

Submitted version¹

Book Review: The Open Future: Why Future Contingents are all False

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Patrick Todd's latest book, *The Open Future: Why Future Contingents are all False*, offers a response to the problem of the open future. Traditionally, the open future problem is the problem of how we should metaphysically understand, ground, and model the difference between a fixed past and an open future. In Todd's view, presentism and indeterminism are what explain the fundamental distinction between the past and the future. In his account, the future is open insofar as the objective present and the indeterministic laws of nature give rise to a multiplicity of futures that represent the multiple ways the future might unfold. Whereas Todd just assumes the truth of presentism and causal indeterminism, the book puts forward a set of compelling arguments for the claim that none of all nomologically possible futures is actual or metaphysically privileged: they are all metaphysically on a par.

The absence of a privileged future among the multitude of possible futures brings Todd to what is the main focus of the book, viz. the claim that future contingents are invariably all false. Future contingents, roughly, are claims about the future occurrence of events that are presently unsettled. The classical Aristotelian example is that of the sentence 'Tomorrow there *will* be a sea-battle', uttered at a moment when it is unsettled whether there will be one. In Todd's account, the future operator *will* behaves semantically like a universal quantifier that ranges over all the *available* futures. Moreover, the absence of a privileged future makes all the nomologically possible futures equally available. Consequently, in a situation where at least one available future features a sea battle and at least another one does not, the relevant future contingent sentence turns out to be false.

¹ The final version can be found in the journal *Ratio* here: [10.1111/rati.12359](https://doi.org/10.1111/rati.12359)

Chapter 1 introduces and justifies Todd's account of the open future. As said, in Todd's view, the openness of the future is grounded on the truth of presentism and indeterministic laws of nature. The resulting picture is one where there is a multiplicity of ways things might unfold, given the state of the objective present and indeterministic laws. This move gives rise to a standard objection in the literature. Many take the laws of nature to be perfectly symmetrical with respect to the past and the future. If that is the case, and if we think that indeterministic laws are partly responsible for the openness of the future, why should we not think that the past is open as well?

To counter this objection, and prevent the unwelcomed result that presentism and indeterminism imply the openness of the past, Todd resorts to the strategy of rejecting the principle that truth supervenes on (present) reality. In his view, the principle should be rejected, at least when it comes to truths about the past. The argument for this rejection of the principle is based on a possible scenario where, say, it is true that there was a sea battle two years ago, but then at some point everything goes out of existence. Present reality just does not feature any entity. It would then seem that it is still true, *when* nothing exists, that there was a sea battle two years ago. Yet, if the proposition was instead not true, (present) reality would *not* be different, as it would still be empty. Hence a violation of the principle that truth supervenes on (present) reality. Todd's proposed view is consequently one where truths about the past are simply brute, and collectively constitute a unique (closed) past.

Chapter 2 brings the focus to Todd's treatment of future contingents. Here, Todd offers a systematic taxonomy of some of the major views on future contingents. The taxonomy is extremely helpful in situating his view in the context of the current debate. The starting point—intended to be a neutral way to illustrate the debate—is to offer a semantic of *will* where the operator works as a universal quantifier ranging over all *available* futures. Then, he argues, it is a matter of metaphysical choice to decide which futures are available among the set of nomologically possible futures. According to the Ockhamist, there is only one available future, viz. the one selected by present future-directed facts. Consequently, future contingents take one of the two classical truth values. According to a competing view, dubbed by Todd as 'Supervaluationist Indeterminism', there is still *only one* future compatible with present future-directed facts, but it is *indeterminate* which one it is. Accordingly, future contingents have an indeterminate truth value. Finally, according to the

metaphysical view of the future that Todd favors, there are no present future-directed facts that go beyond what is causally determined. Consequently, the set of available futures *just is* the set of futures compatible with the present and the laws of nature. All those futures are metaphysically on a par, and no future-directed facts or Thin Red Line single out a unique future. The result, given the semantics of *will* and the absence of a privileged future, is that future contingents are all false.

Chapter 3 further develops Todd's theory of future contingents. Todd points out that his treatment of future contingents has the advantage of preserving classical and widely-accepted principles such as bivalence and the law of Excluded Middle. In fact, truth and falsity are the only truth values, and disjunctions of the form $p \vee \sim p$ are valid in his system. However, a problem might seem to emerge when we consider not the law of Excluded Middle, but Will Excluded Middle. Consider the disjunction of 'tomorrow there will be a sea battle' (Fnp) and 'tomorrow there will *not* be a sea battle' ($Fn\sim p$). Such disjunction ($Fnp \vee Fn\sim p$) is an instance of Will Excluded Middle, and false in Todd's system, since both disjuncts are false (assuming p is contingent). However, if we thought, as intuitively seems to be the case, that 'tomorrow there will *not* be a sea battle' ($Fn\sim p$) and 'it is not the case that tomorrow there will be a sea battle' ($\sim Fnp$) are semantically equivalent, then the account would run into a problem, since the instances of Will Excluded Middle can be false, but instances of Excluded Middle never are. To avoid this problem, Todd embraces the idea that the negation is *not* scopeless with respect to the future operator. That is, $Fn\sim p$ and $\sim Fnp$ are not semantically equivalent, as in Todd's view $\sim Fnp$ does not imply $Fn\sim p$. One argument provided by Todd for the idea that *will* is not scopeless with respect to negation is that *will* behaves like well-known neg-raising predicates. Whereas 'It is not the case that I think that God exists' *suggests* that 'I think that God does not exist', it does not imply it. Similarly for *will*, Todd argues.

Ordinary folks would resist this analysis that treats *will* as not being scopeless with respect to negation, and insist that they do not see any difference in *meaning* between 'it is not the case that in the future p ' and 'in the future, not p '. They would claim that we can logically move from the former to the latter. To them, Todd replies that this attitude is simply based on a hidden (and wrong, in his view) metaphysical assumption, viz. that there is a unique privileged or actual future. Once the metaphysical assumption is brought to the fore, and we get

convinced that there is no such thing as an unique actual future, the idea that *will* is scopeless with respect to negation dissolves.

Chapter 4 attempts to bring more plausibility to Todd's idea that *will* is not scopeless with respect to negation. To do so, he turns to the debate on counterfactuals and their interactions with negations. Take a case of a perfectly indeterministic coin which has *not* been tossed. It seems *false* to claim that 'if the coin had been flipped, it would have landed tails', and likewise it seems *false* that 'if the coin had been flipped, it would *not* have landed tails'. Some (notably Lewis and Williamson) consider the disjunction of those two claims (an instance of Conditional Excluded Middle) false, while they maintain bivalence and the classical principle of Excluded Middle. Moreover, they defend the idea that the negation of a counterfactual is not equivalent to what results from negating the consequent. Todd's main goal in this chapter is to show how the arguments against Conditional Excluded Middle and the scopelessness of negation with respect to counterfactuals can be employed, *mutatis mutandis*, to his treatment of *will*.

Chapters 5 and 7 deal with future contingents and the problem of God's omniscience (Chapter 7 is a reprint of Todd & Rabern 2021). Given the absence of future-directed facts that go beyond what is settled, and given that Todd assumes that God is outside time, some aspects of the future are epistemically open to God. In case the sea battle tomorrow is unsettled, God anticipates neither that there will be one, nor that there will not be one. Furthermore, Todd argues for the logical equivalence of 'it will be the case that p ' and 'God anticipates that p '. This equivalence brings support to one of Todd's central claims, viz. that $\sim Fnp$ does not imply $Fn\sim p$. In fact, in this framework of omniscience, the fact that it is not the case that God anticipates that p does not imply that God anticipates that $\sim p$. There might simply be no fact of the matter to know for God with respect to the future occurrence of p .

Chapters 6 and 8 cover two practical problems that afflict accounts where future contingents are always false, viz. the betting problem and the assertion problem. For it might seem that if asserting future contingents inevitably means asserting a falsehood, why should we even assert them, or why someone should owe us money if our (false) prediction turns out later to be the case? As for betting, Todd develops an ingenious reply where betting is not construed as involving judgments on the truth value of what was said, but it is just a practice that

establishes reciprocal obligations in various scenarios that might eventually happen. As for assertions, on the other hand, Todd resorts to the strategy of exploiting the fact that sometimes we can say something false to communicate what is true. Consider the ontological nihilist who has just seen atoms arranged tablewise in the next room. They might appropriately assert “there is a table in the next room” (false in their theory) but convey something true—there are atoms arranged tablewise in the next room. Similarly for someone who asserts “I will be there on Wednesday” and “it will rain tomorrow”, in situations where there are some small chances that I will not be there on Wednesday or that the (usually reliable) weather forecast is wrong. Those claims are false but their assertion is appropriate insofar as they communicate something true—viz. that if things go according to plan, I will be there on Wednesday, and that there is a weather *tendency* such that rain tomorrow is highly likely.

Todd’s book is a highly recommended read to all those working in metaphysics of time, tense logic, and debates about philosophy of religion. It is remarkable how the book offers a complete, original, and ingenious defense of the doctrine that future contingents are all false. It is also interesting to see how Todd’s view on future contingents evolved from the disjunctive Russellian view of future contingents in Todd (2016) to the present one in terms of available futures and future-directed facts. Although both accounts come to the conclusion that future contingents are all false, the latter is arguably more solid and elaborated.

Before concluding, I want to address a couple of worries that other readers might have while reading the book. The first one has to do with the general scope of the project. Todd fiercely insists (e.g., p. 38) that his view differs from Priorean Peirceanism (Prior 1967). However, the two views are extremely similar. After all, one might *define* Peirceanism as a view where *will* behaves like a universal quantifier and where consequently all future contingents are false. True, Todd adds that *will* should be construed as a quantifier over all *available* futures, whereas Prior does not put his Peirceanism in terms of available futures. Yet, one can respond that Prior implicitly assumes that his Priorean *will* ranges over all futures which are nomologically possible, something on which Todd’s account agrees. After all, in Todd’s view the available futures just are those futures compatible with the present and the laws. If this criticism is founded, it is not necessarily a shortcoming of the project, however. One could just see the book project as a novel, original, and thorough way to defend an old and venerable view.

The second worry has to do with what Todd writes with respect to Will Excluded Middle. As said, in Todd's view the principle is not valid, since instances involving future contingents turn out to be false. The classical objection is that this principle just strongly strikes us as intuitively valid. How can it be that 'tomorrow there will be a sea battle or tomorrow there will not be a sea battle' is false (assuming that time does not end in the interim)? Todd responds (p. 75) that what allegedly supports the intuition of the validity of Will Excluded Middle is some thought that inclines us to think that *it will be one way or the other*. Nonetheless, he insists that when there are available futures that feature p and others that do not, and all futures are on a par, despite appearances to the contrary, the corresponding instance of Will Excluded Middle is false because the two disjuncts are false. Todd observes that we should take the intuition that it will be one way or the other to support not Will Excluded Middle, $Fnp \vee Fn\sim p$, but rather $Fn(p \vee \sim p)$, which Todd's system can easily accommodate. However, one might respond that even if we grant Todd that all available futures are on a par, and thus there is *currently* no such thing as the actual future, we *will* nonetheless end up in one of those futures. That is, among them, one of them *will become* actual. So, *currently*, either we *will* have an actual future with p , or one without p . This might be what grounds the intuition behind our tendency to take Will Excluded Middle as valid. If so, our reasons to accept Will Excluded Middle stay, even if all futures are on a par.

Overall, *The Open Future: Why Future Contingents are all False*, does a remarkable job in bringing together arguments from metaphysics, logic, linguistics, and philosophy of religion. The resulting picture is sharp and cohesive. This, once again, confirms Todd's notable contribution to the debate on future contingents.

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