

# Serious Actualism and Nonexistence\*<sup>†</sup>

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## Abstract

Serious Actualism is the view that it is metaphysically impossible for an entity to have a property, or stand in a relation, and not exist. Fine [1985] and Pollock [1985] influentially argue that this view is false. In short, there are properties like *the property of nonexistence*, and it is metaphysically possible that some entity both exemplifies such a property and does not exist. I argue that such arguments are indeed successful against the standard formulation of Serious Actualism. However, I also argue that we should distinguish a weaker formulation of Serious Actualism using the actualist distinction between truth in, and truth at, a possible world. This weaker formulation is then shown to be consistent with the existence and possible exemplification of properties like the property of nonexistence. I end with a novel argument for the truth of the weaker formulation.

Serious Actualism is the thesis that it is impossible for an entity to have a property, or stand in a relation, and not exist. In other words, all properties are existence entailing. In the language of first-order modal logic with identity, Serious Actualism is typically formalised with the following scheme.

$$(SA) \quad \Box \forall x_1 \dots \forall x_n \Box (\Phi(x_1, \dots, x_n) \rightarrow \exists y_1 \dots \exists y_n (y_1 = x_1 \wedge \dots \wedge y_n = x_n))$$

(To be read: It is necessary that, for any things, necessarily, they exemplify  $\Phi$ , where  $\Phi$  is any  $n$ -adic property, only if each is identical to something.)

On this understanding of Serious Actualism, to be a Serious Actualist is just to think that each and every instance of (SA) is true. Here, the necessity is metaphysical, the quantifiers and schematic terms are interpreted absolutely generally and the existential quantified

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expression is taken to represent the existence of  $x$ —here, to exist is to be identical to something.<sup>1</sup>

Although most notably rejected by Fine [1977, 1985], Pollock [1985], and Salmon [1987], Serious Actualism has wide support: Stalnaker [2012], Stephanou [2007], Plantinga [1983, 1985] and Jacinto [2019] all defend some claim approximating (SA). Some even take this claim to be *obviously* true. For instance, Timothy Williamson asks, somewhat perplexed:

How could a thing be propertied were there no such thing to be propertied?

How could one thing be related to another were there no such things related?

[Williamson, 2013: 148–149]

Whilst, Boris Kment goes as far as to claim that ‘[t]o justify [Serious Actualism], I can do no better than to say that the principle seems to me to be obviously true’ [Kment, 2014: 79].<sup>2</sup> The thesis plays an essential part in several prominent arguments in modal metaphysics. Plantinga [1983] assumes it in his influential argument against Existentialism—the view that some propositions and properties ontologically depend on individuals. Williamson [2002] assumes it in his argument for the necessary existence of himself and others. Outside of modal metaphysics, we even find it assumed in an argument from Trenton Merrick [2015: 11–13] for the very existence of propositions.

In this paper, I aim to do two things. First, in §1, I argue that (SA) is false. I argue we have good reason to think there is a property of nonexistence and that such a property is possibly exemplified—this is what I will call the *problem of nonexistence*. Second, I argue that whilst we should accept that (SA) is false, an alternative, weaker formulation of Serious Actualism is true. This reformulation is outlined in §3 using the distinction between truth *in*, and truth *at*, a world. Loosely speaking, I will argue that we should take Serious Actualism to hold *in* all worlds, but not *at* all worlds. This idea of distinguishing two formulations of Serious Actualism using the distinction between truth *in*, and truth *at*, a world has been discussed once before in the work of Iris Einheuser [2012]. However, no one has yet to argue at length for the theoretical benefit of the weaker formulation over the standard formulation and how the former interacts with old problems like the problem of nonexistence. I aim to reverse the fact that this approach to Serious Actualism is unjustifiably under discussed, arguing in §4 that the weaker formulation avoids the problems besetting (SA) and goes far in clarifying what is at stake in the dispute over the thesis. Finally, in §5, I propose a novel argument for the truth of the weaker formulation.

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<sup>1</sup>Meinongians who claim that there *are* objects which do not exist obviously challenge this [Berto, 2013]. Of course, it’s very natural for Meinongians to reject (SA), see Parsons [1980]. However, here, I argue against (SA) from a simpler and less controversial meta-ontological position.

<sup>2</sup>Kment endorses (SA) with his principle *Instantiation Requires Existence* (IRE)

## 1 The Problem of Nonexistence

Here's the problem, loosely. First, there is a property of nonexistence—a property exemplified by some thing if and only if it does not exist. Second, such a property is possibly exemplified. If such a property is possibly exemplified, then possibly some object exemplifies some property and does not exist. Thus (SA) is false. The problem posed by nonexistence has been suggested before, see [Fine, 1985] and [Pollock, 1985]. I discuss this problem here because the issues it raises are particularly simple and stubborn. Moreover, I want to use the property of nonexistence as an example to bring to light a general worry facing those who endorse (SA). This is that, on the one hand, we ought to prefer simple, elegant and explanatorily powerful principles governing properties over not so simple, elegant and powerful principles. However, on the other hand, in endorsing (SA), we must complicate the principles which govern properties, rejecting claims which we should otherwise find compelling. I will later show that these competing theoretical pressures do not arise for the weaker formulation of Serious Actualism defended here.

Now, to state the problem of nonexistence more precisely, we need a perspicuous way of talking about properties in order to outline the principles which motivate it. For our purposes here, this can be done with an abstraction operation. Suppose that  $\ulcorner \phi(x) \urcorner$  is an open sentence of the language of first-order logic with identity but *without* constant symbols—call this language  $\mathcal{L}_{\text{FOL}}^-$ .<sup>3</sup> Our operation of abstraction takes us from  $\ulcorner \phi(x) \urcorner$  to a singular term  $\ulcorner \lambda x. \phi(x) \urcorner$  which is intuitively understood as  $\ulcorner$ the property of being an  $x$  such that  $\phi(x)$  $\urcorner$ . We write  $\ulcorner \lambda x. \phi(x)(a) \urcorner$  for  $\ulcorner a$  exemplifies the property of being an  $x$  such that  $\phi(x)$  $\urcorner$ . With this notation in mind, then, consider the following two principles:

(Ext) For any open-sentence  $\phi$  of  $\mathcal{L}_{\text{FOL}}^-$  with exactly  $x$  free, there is a one-place property term  $\ulcorner \lambda x. \phi(x) \urcorner$ .

(App)  $\forall y \Box (\phi(y) \leftrightarrow \lambda x. \phi(x)(y))$

Both of these principles are compelling and, in a moment, I'll motivate both; but first it's worth seeing more precisely how these generate the problem of nonexistence. First, we observe that from (Ext) it follows that there is a property of nonexistence, namely the property of not being identical to something, or  $\lambda x. \neg \exists y (y = x)$ . Then, from the assumption that some thing  $a$  possibly does not exist, we argue as follows.<sup>4</sup>

<sup>3</sup>Here I am concerned with only an *interpreted* formal language, e.g., predicates stand for natural language predicate expressions and so on.

<sup>4</sup>Of course if contingentism—the view that at least something might not have existed—is false, then (SA) is trivially true. Consequently, I am here only concerned with exploring the truth of (SA), assuming contingentism.

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|---|-----------------|
| (1) There is: $\lambda x. \neg \exists y(y = x)$  | (Ext)           |
| (2) $\diamond \neg \exists y(y = a)$  | (Contingentism) |
| (3) $\Box(\neg \exists y(y = a) \leftrightarrow \lambda x. \neg \exists y(y = x)(a))$       | (App)           |
| (4) $\diamond(\neg \exists y(y = a) \wedge \lambda x. \neg \exists y(y = x)(a))$            | (2), (3), QML   |
| (5) $\neg \forall x \Box(\lambda x. \neg \exists y(y = x)(x) \rightarrow \exists y(y = x))$ | (4), QML        |

(1)–(5) is valid in the weak logic K and (5) is the negation of one instance of the scheme (SA), taking  $\Phi := \lambda x. \neg \exists y(y = x)$ .

(Ext) is minimal in three ways. First, (Ext) is largely neutral on what properties ultimately are. The idea is simply that the open-sentences of a fragment of some otherwise respectable language correspond to properties—whatever it is that properties turn out to be. Second, (Ext) only states a *lower bound* on how many properties there are. After all, (Ext) is defined on  $\mathcal{L}_{\text{FOL}}^-$  and thus it alone doesn't guarantee the existence of *bona fide* properties like the property of being identical to something in particular, e.g.  $\lambda x. x = a$  or the property of necessarily existing, e.g.  $\lambda x. \Box \exists y(y = x)$ . Thirdly, the lack of constants in  $\mathcal{L}_{\text{FOL}}^-$  and the restriction that  $\phi(x)$  feature *only* one free variable means that (Ext) is consistent with higher-order contingentism—the view that properties which are defined in terms of individuals, e.g. the property of being *a* in particular, ontologically depend on those very individuals (see [Fritz and Goodman, 2016], [Fritz, 2018b; Fritz, 2018a] for recent, extensive discussion of this view). (Ext) does not entail the necessary existence of properties involving specific individuals. This is crucial: later I make use of the distinction between truth in, and truth at, a world, and this requires that certain *propositions* contingently exist. It is problematic to maintain that some propositions, but no properties, contingently exist—propositions can be formally understood as zero-adic properties [Williamson, 2013: 289]

As I indicated earlier, I will not defend contingentism here; but it's worth asking how compelling (Ext) and (App) are. Here's a simple way of motivating (Ext): we can think of properties as, fundamentally, the ways in which things can be alike or differ. To be clear, this is not the claim that properties are the ways in which things are alike or differ *perceptually*, or *qualitatively* or in some *natural*, joint-carving way. Simply put: any way in which things can be alike or differ is a property. Now, one way in which objects can be alike or differ concerns whether they satisfy open-sentences of some formal language, i.e. we can truthfully distinguish objects by the open-sentences they satisfy and insofar as some objects can be alike or differ in the open-sentences they satisfy, there are properties corresponding to those similarities and differences. Thus, for every open-sentence of  $\mathcal{L}_{\text{FOL}}^-$ , there is a corresponding property. Thus, (Ext). (App), on the other hand, follows straightforwardly from

this connection between open-sentences and the corresponding properties. The thought is twofold. First, it follows from what it is to be the property  $\lambda x.\phi(x)$  that if any object satisfies the open-sentence  $\phi$  then that object exemplifies the property  $\lambda x.\phi(x)$ . Second, given again what it is to be  $\lambda x.\phi(x)$ , it is deeply implausible that some thing could have exemplified  $\lambda x.\phi(x)$  and yet failed to satisfy the open sentence  $\phi(x)$  or, indeed, *vice versa*.

The problem of nonexistence is simple. If it is the case that there is just one thing which might not have existed, then, given (Ext) and (App), there is some thing  $x$  and it is possible that  $x$  exemplifies some property—the property of nonexistence—and yet does not exist. How might those Serious Actualists who want to endorse (SA) justify rejecting (Ext) or (App)? There are two natural strategies. One is to argue that the property of non-existence is defective and here's a tempting way of motivating this. First, consider the following influential passage from Russell where he discusses *existence*:

There is no sort of point in a predicate which could not conceivably be false. I mean, it is perfectly clear that, if there were such a thing as this existence of individuals that we talk of, it would be absolutely impossible for it not to apply, and that is the characteristic of a mistake. [Russell, 1994: 108]

The motivating thought here seems to be that properties or predicates which are, in a sense, *total* are problematic. Indeed, earlier I said that, very generally speaking, properties are the ways in which things can be alike or differ. Moreover, it is plausible that *everything* exists: nothing is alike or different to something else in that it does not exist, whereas the other thing does. So it is tempting to say that a property like nonexistence which *fails* to apply in all cases is one which does not stand as a way in which things can be alike or differ and thus there just is no property  $\lambda x.\neg\exists y(y = x)$ .

This objection has some initial force; but I think ultimately we should resist it. The first thing to note is that the thought that properties are ways in which things are alike or differ is *disjunctive*: there is no requirement that properties must be ways in which things are alike *and* differ. Thus there is no requirement that properties must divide the domain of all things into two non-empty subdomains. Second, *even if* this Russellian worry is right, we should note that the property of nonexistence is not a property which cannot apply: there actually are objects which we *can* distinguish in terms of nonexistence, i.e. we can draw modal distinctions since some objects do not exist in certain possible worlds whereas others do.

The second strategy to retain (SA) is to deny that the property of nonexistence is possibly exemplified. The most prominent argument for this claim is given by Plantinga [1987: 197–198]. Here, Plantinga argues that, since necessarily everything exists, then necessarily ev-

everything which exemplifies a property exists. Therefore, it is impossible that the property of nonexistence be exemplified. The two crucial premises are the following.

(6) Necessarily, for any property  $P$ , if  $P$  is exemplified, then there is something that exemplifies it.

(7) Necessarily, for any property  $P$ , whatever exemplifies  $P$  exists.

Plantinga claims that (6) is ‘obvious’ [Ibid.: 197] and that (7) is an ‘immediate consequence of actualism’—the view that necessarily, everything exists. (A similar argument in which Plantinga deduces ‘Serious Actualism from Actualism’ is found in [Plantinga, 1985: 319].)

Plantinga’s argument here is problematic. The problem is that (7) is perfectly consistent with what I have so far argued. (7) amounts only to the claim that—framing matters in terms of possible worlds—everything which exists in a world and exemplifies some property exists in that world. Crucially, I argued that (SA) fails to be true because there is something in the actual world which fails to exist in some other world and *at that non-actual world* it exemplifies a property. This difference in the scope of the modal operator makes a crucial difference: to argue against (SA), one does not have to absurdly claim that it is possible that there *exists something* which *doesn’t exist* (see [Pollock, 1985: 127]). One only has to claim that there exists some  $x$  which *possibly doesn’t exist* and then, given (App) and (Ext), it follows that  $x$  possibly exemplifies a property and yet does not exist.

Perhaps we might be able to give some less problematic reasons for thinking that the property of nonexistence either failed to exist or failed to be possibly exemplified. Regardless, I think an underlying and stubborn worry would remain for those endorsing (SA). Clearly, in order to retain (SA) one must reject (Ext) or (App). This will involve proposing alternative principles governing properties which rule out either (Ext) or (App). However, it is far from clear that we have more reason to accept such alternative principles than we do to accept both (Ext) or (App). Consider, for instance, how (App) and (Ext) would fare compared to alternative principles—whatever they turn out to be—on the basis of those theoretical virtues of scientific theory selection like simplicity, elegance, and explanatory power. We have already seen how (Ext) is a logically weak claim, setting merely a lower bound on what properties there are, and is motivated by a general and elegant conception of properties as, fundamentally, the ways things are alike or differ. Likewise, (App) is compelling, simple and elegant—it includes no qualification about the conditions under which a property is exemplified, e.g. there are no existential presuppositions built into the use of property abstracts. Given what it is to be the property  $\lambda x.\phi(x)$  and how this relates to  $\phi(x)$ , it is eminently plausible that an object exemplifies  $\lambda x.\phi(x)$  just in case it satisfies  $\phi(x)$ . As

Fine writes:

This use of property abstracts, in which ‘ $x$  has  $\lambda xA(x)$ ’ says no more than  $A(x)$ , is not only perfectly intelligible: it also appears to be the most appropriate way of understanding abstracts... the application conditions for the complex property  $\lambda x.A(x)$  ... are most naturally provided by the statement  $A(a)$ . [Fine, 1985: 165]

Of course, one might argue that (App) is false *because* (Ext) and (SA) are true. However, this is a *non sequitur*. Both those who endorse (SA) and those who reject it can argue for, or against, (App) by accepting (Ext). The question should be instead: which package of views allows for the best systematic account of properties consistent with minimal principles and which maximises simplicity and elegance.<sup>5</sup>

This is, then, the outline of the problem of nonexistence. What I have tried to draw out from this discussion here is that there are competing theoretical pressures on Serious Actualists. On the one hand, they ought to endorse principles like (Ext) and (App). On the other hand, insofar as they find Serious Actualism as formulated using (SA) compelling, they cannot accept both (Ext) and (App). This I take to be the essence of the problem of nonexistence. Of course, more can and should be said about how those who endorse (SA) can respond to this problem, as well as the problem itself. However, I have been brief because I now want to argue that the Serious Actualist should take a different approach. In particular, I argue that we can, and should, endorse a neglected formulation of Serious Actualism which avoids the worries which arise from endorsing (SA).

## 2 Truth in a world vs. truth at a world

Reformulating Serious Actualism will involve appealing to the distinction between truth in, and truth at, a possible world and showing how this affords us two different conceptions of the role of possible worlds in our accounts of modality. Thus I first outline the distinction, starting with a preliminary discussion of the role of worlds, propositions and truth in modal metaphysics. For the most part, I will not defend the distinction, or the metaphysical presuppositions about propositions and worlds required to draw it. That is an argument for

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<sup>5</sup>As an anonymous reviewer noted, the Serious Actualist may reject the deflationary reading of lambda abstracts encoded in (App). However, adjustments to (Ext) and (App), though perhaps plausible for the Serious Actualist, are implausible from a wider theoretical perspective which aims to maximise simplicity and elegance in our theorising about properties. Williamson [2013] has defended this methodology generally—the idea that in metaphysics we should consider features like simplicity, elegance and explanatory power, as in the natural sciences. Here, I don’t rely on Williamson’s methodology *per se*; but simply recognise that we should, on the whole, endorse simple, elegant and explanatorily powerful principles. Bruno Jacinto argues in *support* of Serious Actualism on the basis of this kind of theoretical consideration [Jacinto, 2019]. However Jacinto is a necessitist and I have bracketed off such defences of (SA).

another paper. Here, I simply outline it and then argue how we can use it to better make sense of Serious Actualism.

Possible worlds here are understood as some sort of abstract entity. Which sort of entity one chooses is not of huge importance, e.g. sets of propositions, or sentences, individual propositions, some sort of state of affairs or so on. What *is* important, however, is that the following two claims are true.

(P) It is possible that  $\phi$  if and only if  $[\phi]$  is true relative to *some* world.

(N) It is necessary that  $\phi$  if and only if  $[\phi]$  is true relative to *all* worlds.

In what follows, ' $[\phi]$ ' denotes the propositions actually expressed by the sentence  $\phi$ . To be clear, I won't assume that (P) and (N) have any particular metaphilosophical role, e.g. I won't assume that the left-hand side grounds the right-hand side or that one explicates the meaning of the other—I just assume that there are *some* entities which will play the role of worlds and satisfy (P) and (N).

Both (P) and (N) make reference to the notion of world-relative truth. One natural way of understanding this represents one half of the distinction which I will use to pull apart two formulations of Serious Actualism. Let's say that a proposition  $[\phi]$  is true *in* a world  $w$  just in case  $[\phi]$  would be true *simpliciter*, were  $w$  actual or actualised. Thus, on this understanding of (P) and (N), a proposition is possible or necessary just in case it would be true *simpliciter* were some, or all worlds, actual, respectively, see [Plantinga, 1985: 342]. On this view, we accept that how we characterise a possible world and how we *would* characterise a possible world are one and the same. Each possible world is characterised intrinsically, as it were, using all and only the resources that are available in the possible world in question. Thus, clearly, the viability of this view rests on a crucial assumption about possible worlds and the resources we use to characterise possible worlds. Namely that, for any world  $w$ , the resources with which we should want to characterise  $w$  with exist relative to  $w$ .

This assumption interacts problematically with a compelling claim about propositions—the claim that some propositions only contingently exist. Typically, this view about propositions is motivated by isolating a particular class of propositions, the so-called singular propositions which are *directly* about certain objects (see [Glick, 2017] and [Fitch and Nelson, 2018] for discussion of singular propositions). Such propositions are taken to ontologically depend upon the objects they are about, i.e. some proposition  $p$  ontologically depends on object  $o$  insofar as necessarily, if  $p$  exists, then  $o$  exists. If we plausibly assume that some singular propositions are about individuals which are contingent then this entails that the propositions themselves are contingent. However, talk of singular propositions is unneces-

sary here. The important claim is the following, where  $[\phi^{t_1, \dots, t_n}]$  is a proposition expressed by a sentence featuring  $t_1, \dots, t_n$  as terms.

$$(OD) \quad \Box(\exists x(x = [\phi^{t_1, \dots, t_n}]) \leftrightarrow \exists y_1, \dots, \exists y_n(y_1 = t_1 \wedge \dots \wedge y_n = t_n))$$

Again, I will not defend (OD) here.<sup>6</sup> What is important to note is that (OD) and ordinary contingentism jointly entail that we can no longer accept that characterising possible worlds intrinsically, in terms of the propositions available in the worlds themselves, is viable. There are propositions which do not exist in a world but which we should like to say are true relative to the world. For instance, the proposition  $[\neg \exists y(y = x)]$  should be true relative to a world in which  $x$  does not exist. However, by (OD), it would not exist, were such a world actual. Consequently, it could not be true *simpliciter* were such a world actual, i.e. true *in* such a world. Thus there must be some other notion of world-relative truth.

This is where truth *at* a world enters the picture (see [Adams, 1981] and [Fine, 1985] for the classic discussions of truth at a world, as well as [Menzel, 1993], [Turner, 2005], and [Mitchell-Yellin and Nelson, 2016]). Rather than thinking that we characterise possible worlds in terms of the propositional resources that are available in the world in question, we instead characterise possible worlds in terms of all and only the *actual* propositional resources. As it is often metaphorically put, we consider possible worlds only from the *perspective of the actual world* [Fine, 1985: 194]. For instance, Robert Adams writes:

A [possible world] that includes no singular proposition about me constitutes... a possible world in which I would not exist. It represents my possible nonexistence, not by including the proposition that I do not exist but by simply by omitting me. [Adams, 1981: 22]

The crucial idea: disregard the fact that certain propositions *would not* exist, *were* those worlds actual and instead focus on how we *actually* characterise such ways the world could have been. Truth at a world is a weaker notion than truth in a world—the former requires less of the possible world. A proposition is true *at* a world if it characterises that world correctly whereas a proposition is true *in* a world if it characterises that world correctly precisely because it would be true *simpliciter*, were that world actual.<sup>7</sup>

<sup>6</sup>See [Stalnaker, 2012: 22], [Adams, 1981: 3–6], [Fine, 1985: 155–160], [Speaks, 2012: 529–530] for defences of (OD). Note that (OD) is not tied to a particular conception of propositions. (OD) holds if propositions are structured entities and singular propositions contain *the very objects* they are about, e.g. [Fine, 1980; Fine, 1985] and [King, 2007]. However, this is not necessary: Stalnaker [2010; 2012] accepts (OD) and holds a coarse-grained view of propositions.

<sup>7</sup>Note many draw the distinction by appealing to (SA), see [Adams, 1981: 18], [Turner, 2005: 203], [Speaks, 2012] and [Stalnaker, 2012: 46]. However, this is unnecessary: the two notions come apart because of the weaker claim that a proposition's truth requires its existence. I argue later (§5) that the truth of a proposition implies its existence simply because of facts about truth, meaning, and propositions.

All that remains is to tighten up some notation and then see how this distinction can be applied to the debate over Serious Actualism. For the rest of the paper, I write  $\lceil w \models_a [\phi] \rceil$  for the claim that  $[\phi]$  is true *at*  $w$  and  $\lceil w \models_i [\phi] \rceil$  for the claim that  $[\phi]$  is true *in*  $w$ . This latter notion admits of a simple definition.

$$(T_{in}) w \models_i [\phi] \text{ if and only if } \Box(Aw \rightarrow T[\phi])$$

Here ‘ $A$ ’ is an actuality predicate. Of course, depending on how one thinks about worlds, this predicate will be interpreted differently. Since I aim to remain as neutral as possible on what worlds are, actuality will be taken as a primitive. As I have stressed, given (OD), then we cannot take truth *in* a world to play a role in our account of *metaphysical* modality. However, this is not to say that the notion alone isn’t in perfect working order and it will be useful to define a notion of modality distinct from metaphysical modality in terms of truth in a world. We can call this *strong modality* and for the rest of the paper, I will say that  $\lceil \Box_s \phi \rceil$  is an abbreviation for  $\lceil \forall w(w \models_i [\phi]) \rceil$  and  $\lceil \Diamond_s \phi \rceil$  is an abbreviation for  $\lceil \exists w(w \models_i [\phi]) \rceil$ .

In contrast, we cannot so easily define truth at a world like truth in a world. Moreover, it is beyond the scope of this paper to outline a comprehensive definition of the notion. Thus, here, I will treat the notion as simply a primitive one and from here on assume that it is the operative notion of world-relative truth in (P) and (N). This means that I will assume:

$$(PT_{at}) \Diamond \phi \text{ if and only if } \exists w(w \models_a [\phi])$$

$$(NT_{at}) \Box \phi \text{ if and only if } \forall w(w \models_a [\phi])$$

In other words, it is possible that  $\phi$  if and only if the proposition that- $\phi$  is true *at* some world and it is necessary that  $\phi$  if and only if the proposition that- $\phi$  is true *at* all worlds.

### 3 Formulating Serious Actualism

The in/at distinction affords us two ways of looking at how we assess propositions relative to worlds. These two ways of assessing propositions afford us two distinct conceptions of modality, once we accept (OD). Since Serious Actualism is a modal claim, we therefore have *prima facie* grounds for thinking that we can distinguish two version of Serious Actualism.

Here’s intuitively what the two versions involve. First we have the idea that an object cannot have any properties relative to a world that it would not have, if that world were actual. This corresponds to thinking about Serious Actualism using the first way of understanding world-relative truth: to say  $x$  would not exemplify some property, were  $w$  actual is just to say that  $x$  does not exemplify some property *in* a world. Second, we have the view

that, *even when* we insist on examining possible worlds from the perspective of the actual world, characterising those worlds using all and only the resources of the actual world, we ought not ascribe properties to objects at worlds where they do not exist. This corresponds to thinking about Serious Actualism using the second way of understanding world-relative truth: to say that we cannot characterise  $w$  from the perspective of the actual world by saying that  $x$  exemplifies some property there is just to say that it is not true *at*  $w$  that  $x$  exemplifies some property.

We can bring out this difference concretely with an example. According to the first idea, Smith does not exemplify the property of nonexistence *in* a world where he does not exist because, were that world actual, Smith would not exist for it to be true that he exemplifies the property. According to the second way of viewing things, Smith does not exemplify the property of nonexistence *at* a world where he does not exist because to say that Smith exemplifies the property of nonexistence does not capture something correct, in the weaker sense, about that world. In other words, even when we ignore the constraints which result from thinking about what we *would* be able to say, were that world actual, we still cannot say that Smith exemplifies the property of nonexistence. It's clear to see that we have two different ways of connecting existence and exemplification relative to worlds here: on the first, he *would* not exist in order to have properties, and on the second, he does not have properties relative to worlds where he does not exist because his exemplifying the properties does not get something right about the world, characterised from an external perspective.

As I noted earlier, this point has been made once before by Iris Einheuser [2012] and, needless to say, I am largely in agreement with Einheuser—her insight that we can formulate two Serious Actualisms off the back of the distinction between truth *in*, and *at*, a world is crucially important. However, I think more can and should be said, including amending some serious errors in Einheuser's presentation. So before I elaborate my own defence of the weaker formulation, it is worth pausing to discuss Einheuser's own account and defence of how we can use the distinction to pull apart two formulations of Serious Actualism. This will also help clarify some subtle issues which arise when trying to formulate the two versions of Serious Actualism.

Einheuser argues that there are the two distinct ideas which lay behind two distinct formulations of Serious Actualism [Einheuser, 2012: 11]:

- (I1) If an entity had not existed, it would not have been involved in any facts.
- (I2) If an entity does not exist in a possible world then it is not involved in any facts relative to that world.

In the present context we can think of Einheuser’s fact-talk in terms of propositions. (I will return to this point later.) The thought is that (I1) and (I2) motivate, respectively, one of the following formulations of Serious Actualism (Ibid. 13):

$$(SA1) \forall x \Box_s (\Phi(x) \rightarrow \exists y (y = x))$$

$$(SA2) \forall x \Box (\Phi(x) \rightarrow \exists y (y = x))$$

Here I have formulated Einheuser’s Serious Actualism using the notation that I have already introduced. Clearly, (SA2) is simply a restricted monadic version of the standard formulation of Serious Actualism, (SA). (SA1) is the claim that for any object, it is true *in any world* that if  $\Phi(x)$  then  $\exists y (y = x)$ . Now, according to Einheuser, we should accept (SA1) because

...from the point of view of a Socrates-free world, no facts involving Socrates obtain, that is, had a Socrates-free world been actualized, Socrates would not have been involved in any facts. (2012: 13)

However, if Serious Actualism is understood to be the claim (SA2)—if it is understood in terms of truth at a world, or given an ‘an ordinary counterfactual reading’ (Ibid. 13), as Einheuser phrases it—then it is too strong:

We can actually characterize a Socrates-free world by reference to Socrates and other objects that would not have existed had that world been actualized. (2012: 13)

Just as we can evaluate propositions at worlds in which they do not exist, we can say of other objects that they have certain properties, even though they would not exist, were that world actual. Only from the perspective of the actual world can we characterise worlds using entities which do not exist there; but we get something right about such worlds when we do so.

To begin in agreement: Einheuser is correct that (I2) supports (SA2), but not (SA1). In fact, we can show that (SA2) follows (I2) by appealing to only one very minimal principle which allow us to manipulate  $\models_a$ -expressions and the previously introduced principle (NT<sub>at</sub>). It’s most natural to interpret Einheuser’s ‘facts’ and her notion of ‘facts involving  $x$ ’ to be propositions and singular propositions about  $x$ —here understood to be propositions expressed by sentences featuring free variables or names. In turn, ‘facts relative to a world’ can be understood as the truth of a *proposition at* a world. Thus, to say that an object is involved in facts relative to a world is to say that there are singular propositions about that object true at that world. Thus (I2) becomes:

(I2\*) For any world  $w, x$ , and property  $\Phi$ :  $w \models_a [\Phi(x)] \rightarrow w \models_a [\exists y(y = x)]$

Second, to derive (SA2) from (I2\*) we need only the following principle for manipulating  $\models_a$ -expressions. Again, for any  $w, x$  and sentence  $\phi$ :

$$T_{at}^{(\rightarrow)} (w \models_a [\phi \rightarrow \psi]) \equiv (w \models_a [\phi] \rightarrow w \models_a [\psi])$$

(To be read: It is true at  $w$  that  $\phi \rightarrow \psi$  if and only if, if it is true at  $w$  that  $\phi$ , then it is true at  $w$  that  $\psi$ .)

$T_{at}^{(\rightarrow)}$  is eminently plausible. With  $PT_{at}$ ,  $NT_{at}$ , and  $T_{at}^{(\rightarrow)}$ , we argue as follows.

*Argument.* Suppose that  $w \models_a [\Phi(x)] \rightarrow w \models_a [\exists y(y = x)]$ , for arbitrary  $w, x$  and  $\Phi$ . From  $T_{at}^{(\rightarrow)}$ :  $w \models_a [\Phi(x) \rightarrow \exists y(y = x)]$ .  $w$  is arbitrary, so:  $\forall w(w \models_a [\Phi(x) \rightarrow \exists y(y = x)])$ . From  $(NT_{at})$  we get  $\Box(\Phi(x) \rightarrow \exists y(y = x))$ . Since, again,  $x$  here is arbitrary, we can generalise and then conclude that  $\forall x\Box(\Phi(x) \rightarrow \exists y(y = x))$ .

Thus, Einheuser is correct that (I2\*) entails (SA2). Indeed, if we consider the generalisation of (I2\*) to more than monadic properties, we can see that such a claim is the motivating idea behind (SA). We can also agree that, given the discussion in §1, this formulation of Serious Actualism is too strong. However, this is the point at which we should part ways with Einheuser: contrary to her claim, (I1) in fact entails that (SA1) is *false*. Given that  $\lceil \Box_s \phi \rceil$  is understood in terms of  $\models_i$ , (SA1) is true just in case, for any  $x, \Phi$ , and  $w$ :

$$(SA1^*) w \models_i [\Phi(x) \rightarrow \exists y(y = x)]$$

In turn, (SA1\*) is true just in case, if any world were actual, the proposition  $[\Phi(x) \rightarrow \exists y(y = x)]$  would be true. However, if we let  $x$  be some contingently existing individual  $c$  and  $w_{no-c}$  be a world which, were it actual,  $c$  would not exist, (SA1\*) is true only if the following is true.

$$(SA1^{**}) w_{no-c} \models_i [\Phi(c) \rightarrow \exists y(y = c)]$$

However, (SA1\*\*) is false *precisely because of the idea that (SA1) was intended to capture*: if an entity does not exist, were a world actual, it cannot have any properties, including the property of truth. The proposition  $[\Phi(c) \rightarrow \exists y(y = c)]$  is a proposition expressed by a sentence which features a singular term denoting  $c$  and so it only exists, if  $c$  exists. Therefore, if  $w_{no-c}$  were actual, the proposition  $[\Phi(c) \rightarrow \exists y(y = c)]$  would not be true *simpliciter*.

It shouldn't be too surprising that we can't express our desired formulation of Serious Actualism using  $\Box_s$  and  $\Diamond_s$ . The conception of modality captured by these operators diverges significantly from metaphysical modality (see [Adams, 1981: 26–32]). However, this shouldn't be too worrying. This simply means that, contrary to Einheuser's formulation, the

alternative, weaker formulation of Serious Actualism is to be expressed explicitly in terms of the relation of truth in a world, instead of directly using the conception of modality afforded to us by the notion of truth in a world. Thus the weaker formulation of Serious Actualism is formulated as follows.

(SA3) For any world  $w, x$  and  $\Phi$ :  $w \models_i [\Phi(x)] \rightarrow w \models_i [\exists y(y = x)]$

That is to say: for any object  $x$  and property  $\Phi$ , if it is true *in* a world that  $\Phi(x)$ , then it is true *in* a world that  $x$  exists.

(SA3) connects the existence of objects with their exemplifying properties. Of course, this connection holds when we think of both the existence of objects and the exemplification of properties exclusively *in* the worlds in question. Endorsing (SA3) alone allows us to commit to statements like the following.

There is no way the world could have been such that, were the world actually that way, there would be a nonexistent entity exemplifying properties. In short, the world just couldn't be any way which means that it is possible that actually some individual  $a$  doesn't exist and it is true that  $a$  exemplifies some property.<sup>8</sup>

However, (SA3) is not as restrictive as (SA), since truth in a world is itself a stronger notion. If we endorse (SA3), we *can* say something subtly different:

It is, however, metaphysically possible for objects to exemplify properties and not exist. For instance, and most clearly, in the case of some object possibly exemplifying the property of nonexistence just in those cases where it doesn't exist.

It is easy to conflate these two claims; but the essence of the proposal here is that their difference comes not from one being Serious Actualist and another not—rather, the difference comes from the two different conceptions of how possible worlds function in our characterisation of modality.

What now remains to be shown is that reformulating Serious Actualism as (SA3) allows us to avoid the theoretical tension between wanting to endorse principles like (Ext) and (App) but also wanting to preserve the intuition that there is *something* wrong with nonexistent entities exemplifying properties. This is the task of the next two sections. As I will argue, there is *something* wrong with nonexistent entities exemplifying properties—specifically that some compelling views about the nature of propositions, truth and meaning rule this out—but that such a restriction is weak enough that one can consistently endorse (SA3) and accept other compelling principles like (App) and (Ext).

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<sup>8</sup>The notion of actuality here is non-rigid, referencing the world of evaluation.

#### 4 The Problem of Nonexistence?

Recall that the problem posed by the property of nonexistence fell out of two principles. The first, (Ext), told us about the extent of property abstraction on first-order open-sentences. The second, (App), told us about the application conditions of such property abstracts. Both principles are compelling in their own right; but they are inconsistent with (SA). At least part of the reason why we should endorse (SA3) over (SA) as a formulation of Serious Actualism is that the former is consistent with compelling principles governing properties like (Ext) and (App). To see this, note first that (Ext) is not a modal claim, and so the Serious Actualist can accept (Ext) independently of how they understand the modality in the formulation of their view. (App), however, is formulated in terms of metaphysical necessity and this notion is in turn understood in terms of truth at a world—a proposition is metaphysically necessary just in case it is true *at* all worlds. (SA3) is formulated in terms of truth *in* a world. Whilst a proposition being true in a world entails that it is true at a world, the converse does not hold. It is thus consistent to maintain both (SA3) simultaneously with (App) and (Ext). (Ext) tells us about how many properties there are, (App) tells us how they behave *at* worlds, and (SA3) limits their behaviour *in* worlds.

One natural thought might be that we can reformulate (App) in terms of either the notion of modality afforded to us by truth in a world or the notion of truth in a world itself. If such a reformulation turns out to be true and problematic, then the proposed reformulation of Serious Actualism I have presented in this paper will be of no use. We would be able to replicate the problem of nonexistence in this new modality, as it were. The simplest approach to reformulating (App) is to delete ‘ $\Box$ ’ and replace it with ‘ $\Box_s$ ’ to get:

$$(\text{App}') \forall x \Box_s (\phi(x) \leftrightarrow \lambda x. \phi(x)(x))$$

The immediate problem is that (App') is simply false. It holds if and only if, for every world  $w$ :  $w \models_i [\phi(x) \leftrightarrow \lambda x. \phi(x)(x)]$ , for any  $x$ . This fails to be true, for any  $x$  which is a contingent entity. For any  $x$  and  $w$ ,  $w \models_i [\phi(x) \leftrightarrow \lambda x. \phi(x)(x)]$  holds if and only if the following holds:

$$(8) \Box (Aw \rightarrow T[\phi(x) \leftrightarrow \lambda x. \phi(x)(x)])$$

However (8) is false: if  $x$  is a contingent entity and  $w$  a world in which  $x$  does not exist, then  $[\phi(x) \leftrightarrow \lambda x. \phi(x)(x)]$  itself does not exist in  $w$  and so cannot be true *simpliciter*. The other alternative is to formulate principles, as we did for (SA3) itself, not in terms of the modality afforded to us by truth in a world, but explicitly in terms of the very notion of truth in a world. This gets us:

$$(\text{App}'') \forall x \forall w (w \models_i [\phi(x)] \leftrightarrow w \models_i [\lambda x. \phi(x)(x)])$$

(App''), unlike (App'), is true. To see this, note that for every world  $w$ , either  $x$  exists in  $w$  or  $x$  does not exist in  $w$ . If  $x$  does not exist in  $w$ , then the following is vacuously true.

$$(9) w \models_i [\phi(x)] \leftrightarrow w \models_i [\lambda x.\phi(x)(x)]$$

(9) is vacuous because both sides of the biconditional fail to hold as a result of each proposition—both  $[\phi(x)]$  and  $[\lambda x.\phi(x)(x)]$ —failing to exist to be true *simpliciter*. If  $x$  instead exists in  $w$ , then (9) is true for much the same reasons that motivated (App) originally. That is to say, if it would be true that  $x$  satisfies  $\phi(x)$ , were  $w$  actual, then it would also be true that  $x$  exemplifies the property  $\lambda x.\phi(x)(x)$ , were  $w$  actual, since  $x$  satisfying  $\phi(x)$  is just what is needed for such a property to be exemplified. This follows from the meaning of the property abstracts. Moreover, since  $x$  exists in  $w$  there is no worry about the nonexistence of the relevant propositions.

That being said, (App'') is not *problematically* true, i.e. its truth is perfectly consistent with the new formulation of Serious Actualism. Although (App'') may well be a principle which governs how properties relate to open sentences *in* worlds, when we consider the property of nonexistence  $\lambda x.\neg\exists y(y = x)$ , there is no world and object pair such that  $w \models_i [\lambda x.\neg\exists y(y = x)(x)]$  whilst it fails to be true that  $x$ —whatever appropriate value is given—fails to exist in  $w$ . This follows from the heart of the worry which originally motivated the development of truth at a world. For  $w \models_i [\lambda x.\neg\exists y(y = x)(x)]$  to hold the truth *simpliciter* of  $[\lambda x.\neg\exists y(y = x)(x)]$  must be necessitated by the actuality of  $w$ . In such case, this means that  $x$  likewise exists in the  $w$ . Of course, the property of nonexistence is still metaphysically possibly exemplified. Moreover, in such cases, the objects exemplifying the property do not exist. However, the property is not exemplified *in* a world, just as we cannot say that it is true in the world that the relevant object does not exist.

## 5 An Argument for (SA3)

If we formulate Serious Actualism using (SA3), then we no longer have to worry about consistently endorsing (App) and (Ext). In this section, I want to argue that (SA3) not only avoids the problem of nonexistence but that (SA3) is true. We can begin to get an idea of what the argument for (SA3) is going to be after the discussion last section. The underlying thought is that (SA3) is true because it cannot be true *that* some entity in particular has a property if that entity does not exist. In other words, Serious Actualism as formulated using (SA3), follows from the idea that propositions cannot be true and not exist. The thought that truth implies existence is common, although some have denied it (see [Fine, 1985] and

[Salmon, 1987]). Here, I outline an argument for the connection between truth and existence, and show that (SA3) follows.

The crux of the argument centers around the following modal principles governing sentences, propositions, sentential meaning, and truth. To fix some notation, in what follows we have ‘ $\ulcorner \phi \urcorner$ ’ as a complex singular term which denotes the sentence  $\phi$ , ‘ $M$ ’ is a meaningfulness predicate for sentences—‘ $M$ ’ is the predicate ‘is meaningful’—‘ $T_s$ ’ is a predicate for *sentential* truth, and  $T$  is the predicate for *propositional* truth.<sup>9</sup>

(M)  $\Box(M\ulcorner \phi \urcorner \rightarrow \exists y(y = [\phi]))$

(Necessarily, if the sentence  $\ulcorner \phi \urcorner$  is meaningful, then  $[\phi]$  exists.)

(T1)  $\Box(T_s\ulcorner \phi \urcorner \rightarrow M\ulcorner \phi \urcorner)$

(Necessarily, if the sentence  $\ulcorner \phi \urcorner$  is true, then the sentence  $\ulcorner \phi \urcorner$  is meaningful.)

(T2)  $\Box(T[\phi] \rightarrow T_s\ulcorner \phi \urcorner)$

(Necessarily, if  $[\phi]$  is true, then the sentence  $\ulcorner \phi \urcorner$  is true.)

(M), (T1), and (T2) are reasonable principles.<sup>10</sup> A sentence is meaningful just in case it has some meaning. Since propositions are understood to at least be the contents of declarative sentences, this means that if a sentence is meaningful then *there is a proposition* which it expresses. (T1) is also reasonable, since it seems undeniable that a pre-condition for a sentence being true *simpliciter* is that it is a meaningful sentence. (T2) simply states the connection between the truth of a proposition expressed by some sentence  $\phi$  and the truth of  $\phi$ .

If (M), (T1), and (T2) hold then it is impossible for propositions expressed by sentences to be both true and non-existent. (Here, I ignore complications which might arise from considering propositions which are not expressed by any sentence, since these have played little role in our discussion.)

(10) If (M), (T1), (T2), then any  $\phi$ :  $\neg\Diamond(T[\phi] \wedge \neg\exists y(y = [\phi]))$ .

*Proof.* Suppose: (M), (T1), (T2), and  $\Diamond(T[\phi] \wedge \neg\exists y(y = [\phi]))$ . From  $\Diamond(T[\phi] \wedge \neg\exists y(y = [\phi]))$  and (T2), we get:  $\Diamond(T_s\ulcorner \phi \urcorner \wedge \neg\exists y(y = [\phi]))$ . Thus, from (T1),  $\Diamond(M\ulcorner \phi \urcorner \wedge \neg\exists y(y = [\phi]))$  and thus, from (M),  $\Diamond(\exists y(y = [\phi]) \wedge \neg\exists y(y = [\phi]))$ . Thus:  $\neg\Diamond(T[\phi] \wedge \neg\exists y(y = [\phi]))$ .  $\square$

<sup>9</sup>Here I have separated sentential and propositional truth, though the principles below are consistent with either an understanding of sentential truth which treats it as reducible to a primary notion of propositional truth or an understanding which treats it as its own *sui generis* notion.

<sup>10</sup>These principles are formulated using metaphysical necessity. So, each should be understood in terms of truth *at* a world. For instance, given the principle  $T_{at}^{(\rightarrow)}$  in §3, (T2) is equivalent to the claim that, for all worlds,  $w$ , if [it is true simpliciter that  $\phi$ ] is true at  $w$ , then [the sentence ‘ $\ulcorner \phi \urcorner$  is true<sub>s</sub>’] is true at  $w$ . Thank you to an anonymous reviewer for noting the need for this clarification.

We should accept (M), (T1) and (T2) and thus we should accept that no proposition can be true and not exist. We can turn this into an argument for (SA3) because we can also show that if (SA3) is false, then it *is* possible that a proposition can be true and not exist. The argument relies on two assumptions. The first is (OD) from §2 and the second:

$$(RT) \quad \Box(\exists y(y = x) \rightarrow (T[\phi(x)] \leftrightarrow \phi(x))).$$

(RT) is a *restricted* necessitated truth schema for propositions since the unrestricted necessitated truth schema, i.e.  $\Box(T[\phi] \leftrightarrow \phi)$ , is problematic. If a proposition is true, it exists. This fact, combined with (OD), entails that not all possible propositions are possibly true—a fact which contradicts the unrestricted truth schema for propositions.<sup>11</sup>

(11) If  $\neg(\text{SA3})$ , then for some  $[\phi]$ :  $\Diamond(T[\phi] \wedge \neg\exists y(y = [\phi]))$

*Proof.* First, suppose:  $\Box(T[\phi] \rightarrow \exists y(y = [\phi]))$  and  $w \models_i [\Phi(x)]$ . If  $w \models_i [\Phi(x)]$ , then, given (T<sub>in</sub>), (i)  $\Box(Aw \rightarrow T[\Phi(x)])$ . By our first supposition and (OD), it follows from (i) that (ii)  $\Box(Aw \rightarrow \exists y(y = x))$ . Then, from (RT) it follows that (iii)  $\Box(\exists y(y = x) \rightarrow (T[\exists y(y = x)] \leftrightarrow \exists y(y = x)))$ . (ii) and (iii) entail in a basic modal logic:  $\Box(Aw \rightarrow T[\exists y(y = x)])$ . Thus  $w \models_i [\exists y(y = x)]$ . Tying this together:

If  $\Box(T[\phi] \rightarrow \exists y(y = [\phi]))$ , then, if  $w \models_i [\Phi(x)]$ , then  $w \models_i [\exists y(y = x)]$ .

Contrapose this for the result. □

Now, tying together (10) and (11), we can see that (SA3) is false only if it is possible for a proposition to be true and yet not exist; but, if (M), (T1), and (T2) hold then it is not possible for this to be the case. Since (M), (T1), and (T2) are reasonable principles, we should then conclude that (SA3) is true.

To end, one upshot of the two arguments presented here is worth noting. If I am right that (SA3) is a formulation of Serious Actualism, then it follows that Serious Actualism holds not because of claims about properties *per se*, but because of the nature of propositions, meaning and truth. This goes some way to explaining why theorists like Plantinga have tied the denial of Serious Actualism with the truth of meta-ontological positions like Meinongianism—the view that, in an appropriately understood sense, there are things which do not exist. It is natural to worry how Serious Actualism could fail, since it is hard to see how we could say of something in particular that *it* doesn't exist and yet exemplifies some

<sup>11</sup> $\Box(T[\phi] \leftrightarrow \phi)$  entails  $\Diamond\phi \leftrightarrow \Diamond T[\phi]$  in the minimal modal logic K.

property. We can now see that this kind of worry is tangential to Serious Actualism formulated as (SA): what we say goes on relative to a possible world should not concern whether we *would* be able to speak in that way, *were* that world actual. However, this kind of worry *is* crucial to motivating (SA3): we cannot say that  $x$  does not exist *in* a world and yet exemplifies properties *in* that world. The weaker formulation of Serious Actualism holds not because of the nature of properties *per se*, but because of what is required of true, so-called, singular propositions, i.e., our being able to truthfully talk about particular individuals requires their existence and thus, were they not to exist, we could not say of *them* that they exemplified properties.

## 6 Concluding Remarks

I have argued for a neglected formulation of Serious Actualism, distinguishing it from the standard formulation, (SA), by appealing to the distinction between truth *in*, and truth *at*, a world. I have argued that this formulation avoids the problem of nonexistence. This problem brought to light a tension for those who are both contingentist and endorse (SA). Namely that (SA) is incompatible with some minimal and compelling principles governing properties. The neglected formulation avoids this tension. Moreover, I have argued that the weaker formulation is true. This argument revealed a compelling thought which, I contend, goes much of the way in showing what many find so compelling about Serious Actualism: we cannot talk in particular about certain individuals which do not exist and say that they exemplify properties because we cannot talk about particular nonexistent entities *simpliciter*.

## References

- Adams, Robert Merrihew, 1981. Actualism and Thisness. *Synthese* 49, 3–41.
- Berto, Francesco, 2013. *Existence as a Real Property*. Springer.
- Einheuser, Iris, 2012. Inner and Outer Truth. *Philosopher's Imprint* 12, 1–22.
- Fine, Kit, 1977. Prior on the Construction of Possible Worlds and Instants. In Fine, Kit and Arthur Prior. *Worlds, Times and Selves*. Duckworth, 116–161.
- Fine, Kit, 1980. First-order Modal Theories. *Studia Logica* 39, 159–202.
- Fine, Kit, 1985. Plantinga on the Reduction of Possibilist Discourse. In *Profiles: Alvin Plantinga*. Ed. by H. Tomberlin and P. van Inwagen. Springer, 145–186.
- Fitch, Greg and Michael Nelson, 2018. Singular Propositions. In *The Stanford Encyclopedia of Philosophy*. Ed. by Edward N. Zalta. Spring 2018. Metaphysics Research Lab, Stanford University.
- Fritz, Peter, 2018a. Higher-order Contingentism, Part 2: Patterns of Indistinguishability. *Journal of Philosophical Logic* 47, 407–418.
- Fritz, Peter, 2018b. Higher-order Contingentism, Part 3: Expressive Limitations. *Journal of Philosophical Logic* 47, 649–671.
- Fritz, Peter and Jeremy Goodman, 2016. Higher-order Contingentism, Part 1: Closure and Generation. *Journal of Philosophical Logic* 45, 645–695.
- Glick, Ephraim N, 2017. What is a Singular Proposition? *Mind* 127, 1027–1067.
- Jacinto, Bruno, 2019. Serious Actualism and Higher-Order Predication. *Journal of Philosophical Logic* 48, 471–499.
- King, Jeffrey C, 2007. *The Nature and Structure of Content*. Oxford University Press.
- Kment, Boris, 2014. *Modality and Explanatory Reasoning*. OUP Oxford.
- Menzel, Christopher, 1993. Singular Propositions and Modal Logic. *Philosophical Topics* 21, 113–148.
- Merricks, Trenton, 2015. *Propositions*. OUP Oxford.
- Mitchell-Yellin, Benjamin and Michael Nelson, 2016. S5 for Aristotelian Actualists. *Philosophical Studies* 173, 1537–1569.
- Parsons, Terence, 1980. Nonexistent objects.
- Plantinga, Alvin, 1983. On Existentialism. *Philosophical Studies* 44, 1–20.
- Plantinga, Alvin, 1985. Reply to Critics. In *Profiles: Alvin Plantinga*. Ed. by J.E. Tomberlin and P. Van Inwagen, 313–396.
- Plantinga, Alvin, 1987. Two Concepts of Modality: Modal Realism and Modal Reductionism. *Philosophical Perspectives* 1, 189–231.

- Pollock, John L, 1985. Plantinga On Possible Worlds. In *Profiles: Alvin Plantinga*. Springer, 121–144.
- Russell, Bertrand, 1994. *The Philosophy of Logical Atomism*. Open Court Classics.
- Salmon, Nathan, 1987. Existence. *Philosophical Perspectives* 1, 49–108.
- Speaks, Jeff, 2012. On Possibly Nonexistent Propositions. *Philosophy and Phenomenological Research* 85, 528–562.
- Stalnaker, Robert, 2010. Merely Possible Propositions. In *Modality: Metaphysics, Logic and Epistemology*. Ed. by Bob Hale and Aviv Hoffman.
- Stalnaker, Robert, 2012. *Mere Possibilities: Metaphysical Foundations of Modal Semantics*. Princeton University Press.
- Stephanou, Yannis, 2007. Serious Actualism. *The Philosophical Review* 116, 219–250.
- Turner, Jason, 2005. Strong and Weak Possibility. *Philosophical Studies* 125, 191–217.
- Williamson, Timothy, 2002. Necessary Existents. *Royal Institute of Philosophy Supplements* 51, 233–251.
- Williamson, Timothy, 2013. *Modal Logic as Metaphysics*. Oxford University Press, Oxford.