.

Our appeal to secondary ways of evaluating conditionals is not merely a defensive measure aimed to prevent Dorst's criticism of the Local Knowledge norm from extending to ourselves. In this connection it is helpful to see that Dorst is wrong to think that all conditionals of the form

If I don't know *p*, then *p*.

are 'manifestly unassertable'. Consider the conditional

If I don't know that there is something I don't know, then there is something I don't know.

When we process a conditional like this we do not engage in the suppositional procedure of supposing the antecedent and then controlling our willingness to assert something conditional on that antecedent by doing our best job at applying a norm of assertion. The little logician in us kicks in, we spot that the antecedent logically entails the consequent, and we give the indicative conditional a big tick on that basis. As a result the conditional sounds anything but abominable. This conditional—which fits the abominable schema—has a lot in common with the conditional

If no one knows anything, then I don't know anything

that Dorst uses against the Local Knowledge proposal. In both cases we process the conditional by relying on logical acumen rather than suppositional development controlled by a knowledge norm. And that is why, in both cases, we find the conditional unproblematic.

The preceding discussion deployed secondary heuristics to explain why

If no one knows anything, then I don't know anything

is assertable. It also offered the sentence

If I don't know that there is something I don't know, then there is something I don't know.

as a counterexample to Dorst's claim that all conditionals of the form

If I don't know *p*, then *p*.

are unassertable. The reader may worry that with regard to the second point, we are being uncharitable to Dorst. He does say at the outset that conditionals of the that form are unassertable, but later makes the more refined assertion that "abominable conditionals are infelicitous in contexts that don't presuppose the truth of their consequents" (Dorst, 2019, p. 1232). One might worry that the proposition expressed by "There is something I don't know" is invariably presupposed in any ordinary conversation, and so is no counterexample to Dorst's more careful statement of his view. But Dorst is controlling for something quite different: special contexts in which the consequent of a conditional is explicitly supposed. Consider

Suppose Jones has stolen from me. Then, even if I don't know it, Jones has stolen from me.

To see that this is what Dorst has in mind, notice that he quickly goes on to explain a striking parallel with Moorean sentences (that is, sentences of the form 'p and I don't know p'). He notes that while such sentences are "uniformly infelicitous when stated outright" (ibid) they are nevertheless "fine in contexts that presuppose the truth of the first conjunct", providing the following example:

Suppose it'll rain in two weeks. Then it'll rain but I don't know it will.

Now since Dorst thinks the "pattern of (in)felicity of abominable conditionals is precisely parallel to that of Moorean sentences" (ibid), and is explicit that the latter

are always unassertable if "stated outright" (ibid), it is reasonable to read him as thinking that conditionals of the form

If I don't know *p*, then *p*.

are always unassertable if stated outright. Against this, we maintain that the logical examples point to a difference between the relevant class of conditionals and Moorean conjunctions here: some claims of the form

If I don't know *p*, then *p*.

can be certified on logical grounds, but no Moorean conjunctions can.¹¹

We would like to make two further points. First, the fact that the consequent of the conditional

If I don't know that there is something that I don't know, then there is something I don't know.

is generally taken for granted can't be the explanation for the conditional's assertability. After all, the claims expressed by 'We are embodied' and 'We speak English' are also presupposed, but the conditionals

Even if I don't know I am embodied, I am embodied.

and

Even if I don't know I speak English, I speak English.

are far more suspect than the logic-certified conditional. Second, there are relevant conditionals that are certified by logical tools *in combination with some additional information*. These conditionals are not evaluated by suppositional development, and their consequents are also not presupposed, yet the conditionals are nonetheless assertable. Consider the following dialogue:

Hylas: If I don't know that there is something curious that I don't know, then there is something curious I don't know.

Philonous: Why do you think that?

Hylas: Here's why. The proposition *that there is something curious that I don't know* is itself something curious. So if I don't know that there is something curious I don't know, the proposition that there is something curious that I don't know is itself curious and something I don't know.

The point isn't that we are completely confident that Hylas is right about which propositions are curious. (And obviously all sorts of other adjectives could be substituted in here. For example, if it is written in Hylas' little gold book that there is something written in Hylas' little gold book that Hylas doesn't know' then the predicate 'written in Hylas' little gold book' would do the trick.) The point is that in this conversational context a conditional of the form 'If I don't know p, p' does not feel so abominable. And it is not plausible to think that the consequent of that conditional is presupposed—it certainly wasn't clear to Philonous from the outset.

¹¹In order for a Moorean conjunction to be certified on logical grounds, both conjuncts would need to be logical truths. But if the first conjunct is a logical truth then it cannot be a logical truth that someone doesn't know it.

We mentioned in passing that one secondary way of approving a conditional is to receive it by testimony. There are certainly conditionals that seem odd when evaluated using the supposional method but seem rather less problematic to take on board when received by testimony. For example, the conditional

If my mind is completely scrambled, it is because of a toxin in the water.

is hard to process using the suppositional method. After all, if one supposed one's own mind completely scrambled, then it is hard to know how to proceed. Nevertheless, such conditionals are much less puzzling when received testimonially from an expert. If a doctor tells you "If your mind is completely scrambled, it is because of a toxin in the water." you can nod along.

It is perhaps instructive to think about cases where one receives a conditional of Dorst's abominable form from testimony. Let's think about contexts in which one reports what one has learned. For example:

Hylas: What did you learn from the doctor today?

Philonous: Here is what I learned: Even if I don't know it, I am about to die.

Here there is an obvious point to citing the conditional rather than consequent as what one learned. After all, that is what one learned immediately from the doctor, and there is some point to saying what one learned directly rather than by inference.¹²

A second kind of conversational point to conditionals of the relevant form is in exhibiting one's own reasoning process. Consider, the following

Hylas: Even if the smartest person in the room doesn't know it, that person will die soon.

Philonous: Alas! I'm the smartest person in the room. So, even if I don't know it, I will die soon. And clearly, if I do know it, I will die soon. So I'm doomed!

Again the conditional has a point—it helpfully displays a process of reasoning.

Because the suppositional procedure is commonly used, conditionals of abominable form will often feel abominable. But because there are secondary methods for evaluating conditionals (such as logic and testimony) special contexts can produce assertable conditionals of the supposedly abominable form. This is a problem for Dorst's view, according to which abominable conditionals are uniformly unknowable.

We can put additional pressure on the idea that abominable conditionals are unknowable by looking at sentences that are clearly assertable which *entail* abominable conditionals. Consider a naval officer making the following announcement:

¹²There are often Gricean reasons why a conditional of the form 'If I don't know *p*, then *p*.' would be infelicitous. After all, the factivity of knowledge straightforwardly guarantees that if you do know *p*, then *p*. Either way *p* comes out true, so the Gricean maxim of quantity (that one should try to be as informative as one can) would mandate asserting *p* outright rather than asserting a conditional with *p* as its consequent. Contexts in which one reports what one learned from some particular source avoid this issue, as they naturally exclude further inferences.

"Each person in the squadron is in the happy position that—even if they don't know it—they can take shore leave in Kyoto." Upon hearing this, it does not sound particularly untoward at all for a sailor to assert "Each of us is in the happy position that—even if they don't know it—they can take shore leave in Kyoto." But this conditional entails the conditional expressed by 'If I don't know it, I can take shore leave in Kyoto.' The natural view of things is that the quantified conditional is something that was learned from the officer. But if so, the conditional that is entailed is something that can be known too. This makes it hard to say that the infelicity of 'Even if I don't know it, I can take shore leave in Kyoto' stems from unknowabilty rather than pragmatic factors.

4. DILIGENT AGENTS AND THE CONDITIONAL KNOWLEDGE TEST

We have defended a view that allows conditionals of the form 'If I don't know *p*, then *p*.' to be known, and have offered our own explanation for why they are generally unassertable. Our take on those conditionals is consistent with the truth or the falsity of the KK principle.

KK: If you're in a position to know p, then you're in a position to know that you're in a position to know p.¹³

For his part, Dorst tries to embarrass the denier of KK by offering two related lines of thought to the effect that, without KK, abominable conditionals will be knowable. The first is this: In the absence of KK, Diligent Agents (agents that are certain about all and only that which they know) can know some conditionals of the form 'If I don't know p, p'. The second is this: Given a particular test for knowing conditionals, when p is known but not known to be known, conditionals of the form 'If I don't know p, p' are knowable.

These lines of thought do not trouble us, as we freely allow that conditionals of the relevant form are sometimes known. Unlike Dorst, we think we can account for the (general) unassertability of those conditionals even when knowable. But we also have particular misgivings about using Diligent agents or conditional knowledge tests as guides to assertability. It's demonstrably false that knowability by a Diligent agent and conditional knowledge in the sense defined by Dorst suffice for assertability. The case of Jack and Jill is instructive here:

Robert has two friends, Jack and Jill. Robert thinks he knows both that Jack is alive and that Jill is alive (and perhaps thinks he knows that he knows these things). Miles away, Jack has just died of a sudden and unexpected heart attack.

Assuming a broadly anti-sceptical bent, Robert knows Jill is alive. But Robert obviously doesn't know Jack is alive—he isn't alive, and knowledge is factive. Now consider the conditional

If only one of Jack and Jill is alive, it is Jill.

¹³A related formulation is that if one knows one is in a position to know that one knows; Goodman and Salow (2018) employs this variant.

That conditional is obviously infelicitous for Robert to assert. The suppositional Rule offers a pretty good explanation as to why—on the supposition that one of Jack or Jill is dead, Robert will be unsure as to who has died. But both lines of Dorst's reasoning support the assertability of that conditional.

4.1. Diligent Agents.

Dorst's first line of thought is this: If KK could fail, it could presumably fail for a Diligent agent. Then there will be some *p* such that the Diligent agent is certain that *p*, but not certain that they know *p*. Dorst then invokes an attractive principle:

Stability: If one is certain that *q* and not certain that $\neg p$, then one is certain that if *p*, *q*.

Given Stability, the agent will be certain that 'if $\neg Kp$, *p*'. And given that the agent is Diligent, the agent will know that conditional. Now let's think about a Diligent agent in Robert's situation.¹⁴ Robert isn't Diligent, so the Diligent agent must be a bit different than him. But there's some flexibility as to where the differences are. Knowledge and certainty do not generally go hand-in-hand. In most situations, there will be many things an agent knows but of which she is—and should be—uncertain. There are two salient paradigms for Diligent agents, one in which the agent is in a position to know very little so as to accord with a normal stock of certainties and one in which the agent's stock of certainties is enhanced so as to accord with a normal capacity for knowledge. We believe that Dorst must employ the latter sort, because the former cannot suit his purposes.¹⁵

So let's look at Diligent agents with enhanced certainties. Such an agent would have to be very strange. The agent knows that Jill is alive but does not know that Jack is alive. Thus the Diligent agent is certain that Jill is alive but not that Jack is alive. But how did that happen? The agent has no reason whatsoever to be more confident that Jill is alive than that Jack is. The difference in knowledge regarding Jack and Jill is explained by factivity, but the difference in confidence regarding Jack and Jill is inexplicable.

This Diligent agent is certain that Jill is alive and has non-zero credence that only one of Jack and Jill is alive. Assuming Stability, the agent will be certain that Jill is alive, have non-zero confidence that only one of Jack or Jill is alive and so, assuming Stability, will be certain of the conditional,

If only one of Jack and Jill is alive, it is Jill.

And given they are Diligent they will know that conditional. But the fact remains that such a conditional is terrible for us to assert.

The strangeness of Diligent agents should make us worry about using such agents in exploring the assertability of conditionals. Conditionals that are assertable for Diligent agents may not be assertable for us.

¹⁴The whole dialectical point of Diligent agents is to see how they fare in situations analogous to ones we face, so there's nothing tendentious about putting a Diligent agent in Robert's situation. ¹⁵Dorst talks about Diligent counterparts of ourselves. Agents who know very little will not be

suitable counterparts.

4.2. Dorst's Conditional Knowledge Test.

Dorst's second line of thought is this: Let's borrow the following conception of conditional knowledge, inspired by the literature on belief revision.¹⁶

You know *q* conditional on *p* iff: if we first contract your knowledge so that it leaves open *p*, and then add *p* to this contracted knowledge state, the resulting knowledge state implies q.¹⁷

Let's assume with Dorst that conditional knowledge of q given p suffices for knowing the conditional "if p, q". As Dorst notes, this means that whenever an antecedent p is already compatible with the set of propositions that one knows, one automatically has, for any q that one knows, conditional knowledge of q on p. Suppose now that one knows q but does not know that one knows it (and does not know anything that entails that one knows that one knows it). Then, the claim that one doesn't know q is compatible with the set of propositions that one knows, and so one knows q conditional on the proposition that one doesn't know q. Thus, in the absence of KK, the test will tell us that in cases of KK failure, one knows conditionals of the form 'If I don't know q,q'.

As announced above, the central point that we wish to make here is that, quite aside from KK, there are conditionals that pass the test introduced by Dorst but which are terrible to assert. Consider again the conditional

If only one of Jack and Jill is alive, it is Jill.

As we have remarked, it is clearly infelicitous for Robert to assert this in the context we have imaged. But Robert has conditional knowledge of the consequent on the antecedent in the sense defined. Robert knows Jill is alive. Jill doesn't know that Jack is alive (because he isn't) and so the situation is one in which Robert's knowledge entails the consequent and is compatible with the antecedent. Hence the conditional 'If only one of Jack or Jill is alive, it is Jill' passes Dorst's test.

There's a clear lesson here. It is no embarrassment for a view that it allows some unassertable conditionals to pass Dorst's test. The view that passing that test is a good guide to assertability is a non-starter.¹⁸

5. Concluding Remarks

The suppositional framework has far greater explanatory power with regard to the infelicity of asserting conditionals than the framework outlined by Dorst. Apart from special cases where secondary heuristics are in play, it explains why conditionals that fit Dorst's abominable schema are unassertable. But it also explains vast swathes of other infelicity data. Dorst gives prominent roles to Diligent agents and to a conditional knowledge test. But neither Diligent agents nor that

¹⁶See, for example, Levi (1977).

¹⁷We've made a cosmetic alteration, as Dorst uses p for the consequent and q for the antecedent while we prefer things the other way around. Please don't think we're being sloppy—we're minding our ps and qs.

¹⁸Should we conclude also that Dorst's test is not a sufficient conditional for knowledge of conditionals? As we are officially neutral on the material conditional analysis in this paper, this is an issue we will not get into.

test are a reliable guide to patterns of infelicity within the domain of indicative conditionals.

There is, of course, more work to be done. It would be more satisfying still to understand how those heuristics relate to the underlying semantics, to provide a more detailed account of when secondary heuristics take priority over the primary one, and to understand when the relevant heuristics get overridden. We hope the above discussion is a good start. And since KK played no role in our account, we are pessimistic about the prospects for using conditionals of the form 'If I don't know *p*, then *p*' as a basis for embracing KK.

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