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## MODAL HUMEANISM AND ARGUMENTS FROM POSSIBILITY

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Sider (2011, 2013) proposes a reductive analysis of metaphysical modality—'(modal) Humeanism'—and goes on to argue that it has interesting epistemological and methodological implications. In particular, Humeanism is supposed to undermine a class of 'arguments from possibility', which includes Sider's (1993) own argument against mereological nihilism and Chalmers's (1996) argument against physicalism. I argue that Sider's arguments do not go through, and moreover that we should instead expect Humeanism to be compatible with the practice of arguing from possibility in philosophy.

Sider (2011, ch. 12) proposes a new reductive analysis of metaphysical modality<sup>1</sup>, 'modal Humeanism'. For the Humean, 'necessity does not carve at the joints'; the necessary statements are just a hodgepodge of certain kinds of truths, which is not particularly interesting or unified (2011, p. 269). Instead, which statements are necessary is determined by 'the way "necessarily" is typically used—by philosophers, in the sense of metaphysical necessity anyway' (2013, p. 276).

We can use deductive consequence to state Humanism more precisely. Specifically, we can state the Human analysis of necessity as the claim that what it is for the statement p to be necessary is for p to be a deductive consequence of a set of 'modal axioms', A (Sider 2011, pp. 271-2):

$$(H\Box) \quad \Box p =_{def} A \vdash p.^2$$

A corresponding Human analysis of possibility follows from (H $\square$ ) by the duality of possibility and necessity. What it is for the statement p to be possible is for  $\neg p$  to not be a deductive consequence of  $\triangle$ :

$$(\mathsf{H}\diamondsuit) \ \diamondsuit p =_{def} \mathcal{A} \nvdash \neg p.$$

Here the modal axioms  $\mathcal{A}$  are just certain kinds of truths. For example,  $\mathcal{A}$  includes truths of several kinds: mathematical statements, 'definitional' statements (which are analytic if true), 'statements of fundamental metaphysics', attributions of deep explanatory features to natural kinds (e.g. 'Gold has atomic number 79'), and identities involving names (Sider 2011,  $\S$ 12.3-5, 12.8, 12.10).

Sider hopes to extract a methodological conclusion from Humeanism. Basically, his strategy is to argue that Humeanism has implications for the epistemology of modality, which in turn has implications for philosophical methodology. Sider's conclusion is supposed to apply to at least to one class of statements: 'statements of fundamental

<sup>&</sup>lt;sup>1</sup> In the remainder of the paper all reference to modality is to metaphysical modality.

<sup>&</sup>lt;sup>2</sup> Perhaps the most standard combination of views is that necessity is a property of *propositions* while deductive consequence is a relation between *sentences*. Then, strictly speaking, the analysis should be stated thusly: what it is for the proposition expressed by the sentence 'p' to be necessary is for 'p' to express a truth and for 'p' to be a deductive consequence of A. I will assume that the issue is orthogonal to the debate here, and for simplicity let context decide whether my talk of 'statements' or 'claims' should be understood as referring to sentences or propositions.

metaphysics' or simply 'metaphysical' statements (2011, p. 274; 2013, p. 276). They are non-contingent statements that concern 'fundamental and abstract matters' without being definitional (2011, pp. 274-5). We can state Sider's epistemological and methodological conclusions as (T1) and (T2) (cf. Sider 2011, pp. 277-8, 2013, p. 275).

- (T1) Evidence of actuality precedes evidence of possibility in metaphysics. Someone S can't know whether p by an argument from possibility if p is 'metaphysical'.
- (T2) No arguments from possibility in metaphysics. Arguments from possibility against p can be discounted from first-order, 'nonmodal' debates if p is 'metaphysical'.

Here an *argument from possibility* has (or can be reconstructed as having) the following form, where  $\neg p$  or some other nonmodal claim inconsistent with p is not used to support (1) in the first place:

- (1)  $\Diamond \neg p$
- $(2) \qquad p \rightarrow \Box p$
- So,  $\neg p$ .<sup>3</sup>

Sider provides his own (1993, 2001) argument against (mereological) nihilism and Chalmers's (1996) argument against physicalism as examples of arguments from possibility that (T2) bans (2011, p. 277). Sider (likewise, Chalmers) there argues that nihilism (physicalism) is possibly false in order to conclude that the thesis is actually false.

Stepping back, Sider's strategy for defending (T2) involves defending Humeanism and then using his reductive analysis to defend (T1). In what follows, I won't question whether Humeanism is true. Rather, I will call into doubt that (T1) is even an epistemological implication of Humeanism. To do this, I first show why three arguments from Humeanism to (T1) suggested by Sider's discussion don't work, and then argue that we shouldn't expect any argument that relies essentially on Humeanism to vindicate (T1).

The first argument from Humeanism to (T1) relies on some picture-thinking, which might at first seem attractive. For this reason, I consider it even though Sider (2013) disavows the argument that it seems to motivate. Consider the following passages:

Humeanism undermines our reason for accepting the possibility in question. Intuitively, this is because for propositions of fundamental metaphysics, possibility boils down to the actual falsity of rivals. (2011, p. 277)

Given the Humean theory, to be necessary is to be true and to fall under a type on the list. But *proposition of metaphysics* is one of the types on the list. So for a proposition of metaphysics such as nihilism, necessity just boils down to truth. But then, the only way to support the claim that nihilism isn't necessary is to argue directly that nihilism is false, in which case the argument from possibility plays no distinctive role. (2013, p. 277)

The suggestion seems to be that the only way we can figure out whether p is necessary (possible,...) will involve asking whether the Humean's corresponding *analysans* is true. When p is a metaphysical statement such as nihilism, it is clear that either it or its negation follows from A. We will then have to figure out whether nihilism is true before we can figure out whether it is possible. Our assessment of possibility in an argument from possibility does not involve first asking whether p, though, since by definition, the possibility premise  $\Diamond \neg p$  does not rely on  $\neg p$ .

<sup>&</sup>lt;sup>3</sup> Perhaps (T1) and (T2) slightly overstate the view Sider has in mind. In particular, I take it Sider should allow that someone can learn that  $\Diamond p$  by expert testimony and then use  $\Diamond p$  (and  $\neg p \rightarrow \Box \neg p$ ) as evidence for p. In what follows, I won't be relying on such cases to challenge Sider's view.

This suggestion assumes that the order of knowledge reflects the direction of the analysis, which need not be true. To see why, consider some other reductive analysis of modality, such as one in terms of essence (Fine 1994). The essence-based analysis is compatible with the view that modal claims can sometimes serve as evidence for claims about essence. Moreover, suppose that we arrived at our modal beliefs without reasoning about essences; we shouldn't say that coming to believe the essence-based analysis automatically threatens our earlier modal beliefs. As Sider points out, 'epistemic features do not in general transmit across "what it is to be F is to be F." (2013, p. 279). There doesn't seem to be anything more to the above passages than an argument that rests on this false assumption, though. Accordingly, we can move on to other arguments.

Sider also argues that Humeanism undermines the view that conceivability is a guide to possibility in metaphysics (2013, pp. 280-1). The slogan that conceivability is a guide to possibility can be made precise in several ways. If we restate the slogan as CONCEIVABILITY, for example, we can formulate Sider's conclusion as (T3).

CONCEIVABILITY If S conceives that p, then S thereby has prima facie justification to believe that  $\Diamond p$ .

(T3) Conceivability is not a guide to possibility in metaphysics. Someone S's conceiving that p does not provide S with prima facie justification to believe that  $\Diamond p$  if p is 'metaphysical'.

Sider's Humean might attempt to use (T3) in an argument for (T1). Let's bracket for the moment whether Humeanism motivates (T3). Is (T3) enough to ensure (T1)? Only if it is assumed that the only method at our disposal for evaluating whether p is possible in the absence of knowing that p is conceiving that p. This is about as controversial as CONCEIVABILITY itself. Alternative epistemologies of modality suggest that there are other ways of figuring out whether p is possible in the absence of knowing that p. Instead, it could be that a maxim in terms of intuitions of possibility such as POSSIBILITY INTUITION is preferable (e.g. Bealer 2002).

POSSIBILITY INTUITION If S has an intuition that  $\diamondsuit p$ , then S thereby has prima facie justification to believe that  $\diamondsuit p$ .

According to other alternatives, highly constrained imaginative exercises replace merely conceiving or imagining that p. One such alternative falls out of Williamson's (2007, ch. 5) account in terms of counterfactual supposition and development. These alternatives seem to be compatible with the claim that we can sometimes acquire evidence of possibility without relying on evidence of actuality, even in metaphysics; so (T1) will be false whether or not (T3) is. If (T3) is true, then only (T4) follows.

(T4) No arguments from conceivability in metaphysics. Arguments from conceivability against *p* can be discounted from first-order, 'nonmodal' debates if *p* is 'metaphysical'.

Here an argument from conceivability is an argument from possibility in which the possibility premise,  $\Diamond \neg p$ , is asserted on the basis of the arguer's conceiving  $\neg p$  (or some suitably related proposition or scenario). Just as (T3) is weaker than (T1), (T4) is weaker than (T2). A ban on arguments from conceivability still leaves open the permissibility of relying on arguments from possibility in which the possibility premise is asserted on the basis of some method other than conceivability. Of course many of the standard examples of arguments from possibility are also arguments from conceivability. In Sider's own examples in particular, the conceivability of gunk (likewise, zombies) is used in support of the possible falsity of nihilism (physicalism). So, the second argument can't work because even if (T3) is true, a claim as strong as (T1) doesn't follow.

Finally, we can consider what I take to be Sider's main argument (2013, pp. 279-80). It concerns (3), which the Human analyzes as (4).

- (3) Atomism is not necessary.
- (4) Atomism is not a deductive consequence of A.

Sider invites us to consider a scenario in which you don't initially endorse Humeanism or have any reason to believe that atomism is false. You do, however, believe that atomism is necessary if true. You then judge that gunk is possible, and thereby that (3) is true (we can otherwise leave open how you assess (3) so long as your reason is not that atomism is false, or one of its rival theses true). Next, you come to endorse Humeanism. Because (3), the claim that atomism is necessary if true, and Humeanism evidently entail (4), you should either infer (4), or abandon one of your beliefs. Sider thinks that the only reasonable response is to abandon belief in (3): 'Unless your reasons for coming to believe the Humean view somehow give you reason to believe [(4)] (and how could they?), you should surely then abandon your former belief that atomism isn't necessary' (2013, p. 280).

Sider doesn't offer a reason for thinking that the response of inferring (4) is absurd, though. He only raises the rhetorical worry, 'how could they?'. Suppose that Sider is right that inferring (4) is absurd. This is not enough for Sider's purposes. Sider requires that the response of inferring any claim of the form (4') from one of the form (3') is absurd when p is 'metaphysical':

- (3') It is not necessary that p.
- (4') p is not a deductive consequence of A.

There is a competing explanation for why inferring (4) is, or at least seems, absurd. I take it that many of us doubt that we have a reason to believe that gunk is possible, for reasons that have nothing to do with Humeanism.<sup>4</sup> After all, the possibility of gunk was controversial before Humeanism entered the menu of options for analyzing modality. Equally, though, there seem to be cases where the response of inferring (4') from (3') does not seem absurd.

Many less controversial thought experiments in philosophy can also be reconstructed as arguments from possibility.<sup>5</sup> They provide a challenge for this argument as well as Sider's position more generally. For example, Gettier (1963) cases can be reconstructed as arguments from possibility against the claim that knowledge is identical to justified true belief, which provides one way of construing the justified true belief analysis of knowledge (cf. Williamson 2007, ch. 6). Similarly, Putnam's (1975) Twin-Earth cases can be reconstructed as arguments from possibility against a version of functionalism, which claims that the state of associating a certain meaning with a word is identical to a certain brain-state.<sup>6</sup>

Sider can say one of two things about arguments from possibility such as these. The first option is to admit that these arguments from possibility, like his examples, should be discounted from philosophical debates. This looks unattractive. In these cases, it looks perfectly reasonable to infer  $\neg p$  and—assuming Humeanism—(4') on the basis of (3'). In other words, it would be reasonable for someone to conclude that the JTB analysis (say)

<sup>&</sup>lt;sup>4</sup> Williams (2006) motivates one strategy for resisting the claim that gunk is possible.

<sup>&</sup>lt;sup>5</sup> It is then a further question whether the possibility premise in such an argument rests on some further modal premises or not. Williamson (2007), Ichikawa and Jarvis (2009) and Malmgren (2011) offer competing proposals about what the further modal premises are in the case of the Gettier argument.

<sup>&</sup>lt;sup>6</sup> Thanks to Juhani Yli-Vakkuri for suggesting this example.

is not a deductive consequence of A after converting to Humeanism—rather than abandoning her earlier belief that the analysis is not necessary.

The second option is to concede that these arguments from possibility should not be discounted, but that they are importantly different from Sider's own examples. In particular, Sider would have to say that Humeanism undermines all arguments from possibility targeting metaphysical statements, but that they don't undermine others, including my examples. On Sider's characterization of 'statements of fundamental metaphysics', lots of philosophical theses should count. (For this reason, the label sounds overly restrictive.) The worry is that the statements targeted by the Gettier and Putnam arguments fit Sider's characterization as well, or nearly as well, as Sider's preferred examples like physicalism. Suppose that we instead reclassify my examples of statements as necessary if true without being 'metaphysical'. It's not clear why this will help. It will only help if Humeanism doesn't undermine arguments from possibility against other statements that are necessary if true to the same extent. Sider suggests that perhaps the Humean should not discount arguments from possibility against definitional statements (2013, p. 280). This makes it look like my examples will have to be reclassified as statements that are definitional, or analytic if true. It's controversial whether even philosophical 'analyses' such as the JTB analysis of knowledge are analytic if true.<sup>7</sup> Moreover, the grounds that Sider uses to argue that certain claims in metaphysics are not definitional apply equally to my examples: 'They are the subject of controversy, and so are not construed as definitional of the terms they contain' (2011, p. 274).

Finally, there are countless other examples of thought experiments in philosophy, which can be reconstructed as arguments from possibility. In each case, Sider will have to claim either that the argument targets a statement that is not 'metaphysical' (presumably definitional), while at the same time maintaining that nihilism and physicalism are, or else maintain that it should be discounted. More generally, I doubt that one of the two options will always be plausible. Sider's position loses it force once other less controversial arguments from possibility are considered.

So far I have argued that Sider's attempts to motivate (T1) and in turn (T2) using Humeanism don't succeed. Perhaps some other argument from Humeanism can be used to establish (T1) and (T2). I want to suggest that we shouldn't expect any argument that relies essentially on Humeanism to establish (T1)-(T4). Throughout, Sider presupposes that converting to Humeanism gives us a new reason for these conclusions. This is evident from the way he states his position: 'The Humean treatment about the necessity of laws of metaphysics undermines "arguments from possibility" for conclusions in fundamental metaphysics' (2011, p. 277). Whether they give us a new reason depends on what picture of modality we have before encountering Humeanism. They won't supply us with a new reason if we endorse a 'standard' picture of modality. According to it, the same kinds of propositions are necessary (contingent, possible,...) as the Humean analysis predicts. (Think of the standard picture as neutral on which analysis of modality, if any, is correct.) If Humeanism does not change our views about which propositions have which modal statuses, then how can it have revisionary methodological and epistemological conclusions? The same methods of figuring out the modal status of propositions (whatever they are) will remain reliable and thus should remain in place. As a result, we shouldn't expect there to be any arguments for (T1)-(T4) that rely essentially on Humeanism to be possible. They could just be restated as relying on the standard picture of modality.

<sup>&</sup>lt;sup>7</sup> Williamson (2007) provides an attack.

<sup>&</sup>lt;sup>8</sup> For some potential examples, see Bealer 1996, p. 4.

The same range of epistemological and methodological positions seems to be available to the Humean as to anyone with the standard picture of modality. Among those with a more or less standard picture, the consensus is that (T1) is false. Even van Inwagen's (1998) "modal skepticism" is modest by comparison to (T1) as it only dismisses certain modal arguments in philosophy; Gettier arguments are excluded, for example (p. 81, n. 1). If anything, the Humean should reject (T1) rather than embrace it. She should think that at least some arguments from possibility in philosophy are permissible. The Gettier and Twin-Earth arguments mentioned above are plausible candidates. (T3) is much more controversial among those with the standard picture of modality. Perhaps the Humean should endorse (T3), but the arguments for and against do not have anything to do with Humeanism per se. Rather, they turn on which propositions are conceivable, which propositions are possible, and what kind of positive epistemic status ('guide') is at issue.

One of Sider's (2013) aims is to establish that arguments that start by claiming the possibility of gunk do not present a challenge to nihilism. His strategy for reaching this conclusion is to use Humeanism to argue that, in general, arguments from possibility should not be used in fundamental metaphysics. I'll close by sketching a much less contentious—and I think more promising—route to the conclusion that extant arguments from the possibility of gunk do not present a challenge to nihilism. Suppose that we don't know at present whether gunk is possible, at least not unless we know that gunk is actual. In other words, we don't know that nihilism is false by an argument from possibility. The exact form the argument for this claim takes will depend on our preferred epistemology of modality, but here are two suggestions. It could be that even if we have a prima facie reason to believe that gunk is possible, the existence of enough epistemic peers in disagreement defeats this reason. Second, perhaps our methods for assessing modal claims do not yield a clear verdict in this case. Williamson suggests that the claim that zombies are possible may be like that (2007, p. 164), and perhaps the claim that gunk is possible is similar. The obvious advantage of this route to dismissing merely possible gunk is that it does not require the existence of an argument from Humeanism to (T1), which I already cast doubt on. Moreover, while this approach is available to the Humean, it is also available to those of us who don't accept Sider's analysis of modality. 10 Again, this reinforces my earlier point. We can't derive methodological and epistemological views from Humeanism in any straightforward way. Even if Humeanism is true, arguments from possibility continue to raise difficult issues. 11

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<sup>&</sup>lt;sup>9</sup> Though Yablo (1993) provides an influential defense of CONCEIVABILITY, which seems intended as compatible with the standard picture of modality.

<sup>&</sup>lt;sup>10</sup> Sider (2013, pp. 275, 281-2) also sketches some strategies for dismissing the possibility of gunk, which do not assume Humeanism.

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