Modality, Truth and Mere Picture Thinking[1]

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Abstract. Many draw the distinction between truth in, and truth at, a possible world. The latter notion purportedly allows for propositions to be true relative to worlds even if they do not exist relative to those same worlds. Despite its wide application, the distinction is controversial. Some think that the notion of truth at a world is unintelligible. Here, I outline and discuss the most influential argument for the unintelligibility of truth at a world, *The Picture Thinking Argument*. I outline and defend a neglected strategy to respond to this, arguing that if we take seriously the idea that possible worlds represent total ways the world could be, the distinction can be drawn intelligibly.

1. Introduction

The distinction between a proposition being true in a possible world and a proposition being true at a possible world is appealed to widely in metaphysics and logic. Whilst a proposition must exist in the world to be true in the world, the same does not hold of propositions true at the world. This distinction plays a pivotal role in the debate over actualism vs. possibilism, see (Adams, 1981), (Fitch, 1996), and (Einheuser, 2012), contingentism vs. necessitism, see (Stalnaker, 2012: 42–51), (Turner, 2005), and (Speaks, 2012), the debate over the correct modal logic, see (Menzel, 1991), (Mitchell-Yellin and Nelson, 2016), and (Werner, 2021), the debate over the relationship between existence and predication, see (Fine, 1985), (Einheuser, 2012: 11–13), and (Masterman, 2024), as well as debates concerning presentism, see (King, 2007: 80–101).

Yet, the distinction is deeply controversial. Plantinga (1985) influentially argued that the distinction rests merely on 'picture thinking'—a criticism taken up by Davidson (2000; 2007) and Crisp (2003). In short, the worry is that the distinction rests on confused, merely metaphorical thinking about possible worlds. If successful, such arguments show—at best— that the distinction is untethered to a robust philosophical explanation of its applicability and

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thus we simply resolve substantive problems with what Kripke called 'the lazy man's approach to philosophy' (Kripke, 1977: 268)—positing unmotivated and convenient ambiguities to resolve substantial philosophical problems (Speaks, 2012: 533). At worst, such arguments show that the distinction is simply unintelligible. These arguments should be taken seriously, but there is little in the literature which directly addresses them.

My aim in this paper is to defend the distinction against this influential criticism—what I call the Picture Thinking Argument. First, I clarify what the distinction amounts to (§2) and how we should understand the Picture Thinking Argument (§3). I then argue that if we take representationalism seriously—the view that possible worlds only represent the ways the world could be—then the distinction between truth in, and truth at, a world can be intelligibly drawn (§§4–5). That is, the distinction amounts to different conventions for extracting what it is that worlds represent.

2. The Distinction: what it is, and what it isn't

To understand the distinction, it is best to see what goes wrong without it and why.

Philosophers typically think that possible worlds ought to play a central role in our theorising about modality. That is to say, p is possible iff p is true relative to some possible world and p is necessary iff p is true relative to all possible worlds.

To get clearer on this, we should distinguish between technical and philosophical accounts of modality which utilise worlds. In technical discussions, we define a semantics for formal languages including sentential operators $\Diamond$ and $\Box$ by characterising a class of models, each of which contains a set W of 'worlds'. This affords us simple recursive clauses for evaluating modal formulae relative to members of W, e.g., $\Diamond \varphi$ is true relative to $w \in W$ iff φ is true relative to some accessible $v \in W$. The further details are well-known and unimportant here. What is important is that, although this kind of semantics tells us a lot about formal modal languages, it is not itself a philosophical account of modality (Divers, 2006: 196). For a philosophical account of modality, we require a theory which tells us which natural language modal claims are genuinely true or false, not just which formulae in a formal language have various model-relative features. Typically, this is achieved by specifying an intended model containing a domain of genuine possible worlds, whatever possible worlds really are, thereby connecting

modal statements up with something which plausibly explains the truth of them (Divers, 2002: 196–7).[2]

But describing the intended model of possible worlds is only part of it. An important detail of any philosophical theory of modality, given in terms of worlds, is an account of which features of genuine possible worlds make it the case that some claim φ is true relative to a world. If possibility is truth relative to some world, then an account of possibility must tell us both what worlds are and specify the conditions under which various claims are true relative to worlds. To this end, many find the following compelling.

(T) Truth in a world: A proposition p is true relative to a world w just in case p is true in w and p is true in w just in case, were w actual, p would be true simpliciter.[3]

That is, according to the above, 'Some donkeys fly' is true relative a world just in case, were that world actual, the proposition that some donkeys fly would be true. This is compelling. Possible worlds are supposed to be the ways the world could have been. If we want to know what is true according to some way the world could be, it's very intuitive to ask what would have been true, had the world actually been that way.

Although compelling, (T) interacts problematically with a popular form of contingentism. Indeed, the problems which arise from this interaction are the precise reasons many wish to draw the distinction between truth in, and truth at, a world. Adopting the terminology introduced in (Williamson, 2013), let *contingentism* be the claim that there at least might have been things which might have been nothing, and *propositional contingentism* be the claim that there at least might have been propositions which might have been nothing. For many, contingentism is plausible, if not commonsensical. Likewise, many think it plausible that certain propositions only contingently exist. Typically, this second idea is taken to follow from contingentism and the idea that at least some proposition p is singularly about certain

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[2]Plantinga distinguishes between pure and applied possible worlds semantics in (Plantinga, 1974: 126–8). For more on the idea that an intended model is required, see (Plantinga, 1974: 248–51), (Lewis, 1986: 17–20), (Chihara, 1998: 23), and (Divers, 2002: 37–9). Note that, for the present discussion, it matters little which approach to worlds is taken. Some argue that worlds are certain sorts of proposition (Fine, 1977; Fine, 1980), sets of propositions (Adams, 1981), or sentences (Roy, 1995), some other kind of set-theoretic construction (deRosset, 2014), a kind of special state of affairs (Plantinga, 1976; 1974), or some kind of property, see (Stalnaker, 1976; 2012) and (Forrest, 1986).
[3]See (Plantinga, 1974: 45–46; 1985: 342), (Bergmann, 1996: 358), and (Bricker, 2006: 53).

contingent individuals and because of this, if any of those individuals were not to exist, p would likewise not.[4]

To see the problem with combining propositional contingentism and a notion of truth in a world, suppose we have a fixed domain of worlds and that j is some contingent entity. If j is contingent, there must be some world u where j doesn't exist. That is, there must be some world u such that 'j doesn't exist' is true relative to u. From (T), we unpack this as follows, where [j doesn't exist] is the proposition that j doesn't exist.

(1) 'j doesn't exist' is true relative to u iff, were u actual, [j doesn't exist] would be true.

It is deeply plausible that the truth of a proposition requires its existence. This claim follows from serious actualism—the view that it is impossible for an entity to exemplify a property and not exist.[5] Given this, then, we accept:

(2) Necessarily, if [j doesn't exist] is true, then [j doesn't exist] exists.

But, from (1) and (2), given some minimal modal logic, it jointly follows that

(3) 'j doesn't exist' is true relative to u iff, were u actual, [j doesn't exist] would exist.

Now, here's the problem: the right-hand side of (3) is plausibly false, given propositional contingentism. Any proposition which ontologically depends on something which doesn't exist in u does not itself exist in u—including propositions like [j doesn't exist]. Thus, by (3), 'j doesn't exist' is not true relative to u, even though we supposed u to be an arbitrary world where j does not exist. In short, despite the fact that propositional contingentism and (T) are both individually compelling, they are plausibly jointly incoherent.

The problem here is a general one. It has nothing to do with j specifically. Moreover, the problem here also doesn't hinge on any particular account of what possible worlds are. Some

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[4]This ontological dependence is often taken to follow from thinking of propositions as structured, see (Fine, 1980: 161), (Kaplan, 1989: 494), (Salmon, 1986), (Soames, 1987), (King, 2007), (Kment, 2022). But not always: one may alternatively argue that the meaning of a name is at least partly constituted by its referent and thus, without the referent, any proposition expressed using that name does not exist, see (Speaks, 2012: 529), and (Loptson, 1996: 420). Alternatively still, one might accept that if p is singular about some individuals, then if p exists, p stands in the relation of being singularly about those individuals. Thus, in the absence of those individuals, p does not exist, see (Williamson, 2002: 241–2) and (Speaks, 2012: 529-30).

[5]The view is given many labels in the literature, but defences or endorsements of serious actualism are in (Adams, 1981), (Adams, 1986), (Plantinga, 1983: 11–15), (Plantinga, 1985), (Yagisawa, 2005), (Stephanou, 2007), (Williamson, 2013: 148–58), (Kment, 2014: 79), (Merricks, 2015), and (Jacinto, 2019). The view is not uncontroversial, and is rejected in (Fine, 1985), (Pollock, 1985), and (Salmon, 1987). Indeed, recent literature has been increasingly critical of the view, see (Soames, 2015: 21–22), (Dorr, 2017: 57), (Rayo, 2021), (Masterman, 2023), (Fritz, 2023), and a recent book-length defence of actualism without serious actualism in (Davidson, 2023). Here, I assume serious actualism for the sake of argument.

take this problem to show that contingentism is false, e.g., Williamson (2002), or that propositional contingentism is false, e.g., Plantinga (1983), whilst others, such as Arthur Prior, take this problem to suggest that our standard understanding of modality is defective, e.g., that possibility and necessity are not dual notions, see (Prior, 1957: 48–9). However, my concern here is with those who have taken such problems to suggest that we need a new notion of world-relative truth, so-called truth *at* a world: whilst truth in a world requires the existence of the proposition in the world, truth at a world does not.

But what is truth at a world? Truth at a world is a technical notion which is supposed to solve a specific version of a general problem. The general problem is that what we can actually say about a counterfactual situation often differs from what we could have said about a counterfactual situation, were that counterfactual situation actually the case. As Saul Kripke writes:

> One should not identify what people would have been able to say in hypothetical circumstances, if they had obtained, with what we can say, of these circumstances, perhaps knowing that they don't obtain (Kripke, 2013: 39)

This general problem may arise for a number of reasons. But here, I am concerned with the specific instance of this problem which plausibly follows from taking certain propositions as contingent. For the notion of truth at a world to be at all appropriate as a solution to this sort of problem, it is clear that it is propositions which are true at worlds, not sentences.[6] In particular, in saying that a proposition is true at a world, our concern throughout is evaluating the proposition actually expressed by a sentence relative to a world, even if that very proposition were not to exist. That is, the difference between truth in, and truth at, a world is not about sentences expressing different propositions in different circumstances.

How is the notion of truth at a world supposed to resolve the problem of (1)–(3)? First, as discussed, it's plausible to accept (2). However, if we accept (2), (1) holds only if a proposition is true relative to a world only if that proposition exists relative to that world. Thus, the crucial move behind appealing to truth at a world is to reject (1)—the would-be truth of the proposition expressed cannot be in general what is required for a claim to be true relative to a world. Robert Adams makes this distinctive move clear:

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[6] Merricks (2015: 14), for instance, proposes a so-called notion of truth at a world which involves assigning truth values to sentences, not on the basis of the truth conditions a sentence would have, but on whether the actual truth conditions would be satisfied. This is orthogonal to the notion discussed here.

I deny, then, that ⌜ It is possible that *p* ⌝ always implies that the proposition that-*p* could have been true (Adams, 1981: 19)

Thus, we accept that a proposition must exist to be true and yet some propositions true at a world do not exist at those worlds. That is, we accept:

(TA) Truth at a world: A proposition *p* is true relative to a world *w* just in case it is true at *w*. The truth of *p* at *w* does not, in general, require the existence of *p* at *w*.

Of course, (TA) leaves much to be desired. What are the conditions under which a proposition is true at a world? How does truth at a world relate to truth in a world? Can we define truth at a world in terms of truth in a world? I will return to some of these questions in due course. But what's important to emphasise at this juncture is that what (TA) captures is really a family of views about world-relative truth. The defining characteristic of this sort of approach is a modal semantics in which possibility is divorced from possible truth. The core advantage of this approach, besides it preserving our deep-seated intuitions about contingency, is that it is consistent with the idea that the truth simpliciter of a proposition entails its existence—a thesis which many find compelling, if not obvious. Beyond these central similarities, there is much room for divergences in how truth at a world is understood. However, these differences are about how we might flesh out the notion of truth at a world and, here, I am concerned with more fundamental questions about whether the notion of truth at a world can be appealed *to begin with.*

3. The Picture Thinking Argument

Some argue that the notion of truth at a world is unintelligible. Plantinga (1985) is the first to object to the distinction in these terms, arguing that 'the fact is, however, that it isn't clear at all what these two senses of "true in" might be.' (342). This charge is also taken up by Matthew Davidson (2000, 2007) and Thomas Crisp (2003). Davidson claims that his '...main problem with...[the notion of truth at a world]...is that, try as I might, I can't make sense of it' (2000: 290) and Thomas Crisp (2003: 229) writes:

What else might it mean to claim of [Socrates does not exist] that it accurately describes what goes on in W_s? I have no idea. What we need, then, is an informative analysis of truth at a world. And this we do not have.

The most influential diagnosis of this failure can be found in what I term the *Picture Thinking Argument*. To best understand the Picture Thinking Argument, we must note that there's a lot of rhetorical metaphor surrounding the notion of truth at a world in the literature. The most common claim is that the notion involves a change of 'perspective' in which we evaluate propositions at worlds 'from the perspective of the actual world', e.g., (Adams, 1981: 22, 1986: 322), (Fine, 1985: 163), (Deutsch, 1990: 98), and (Nelson, 22 2009: 139–40). In an often-quoted passage from Fine, truth at a world involves 'standing outside' the world whereas with truth in a world we 'first enter into' the world, e.g., (Fine, 1985: 163) and (Turner, 2005: 198–9). We might think of what is true at a world as what characterises that world correctly or what worlds 'implicitly' represent, e.g., (Adams, 1981: 22), 3 (Einheuser, 2012: 9), (Kment, 2014: 102–3), and (Werner, 2021: fn. 10). It is even sometimes said that we *have* certain propositions 'here', and thus we can assess their counterfactual status, even if they would not exist, e.g., (Almog, 1986: 220) and (Cartwright, 1997: 77).

The Picture Thinking Argument charges that these loose motivational ideas are strictly speaking nonsense and so we cannot use them in any meaningful way to grasp the notion from the outset. For instance, Plantinga (1985: 343) first considers the idea that the distinction involves thinking about worlds from external, and internal, perspectives:

> But of course, this is just *picture thinking*—if, at any rate, possible worlds are, as I think they are, states of affairs. There is no such thing as looking into a possible world to see who or what exists therein; there is no such thing as standing outside a possible world and watching what goes on in it. So, this metaphor doesn't help much. *What is its literal value*? What is the outer notion of truth in *W*? [My italics]

Matthew Davidson (2007: 564) makes a similar, although stronger, claim. He argues that the distinction, particularly the notion of truth at a world seems—

> ...to be based on an incoherent metaphysical picture. Indeed, it is based on the same sort of picture on which the problem of transworld identity is based. Again, we think of worlds as objects with insides and outsides. However, again, worlds are abstract, and it is incoherent to think of a world as having an "inside" and an "outside".

The Picture Thinking Argument is then, on the face of it, a demand for some literal claims which correspond to the various metaphorical or otherwise imprecise characterisations of the notion. Plantinga claims that all this is merely a metaphor. Davidson claims that this is, at worst, a pernicious metaphor which distracts from the ability to do proper philosophical work—the distinction is not 'anything more than a concept based on a false metaphysical picture' (Davidson, 2007: 566). Both hold that no literal content can be given to the metaphors and thus the distinction is meaningless.

But this can't plausibly be what the Picture Thinking Argument amounts to. The metaphors don't obviously play an essential role in drawing the distinction. After all, I explained what the distinction amounted to in §2, but only discussed the evocative metaphors here in §3. In fact, it seems that we can draw the distinction without appealing to any conception of worlds, faulty or otherwise. Let p be the proposition that i does not exist, where i is some contingent entity. Assuming that possibility is just truth relative to some world and contingentism, it straightforwardly follows that, p is true relative to some possible world. Yet, assuming propositional contingentism, no world w is such that, were w actual, the proposition p would be true. Thus, if we define truth in a world as the would-be truth of a proposition, it follows that in *whatever* sense p is true relative to w, it cannot be true in w. Instead, it is true relative to w in some distinct sense. Call this notion of truth relative to a world, whatever it is, truth at a world. We thereby have a distinction, and yet we appealed to no conception of possible worlds, faulty or otherwise.

What does the Picture Thinking Argument amount to, then? Recall that in setting up a philosophical theory of modality we were required to give an account of modality which plausibly explained the genuine truth of modal claims. One part of this project involves explaining the connection between worlds and claims true at them. We would fail if this was specified arbitrarily and without any explanation for why a given proposition is indeed true relative to a world. If we formulate matters with truth at a world, we claim that a proposition is true relative to a world just in case it is true at that world. But, at first glance, such an answer is explanatorily opaque in two respects. First, we need more informative conditions under which a proposition is said to be true at a world. Second, we need to fit such conditions into a broader picture which outlines why the truth of a proposition at a world can be of any relevance to why a particular modal claim is genuinely true. The Picture Thinking Argument can be thus understood as the charge that no clear explanation can be given of this latter kind—there is no

explanation of the relevance of this new notion of world-relative truth to the truth of modal claims.

On this way of understanding the Picture Thinking Argument, then, is not that it is essential to drawing the distinction that we make use of unintelligible metaphors, but rather that to properly understand the kind of modal semantics which arises as a result of the distinction, we must reach for further explanatory claims and all we find are metaphors which leave the distinction, ultimately, unintelligible. The brunt of the objection: we need an explanation of why truth at a world plays the right role in a theory of modality given in terms of possible worlds and, according to the Picture Thinking Argument, any such account will introduce faulty assumptions about possible worlds.

There are two natural kinds of responses to the Picture Thinking Argument. One option is to argue that we can define truth at a world in terms of truth in a world, using what Einheuser calls a 'recovery procedure' (Einheuser, 2012). Indeed, some who raise the Picture Thinking Argument in the literature also further complain that the notion of truth at a world lacks an adequate analysis, see (Davidson, 2023: 106). Now, the strategy of providing an analysis of truth at a world is appealing, and there are some notably sophisticated attempts to do so in (Turner, 2005), (Einheuser, 2012), and (Speaks, 2012). However, it remains controversial whether such a strategy can be successful (Davidson, 12 2023: 104–6). Moreover and ideally, a response to the Picture Thinking Argument should not unnecessarily tie the intelligibility of truth at a world to the availability of an analysis: even if an analysis was not forthcoming, can we still take truth at a world as intelligible? Another natural way of addressing the Picture Thinking Argument, then, is to articulate a conception of worlds which we can plausibly take to replace the metaphors or imprecise talk about standing inside and outside of possible worlds. On this approach, we show how a notion like truth at a world can hang together with other intelligible notions, undercutting the charge that only an implausible conception of possible worlds can afford us an intelligible conception of truth at a world. This is what I aim to do.

4. Representationalism

Here's one conception of possible worlds which Plantinga, Crisp, and Davidson neglect: *representationalism* about possible worlds. The core idea behind representationalism about possible worlds can be stated as follows.

Representationalism: Possible worlds are *representations* of total ways the world could have been, not simply those total ways the world could have been.

Earlier, I introduced the idea of a possible world by talking about them as the *ways* the world could have been (§2). This is a common way of introducing the idea of a world. However, it is also sometimes said that worlds are in fact only representations of the ways the world could be. At the core of representationalism is the distinction between the *representation*—the world—and the *represented*—loosely speaking, a total possibility, or way the world could be.

Now, according to one very broad understanding of the term, all possible worlds represent. Thus, Divers (2002: 172) claims that all formulations of actualist realism about worlds, i.e., all versions of the view that worlds are to be conceived of as some kind of abstract actual object, involve a concrete proposal about '...how possible worlds represent that such-and-such is the case 'at' them'. Skow (2007: 103) goes as far as to claim that 'Possible worlds are representations. All theories of possible worlds agree about this'. Indeed, it seems to be on this understanding of representation that even David Lewis (1986) talks about worlds representing things as the case, even though maximal mereological fusions of space-time points are not paradigmatic representational entities. However, 'representation' is understood in this paper in a more substantial manner. On some conceptions of worlds, worlds fail to be representations of the ways the world could have been: they *are* the ways the world could have been. Stalnaker (2012: 9) for instance, responding to Skow's claim above, emphasises that his own view of worlds as a certain sort of property is non-representational, properly understood. On other conceptions, however, worlds cannot be the ways the world could have been. For instance, if one thought worlds were any kind of set-theoretic construction, then worlds cannot be strictly identical to way things could have been—the world, after all, could not have been a set.

Although understood more narrowly than this broad interpretation, there are many ways worlds may manage to be representations. They might be representational because they are composed of essentially representational entities, e.g., linguistic or propositional entities. Or it may be that they are representational because the resulting complex that is taken to be the world, despite not being made up of representational entities, manages itself to be representational. Here, I will not discuss any deep questions about what it is to be a representation. Instead, a rough and ready understanding supported with paradigmatic examples of representationalist

accounts, e.g., set-theoretic approaches, will suffice. What is important is that we discuss some features of representations generally and thus features of possible worlds as representations. I don't intend these features to be controversial, but getting clear on them will have a direct bearing on how representationalism about worlds can answer the Picture Thinking Argument.

First, the representing relation is, if not always, almost always a conventional one.[7]

Convention (C): A representation only represents something external to it, if we provide some means of interpreting it—some set of representational conventions.

This means that the very same representation *qua* entity can be taken to represent two very different other things, depending on the choice of conventions. Take the following mundane example. We have a toy car which consists of a cube with four wheels attached to the bottom of the cube. Suppose we wanted to use this toy car to illustrate some real-world event involving a car. One way of doing this would involve taking two of the wheels as the front wheels and the other two as the back wheels. Another way of doing it would be to take two *other* wheels as the front wheels and let the remaining *other* wheels be the back wheels. Both of these approaches are merely conventions for how we could take the cube to represent a car.

This example brings out another important feature of this kind of representation: there is no one privileged convention independent of other considerations. It does not make sense to say that a certain state of affairs is what a representation really represents:

Arbitrary (A): What a representation represents is in some sense, ultimately, arbitrary.

Of course, this is not to deny that some conventions of representation are more natural than others. Importantly, however, no convention is so natural so as to be inevitable. 1 Again, take the toy car example. If I let two specific wheels of the cube represent the front wheels of the car, no one could intelligibly object that those wheels on the cube don't really represent the

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[7]The caveat here is necessary, since, e.g., traditional conceptions of propositions take propositions to be the primary and absolute bearers of intentionality (Soames, 2014: 26)—they inherently represent. However, such considerations are unimportant here.

front wheels, but in fact really represent the back wheels. This all suggests another feature of representations.

No Disagreement (ND): There can be no substantive disagreement about which convention is ultimately correct, i.e., what something *ultimately* or *really* represents.

To be clear, (ND) is not the claim that there can be no substantive disagreement over conventions. Different conventions exemplify different virtues and vices, and we may substantively disagree over whether this or that convention is best for our purposes. What (ND) claims is that there can be no disagreement about what a representation *ultimately* or *really* represents because, at-bottom, it represents only conventionally.

Let's return to representationalism about possible worlds. This is the claim that worlds are representations of the ways the world could have been. In this respect, worlds are understood to be rather like paintings, or the toy car from above, though the medium is, of course, more abstract. Some obvious corollaries follow if we accept representationalism, given (C), (A), and (ND). First and foremost:

$(\mathbf{C^{WRT}})$ Worlds represent what could be the case by some representational conventions.

What are the relevant representational conventions in this context? For representationalists, worlds are representations of a total way the world could have been: according to any world w, either w represents that p or represents the negation of p, for every proposition p. Moreover, worlds are total in the sense that they have true at them, either p or the negation of p, for every proposition p. For representationalism, the fact that the propositions true at a world and the propositions represented by a world both form a maximal collection is not accidental. That is, the way in which we understand what it is that they are representing—the representational conventions relative to which they represent—is by some account of world-relative truth. An account of world-relative truth is an account of how we systematically understand what a world represents.

Second, like any other representational entity, whilst there may be more, or less, natural conventions for understanding what they represent, i.e., accounts of world-relative truth, each such account is—in an *ultimate* sense—arbitrary.

(**A^WRT**) Any account of world-relative truth, is *ultimately* arbitrary.

In other words, there is no such thing as what a possible world *really* represents. This means that if we accept representationalism, we should also accept:

(**ND^WRT**) There can be no substantive disagreement about which account of world-relative truth is *ultimately* correct, i.e., what a world *really* represents as possible.

In short, an immediate consequence of representationalism, then, is that no single account of world-relative truth can be thought of as the ultimately correct account.

Of course, it is consistent with this that some accounts of world-relative truth are not at all fit for purpose in a theory of modality which utilises worlds. The crucial point is that, according to representationalism, we have a certain freedom with our definitions of world-relative truth and no one account is from the outset privileged. Indeed, it is crucial to understanding representationalism that we separate two questions which might be run together. First, there is the question of what a possible world represents as the case. Second, there is the question of what is genuinely possible, necessary, or impossible. What I have emphasised so far is that any answer to the first will state conventions and as *conventions*, no answer will have a deep, special privilege over another. What this does not mean is that our answers to the second question will state conventions. Representationalism entails an important, but otherwise innocent, degree of conventionalism about how we set up a modal semantics. But representationalism is not conventionalism about modality. Our modal semantics is not stipulative: we cannot secure by convention alone what is possible, necessary, or impossible.[8]

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[8] 7The following analogy is helpful here. It is a conventional truth that a certain stick is 1.2m and another is 1.4m. From this, we naturally conclude that the first stick is shorter than the second. But this conclusion is not a conventional truth: what is shorter than what is not decided by, or dependent on, us. Rather, we conclude that one

5. Representationalism and the PTA

Representationalism alone allows us to in principle distinguish different notions of world relative truth. However, a response to the Picture Thinking Argument requires us to show that by taking representationalism seriously, we can intelligibly define *specific* conventions which capture a notion of world-relative truth which behaves distinctively *like* truth at a world. Here's what I propose to do. First, I'll take a commonly discussed account of possible worlds—Robert Adams's (1981) theory of worlds as world-stories—and show that we can draw the distinction within that theory, if we take representationalism seriously. This proof of concept will in turn show that representationalism about possible worlds gives us the resources to draw the distinction without introducing unintelligible assumptions about possible worlds.

5.1. Adams's World-Stories and the PTA

World-stories are maximally consistent sets of propositions. World-stories are consistent in that possibly all members of any world-story are jointly true (Adams, 1981: 20–21). World-stories are maximal and count as elements, for each proposition *p*, either *p* or the negation of *p*, with one qualification: no world-story contains singular propositions about an object which would not exist, were the world the way that world-story describes (Adams, 1981: 22), e.g., a world-story which describes a world where I do not exist does not contain singular propositions about me. Since singular propositions are, for Adams, propositions which ontologically depend on certain objects, this qualification is natural.

World-stories are representations of the ways the world could be. We've seen that taking representationalism seriously involves, in part, recognising that we have choices over conventions governing how our worlds represent what is the case relative to them. One option would be to take world-stories as representing *p* just in case *p* would be true, if all the elements in the world-stories were jointly true. Again, whilst natural, this way of understanding what worlds represents results in a problematic modal semantics in which *p* is possible only if *p* is possibly true.

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stick is shorter than the other because it is true that any stick which is 1.2m is shorter than one which is 1.4m. And *this* truth is not conventional: it is true because our conventions line up with certain facts about the world. Likewise, with a modal semantics for the representationalist. Whilst it is a conventional truth that our worlds represent certain propositions, the success of the semantics in being systematically in sync with modal truths is not guaranteed by convention. Moreover, the degree of freedom afforded to the representationalist in deciding what worlds represent is all that is needed to offer alternatives accounts of world-relative truth. Freedom to change the modal facts by convention is not required. To think otherwise, would be to think that we could not change our conventions concerning metres without changing *by convention* facts about what is shorter than what.

However, given (A^{WRT}), there's nothing inherent in the theory of worlds stories which requires we adopt this—nothing mandates that this particular complex feature is the one taken to be representationally significant. Instead, Adams's (1981: 22) stipulates that the following is instead the case in his theory:

> A [world] that includes no singular proposition about me constitutes and describes 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 simply by omitting me.

Although Adams's does not discuss this himself, we should note that the above stipulation is a perfectly legitimate stipulation of a representational convention. We can state such a convention more precisely as follows.

(WRT) For any world-story w_s and object o: w_s represents that o does not exist if and only if the proposition $[o = o]$ is not a member of w_s.[9]

Needless to say, (WRT) is a rather abstract convention governing how some representation (a world story) represents (that o does not exist). However, it is no different in kind from the sorts of stipulations about representations which we could make in the previous, more mundane, example in §4 of the toy car.

Earlier, I outlined the general shape of a semantics which incorporated truth at a world. This outline was, I noted, quite uninformative. To remedy this, I first fleshed out how one might connect truth at a world to being represented by a world. Crucially now, we can go further and stipulate, in line with representationalist approach to possible worlds, that that a proposition is true at a world just in case that world represents it as the case, where the relevant notion of representation is at least constrained by (WRT):

(WRT*) For any world-story w_s and object o: the proposition that o does not exist is true at w_s if and only if the proposition $[o = o]$ is not a member of w_s.

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[9] (WRT) is a simplified so that rather than require all singular propositions be absent, we only require that $[o = o]$ be absent. These are equivalent on the assumption that no singular proposition about o can be true without $[o = o]$ likewise being true.

Now, a convention like (WRT) and a claim like (WRT*) are in isolation, of course, only a partial characterisation of what a world-story represents, telling us nothing, for instance, about how propositions besides so-called singular negative existentials are represented by worlds. But, however partial, it secures at least one core aspect of a modal semantics based on truth at a world, i.e., worlds represent some propositions as the case, even though they would not exist, were that world actual.

This is illustrated by returning to the problem which motivated our discussion of truth at a world in §2. Assume that j is, again, some contingent entity and u some world-story according to which j does not exist. Just as before, we still accept that

(2) Necessarily, if [j doesn't exist] is true, then [j doesn't exist] exists.

Yet, we are now in a position to deny that

(3) 'j doesn't exist' is true relative to u iff, were u actual, [j doesn't exist] would exist.

Earlier, (3) was taken to follow from (2) and

(1) 'j doesn't exist' is true relative to u iff, were u actual, [j doesn't exist] would be true.

However, in light of (WRT) and (WRT*) we are in a position to reject (1). What this shows is that we can carve out an informative view which allows for claims like 'j doesn't exist' to be true at worlds without requiring that the corresponding proposition exist therein.

5.2. The Picture Thinking Argument Disarmed

At the heart of the Picture Thinking Argument is the claim that the notion of truth at a world is explanatorily opaque—the only kind of explanation available was metaphorical. We can now see how representationalism answers this objection. (WRT) is a convention for understanding what worlds represent. Given representationalism, it entails (WRT*). (WRT*) is not a metaphorical claim and it plays a legitimate, although partial, role in characterising truth at a world, given representationalism about worlds—a thesis which is also not metaphorical: throughout this response to the Picture Thinking Argument, we appealed to no metaphors. Importantly, (WRT*) affords us one way of blocking the problem outlined in §2, and it does so by carving out a conception of world-relative truth which has the distinctive features of truth

at a world and is faithful to the picture the evocative metaphors invoked. It allows us to make significant distinctions between possible worlds in terms of propositions 'available to us' in the actual world which we would otherwise be unable to do, were some of those worlds actual. Using (WRT), we distinguish a world in terms of actually existing propositions, as opposed to solely in terms of those propositions which would exist, were some world actual.

Although (WRT) is, strictly speaking, only a partial characterisation of truth at a world a world-story, I think it answers the brunt of the Picture Thinking Argument. I want to end by discussing two natural objections to my argument. First, whilst it might be conceded that the distinction can be intelligibly drawn, if representationalism is taken seriously, it might be objected that representationalism, as I have understood it, is just false. Now, in this paper I have not defended representationalism, but only tried to get clear on what a commitment to representationalism entails and what work such a view can do. Nonetheless, this objection is mistaken on what needs to be done to answer the Picture Thinking Argument. At its core, such an argument purported to show that the kind of explanatory project which fits the notion of truth at a world into a broader, plausible account of possible worlds could not be done. My argument shows otherwise.

It might also be objected that my argument here merely pushes worries about the notion of truth at a world back to worries about the notion of representation. Indeed, one might worry that I have not offered anything like an analysis of when representation occurs and thus we are left as much in the dark as before about truth at a world. Of course, this is partially true insofar as the notion of representation plays a crucial role in my argument. However, the force of this objection can only be sustained if the relevant notion of representation is, like the metaphors and imprecise talk it replaces, unintelligible. I think this objection is implausibly strong. First, it strikes me that we do in fact have a grasp on a notion of representation which meets the constraints in §4. Of course, I do not claim that what I have said here exhausts what can and should be said about such a notion. However, it is implausible that the questions which remain, if left unanswered, threaten the intelligibility of notion. Anything like the Picture Thinking Argument, but applied to representation, survives at the cost of taking on an implausibly dogmatic form.

Second, it is far from clear that an analysis of when representation occurs is required here. It is, after all, the intelligibility of the notion of truth at a world which is under discussion. It neither can be the case that we can, generally, provide analyses for all intelligible notions, nor

is it the case that the relevant notion of representation here is hopelessly unclear without analysis. Taking the challenge of the Picture Thinking Argument seriously does not require that the proponent of truth at a world provides a plausible explanation of truth at a world which uses only notions susceptible to analysis. Of course, the notions utilised must be themselves intelligible, otherwise we are replacing unintelligibility for unintelligibility. But requiring an analysis of such notions is an implausibly strong requirement on a response to the argument, as I have understood it.[10]

Where does this leave us in our assessment of the notion of truth at a world? Many important questions about truth at a world remain. Most importantly, the question remains of whether the notion of truth at a world can be fleshed out satisfactorily and play the right kind of systematic role in our modal semantics, as proponents of the notion claim. Nothing I have said here answers this, or other, further questions. My aim here has been modest, but important. I have here argued that the most influential objection to the very intelligibility of the notion of truth at a world is unsuccessful. Whether or not the notion of truth at a world is a notion of worth will be decided by serious and systematic work investigating various further questions about its appropriate role in our modal theorising. But insofar as the Picture Thinking Argument purported to challenge the intelligibility of the notion of truth at a world, it purported to block the possibility of even meaningfully raising such questions about truth at a world. Here, I have sketched one way we might resist the Picture Thinking Argument and its consequences.

6. Conclusion

In this paper, I have outlined and clarified the most influential argument against the intelligibility of the distinction between truth in, and truth at, a world, the Picture Thinking Argument. I argued that we can respond to this by adopting representationalism about worlds.

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[10] A tempting related thought is that at least part of the problem with truth at a world is that, whilst truth at a world is not readily analysable, truth in a world can be analysed. Thus, Davidson complains that truth at a world '...seems like the sort of thing that should have an analysis, in the way that truth inside a world has an analysis' (Davidson, 2023: 106). Now, a proposition is true in a world just in case, were that world actual, that proposition would be true. But if an analysis of a concept is a set of non-circular and reductive necessary and sufficient conditions for that concept obtaining, it is not obvious that this characterisation of truth-in amounts to analysis. There is here an appeal to a notion of counterfactuality which is presumably understood in terms of quantification over worlds and what is true in them. Alternatively, then, we might relax the constraints on analysis and think of it in less strict terms of simply making some notion more precise, even allowing for virtuously circular analyses—ones which show how some notion fits together with other notions. But, allowing this significantly reduces the gap between what sort of analysis can be given for truth-in and what sort of analysis can be given for truth-at.

On this conception of worlds, we can utilise the notion of truth at a world as an intelligible resource—an alternative representational convention.

To an important extent, my argument here has been deflationary. This is, I think, important, suggesting that progress can be made on some questions in modal metaphysics by careful application of what is, in effect, an exercise in sorting out more substantive questions from less substantive ones—the latter kind, I argue, perhaps includes questions about world-relative truth which have conventional answers, granted representationalism about worlds.

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