

# Counteressential Conditionals\*

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## Abstract

Making sense of our reasoning in disputes about necessary truths requires admitting non-vacuous counterpossibles. One class of these is the counteressentials, which ask us to make contrary to fact (and therefore contrary to possibility) suppositions about essences. A popular strategy in accounting for non-vacuous counterpossibles is to extend the standard possible worlds semantics for subjunctive conditionals by the addition of impossible worlds. A conditional  $A \Box \rightarrow C$  is then taken to be true if all of the nearest  $A$  worlds (whether possible or impossible) are  $C$  worlds. I argue that this approach fails as applied to counteressentials due to the obscurity of the nearness relation and due to its failure to take seriously the relationship between counteressentials and grounding. I then propose an alternative covering law semantics for counteressentials which makes central use of the notion of grounding.

## 1 The Euthyphro Dispute

Suppose that God exists necessarily and essentially possesses a certain character which ensures that God eternally disapproves of torture. Suppose further that it is a necessary truth that God eternally disapproves of all and only those actions that are morally wrong. Within the framework of these suppositions, it is possible for the Euthyphro dispute to arise. One disputant (call her ‘Thea’) may hold that torture is wrong because God disapproves of it, while another disputant (call him ‘Deon’) may hold that God disapproves of torture because it is wrong.<sup>1</sup> The ‘because’ in these claims is hyperintensional: the disputants

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1. I use ‘disapproves of’ rather than ‘prohibits’ because Thea should not be understood as holding that God at some time issues a prohibition against torture and thereby brings it about that (beginning from that time) torture is wrong. Instead, it is God’s eternal attitude, following necessarily from God’s character, which Thea takes to ground the wrongness of torture.

agree that the two sentences joined by ‘because’ express necessary truths, but disagree on the relation between those necessary truths.

Thea’s ‘because’ claim commits her to the following conditional:

**Thea’s Conditional.** If God did not disapprove of torture, torture would not be wrong.

Deon’s ‘because’ claim commits him to a different conditional which is apparently inconsistent with Thea’s:

**Deon’s Conditional.** If God did not disapprove of torture, torture would still be wrong.

Thea and Deon agree that the antecedent which is shared by these two conditionals is necessarily false due to the divine essence. Yet it seems that each is committed to regarding the other’s conditional as false. Accordingly, making sense of the Euthyphro dispute requires us to reject the standard possible worlds semantics for subjunctive conditionals, since that semantics takes all conditionals with necessarily false antecedents to be true vacuously (see Lewis 1973, §1.6).

The Euthyphro dispute is merely one vivid example of a much more widespread phenomenon: reasoning about what is necessarily true frequently requires us to make impossible suppositions and these suppositions and the results we take them to have are frequently expressed as counterpossible conditionals (see Nolan 1997, §2; 2013, §2.2). The conditionals involved in the Euthyphro dispute are what I will call *counteressentials*: conditionals which ask us to consider contrary to fact, and therefore contrary to possibility, suppositions about essences. In this case, we are asked to make suppositions which the disputants take to be contrary to the divine essence. However, these sorts of conditionals are not found only in philosophy of religion. For instance, it is very plausible to suppose that chemical substances have their molecular composition essentially, but in order to determine what this molecular composition is it is important to consider how the experiments *would* come out on various assumptions about that composition. All but one of these suppositions will be necessarily false.

My aim in this paper will be to understand how these conditionals are to be evaluated and, in particular, how they are related to the hyperintensional ‘because’ claims that give rise to them. I will first consider attempts to modify the possible worlds semantics by the addition of impossible worlds and argue that these attempts fail. I will then develop an alternative covering law semantics for counteressentials. My approach will give central importance to the relationship between these conditionals and the hyperintensional ‘because’.

## 2 Against Impossible Worlds

The most obvious way of adapting the possible worlds semantics to accommodate counterpossibles is to introduce impossible worlds (Nolan 1997, §4; 2013,

363). Such an approach would retain the basic idea that a subjunctive conditional  $A \square \rightarrow C$  is true if and only if all the nearest A-worlds are C-worlds and simply allow that in some cases the nearest A-worlds may be impossible worlds.

The most pressing problem for such a semantics is to give an account of nearness. Nearness cannot simply be overall similarity, since, as Kit Fine pointed out, it is true that *if Nixon had pressed the button there would have been a nuclear holocaust*. Yet, on the assumption that there will not be a nuclear holocaust, the world at which the button malfunctions is more similar to the actual world than the one at which the button works, thus apparently rendering the conditional false (Fine 1975, 452).

Once impossible worlds are introduced, this objection becomes even more pressing. For any false proposition you like, there will be an impossible world at which that proposition is true and everything else is the same – including the truth of that proposition’s negation. Thus not only will we apparently get the result that *if Nixon had pressed the button, no nuclear holocaust would have occurred*; we will also get the result that *if Nixon had pressed the button, Nixon wouldn’t have pressed the button*.

David Lewis responded to Fine’s objection by developing a detailed account of nearness of worlds. Crucially, according to Lewis, “It is of the first importance to avoid big, widespread, diverse violations of [natural] law” (Lewis 1979, 472). Note, however, that Lewis here relies on the notion of *magnitude* of violation of the laws of nature. In some cases, the magnitude of a violation can actually be quantified as if, for instance, we consider *how much* faster than the speed of light a particle is supposed to move. In many other cases, though, we have to rely on our intuitions about how ‘big’ the violation is. As we get further from actuality, these intuitions get murkier and our judgments get quite fuzzy.

Attempts to adapt this approach to impossible worlds would, again, make things even worse, for many of the impossible scenarios we need to consider are simply beyond our powers of conception. Of course there are some cases in which we can easily say that one violation of necessary truth is bigger than another – as, for instance, the supposition  $2+2=8$  involves a bigger violation of necessary truth than the supposition  $2+2=5$ . But how should Thea compare the impossible world at which God does not disapprove of torture and torture is still wrong with the world at which God does not disapprove of torture and torture is not wrong? Here there is a collision between normative ethical claims and meta-ethical claims, both of which are taken to be necessary truths. As long as we are trafficking in impossibilities, perhaps we might even consider the impossible world at which God both disapproves and does not disapprove of torture and torture is both wrong and not wrong.

The worlds analysis misses the point of the Euthyphro dispute. Thea believes that torture is wrong *because* God disapproves of it, while Deon believes that God disapproves of torture *because* torture is wrong. It is our understanding of the hyperintensional relation which Thea alleges to exist between divine disapproval and wrongness that makes us judge that *if Thea’s theory were correct and God did not disapprove of torture, then torture would not be wrong*.

This kind of hyperintensionality is widespread in talk about essences. Thus,

to use Fine’s famous example, on the assumption of the existence of sets (including sets with concrete members), it is a necessary truth that Socrates exists if and only if {Socrates} does. Yet being a member of the set {Socrates} is not essential to Socrates, while containing Socrates as a member *is* essential to {Socrates} (Fine 1994). This kind of robust hyperintensionality is important to the proper understanding of counterpossibles, and especially counteressentials.

On Lewis’s theory of possible worlds, each world is a ‘Humean mosaic’ – a distribution of categorical properties through space and time (Lewis 1986, 70-86; 1994). Lewis believed that by allowing the extensions of our terms to range across all possible worlds, we could analyze apparently intensional concepts. So, to use Lewis’s example, the concepts *having kidneys* and *having a heart* are coextensive across the actual world. Their difference in meaning can be accounted for by considering the fact that, when allowed to range over possibilities, the terms *do* differ in extension (Lewis 1986, §1.5). Thus Lewis’s plurality of worlds *explains away* the phenomena of intensionality. Some proponents of impossible worlds have hoped to do the same for hyperintensional phenomena such as essence and ground (see, e.g., Nolan 2013, 366). This approach cannot, however, make sense of counteressential conditionals since, as the discussion of the Euthyphro dispute above shows, we employ hyperintensional concepts in evaluating counteressentials and, prior to these judgments and concepts, we are unable to judge the nearness of impossible worlds.

Note that the situation here is not analogous to the situation with Lewis’s theory of counterfactuals and worlds. Lewis acknowledges that we must use our concept of a law of nature to judge the nearness of worlds in order to evaluate counterfactuals, but Lewis has a purely extensional (this-worldly) reductive theory of laws of nature (Lewis 1973, 73-74; 1994). The proponents of impossible worlds semantics owe us a comparable theory of essence and of the hyperintensional ‘because’.<sup>2</sup> In the absence of such a theory, we should look elsewhere for an account of counteressentials.

### 3 A Covering Law Semantics For Counteressentials

The leading alternative to the worlds approach to evaluating subjunctive conditionals takes some relevant state of affairs smaller than an entire world and

2. Perhaps the closest thing on offer is Brogaard and Salerno 2013. However, on this view the hyperintensional ‘because’ could not be identified with any objective relation but would instead have to be connected to Brogaard and Salerno’s notion of relevant a priori implication. It is true that, given Thea’s conceptions of God and of wrongness, *God does not disapprove of torture* implies *torture is not wrong*. (It is unclear whether this implication counts as a priori in Brogaard and Salerno’s sense.) It is further true that, given Deon’s conceptions, this implication does not hold, and this is the reason why Thea endorses her conditional and Deon does not. But their dispute over the truth of the conditional is a dispute about objective relations between God and wrongness. On Brogaard and Salerno’s analysis, it appears that the dispute will turn out to be merely verbal (because of the employment of different concepts with different a priori implications) and this is not the right result.

modifies it to render the antecedent of the conditional true. The conditional is then taken to be true if the consequent becomes true as a ‘result’ or ‘outcome’ of the modification. These are sometimes called ‘covering law’ approaches because the consequent is usually said to be a result or outcome of the antecedent only if it follows according to some law. Approaches along this general line have been advocated by Tim Maudlin and Kit Fine (Maudlin 2007, ch. 1; Fine 2012b).

If this approach is to succeed, we must develop a procedure which will allow us, for each conditional, to identify the relevant state of affairs and determine what modification should be made. Further, we must define the relevant notion of ‘result’ or ‘outcome.’ I will show how to do this for counteressentials.

A counteressential asks us to make a contrary to fact (and therefore contrary to possibility) supposition about some particular essence. This essence is the state of affairs we should consider in evaluating the conditional.<sup>3</sup> We then consider every way of modifying that essence to make the antecedent true, and ask whether the consequent is an outcome of every such modification. Accordingly, Thea’s Conditional is to be understood as claiming that, in whatever way we modify (in thought) the divine essence to render it consistent with God’s failing to disapprove of torture, we will get the result that torture is not wrong.

It is important that at this stage we do *not* consider modifications of the essences of torture or wrongness. That it is God, and not (e.g.) wrongness, that is to be modified is indicated by God’s appearing in subject position. Additional essences may perhaps be modified in the course of determining the result, but this modification should not be part of our initial supposition.

Having identified the state of affairs and the modifications to that state of affairs to be considered, we must next determine what the result relation should be. It certainly cannot be a causal relation, for essences are not generally (efficient) causes. Instead, I suggest, the relation in question is a *grounding* relation.

Consider, by way of analogy, Maudlin’s account of subjunctive conditionals with physically possible antecedents. According to Maudlin, the laws of nature are Laws of Temporal Evolution (LoTEs) that tell us how to evolve a system forward or backward in time. For most counterfactuals, the relevant state of affairs is the state of the universe at a time.<sup>4</sup> One then uses the relevant LoTEs to evolve the system in the appropriate direction and see if the consequent comes out true.

Similarly, many metaphysicians hold that there are metaphysical laws of grounding which govern the manner in which less fundamental things arise from more fundamental things (see, e.g., Fine 2011, 75-76). These laws generate a hierarchy of fundamentality (44-45, 51). My suggestion is that we use these metaphysical laws for evaluating counteressentials analogously to Maudlin’s use of physical laws for evaluating counterfactuals. Thus we first modify the essence, then use the general facts about grounding to determine whether the modi-

3. If essences are not states of affairs, then in evaluating the Euthyphro conditionals we should consider the state of affairs *God’s essence being such and such*.

4. Various complications, which Maudlin addresses in detail, are introduced by the theory of relativity.

fiction of the essence requires the consequent to come out true. Since the grounding relation is hyperintensional, this will get the desired result that necessary equivalents *cannot* be substituted into the antecedent or consequent of a counterfactual conditional, and hence that conditionals with necessarily false antecedents and consequents may differ in their truth-values.<sup>5</sup>

On this view, the Euthyphro dispute comes out just the way it should, as a dispute about the grounds of wrongness. The hyperintensional ‘because’ which is at issue here expresses a grounding relation. Thea holds that wrongness is grounded in divine disapproval. Accordingly, on her view, the supposition that God’s essence is such that God does not disapprove of torture will have the consequence that torture is not wrong. Deon holds that wrongness is metaphysically prior to divine disapproval so that, on the supposition that God did not disapprove of torture, God would be in disagreement with the moral facts. The covering law approach succeeds where the worlds approach fails in providing a satisfactory account of counterfactuals.

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5. Fine 2012a argues at length that substitution of logical equivalents is invalid even for counterfactuals with possible antecedents.

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