TO BE OR NOT TO BE: THE PROBLEM OF INDETERMINATE EXISTENCE

by

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ABSTRACT

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Sider argues that existence cannot be indeterminate, since the existential quantifier cannot be precisified in terms of domain variation. Barnes counterargues that domain variation is indeterminate in the case of indeterminate existence, which allows precisification. I argue that indeterminate domain variation among precisifications is only possible if domain variation is understood in a "strong" sense wherein some object in the domain of one precisification satisfies a given predicate, whereas no object in the domain of the other precisification satisfies this predicate. In presuming that something determinately exists, both Barnes and Sider end up imagining the precisifications as associated with weakly varied domains, where the salient difference between the domains (if there is more than one domain at all) is their size. The problem of indeterminate existence requires reconciling Barnes' indeterminate domain variation among precisifications with Sider's description of strongly varied domains.

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Introduction

Sider argues that existence can't be indeterminate, in the sense that an indeterminate unrestricted existential quantifier can't have precisifications that are associated with different domains; whichever precisification has the larger domain is determinately the meaning of ∃. Barnes counters by arguing that if what differentiates precisifications is merely the size of their domains, then of course ∃ turns out to have been determinate all along—if there's determinate domain variation, then the notion that we ever had two candidates for the meaning of ∃ was just an illusion. Nevertheless, she thinks that she can get two genuine precisifications by rendering domain variation indeterminate, thus forestalling either precisification from canceling the other's candidacy.

I begin by reviewing Sider's argument and Barnes' counterargument. After discussing Sider's complaint about non-domain varying precisifications, I show how Barnes subverts this complaint and reconceives the problem of indeterminate existence so as to allow for indeterminate domain variation among candidate precisifications. Barnes thinks that Sider goes wrong in imagining that we could "track back" from domains to the meaning of ∃, and she thinks that she forestalls either precisification from canceling the other's candidacy by reversing the direction of this trajectory. However, this interpretation is misguided and inadvertently leads Barnes into the same trap that Sider falls into. Indeterminate domain variation among candidate precisifications requires that the precisifications be associated with strongly varied domains, whereas both Barnes and Sider end up imagining the precisifications as associated with weakly varied domains, where the difference of "weak variation" reduces to a "greater than" relation. Nevertheless, Barnes is correct insofar as indeterminate domain variation among candidate precisifications is what we're really after, and Sider is correct insofar as his argument in fact describes strongly varied domains.

I argue that indeterminate domain variation among candidate precisifications is only assertable if the possibility of two genuine precisifications and the possibility of strongly varied domains are two sides of the same coin, a mutually exclusive yet inextricable pair. In the end, the problem of indeterminate existence requires reconciling the best of both approaches.

1. Sider's Argument Against Indeterminate Existence

Sider argues that existence can't be indeterminate, if indeterminacy is the sort of thing that admits of precisification. Suppose existence *were* indeterminate. The unrestricted existential quantifier would then be indeterminate, in the sense that it would be indeterminate what it would mean for ∃ to range over everything that exists. This indeterminate ∃ could be precisified in the following way. Imagine some predicate Φ such that Φ is not vague. Given that ∃ is indeterminate, the sentence "$\exists x \Phi x$" has indeterminate truth value, even though Φ is not vague. Now suppose I have two precisifications of the unrestricted existential quantifier, $\exists_1$ and $\exists_2$, such that substituting one into "$\exists x \Phi x$" makes the sentence come out true, and substituting the other makes the sentence out false. In considering what it would mean for $\exists_1$ and $\exists_2$ to generate these truth values, Sider suggests that it has something to do with domain variation. More specifically, each precisification of ∃ is associated with a different domain, such that one domain includes some object that satisfies Φ, and the other domain includes no object that satisfies Φ. He calls this principle "Domains."[1]

> Domains $\exists_1$ and $\exists_2$ are associated with different domains;
> some object in the domain of one satisfies Φ,
> whereas no object in the domain of the other satisfies Φ

Sider further argues that Domains entails that some Φ-satisfying object exists.

[1] Theodore Sider, "Against Vague and Unnatural Existence: Reply to Liebesman and Eklund," *Noûs* 43, no. 3 (2009): 557, https://doi.org/10.1111/j.1468-0068.2009.00718.x.

—"ay, there's the rub," as Hamlet remarked when pondering a kindred question.[2] If some object satisfies Φ, and this object in is the domain of one precisification but not the other, then whichever precisification has the larger domain is determinately the meaning of ∃. This follows straightforwardly from ∃ ranging over everything that exists. Merely quantifying over the Φ-satisfying object—even in this tentative way, wherein the Φ-satisfying object is a mere marker of domain variation distinguishing two precisifications of ∃—commits us to the object's existence, and thereby commits us to a determinate unrestricted existential quantifier.

2. Barnes' Critique of Sider's Argument

Barnes' reply to Sider targets his cashing out precisification in terms of domain variation. More specifically, she targets the notion that precisification is a matter of fixing reference to one of two determinate domains, which she thinks is implicit in Sider's argument. In Barnes' description of Sider's scenario, we are asked to imagine that some object *a* determinately exists, and it's indeterminate whether anything besides *a* exists. We then imagine the precisifications of ∃ such that one—$\exists_1$, let's stipulate—is assigned to the domain $\{a, b\}$, and the other, $\exists_2$, is assigned to $\{a\}$. Genuine precisifications of an indeterminate ∃ must have equal claim to being the meaning of ∃. Barnes argues that this is impossible for Sider's domain-varying precisifications, since anything that could distinguish one domain from the other will automatically determine one precisification as the meaning of ∃ and thereby rule out the other. As soon as we have determinate domain variation, we have a determinate unrestricted existential quantifier.

Sider's argument is supposed to show that if indeterminacy is the sort of thing we can precisify, then existence can't be indeterminate. Barnes rightly points out that if we're trying to

[2] William Shakespeare, *Hamlet*, ed. Burton Raffael (New Haven: Yale University Press, 2003), 97.

figure out what it means for ∃ to range over "everything," then imagining ∃ ranging over domains of different sizes isn't useful. If the salient variation between precisifications of an indeterminate ∃ is the size of their domains, then we can't ever have two genuine precisifications. Whichever precisification has the bigger domain is automatically the meaning of the unrestricted existential quantifier. But that doesn't mean that existence can't be indeterminate; it just means that indeterminate existence would infect our attempts to quantify stuff, which is probably what we ought to expect.

3. Sider's Intuitive Problem with Non-Domain-Varying Precisifications

Sider examines whether there might be non-domain-varying precisifications of indeterminate existence, but he doesn't think that this is a viable alternative.[3] Consider how a range of translation functions might yield a range of precisifications. Suppose that existence is indeterminate in the sense that there may or may not be something composed of *a* and *b*, which are "attached" to each other to degree 0.8, a borderline case of attachment. The sentence "Something is composed of objects *a* and *b*" would have indeterminate truth value, since it's indeterminate whether any further "something" is composed—it's indeterminate whether any further object exists. Rather than precisifying indeterminate existence in terms of ∃-like operators that make an indeterminate sentence "$\exists x \Phi x$" true or false, Sider suggests that we might precisify in terms of functions that translate "Something is composed of objects *a* and *b*" into true or false sentences. One translation function returns the true sentence, "*a* and *b* are attached to each other at least to degree 0.7." Another translation function outputs the false sentence, "Some object, any two parts of which are attached to each other at least to degree 0.9, is composed of *a* and *b*."

[3] Sider, "Against Vague and Unnatural Existence," 558.

Precisifying indeterminate existence in terms of ∃-like operators that make an indeterminate sentence true or false represents precisification in terms of what happens if we force a choice of stuff to quantify over. In contrast, this alternative approach represents precisification in terms of how true and false statements can be used to mark off determinate limits peripheral to what's indeterminate. It's indeterminate whether "something" is composed of *a* and *b*, since it's a borderline case of attachment. Nevertheless, it's determinately true that *a* and *b* are "attached" to degree 0.8 (even though it's indeterminate whether this counts as attachment in the relevant sense), and it's determinately false that *a* and *b* have the 0.9 degree of attachment requisite to compose some object.

However, Sider doesn't think that this is a genuine alternative to precisifying indeterminate existence. Intuitively, it doesn't accomplish what precisification is supposed to accomplish. In refining the meaning of an indeterminate unrestricted existential quantifier, we're trying to figure out what it would mean for ∃ to range over everything if existence were indeterminate. In this scenario, ∃ is indeterminate because it's unclear whether borderline attachment composes any "further object" that ∃ could range over. That *a* and *b* are "attached" at least to degree 0.7 doesn't address whether *a* and *b* have the kind of attachment that counts. That *a* and *b* fall short of the 0.9 attachment that would determinately compose something doesn't tell us what to do with borderline cases. Representing indeterminate existence in terms of a graded scale merely shows that if existence comes in degrees, then a portion of the continuum at which existence is indeterminate would not overlap the portion at which existence is indeterminate. Maybe this expresses the problem of indeterminate existence more precisely, but it's not the kind of precisification we're after.

4. Barnes' Alternative Approach to Precisifying Indeterminate Existence

In Barnes' diagnosis of the problem with Sider's two attempts to precisify indeterminate existence, he gets stuck because he expects Domains to be determinately true or false. On the one hand, Sider's argument from domain-varying precisifications to the impossibility of indeterminate existence depends on Domains being true. What distinguishes the precisifications is their association with different domains. What differentiates the domains is that one includes some object that satisfies Φ and the other includes no object that satisfies Φ. But if Domains is assertable, Sider argues, then Domains is true; and so Domains entails that some object satisfies Φ. But if some object satisfies Φ, then "$\exists x \Phi x$" isn't indeterminate after all, and so there's no way to precisify a supposedly indeterminate unrestricted existential quantifier. Consequently, if indeterminacy is the sort of thing that we ought to be able to precisify, then it looks as if existence can't be indeterminate.

On the other hand, Barnes suggests that Domains has to be false for Sider's objection to non-domain-varying precisifications to be a legitimate complaint. If indeterminate existence is the sort of thing that can only ever be precisified in the sense of marking off the borders at which existence is determinate and saying that what's indeterminate doesn't overlap these portions of the continuum, then ∃'s meaning is determinately not the sort of thing that could ever be made to show up in terms of domain variation, and Sider's complaint that we're really just precisifying the problem (not precisifying ∃) makes sense. Barnes claims that this approach to non-domain-varying precisification renders Domains false, since "precisifications don't have anything to do with varying the domain of a quantifier."[4]

[4] Elizabeth Barnes, "Metaphysically Indeterminate Existence," *Philosophical Studies* 166, no. 3 (2013): 509, https://doi.org/10.1007/s11098-012-9979-3.

However, from Barnes' perspective, Domains shouldn't be either true or false—if existence is indeterminate, then Domains is indeterminate as well. On her approach to precisifying indeterminate existence, it's indeterminate whether or not precisifications of ∃ are associated with different domains. Since the meaning of the unrestricted existential quantifier is to range over everything that exists, if existence is indeterminate, then what's indeterminate about ∃ is whether or not it should range over indeterminately existing things in addition to those that determinately exist. Rather than associating $\exists_1$ and $\exists_2$ with varying domains, she assigns varying sets of instructions to each precisification. $\exists_2$ should cautiously range over only what determinately exists, and $\exists_1$ should boldly range over what indeterminately exists in addition to what determinately exists.

Unlike Sider's domain-varying precisifications, Barnes thinks that her precisifications have equal claim to being the meaning of ∃. There's no avoiding the fact that whichever is the "correct" precisification automatically eliminates the other's candidacy for being the meaning of ∃. Nevertheless, her precisifications both count as genuine candidates because she manages to forestall this elimination. Recall that in Barnes' description of the scenario, some object *a* determinately exists, and it's indeterminate whether anything besides *a* exists. Since $\exists_2$'s domain is $\{a\}$, $\exists_2$ is determinately a quantifier; but since it's indeterminate whether anything else exists, $\exists_2$ is indeterminately unrestricted. Since $\exists_1$'s domain is $\{a, b\}$, $\exists_1$ can't help but range over everything; but since it's indeterminate whether anything besides *a* exists, $\exists_1$ is indeterminately a quantifier (it might be a pseudo-quantifier). So it's indeterminate whether $\exists_1$ ranges over *only* what exists, and it's indeterminate whether $\exists_2$ ranges over *all* that exists. The unrestricted existential quantifier determinately ranges over something, but it's indeterminate whether its domain is $\{a\}$

or something else, because it's indeterminate whether a precisification of ∃ could range over anything besides *a* and still count as a quantifier.

On Barnes' framing of the problem of indeterminate existence, there's a sense in which indeterminacy is precisified in terms of domain variation, insofar as it's possible that $\exists_1$ and $\exists_2$ are associated with different domains. However, this possibility is inextricably paired with the possibility that there's only one genuine domain in the sense relevant for the meaning of ∃. Sider gets stuck in both attempts at precisification because he's imagining indeterminate existence as either the sort of thing for which we could force a choice of stuff to quantify over, or else the sort of thing that could never be represented in terms of domain variation. Barnes reconceives indeterminate existence as precisely the sort of thing that *should* get us stuck if we imagine that precisifying indeterminacy in terms of domain variation is determinately possible or impossible.

5. What Barnes Thinks her Approach Accomplishes

Now, there's more than one way to conceive of what Barnes' approach to precisification accomplishes. In the next section I'll argue for my own interpretation. First let's consider what Barnes thinks she's up to. She describes her project as showing that the possibility of indeterminate existence means that "we can't assume that we can track back from extensions or domains to reference-fixing descriptions."[5] This is what motivates her assignment of different sets of instructions—a sort of reference-fixing description—to $\exists_1$ and $\exists_2$, rather than assigning them to different domains. By reversing the direction of the arrow, so that we move from $\exists_1$ and $\exists_2$ toward their domains instead of trying to track back from domains to $\exists_1$ and $\exists_2$, she shows how it could

[5] Barnes, "Metaphysically Indeterminate Existence," 507.

be indeterminate whether there are multiple domains, which forestalls either precisification from ruling out the other.

Barnes offers a "story" that's meant to convey what goes wrong with Sider's approach to the problem of indeterminate existence and how she subverts this roadblock.[6] She asks the reader to imagine language "as composed of terms, reference-fixing descriptions, and the extensions you get by applying those reference-fixing descriptions."[7] An ordinary term like "red" generates indeterminacy because there are many ways we could mark off the boundaries of what "counts" as red, but we can precisify the term by arbitrarily picking some boundaries and then tracking back to a reference-fixing description that picks out exactly this delimitation of the term's extension. In the case of "red," it's perfectly fine to precisify by tracking back.

The problem with Sider's argument, Barnes thinks, is the presumption that "∃" is a term like "red," amenable to precisification in terms of a process of tracking back to the reference-fixing description that picks out exactly "this" extension. But "∃" isn't like "red." The reason it's indeterminate what counts as existing isn't a matter of uncertainty about whether ∃ picks out this or that or some other object, such that the term's extension has fuzzy borders. Rather, it's indeterminate what counts as existing because even though ∃ determinately ranges over everything, it's indeterminate whether the description "ranges over everything" links ∃ to this domain or some other domain. Precisify the description "ranges over everything," Barnes thinks, and you can precisify ∃.

6. "Different" Domains? Weak and Strong Variation

[6] Barnes, "Metaphysically Indeterminate Existence," 508.

[7] Barnes, "Metaphysically Indeterminate Existence," 507.

Barnes purports to show that Sider's method for precisifying is reducible to a kind of reference-fixing that surreptitiously assumes its conclusions. Describing domain variation in terms of some Φ-satisfying object that shows up in one precisification's domain but not the other presumes that there's some sense in which this Φ-satisfying object's existence isn't really indeterminate after all. But "if it can be indeterminate *what objects there are*," she objects, then "we can't assume that we can precisify by sorting objects into extensions and domains."[8] Sider hasn't shown that "indeterminate" existence can't be precisified; he's merely shown that determinate domain variation automatically yields a determinate unrestricted existential quantifier.

Nevertheless, Barnes' interpretation inadvertently converts her own approach to precisification into a variant of what she describes of Sider. If Barnes' project is merely about describing precisifications in a way that forestalls each from canceling the other, then it's just another way of putting the claim that determinate domain variation automatically yields a determinate unrestricted existential quantifier.

The problem begins with how she frames Sider's approach as a kind of precisification by sorting objects into domains. In Barnes' description of Sider's scenario, we imagine a determinately existing entity in a world where nothing else determinately exists; then we construct one domain with merely that entity, and a second domain with that entity plus something else; and then we stipulatively assign the domains to different ∃-like operators.

However, that's not quite the scenario Sider describes. In his description, the Φ-satisfying object is a kind of heuristic device, a way of trying to imagine how substituting in precisifications of ∃ could generate varying truth values for the indeterminate sentence "$\exists x \Phi x$." Unlike Barnes' scenario, which is framed in terms of objects, Sider's scenario is framed in terms of a sentence's

[8] Barnes, "Metaphysically Indeterminate Existence," 506.

truth values. We imagine an unrestricted existential quantifier in a world where existence is indeterminate, then we construct a sentence "$\exists x \Phi x$" that comes out indeterminate. Next, we use that sentence to construct precisifications of $\exists$ such that one makes the sentence come out true and the other makes the sentence come out false. We only start thinking in terms of entities after constructing these precisifications.

Domains fleshes out the hypothesis that different truth values for "$\exists x \Phi x$" could be generated by domain-varying precisifications, but it merely asserts that one domain includes a Φ-satisfying object and the other includes no Φ-satisfying object. This isn't quite the same as Barnes' description, in which the two domains are alike in having at least one Φ-satisfying object and vary insofar as one has a second Φ-satisfying indeterminate object. There are two ways to understand $\exists_1$ and $\exists_2$ being associated with different domains—two meanings of "different." Let's call these "weak" and "strong" variation.

Weak domain variation	exactly one object in the domain of one satisfies Φ, whereas more than one object in the domain of the other satisfies Φ
Strong domain variation	some object in the domain of one satisfies Φ, whereas no object in the domain of the other satisfies Φ

We can then construct two versions of the Domains principle.

Weak Domains	$\exists_1$ and $\exists_2$ are associated with weakly varied domains
Strong Domains	$\exists_1$ and $\exists_2$ are associated with strongly varied domains

Weak Domains entails that *something* determinately exists. Whatever indeterminate existence might be, it's at least clear what determinate existence is. Sider similarly claims that Domains entails that some object satisfies Φ, leading him to conclude that existence can't be indeterminate—if some Φ-satisfying object exists, then "$\exists x \Phi x$" can't be indeterminate after all. Weak Domains entails that something determinately exists because differentiating the

precisifications in terms of whether or not ∃ ranges over some indeterminate entity in addition to ranging over what determinately exists presupposes that something determinately exists.

The core difficulty with Barnes' interpretation is that "$\exists x \Phi x$" coming out indeterminate can't be clarified in terms of weakly varied domains. For the precisifications to have equal claim as candidates for the meaning of ∃, it must be indeterminate whether or not there is domain variation among them. But $\exists_1$ and $\exists_2$ can't even possibly be associated with weakly varied domains, because the "difference" of weak variation reduces to a "greater than" relation, where the salient variation is domain size. As soon as we say that some Φ-satisfying object determinately exists, the salient difference between the domains is the number of objects they encompass, in which case one precisification automatically cancels the other's candidacy. As Barnes herself shows, if we're trying to figure out what it means for ∃ to range over "everything," then imagining ∃ ranging over domains of different sizes isn't going to help. That Barnes manages to describe the scenario in a way that appears to forestall this elimination is inconsequential. Merely expressing the precisifications such that it's indeterminate which one cancels the other isn't a genuine alternative to Sider.

Barnes rightly reconceives the problem of indeterminate existence such that Domains is indeterminate, and she appropriately intuits that indeterminate domain variation among candidate precisifications is needed to render Domains indeterminate. However, she takes a wrong turn in converting Domains to Weak Domains in order to explain why Sider's precisifications can't both be genuine candidates for the meaning of ∃. Once she's made this conversion, Domains isn't available anymore, and so she's forced to interpret her own approach to precisification in terms of Weak Domains as well. Arguing that ∃ determinately ranges over something, but it's indeterminate whether its domain is $\{a\}$ or something else (because it's indeterminate whether a precisification

of ∃ could range over anything besides *a* and still count as a quantifier), appears to yield indeterminate domain variation. In the end, however, this is just as much an illusion as Sider's "two" candidates for the meaning of ∃. Her claim that both precisifications of ∃ determinately range over something is every bit as determinate as Sider's determinate domain variation and equally commits us to a single candidate as determinately the meaning of ∃, because as soon as the precisifications determinately range over *anything*, it's impossible for the salient difference between candidate domains to amount to anything more than a "greater than" relation.

The only way that "$\exists x \Phi x$" could have indeterminate truth value is if Domains is indeterminate, and Domains can only be indeterminate if domain variation among candidate precisifications is indeterminate. If that's what we're aiming at, then $\exists_1$ and $\exists_2$ can't even possibly be associated with weakly varied domains, because weak variation merely offers the illusion of difference. It's only possible for genuine candidate precisifications to be associated with genuinely different domains if this difference amounts to strong variation and is irreducible to a "greater than" relation.

7. Asserting Indeterminate Domain Variation

What could it mean for "$\exists x \Phi x$" to fail to come out either true or false? Does existence come in degrees, but it's unclear whether some intermediate degree "counts" as existing? This is the possibility that Sider attempts to develop in his non-domain-varying approach to precisification, which seems to narrow the scope of the question rather than producing the kind of precisification we're after. Does existence come in kinds, and we're not sure if we're justified in talking about existence univocally? Whatever we might say positively about why "$\exists x \Phi x$" comes out indeterminate, we can at least rule out weakly varied domains from the possible explanations. $\exists_1$ and $\exists_2$ being associated with strongly varied domains is the only scenario in which "$\exists x \Phi x$" can

have indeterminate truth value, because it's the only scenario in which it's possible for the precisifications to be associated with different domains. Only strong variation yields genuine difference.

Sider argues that if Domains is assertable, then Domains is true, which entails that some object satisfies Φ. In Barnes' reconception of the problem of indeterminate existence, Domains is indeterminate in the sense that it entails a pair of mutually exclusive possibilities: either $\exists_1$ and $\exists_2$ are associated with different domains (in which case the candidate with the larger domain immediately cancels the other), or else there's only one genuine domain (in the case that one of the precisifications turns out to be a pseudo-quantifier). The indeterminacy of "$\exists x \Phi x$" gets precisified in terms of this pair—the possibility that the precisifications are associated with different domains, and the possibility that there's only one genuine domain. Since Barnes' varying sets of instructions assigned to each precisification merely fix trajectories toward domains (or a domain and a pseudo-domain, as the case may be), whereas the question of which possibility comes to fruition to the exclusion of the other is a matter of the precisifications hitting their targets, the candidates are supposed to have equal claim.

However, if the indeterminacy among this pair of possibilities reduces to a question of whether there's *more than one* or *merely one* domain that a precisification of ∃ could range over and still count as a quantifier, then Domains isn't indeterminate after all. Weak Domains *can't* be indeterminate, because the only salient difference between the domains (if there's more than one domain at all) is their size. Weakly varied domains don't have the kind of difference that could individuate precisifications as genuine candidates. Since we can only ever assert that $\exists_1$ and $\exists_2$ are associated with different domains if "different" means strongly varied, the appropriate question isn't whether there's more than one or merely one domain that a precisification could range over

and still count as a quantifier. Rather, the appropriate question is whether there's a domain at all. Is ∃ a functional operator? If existence can be indeterminate, what would it mean for ∃ to range over everything that exists, and could ∃ play this role?

Here's what I think. Domains entails that some object satisfying Φ and no object satisfying Φ are mutually exclusive possibilities that are both genuinely possible with respect to the question of what it could mean for $\exists_1$ and $\exists_2$ to generate the values "true" and "false" for the indeterminate sentence "$\exists x \Phi x$." This is a kind of weaving together of Sider's robust description of strong variation among candidate precisifications, and Barnes' insistence that Domains is indeterminate because indeterminate existence makes for indeterminate domain variation among candidate precisifications. The assertability and indeterminacy of Domains go hand in hand, because indeterminate domain variation among candidate precisifications is only assertable if the possibility of two genuine precisifications and the possibility of strongly varied domains are two sides of the same coin, a mutually exclusive yet inextricable pair.

Barnes wants to describe this pair as the possibility that $\exists_1$ and $\exists_2$ are associated with different domains and the possibility that there's only one genuine domain. However, this can't amount to a scenario in which either the candidate with the larger domain immediately cancels the other, or else one of the "quantifiers" isn't genuine. Barnes' description of the scenario envisions a kind of adversarial relationship between the oneness or twoness of the candidate precisifications and their possible domains: either the domains being genuinely two makes it so that one candidate immediately annihilates the other "candidate", or else the candidates being genuinely two makes it so that one "domain" is in fact a pseudo-domain.

What I'm trying to envision is rather a harmonic interweaving of the oneness and multiplicity of the candidate precisifications and their domains. Given that "$\exists x \Phi x$" is

indeterminate yet assertable, it must be the case that "$\exists_1$ and $\exists_2$ are associated with different domains" is indeterminate yet assertable. We can make sense of this as a kind of dynamic oscillation between subject and predicate that doesn't allow us to get both into focus at the same time. If I focus my attention on the predicate "associated with different domains," then it looks like there's genuine domain variation but only one genuine candidate. If I fix my gaze on the subject, then it looks as if "$\exists_1$" and "$\exists_2$" are distinct candidates, but one turns out to be a pseudo-quantifier. But if I let the copula become the focal point, then I discern both subject and predicate in my peripheral vision.

"$\exists_1$ and $\exists_2$ are associated with different domains" is both indeterminate and assertable because its representation of how substituting precisifications into the sentence "$\exists x \Phi x$" could generate the values "true" and "false" only goes through when the copula is understood as a kind of pivot that holds subject and predicate in dynamic equilibrium. If the domains were determinately two rather than one, then we could no longer assert the "$\exists_1$ and $\exists_2$" portion of the sentence, because association with domains linked by a "greater than" relation immediately cancels the candidacy of all but one precisification. If "$\exists_1$" and "$\exists_2$" were determinately two rather than one, then we could no longer assert the predicate "associated with different domains," because the precisifications can only be associated with genuinely different entities if all but one is a pseudo-quantifier, associated with a pseudo-domain. If we try to have it both ways, determinately distinct candidates and determinately different domains, we'll end up with neither. The indeterminacy of "$\exists_1$ and $\exists_2$ are associated with different domains" is presupposed in its assertability.

Conclusion

I've argued that the problem of indeterminate existence calls for integrating aspects of both Barnes' and Sider's arguments. If existence can be indeterminate, then we can construct a sentence

"$\exists x \Phi x$" with indeterminate truth value even though Φ is not vague. Moreover, we can construct two precisifications such that substituting $\exists_1$ and $\exists_2$ into "$\exists x \Phi x$" generates the values true and false, because of some respect in which the precisifications are associated with strongly varied domains. Given that "$\exists x \Phi x$" is assertable and indeterminate, the assertability of "$\exists_1$ and $\exists_2$ are associated with different domains" presupposes its indeterminacy. "$\exists_1$ and $\exists_2$ are associated with different domains" can only be indeterminate if there is both strong domain variation and indeterminate domain variation among the candidate precisifications. The requirement of strong domain variation means that neither of "$\exists_1 x \Phi x$" and "$\exists_2 x \Phi x$" comes out true or false because something determinately exists, since then it would be the case that Domains is really just Weak Domains, which can't be indeterminate. Consequently, the indeterminacy of domain variation among the precisifications is a matter of there being either strongly varied domains or no domains at all, not a matter of whether there's more than one or merely one domain.

What's indeterminate about domain variation among precisifications involves whether or not the precisifications are functional quantifiers, not which objects they do or don't range over. The problem of indeterminate existence isn't a question of which entities count as existing, but rather what it would mean to be counted as existing, if existence were indeterminate. "$\exists x \Phi x$" has indeterminate truth value because it's indeterminate what it means for $\exists$ to range over everything—what it means for $\exists$ to be a functional operator.

Suppose that we have two precisifications of $\exists$ such that "$\exists x \Phi x$" comes out true for one and false for the other. What would it mean for the precisifications to generate these truth values? If it means anything at all, its meaning is a matter of one precisification ranging over what indeterminately exists as if it existed determinately, and the other precisification failing to range over anything at all because it treats what indeterminately exists as if it were determinately

nonexistent. But which is bold, and which is cautious? Is it prudent or dauntless to infer determinate existence from indeterminate existence? How about inferring non-existence from indeterminate existence? Which precisification comes out true, and which comes out false? It's hard to say what it would mean to give truth conditions, because whatever indeterminate existence is, isn't reducible to "existence vs. non-existence."

"To be, or not to be: that is the question," begins Hamlet in his famed soliloquy.[9] Is it better to go on living and passively "suffer the slings and arrows of outrageous fortune," or to actively "take arms" against this "sea of troubles" and "end the heart-ache" by taking one's life into one's own hands? Yet as Hamlet ponders the resemblance between death and sleep, the question changes. If it were merely a question of whether to live or not to live, he suggests, then there would not be much indecision at all, "for who would bear the whips and scorns of time"? Yet there *is* indecision, because "to be, or not to be" is not quite equivalent with "to live, or not to live." The question is rather, "to live, or to die." "To die" may be synonymous with "not to live" in a certain limited respect. Nevertheless, "the dread of something after death, the undiscovered country, from whose bourn no traveller returns, puzzles the will" and generates indecision. This isn't the sort of indecision that can be resolved by refusing to continue being a passive object of fortune's arrows and becoming a subject who actively "shuffle[s] off this mortal coil." "To be, or not to be" is a question about a pivot; subject and predicate are held in dynamic equilibrium. Such is the problem of indeterminate existence.

[9] Shakespeare, *Hamlet*, 96-98.

Bibliography

Barnes, Elizabeth. "Metaphysically Indeterminate Existence." *Philosophical Studies* 166, no. 3 (2013): 495-510. https://doi.org/10.1008/s11098-012-9979-3.

Shakespeare, William. *Hamlet.* Edited by Burton Raffael. New Haven: Yale University Press, 2003.

Sider, Theodore. "Against Vague and Unnatural Existence: Reply to Liebesman and Eklund," *Noûs* 43, no. 3 (2009): 557-567. https://doi.org/10.1111/j.1468-0068.2009.00718.x.