Parsimony and the Argument from Queerness

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Abstract: In his recent book *Error Theory: History, Critique, Defence*, Jonas Olson attempts to revive the argument from queerness originally made famous by J.L. Mackie. In this paper, we do three things. First, we eliminate four untenable formulations of the argument. Second, we argue that the most plausible formulation is one that depends crucially upon considerations of parsimony. Finally, we evaluate this formulation of the argument. We conclude that it is unproblematic for proponents of moral non-naturalism—the target of the argument from queerness.

1. Introduction

In the opening sentence of his seminal work *Ethics: Inventing Right and Wrong*, J.L. Mackie famously proclaimed: "There are no objective values" (1979, 1). In defense of that claim, Mackie offered what would become one of the central arguments in metaethics for the next several decades. He called it the argument from queerness. Just what Mackie meant by "queerness" has been the subject of some disagreement. This is no surprise since Mackie's own discussion of that argument spans just over three pages. Recently, Jonas Olson has tried to clarify just what Mackie was after. Olson concludes that several of Mackie's criticisms fail, but that Mackie was on the right track. Olson then presents his own Mackie-inspired queerness argument which he thinks avoids all of the problems in Mackie's original presentation. The conclusion of Olson's argument is that there are no moral facts.

In this paper, we attempt to reconstruct and evaluate Olson's new-and-improved argument from queerness. We argue that Olson's argument must be one that depends crucially upon considerations of parsimony. We proceed to evaluate that parsimony argument using some of the tools of formal epistemology now commonplace in the philosophy of science. We argue that, once Olson's queerness argument is subjected to close scrutiny, it becomes clear that proponents of moral non-naturalism—the target of the argument from queerness—have nothing to fear.

2. Queerness and Irreducible Normativity

Olson distinguishes four plausible interpretations of Mackie's argument from queerness. These interpretations focus on four different features of the moral domain: supervenience, knowledge, motivation, and irreducible normativity. Olson argues that queerness arguments focusing on the first three features of the moral domain fail.

The argument focusing on supervenience depends upon Hume's Dictum, the claim that there can be no relations of necessary coextension between distinct properties. But Hume's Dictum, Olson argues, is a controversial metaphysical principle that has implications far beyond the moral and the normative domains. So, this queerness argument is held hostage to a more general issue in metaphysics—the debate over whether Hume's Dictum is true. Until that debate is resolved, the force of the first queerness argument is entirely unclear.

According to the argument focusing on knowledge, it is inexplicable how humans could have epistemic access to moral facts¹ given that these facts are, by non-naturalists' own admission, *sui generis*. Humans must have some very odd faculty that allows them to know about these facts. What on earth could that faculty be? Olson rejects this argument because, even if it were successful, it would not establish that the error theory is true.² At best, it would vindicate moral skepticism—the view that we cannot *know* anything about moral reality.

¹ For ease of exposition, we shall use "moral facts" to refer to moral facts, properties, relations, and values.

² By "the error theory", we shall mean the view according to which moral judgments are beliefs that ascribe moral properties, even though such properties do not exist or are never instantiated. Thus, the error theory has two components: a linguistic component (i.e., moral judgments are beliefs that ascribe moral properties) and an ontological component (i.e., moral properties don't exist or are never instantiated). In this paper, we shall focus exclusively on the ontological component of the error theory.

Finally, Olson rejects the queerness argument focusing on motivation because it depends upon an implausibly strong version of motivational internalism to which few moral non-naturalists subscribe. This leaves only the fourth queerness argument: the one focusing on irreducible normativity.

Olson begins his discussion of this last argument by distinguishing reducible from *ir* reducible normativity. In chess, one should not play one's rook diagonally. In English, one has reason not to split the infinitive. These are examples of *reducible* reasons. The reasons one has not to play one's rook diagonally or not to split the infinitive are reducible to facts about norms of correctness, or contingent rules, for some particular game or practice. But if you don't care about the game or practice, then you have no reason to obey its rules. And even if you do care about the game or practice, you can lose any (reducible) reason you might have to comply with its rules simply by changing the rules or experiencing a change in your desires. So, according to Olson, reducible reasons are reasons that reduce to facts about some non-moral correctness norms or facts about what promotes desire satisfaction.

Irreducibly normative reasons, by contrast, are reasons an agent has that are *not* reducible to facts about non-moral correctness norms or desire satisfaction. So, a fact, F, is an irreducibly normative reason for an agent, A, to behave in accordance with some norm, N, just in case F counts in favor of A's complying with N, where the favoring relation is irreducibly normative (Olson 2014, 122). For example, ethicists sometimes say that one has moral reason not to eat meat. This is not because these ethicists think that eating meat is illegal—it's not. Nor is it because they think eating meat is rude. Nor do they think that refraining from eating meat will promote (at least one of) your desires—maybe it will do that, maybe it won't. These ethicists say that you ought not to eat meat because there are irreducibly normative reasons not to do so. The fact that eating meat results in great pain to animals, or harms the environment, or violates animal rights is a fact that counts in favor of not eating meat, where this favoring relation is not reducible to facts about non-moral correctness

norms or desire satisfaction. The feature of our moral practice that Olson wants to target with his argument from queerness is precisely this kind of irreducibly normative favoring relation that supposedly holds between facts and courses of behavior. This relation, he argues, is where the queerness resides. Thus, Olson presents the following Mackie-inspired queerness argument.

Olson's Queerness Argument

- 1. Moral facts entail that there are facts that favour certain courses of behavior, where the favouring relation is irreducibly normative.
- 2. Irreducibly normative favouring relations are queer.
- 3. Hence, moral facts entail queer relations.
- 4. If moral facts entail queer relations, moral facts are queer.
- 5. Hence, moral facts are queer. (Olson 2014, 123)

What does Olson mean by "queer"? It is not easy to say. Finding a plausible interpretation of this claim is the subject of section three. Olson doesn't say much about what he means, but he does say that if some fact is queer, then that fact is "ontologically suspicious" (2014, 84). So, Olson begins by claiming that moral facts are ontologically suspicious.

But there is a second step to Olson's argument. Step one was to identify the feature of our moral practice and discourse that is queer. Olson locates the queerness in irreducibly normative favoring relations to which, he thinks, our moral practice and discourse is committed. Step two is to offer a debunking explanation for our moral practice and discourse. So, in step two, Olson attempts to give an explanation of our moral practice and discourse that makes no appeal to queer facts. That explanation, in broad strokes, is that having the moral beliefs we have is evolutionarily advantageous.

More specifically, the explanation is that natural selection tends to favor patterns of human behavior such as sticking to agreements, returning favors, looking after one's close relatives, and punishing those who flout important social norms. Moral discourse serves as a way to enforce these norms by putting social pressures on those who would otherwise violate them. Moral discourse, in other words, is a tool for keeping people in line. The illusion of irreducible normativity is a key part

of this tool. Were moral norms reducible to facts about other correctness norms or facts about desire satisfaction, then one could always evade one's moral duties simply by ignoring the rules, changing the rules, or experiencing a change in one's desires. But since moral rules are thought not to reduce to these kinds of facts—they're irreducibly normative—none of these moves is available to one who would rather not act in accordance with moral norms. And not only is moral discourse useful for regulating the behavior of *others*, it is also a way for pressures to come from within agents themselves so that agents regulate their own behavior in ways that tend to be evolutionarily advantageous. So, according to Olson, belief in irreducible normativity is an integral part of our moral practice and discourse because it promotes the sort of behavior that helps societies survive and reproduce.

Olson thinks that once this evolutionary story, which we have sketched only in broad outlines, is fully explicated, it will have the power to explain everything about our moral practices and discourse without appealing to irreducible normativity. And if that is true, then, he argues, we should eliminate from our ontology any irreducibly normative favoring relations between facts and courses of behavior (Olson 2014, 147). In other words, the conclusion of Olson's two-step queerness argument is that there are no moral facts.

3. How (Not) to Understand the Argument from Queerness

Olson's argument requires clarification for two reasons. First, it is unclear what it means for a fact to be queer. Error theorists need to explain this or else they will be relying on an intuition that their opponents do not share. After all, many moral non-naturalists see nothing queer at all about moral facts (on any interpretation of "queer"). Second, the argument, up to this point, purports to establish that moral facts are queer in some respect, and that there is an explanation of our moral discourse and practices that does not entail that moral facts exist. But why should this lead us to

conclude that moral facts don't, in fact, exist? In this section, we attempt to answer these two questions in a way that doesn't rely upon parsimony considerations. We argue that there is no such plausible formulation. Thus, we conclude that if the argument from queerness is going to be successful, it must be an argument from parsimony.

3.1 An Argument from Metaphysical Naturalism

Perhaps the argument from queerness depends upon the truth of metaphysical naturalism—roughly, the view that the only things that exist are things in nature. The argument might run as follows:

An Argument from Metaphysical Naturalism

- 6. A fact is queer if it is not a natural fact.
- 7. Moral facts are not natural facts.
- 8. So, moral facts are queer. (From 6,7)
- 9. Queer facts don't exist.
- 10. Therefore, moral facts don't exist. (From 8,9)

We recognize that (6) is not terribly informative, and that to define metaphysical naturalism precisely, we would need to say what a "natural fact" is. Our point here, however, holds regardless of the specific definition of this term. The point is just this: the above argument begs the question. (6) will appeal only to a metaphysical naturalist; but error theorists hope to convince even those who are not already convinced of the truth of metaphysical naturalism (see, for example, Mackie 1979, 32; Olson 2014, 80-83). The moral non-naturalist, for example, certainly will not find (6) plausible. This is probably why Olson wants his argument not to depend upon metaphysical naturalism (2014, 86).

3.2 An Argument from Intuition

Perhaps error theorists simply mean to pick up on a certain intuitively discernible feature of moral facts when they call them queer. Whatever feature is being objected to in the argument—most

plausibly, irreducible normativity—that feature just *seems* utterly queer. Error theorists do not attempt to pick out the feature *in virtue of which* irreducible normativity seems queer. It just seems unusual.

This formulation will certainly fail to convince the non-naturalist to reject non-naturalism, since, again, irreducible normativity just won't seem queer to her; but it shouldn't even convince those who haven't yet made up their mind about non-naturalism. Even if moral facts *are* intuitively queer, as the proponent of the argument from intuition alleges, this would not entail (or make it probable) that there are no moral facts. We still need to ask: so what? What follows from the fact that moral facts are queer (if they are)? The argument from intuition has nothing to say on this score. In order to establish the conclusion that error theorists are after—namely, that there are no moral facts—the argument from intuition would need to give us some guidance about what to think of queer facts, properties, relations, and so on. But it doesn't. So, the argument from intuition cannot, on its own, establish that there are no moral facts.

An additional problem is that the argument from intuition may rely upon estimations of *prior probabilities*. In Bayesianism, a prior probability of some proposition *p* is just an agent's assessment of the probability that *p* before some body of evidence is taken into account. Perhaps moral facts seem queer to error theorists because they set the prior probability of the existence of moral facts very low, such that:

$$Pr(ET) > Pr(\sim ET)$$
,

where "ET" represents the proposition that the error theory is true (which entails that there are no moral facts).

But there is an enduring debate about whether there is any objectively rational way to set one's prior credence distribution—and if so, how that ought to be done. If there is no such objectively rational credence distribution, then error theorists, on this formulation of the argument from

queerness, will not have a leg to stand on. That is, moral non-naturalists (or any opponent of error theorists) can rationally set a different prior credence distribution, such that:

$$Pr(ET) < Pr(\sim ET)$$
.

In any event, error theorists will have a hard time justifying the claim that there is an objectively rational prior credence distribution, such that $Pr(ET) > Pr(\sim ET)$. One way to do so is to assume that naturalism is true, but we've already seen why this won't work. Another way is to see the objectively rational prior credence distribution as a result of past conditionalizing on evidence (i.e., yesterday's posterior probabilities—probabilities given some body of evidence—are today's priors). And perhaps the relevant evidence here is constituted by other arguments for the error theory. But in this case, the argument from queerness is just a summary of all of the arguments against moral non-naturalism. Understood this way, there is no longer a distinctive argument from queerness. Moreover, in order to evaluate this argument, we would need to assess the merits of every argument for and against the error theory. But it is not clear that this evaluation would result in a prior credence distribution that favors the error theory over its negation. Thus, we don't see much hope for the argument from intuition.

3.3 An Argument from Differentness

Mackie sometimes writes as if the radical *differentness* of moral facts counts as a reason to doubt their existence. He writes, "If there were objective moral values, then they would be entities or qualities or relations of a very strange sort, utterly different from anything else in the universe" (1979, 38). This suggests the following argument:

An Argument from Differentness

- 11. If moral facts were to exist, they would be *sui generis* (i.e., of a type fundamentally different from everything else that exists).
- 12. No sui generis things exist.
- 13. Therefore, moral facts do not exist.

Olson could be read as supporting (11) in the following way: irreducibly normative favoring relations, if they existed, would be *sui generis*. Since moral facts entail those relations, moral facts would be *sui generis*.

The argument from differentness is unsound because (12) is false. In order to see why, we need to see why we ought to believe (11). How do we know, of any given type of fact, that it is *sui generis*? We propose the following test for whether a type of fact F is *sui generis*. Consider two worlds, W₁ and W₂. W₁ is qualitatively identical to the actual world, minus any F facts that might exist. W₂ is qualitatively identical to W₁, but it has at least one F fact. Now ask: does W₂ have a fundamental type of thing in it, which W₁ lacks? If so, then F facts are *sui generis*. If not, then F facts are not *sui generis*.

On the basis of this test, we grant (11). Substitute "moral facts" for "F facts" above to see why. Let W₁ be qualitatively identical to the actual world but without any moral facts that might be in our world. Let W₂ be a world qualitatively identical to W₁ but with at least one moral fact. Adjusted in this way, it is plausible that W₂ will have a fundamental type of thing in it that W₁ doesn't—namely, irreducibly normative favoring relations.

The problem, however, is that (12) overgeneralizes. We stipulate that "physical thing" is a fundamental type of thing.³ Consider a world W₃ which is just like the actual world, minus any physical things. Add a physical thing to W₃, and call the resulting world W₄. Is there a fundamental addition to W₃, in W₄? Yes: a physical thing. This gives us the following parity argument:

A Parity Argument

- 14. If physical things existed, they would be *sui generis*.
- 15. No sui generis things exist.
- 16. Therefore, physical things do not exist.

³ Some might find this controversial. Our point does not depend on "physical things" being a fundamental type. The argument will make its point no matter the specific candidate that is identified as fundamental.

The argument is valid. The test we have provided for being *sui generis* shows that (14) is true. But (15) is false, since its truth would lead to an absurd conclusion—namely, (16). Since (15) is false, (12) is also false. Thus, we see no way for the argument from queerness, construed as an argument from differentness, to succeed.

3.4 Harman's Inference to the Best Explanation

Perhaps error theorists will respond to the above criticisms by pointing out the following difference between physical facts and moral facts: we don't need moral facts to explain any of our experiences, but we do need physical facts. So, something is not queer in virtue of being *sui generis*, but rather in virtue of not playing a role in the best explanation of our experiences.

Thus understood, the argument from queerness is a new iteration of Gilbert Harman's familiar argument in *The Nature of Morality* (1977, Ch. 1). There Harman argues that the best explanation for our moral beliefs and practices does not entail the existence of objective moral facts. Nor are such facts explanatorily indispensable for any other explananda. Thus, we ought to believe that objective moral facts do not exist.

For example, if Joe turned a corner and saw a couple of hoodlums setting fire to a cat, he would immediately form the judgment that what they were doing was morally wrong. Is the fact that their act was morally wrong part of an explanation of why Joe formed his moral judgment? It might be. But we could give a complete explanation for Joe's moral judgment without appealing to any moral facts. We could explain Joe's judgment more simply by citing a combination of non-moral facts—namely, the fact that some hoodlums set fire to a cat and the fact that Joe believes certain moral principles. Call this set of non-moral facts "F" and let "Joes's judgment" stand for the proposition that Joe forms the judgment that the hoodlums' actions are wrong. Harman's claim amounts to this:

Pr(Joe's judgment | F) = Pr(Joe's judgment | F & burning cats is actually morally wrong).

In other words, the fact that burning cats is morally wrong doesn't change the probability that Joe

would believe that burning cats is morally wrong. This suggests that the fact that burning cats is

morally wrong is explanatorily irrelevant for Joe's belief. Harman claims that all moral facts are

similarly irrelevant to the best explanation of our moral beliefs and practices (and anything else). Thus,

we should believe that moral facts don't exist.

Why not think that the argument from queerness is doing the same thing, less efficiently? After

all, the second step of the argument from queerness is to give an explanation of our moral beliefs and

practices that does not entail the existence of moral facts. Some commentators (e.g., Hampton 1998,

21) think that this is exactly what's going on in the argument from queerness, and Olson sometimes

argues this way. For example, in response to the objection from Mark Platts (1980) that queerness is

not problematic for non-naturalists—since neutrinos, aardvarks, and impressionist paintings are all

queer—Olson replies:

Neutrinos, aardvarks, and impressionist paintings may strike us as prima facie queer, but when we reflect on how they fit into the natural order of things it is unlikely that we will continue

to view them as queer. On reflection, we realize that they are actually parts of the best

explanations of some of our observations and beliefs. (2014, 87)

Thus, one might plausibly interpret Olson's charge that moral facts are queer as the charge that moral

facts are explanatorily irrelevant.

But understanding the argument from queerness in this way does not help error theorists,

because Harman's argument depends upon the following principle of explanatory relevance:

Harman's Principle: If C explains E, and if $Pr(E \mid C \& X) = Pr(E \mid C)$, then X is explanatorily

irrelevant to E.4

⁴ This principle is inspired by Sober (forthcoming).

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and Harman's Principle is false. Consider a simple causal chain: $X \rightarrow C \rightarrow E$. Let "X" be the President pressing the "launch" button for a nuclear bomb headed toward Moscow; let "C" be the bomb hitting Moscow; and let "E" be Russia's retaliation in kind. It is true that $Pr(E \mid C \otimes X) = Pr(E \mid C)$. But it is false that X (the President's pressing the launch button) is explanatorily irrelevant to E (Russia's retaliation). The President's action is obviously explanatorily relevant in explaining why Russia responded in kind. This means that Harman's Principle is false and we have no reason, as yet, to think that moral facts are irrelevant to the explanation of our moral beliefs and practices.

But one might insist that there is an important difference between the relata in our bomb case and non-natural moral facts. Presidents, bombs, and Russia can *cause* things. Non-natural moral facts—according to most moral non-naturalists—cannot. Most moral non-naturalists insist that moral properties are causally inert. So, one might think that Harman's Principle is false *in its present form*, but that it can easily be revised to show that we ought not believe in things that do not provide any *causal* explanations.⁵

Unfortunately for error theorists, Harman's Principle is beyond repair, for we can show that it is false without ever invoking causal relations. Recall Harman's Principle:

Harman's Principle: If C explains E, and if $Pr(E \mid C \& X) = Pr(E \mid C)$, then X is explanatorily irrelevant to E.

Let "X", "C", and "E" stand for the following facts:

X: There are particles arranged cup-wise at some location L.

C: There is a cup at L.

E: There is something that can hold liquids at L.

These facts create an explanatory—not causal—chain with the following structure: $X \rightarrow C \rightarrow E$. The fact that there are particles arranged cup-wise at L explains why there is a cup at L. The fact that there

⁵ We are grateful to an anonymous referee for raising this worry.

⁶ We are assuming that none of the facts represented by "X", "C", and "E" are identical to one another (i.e., that they represent three distinct facts).

is a cup at L explains why there is something that can hold liquids at L. In this example, the antecedent of Harman's Principle is satisfied, but the consequent is false. The fact that there is a cup at L explains why there is something that can hold liquids at L, and Pr(E|C & X) = Pr(E|C). But X is not explanatorily irrelevant to E. That is, the fact that there are particles arranged cup-wise at L is obviously explanatorily relevant for the fact that there is something that can hold liquids at L. So, Harman's Principle is false, and we see no way to repair it. It cannot support the claim that moral facts are explanatorily irrelevant. Thus, it cannot support the claim that there are no moral facts, as Harman, Olson, and others would like.

3.5 Parsimony: The Last Bulwark

One might get the feeling, from the discussion in this section, that there's a common strain in all of the arguments that we have considered. Defenders of the arguments from naturalism and intuition may be groping at the idea that naturalism is *more parsimonious* than a view that countenances irreducibly normative moral facts. Defenders of the argument from differentness may be trying to dispense with a fundamental addition to our ontology. And defenders of Harman's inference to the best explanation seem to be hunting for a *more parsimonious* explanation of our moral beliefs than one that appeals to moral facts. Thus, we suspect that the argument from queerness is motivated by, or depends upon, parsimony considerations. Indeed, Mackie and Olson (to different degrees) suggest that this is so. Mackie (1979, 42) suggests such reliance when he claims that it is "less paradoxical" to reject moral facts than to accept them, whereas Olson says it explicitly:

[M]oral error theorists can apply Occam's razor. If our moral practices and beliefs can be explained without appeal to irreducibly normative properties and facts, a theory that dispenses with such properties and facts will have the advantage of being in this respect the more ontologically parsimonious theory. (2014, 147)

This appeal to Occam's razor comes late in the course of Olson's argument, but it shows that Olson thinks it is important for his case.

In section four, then, we apply to Olson's argument from queerness the best tools for understanding appeals to parsimony that contemporary philosophy of science has to offer. We conclude that the argument from queerness, construed as an argument from parsimony, does not succeed.

4. Parsimony and the Argument from Queerness

If the argument from queerness construed as an argument from parsimony is to be effective against moral non-naturalism, it will not be enough simply to point out that the error theory is more parsimonious than moral realism. For we could then ask "So what? Why should we think that the more parsimonious theory is *more likely to be true*?" Thus, considerations of parsimony must have some kind of justification, or epistemic relevance. There must be some reason to think that the more parsimonious theory is more likely to be true than the less parsimonious theory.

Justifications for parsimony come in two varieties: local and global. A local justification for parsimony is an explanation of why parsimony is epistemically relevant *in a particular case* only. A global justification, by contrast, is an explanation of why parsimony is epistemically relevant across a wide range of cases. We will consider both kinds of justifications in this section and try to evaluate whether either kind of justification can be invoked to support a powerful argument against moral non-naturalism.

4.1 The Metaphysical Claim

One traditional way of justifying parsimony globally has been to make the following metaphysical claim: generally speaking, nature is simple, so simpler theories are more likely to be true. This is how many philosophers and scientists throughout history have justified appeals to parsimony, from Aristotle to Leibniz to Newton (see Sober (ms)).

The support for the claim that nature is simple has often involved appeals to facts about God. Descartes, for example, appeals to God's nature and goals to justify the metaphysical claim: we know that the laws of nature do not change because God is immutable. So, once the laws of nature are set in place, they will stay that way forever. Moreover, we know that the laws of nature are simple because God would want his creatures to discover them. By discovering these laws, humans can better fulfill their call to subdue the earth and rule over it. And since simple, unchanging laws are much easier to discover than highly complex, ever-changing laws, we can be confident that nature is simple and its laws are unchanging. Leibniz's justification for the claim that nature is simple was that God wanted to make the best possible world. And the best possible world, Leibniz argued, is one with simple laws. This is because a world with simple laws is, among other things, more beautiful than a world with highly complex, disunified laws (Sober (ms)).

But error theorists cannot appeal to facts about God to justify their appeals to parsimony, since theism and the error theory are logically incompatible. If God exists, then he is morally perfect. After all, God is by definition omnipotent, omniscient, and morally perfect. But if there exists a morally perfect being, then there is at least one moral fact. And if there is at least one moral fact, then the error theory is false. So, if God exists, then the error theory is false. Thus, error theorists will have to look elsewhere for a global justification for their appeals to parsimony. They cannot go the traditional route.

4.2 Parsimony as a Norm

Another way to justify parsimony globally is to appeal to the following norm of theory selection: you should pick the more parsimonious theory. This potential justification makes no appeal to a metaphysical claim that nature is, in fact, simple. And it seems to be the route preferred by Olson.

⁷ This may be an oversimplification of the norm, but nothing that follows depends on how we precisify it.

He writes, "The error theorist should concede that appeals to Occam's razor are indeed appeals to a norm" (2014, 147). But what kind of norm is this? And what kind of "should" is involved in the norm that you should pick the more parsimonious theory? One thing is for sure: this "should" cannot imply an irreducibly normative reason to select the more parsimonious theory. That would obviously conflict with error theorists' commitment to the non-existence of irreducibly normative favoring relations. So, error theorists must reduce the normativity of this "should" to some goal or preference we have, or to some non-moral correctness norm. Olson attempts just this when he writes:

To say that a theory T offers a more parsimonious explanation of some phenomenon than a distinct theory T' is not to say that the comparative parsimony of T is an irreducibly normative reason to prefer T to T'... The reason why parsimony considerations are commonly invoked in philosophy and the sciences may well be that such considerations track the truth. (2014, 147)

Thus, Olson's view seems to be this: if you prefer to have true beliefs, then you will probably prefer more parsimonious theories, since more parsimonious theories tend to track the truth. Thus, on Olson's view, the appeal to Occam's razor does not violate error theorists' commitment to the non-existence of irreducibly normative favoring relations.

But what does Olson mean when he says that a more parsimonious theory "tracks truth" better than a less parsimonious theory? We assume that he either means to assert the following inequality of posterior probabilities:

 $\Pr(T_1 \text{ is true} \mid T_1 \text{ is simpler than } T_2) > \Pr(T_2 \text{ is true} \mid T_1 \text{ is simpler than } T_2)$ or this likelihood inequality:

Perhaps he means to assert the former because of the latter.

 $\Pr(T_1 \text{ is simpler than } T_2 | T_1 \text{ is true}) > \Pr(T_1 \text{ is simpler than } T_2 | T_2 \text{ is true}).$

The problem is that there is an ambiguity in Olson's use of "simpler than". In one sense, T_1 is simpler than T_2 when T_1 posits a proper subset of those entities posited by T_2 , but is silent on whether the remaining entities in T_2 exist. Call this "the razor of silence." In another sense, T_1 is simpler than

 T_2 when T_1 posits a proper subset of those entities posited by T_2 , and claims that the remaining entities in T_2 do not exist. Call this "the razor of denial" (see Sober (ms)).

Now consider the first interpretation of Olson's claim—the posterior inequality. It can be interpreted either as a claim about the razor of silence:

$$Pr(T_1 \text{ is true} \mid T_1 \text{ asserts A and } T_2 \text{ asserts A & B}) >$$

$$Pr(T_2 \text{ is true} \mid T_1 \text{ asserts A and } T_2 \text{ asserts A & B})$$

or about the razor of denial:

$$Pr(T_1 \text{ is true} | T_1 \text{ asserts A & } \sim B \text{ and } T_2 \text{ asserts A & B)} >$$

$$Pr(T_2 \text{ is true} \mid T_1 \text{ asserts A & } \sim B \text{ and } T_2 \text{ asserts A & B})$$

But neither of the above inequalities is true, merely in virtue of their form. This is because, for any conjunction, the probability of one of its conjuncts is greater than or equal to the probability of the conjunction. Therefore—looking at the razor of silence formulation—given that T_1 asserts one conjunct, and T_2 asserts the conjunction, the probability of T_1 will be greater than *or equal to* the probability of T_2 . Furthermore, it is false that \sim B is more probable than B, just in virtue of the forms of these propositions. So—looking at the razor of denial formulation—given that T_1 asserts A & \sim B and T_2 asserts A & B, it is false that T_1 is more probable than T_2 simply in virtue of their forms. (A similar result holds for the likelihood interpretation of the truth-tracking claim.)

This is significant because error theorists want to wield the razor of *denial* against moral facts. They do not claim that we should withhold judgment about the existence of moral facts. Rather, they claim that moral facts (probably) do not exist. So Olson, in claiming that simpler theories track the truth, is mistaken if he's making a claim about the forms of posterior inequalities or likelihood inequalities. This doesn't mean that there's no justification for appeals to parsimony. It just means that both of the attempts at a *global* justification of parsimony that we have considered fail. The metaphysical claim is off-limits to error theorists because of its theological baggage, and neither the

likelihood inequality nor the posterior inequality above is true in virtue of its form. Thus, error theorists need a *local* justification of parsimony, one that involves domain-specific (in our case, morality-specific) assumptions. And it must be a justification for parsimony that favors the error theory over its negation.

4.3 Likelihoods

A common local justification for parsimony is an appeal to likelihoods, where "likelihood" is understood in its technical sense. The likelihood of some hypothesis, H, is the probability of some observational evidence, E, on the supposition that H (i.e., Pr(E|H)). The application to parsimony is this: if you have two theories T_1 and T_2 , and T_1 is more parsimonious than T_2 , then this difference in parsimony will be epistemically relevant if $Pr(E|T_1) > Pr(E|T_2)$, since, according to the *law of likelihood*, observations differentially support the hypothesis with the higher likelihood (see Hacking 1965, Royall 1997). So, in our particular context—the debate over the error theory and moral non-naturalism—error theorists would need to establish an inequality of the following form in order for parsimony to be epistemically relevant:

The Inequality:
$$Pr(E | Error Theory) > Pr(E | \sim Error Theory)$$

for some observational evidence E.

But we must be careful. Even if error theorists could establish the truth of The Inequality, we should not overestimate its significance. The Inequality says that *some* set of evidence favors the error theory over the negation of the error theory. But that is *not* the same thing as saying that the error theory is probably true, or that it is more likely to be true than its negation when we consider *all* of the relevant evidence. That is,

$$Pr(E | Error Theory) > Pr(E | \sim Error Theory)$$

does not entail that

 $Pr(Error Theory | S) > Pr(\sim Error Theory | S)$

where "S" represents the sum of all of the relevant evidence. If The Inequality is true, all it would show is that some set of evidence favors the error theory over its negation. We think that The Inequality is false for all plausible values of E. We will argue for that claim below in section 4.4. For now, though, we merely want to note that even if error theorists establish the truth of The Inequality, they won't thereby establish that their conclusion is true—that is, that the error theory is more probably true than its negation.

If error theorists were able to establish the truth of The Inequality for some value of E, whether this would make the posterior probability of the error theory higher than that of its negation is complicated. If you assume that all of the other relevant evidence is neutral between the error theory and its negation—that is, assume that all of the relevant evidence besides E doesn't favor the error theory over its negation8—then The Inequality will tip the probabilistic scales in favor of the error theory. If, however, the other evidence favors the negation of the error theory, then establishing the truth of The Inequality may not be sufficient to make the posterior probability of the error theory higher than its negation. So, the significance of The Inequality depends heavily upon the state of the debate about the error theory more generally. Parsimony considerations alone simply won't be able to settle this debate. In any case, we don't think that error theorists can establish the truth of The Inequality. Let us now say why.

4.4 What could E be?

Recall The Inequality:

⁸ In other words, one's priors are neutral with respect to the error theory and its negation.

The Inequality: $Pr(E | Error Theory) > Pr(E | \sim Error Theory)$

If error theorists want to give a local justification for parsimony with a likelihood inequality, then they need to give a value for E that makes The Inequality true. We can think of two initially plausible values for E. The first is our moral discourse's commitment to irreducible normativity. The second is the evolutionary debunking explanation. We will consider each value for E in turn and evaluate the plausibility of The Inequality given this value for E.

Suppose E is the datum that our moral discourse and practice is committed to the existence of irreducibly normative favoring relations. Let "IN" stand for this proposition. On this interpretation of E, The Inequality looks like this:

The Inequality_{IN}: $Pr(IN \mid Error Theory) > Pr(IN \mid \sim Error Theory)$

The Inequality_{IN} says that the probability that our moral discourse and practice would be committed to the existence of irreducibly normative favoring relations is higher on the supposition that the error theory is true than on the supposition that the error theory is false. This strikes us as implausible. According to error theorists, the explanation for our moral discourse's commitment to irreducible normativity is certain facts about evolution. So, by error theorists' own admission, the existence or non-existence of moral facts plays no role in explaining what our moral discourse will be like. Why, then, should we think that the truth of the error theory makes it more likely that our moral discourse would be committed to irreducible normativity than the negation of the error theory? We can't imagine what the answer to this question would be. We are *not* saying that since moral facts don't explain why our moral discourse has the features it does that error theorists *cannot possibly* explain why The Inequality_{IN} is true. We're merely saying that error theorists have not *yet* given us such an explanation.

Now, suppose that E, in The Inequality, is roughly the evolutionary debunking story that we sketched in section two of this paper. Let "ED" stand for the proposition that evolutionary pressures

(specifically those mentioned in section two) have caused our moral discourse's commitment to irreducibly normative favoring relations. On this interpretation of E, The Inequality looks like this:

The Inequality_{ED}:
$$Pr(ED | Error Theory) > Pr(ED | \sim Error Theory)$$

You might think that The Inequality_{ED} is false because ED is consistent with the existence of moral facts. But this is too quick. ED may still *favor* the error theory over its negation even if ED does not *entail* the error theory. Our criticism of The Inequality_{ED} is very similar to our criticism of The Inequality_{IN}. That is, we see no way for the existence or non-existence of moral facts to have any probabilistic influence over the way evolutionary pressures work.

To get clearer about this point, consider two worlds: W_1 and W_2 . In both worlds, people have certain moral beliefs and practices (e.g., belief in irreducibly normative favoring relations). Call that set of beliefs and practices "B". In W_1 , there are no moral facts. In W_2 there are. Now we ask: what is the probability, in each world, that evolutionary pressures caused us to have B? In W_1 , it will be evolutionarily advantageous for people to have B. This advantage results in a probability Pr_1 that B is caused by those evolutionary pressures. What about W_2 ? In W_2 , the existence of moral facts will not change the degree to which having B is evolutionarily advantageous. The evolutionary advantage of having B in W_2 will result in a probability Pr_2 that B is caused by those evolutionary pressures. What reason do we have to think that $Pr_1 \neq Pr_2$? Again, we see no reason. At the very least, error theorists haven't given one.

Formally, what we hope to have made plausible is this:

$$Pr(ED | B) = Pr(ED | B \& \sim Error Theory)$$

$$Pr(ED | B) = Pr(ED | B \& Error Theory)$$

And from those two propositions, it follows that

$$Pr(ED | Error Theory) = Pr(ED | \sim Error Theory)$$

which entails the falsity of The InequalityED.

The upshot of this sub-section (4.4), then, is this: none of the initially plausible values for E suffice to make The Inequality true. And if The Inequality is not true, then we don't know what local justification for parsimony error theorists have. We suspect that they have none. Since we've already argued that error theorists have no global justification for parsimony, then the upshot of this section as a whole is that error theorists have no clear justification of any kind for wielding parsimony against moral non-naturalists.

5. An Objection: Sneaky Witches

Let us now consider one pressing objection to the general strategy of our argument. We have argued (1) that the argument from queerness is successful only if error theorists can vindicate The Inequality, and (2) that error theorists cannot vindicate The Inequality. On these grounds, we conclude that the argument from queerness is not successful. But one might worry that using this model in defense of moral non-naturalism threatens to overgeneralize such that many apparently good appeals to parsimony will fail.

Consider, for instance, the possibility that Sneaky Witches exist. Sneaky Witches are just like ordinary witches in that they have magical abilities; however, Sneaky Witches are *incapable* of performing magic when there is any chance that there will be observational evidence of their doing so. Surely, the objection goes, we should disbelieve in Sneaky Witches (i.e., we should believe that Sneaky Witches don't exist). And surely this is because the hypothesis that Sneaky Witches exist is unparsimonious. But how are we to justify this appeal to parsimony? If what we have argued above is true, then one will not be able to give a global justification unless one is willing to take on the theological assumptions we outlined in section 4.1, or one has some other global justification ready at

⁹ We are grateful to an anonymous referee who brought this important objection to our attention.

hand. But most will be unwilling to take on those theological assumptions and most will not have another global justification of parsimony ready at hand. Thus, in order to justify disbelief in Sneaky Witches on the basis of parsimony considerations, one will need to give a local justification for that appeal to parsimony. But this cannot be a likelihood inequality—the most obvious local justification—since we have stipulated that there can be no observational evidence that favors the hypothesis that Sneaky Witches don't exist over the hypothesis that they do. In other words,

The Sneaky Witch Inequality: $Pr(E \mid \sim SW) > Pr(E \mid SW)^{10}$

is false for any value of E because we have stipulated that $Pr(E \mid \sim SW) = Pr(E \mid SW)$ is true for any value of E. The worry, then, is that we're missing something about parsimony arguments. If we have a theory of parsimony that doesn't justify disbelief in Sneaky Witches on the basis of parsimony, then, the objection goes, we have a defective theory of parsimony. So any defense of moral non-naturalism that appeals to such a defective theory of parsimony will be unsuccessful as well. The challenge, then, is this: we need to explain why we ought not to believe in Sneaky Witches, but we ought not to disbelieve in moral facts.

We have a two replies to this important challenge. First, notice that the challenge assumes that we ought to *disbelieve* in Sneaky Witches. We have doubts about this claim. Instead, we think that the proper attitude to take toward the proposition that Sneaky Witches exists is *not to believe* it. There is an important difference between disbelieving a proposition p and merely not believing that p. To disbelieve in Sneaky Witches is to hold the belief that Sneaky Witches do not exist. Not to believe in Sneaky Witches is simply to refrain from believing that Sneaky Witches exist. But one can succeed in not believing a proposition in a variety of ways: by suspending judgment about the proposition, by having a credence at—or around—one-half in the proposition, by failing to take any attitude at all

¹⁰ "E" represents some observational evidence, and "SW" represents the proposition that Sneaky Witches exist.

toward the proposition, or by positively disbelieving the proposition. If, as we've stipulated, our evidence *really does not* favor the hypothesis that Sneaky Witches do not exist over the hypothesis that they do (i.e., $Pr(E \mid \sim SW) = Pr(E \mid SW)$), then it seems rationally permissible to hold any of the attitudes that constitute not believing the proposition that Sneaky Witches exist, except disbelief. The evidence does *not* favor disbelief in Sneaky Witches since, by hypothesis, there couldn't be any evidence favoring the existence or non-existence of Sneaky Witches. So, the challenge rests upon the false premise that we rationally ought to disbelieve in Sneaky Witches even if we stipulate that our evidence does not favor that hypothesis. The truth is that, if our evidence does not favor the hypothesis that Sneaky Witches exist over the hypothesis that they don't, then we ought not to believe in Sneaky Witches (but we ought not to disbelieve in them).

Our second reply is that the challenge gets much of its intuitive force by smuggling in certain background assumptions that are relevant to the likelihood that Sneaky Witches exist. In the previous paragraph, we argued that if our evidence *really does not* favor the hypothesis that Sneaky Witches exist over the hypothesis that they don't, then we should not believe that Sneaky Witches exist (but we shouldn't disbelieve in them). But many will find this unsatisfying because it seems intuitively obvious that we should positively disbelieve in Sneaky Witches. We share this intuition, but that is because we think that, as a matter of fact, our evidence is not neutral between the two hypotheses. We think that there are reasons to disbelieve in Sneaky Witches and that the stipulation that our evidence does not favor one hypothesis over the other does not represent the way the world actually is. Let us say why.

Sneaky Witches are beings that, if they exist, have magical powers. But most of us positively disbelieve in magic. This disbelief is justified by the following likelihood inequality:

No Magic: $Pr(E | Magic) \le Pr(E | \sim Magic)$

where E represents our evidence about how the world works. In other words, the probability that we would observe the kind of world that we do is higher on the supposition that there is no such thing

as magic than on the supposition that magic exists. If magic existed, we would expect to see it in action. We would expect, for example, to see those with the power to perform magic using it publicly to intimidate others, or to gain power, wealth, popularity, followers, and so on. And we would expect others with magical powers to use their power for great good (e.g., to cure diseases, to stop natural disasters). As a matter of fact, however, we see nothing of this kind. This evidence counts significantly in favor of the hypothesis that we live in a world devoid of magic. But if our evidence significantly favors the hypothesis that there is no such thing as magic, and Sneaky Witches are supposed to have magical powers, then our evidence counts significantly against the hypothesis that there are Sneaky Witches. Thus, we are justified in disbelieving in them.

Notice that this reply is one that justifies disbelief in Sneaky Witches but does not justify disbelief in moral facts. Thus, we have met the challenge posed by the case of Sneaky Witches, which was to explain how the theory of parsimony we appeal to warrants disbelief in Sneaky Witches but not disbelief in moral facts.

6. Conclusion

In this paper, we have argued that the argument from queerness—in particular, Jonas Olson's version, which we take to be the best representative of that argument—is most plausibly interpreted as one that depends upon considerations of parsimony. In order for this parsimony argument to succeed, error theorists must establish what we've called

The Inequality: $Pr(E \mid Error Theory) > Pr(E \mid \sim Error Theory).$

Establishing The Inequality is necessary, but not sufficient, for the argument from queerness to succeed. We argued, however, that none of the potential reasons for thinking that The Inequality is

true stand up to scrutiny. Thus, we conclude that the argument from queerness fails—at least, in its current form—and therefore does not constitute a significant challenge to moral non-naturalism.¹¹

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