# **Humean Rationalism**

David Builes

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# Abstract

According to the Principle of Sufficient Reason, every fact has an explanation. An important challenge to this principle is that it risks being a counterexample to itself. What explains why everything needs to be explained? My first goal is to distinguish two broad kinds of answers to this question, which I call "Humean Rationalism" and "Non-Humean Rationalism". My second goal will be to defend the prospects of Humean Rationalism.

### 1. Introduction

Why is the world the way it is? While we have made a tremendous amount of progress on this question, there is of course much left to explain. How far can we push this explanatory project? Might we ultimately explain everything one day, or will we inevitably run into "brute facts", which admit of no explanation? The orthodox view is that explanation always has to stop somewhere, and so any reasonable metaphysical theory will have to posit some brute facts. The alternative answer is embodied in the Principle of Sufficient Reason (PSR), according to which absolutely everything can be explained.

The PSR is a core rationalist principle that has been defended in a wide variety of ways, but it has also been the subject of much criticism.<sup>1</sup> In this paper, I will be exploring one particular challenge that the PSR faces. If the defender of the PSR believes that everything can be explained, then in particular, there must be an explanation for why the PSR *itself* is true. Otherwise, the PSR would be a counterexample to itself! Lin (2007) describes this challenge as follows:

<sup>&</sup>lt;sup>1</sup> For recent defenses of the PSR, see Pruss (2006), Della Rocca (2010), Dasgupta (2016), Koons and Pruss (2021), and Amijee (forthcoming). Perhaps the main criticism of the PSR is that it implies necessitarianism, which is the view that every true proposition is necessarily true (e.g. see van Inwagen (1983: 202-204), Bennett (1984), and McDaniel (2019)). For replies to this necessitarian objection, see Levey (2016), Dasgupta (2016), Werner (2020), and Amijee (2021).

If there is no explanation of the truth of the PSR, then the PSR is incoherent. I can think of nothing that would explain the truth of the PSR, but I know of no argument to show that such an explanation is impossible...Until an explanation of the truth of the PSR is given, the threat of incoherence looms. (296)

My goal in this paper is to put forward a novel explanation for why the PSR is true and defend it from various objections. However, I won't be trying to argue that the PSR is true. Rather, I will be taking it as a working assumption *that* the PSR is true, and I will be offering an explanation as to *why* it is true.

### 2. Humean Rationalism

The claim that "everything has an explanation" comes in many different varieties, depending on how one understands the domain of "everything" and the relevant sense of "explanation". On some of these varieties, the question of why the PSR itself is true does not arise. For example, Pruss (2006) defends a restricted form of the PSR according to which every contingent proposition has an explanation. If the PSR is taken to be necessary, then this version of the PSR does not need to explain itself. To take another example, one might formulate a version of the PSR in terms of causal explanation. If one thinks that the relata of the causal relation are events, then one natural formulation of this version of the PSR might be that "every event has a cause". Given that the claim that "every event has a cause" is not itself an event that may or may not be caused, this version of the PSR doesn't need to explain itself either.

My focus will be on more ambitious versions of the PSR, which apply to themselves. For example, a generic version of the PSR, according to which every fact has an explanation (where "explanation" is understood generically to include any kind of explanation), would apply to itself. But there are also more circumscribed versions of the PSR that apply to themselves. To take one recent example, Dasgupta (2016) has defended a version of the PSR that is formulated in terms of grounding, or "metaphysical explanation", that implies that the PSR must itself be grounded.<sup>2</sup> Dasgupta's version of the PSR relies on a distinction between facts that are "apt to be grounded", or *substantive* facts, and facts that are not apt to be grounded, or *autonomous* facts. Intuitively, autonomous facts are those facts for which "the question of why it obtains does not legitimately arise" (384). Dasupta's main example of autonomous facts are facts about the essences of things. For example, perhaps there is no legitimate question as to why it is essential to knowledge that

 $<sup>^{2}</sup>$  I will be taking the notion of grounding for granted in what follows, but see Rosen (2010) and Fine (2012) for introductions to the concept. I will also be using "grounding" and "metaphysical explanation" interchangeably, which glosses over an important debate about the exact relationship between grounding and explanation. Although there is widespread agreement that grounding bears some intimate relationship to a certain kind of metaphysical explanation, it is controversial exactly what that relationship is. See Maurin (2019) for a recent discussion of this debate.

anyone who knows that P justifiably believes that  $P.^3$  Given such a distinction, Dasgupta formulates a version of the PSR that states that "every substantive fact has an autonomous ground" (387). However, such a claim *itself* is not about the essence of anything, and it certainly seems that we can legitimately ask why such a version of the PSR obtains. So, at least in the absence of further argument to the contrary, we should take this version of the PSR to be a substantive fact that is apt to be grounded.

For the sake of simplicity, in what follows I will be working with a generic version of the PSR according to which "every fact has an explanation", but everything that I say should be applicable to other formulations of the PSR that apply to themselves, such as Dasgupta's formulation.

So, what could explain why every fact has an explanation? It is unnatural to give a *causal* explanation for why every fact has an explanation, since the PSR is not an event in space and time. It is therefore natural to look for a grounding explanation of the PSR. The grounding-based answer that I would like to put forward is fairly deflationary. Its starting point is to notice that the logical form of the PSR is that of a universal generalization (i.e. "every fact has an explanation"), and it is common to give a grounding explanation for such universal generalizations in terms of their instances, perhaps together with a corresponding totality fact. For example, the fact that [all humans are less than 9 feet tall] might be grounded in the following facts: [H<sub>1</sub> is less than 9 feet tall], [H<sub>2</sub> is less than 9 feet tall], etc., together with the fact that [The only humans are H<sub>1</sub>, H<sub>2</sub>, ..., and H<sub>n</sub>].<sup>4</sup> According to a view that I'll call *Humean Rationalism*, while the PSR is true, the only (immediate) ground of the PSR consists in its instances together with a corresponding totality fact (e.g. [F<sub>1</sub> has an explanation], [F<sub>2</sub> has an explanation], [F<sub>3</sub> has an explanation], etc., and [The only facts are F<sub>1</sub>, F<sub>2</sub>, F<sub>3</sub>, ...]).<sup>5,6</sup> In other words, the reason why the PSR is true is simply because we

<sup>&</sup>lt;sup>3</sup> The distinction between autonomous and substantive facts is controversial. See Glazier (2017) and Sider (2020) for criticisms of the distinction.

<sup>&</sup>lt;sup>4</sup> There is some controversy about what form the relevant totality fact should take (e.g. whether it should be a universally quantified fact of the form  $[\forall x \phi(x)]$  or whether it should be taken to be a *sui generis* kind of fact). Since this debate won't be relevant for our purposes, we can remain neutral on this question. However, see Fine (2012) for further discussion. There is also some controversy about whether totality facts should be included at all in the grounding of universally quantified facts (e.g. see Leuenberger 2014 and Skiles 2015). For our purposes, we can also remain neutral on this issue. Although I will write as if totality facts should be included in the grounds of universal generalizations, nothing would be lost if totality facts were omitted from the grounds of universal generalizations.

<sup>&</sup>lt;sup>5</sup> The qualification of "immediate" ground is meant to leave room for the fact that the PSR can also be grounded in some other (sub)collection of facts that collectively ground the instances of the PSR and the corresponding totality fact. For more on the distinction between mediate and immediate grounds, see Fine (2012).

<sup>&</sup>lt;sup>6</sup> Here we are getting dangerously close to certain paradoxes that threaten the notion of grounding. If the PSR says that every fact has an explanation, including itself, then on this proposal it seems that the PSR has an explanation partly in virtue of the fact that the PSR has an explanation. Similar self-referential paradoxes of grounding have been discussed by a number of different authors (e.g. Fine 2010, Woods 2018, and Lovett 2020). Discussing these paradoxes would take us too far afield, so I will be taking it for granted that such paradoxes can be dealt with in one way or another, as everyone who works with the notion of grounding must assume. Another delicate issue here is that it is unclear whether there is any definite totality of facts, or whether facts are "indefinitely extensible". For different

find explanations wherever we look. There is an explanation for why the big bang happened in the way that it did, there is an explanation for why the laws of nature are the way they are, there is an explanation for why the correct moral principles are what they are, there is an explanation for why there is something rather than nothing, etc. According to the Humean Rationalist, once one completes all these "first-order" tasks of explaining why the world is the way it is, one will have fully explained why the PSR is true (just as fully explaining why each particular human is less than 9 feet tall suffices to explain why all humans are less than 9 feet tall). Moreover, there is no *further* explanation of the PSR that is independent of its particular instances. Although the world is fully explicable for the Humean Rationalist, there is no "meta" reason as to why the world should be fully explicable.

The second kind of answer, which I will call *Non-Humean Rationalism*, is the view that combines a commitment to the PSR with a denial of Humean Rationalism. In other words, according to Non-Humean Rationalism, there *is* some further explanation of the PSR that is not mediated by a mere grounding explanation in terms of its instances. I suspect that those who have been searching in vain for an explanation for the PSR have been implicitly presupposing that Non-Humean Rationalism must be correct. In what follows, my goal will largely be to interrogate whether such a presupposition is justified.

The labels of "Humean" and "Non-Humean" Rationalism are meant to be labels that draw an analogy to a corresponding debate concerning how we should explain the law-like universal generalizations that we find in nature, such as the fact that (say) all massive objects attract one another in a particular way. Humeans and Non-Humeans about laws of nature will approach this question differently.<sup>7</sup> Whereas it is natural for Humeans about natural laws to think that the only explanation for such universal generalizations is a grounding explanation in terms of its instances, Non-Humeans will typically think that there is a deeper explanation for such universal generalizations. Perhaps, for example, such facts are grounded in a corresponding fundamental law of nature.<sup>8</sup>

treatments of indefinite extensibility, see Rayo and Uzquiano (2006), Uzquiano (2015), Studd (2019), and Flocke (2021).

<sup>&</sup>lt;sup>7</sup> For a contemporary survey of different Humean and Non-Humean accounts of laws of nature, see Hildebrand (2023). For a recent attempt to combine Humean and Non-Humean principles, see Builes (2023).

<sup>&</sup>lt;sup>8</sup> There is certainly room to question this analogy. For example, Humeans might think that there are other kinds of explanations for law-like universal generalizations: perhaps laws of nature can "scientifically explain" such universal generalizations (e.g. see Loewer (2012), Lange (2013, 2018), Shumener (2019), and Bhogal (2020b) for further discussion). The suggestion that Non-Humeans should ground universal generalizations in laws of nature comes from Rosen (2010). For more discussion on how Humeans and Non-Humeans should think of the grounds of law-like universal generalizations, see Bhogal (2017).

#### 3. The Case for Humean Rationalism

Why should we take Humean Rationalism seriously? I think the answer is largely due to the defects of Non-Humean Rationalism. Non-Humean Rationalists are committed to providing some explanation for why the PSR is true that is independent of the grounding explanation that the Humean Rationalist provides, but it is not at all clear what that explanation should look like. In the absence of any plausible candidate for such an explanation, we have strong prima facie reasons to prefer Humean Rationalism over Non-Humean Rationalism.

So, are there any plausible candidate explanations for the Non-Humean Rationalist to appeal to? Well, although rationalists have provided many different arguments for thinking that the PSR is true, typically these arguments do not explain *why* the PSR is true. For example, one could argue that the only way that inference to the best explanation can be rational is if the PSR is true (Pruss 2006: 280-294). Since inference to the best explanation is rational, therefore the PSR must be true. Or, to take another example, one could argue that if the PSR were false, then inductive skepticism would be true (Pruss and Koons 2021: 1079-1099). But, since inductive skepticism is false, the PSR must be true. Lastly, many rationalists have thought that they can justifiably believe in the PSR on the basis of rational intuition, with some going so far as to claim that the PSR is self-evident (e.g. see Pruss 2006: 189-208).<sup>9</sup> Although all of these arguments may provide reasons to believe the PSR, they clearly do not explain why the PSR is true.<sup>10</sup> For our purposes, the relevant question is whether any of these arguments successfully explain why the PSR is true.

There are two potential explanations for the PSR that can be found in Leibniz' work, but both explanations rely on very controversial assumptions.<sup>11</sup> First, Leibniz attempts to ground the PSR

<sup>&</sup>lt;sup>9</sup> With respect to rational intuition, Huemer (2007) defends the view that intuitions always provide (defeasible) evidence that a proposition is true. With respect to self-evidence, Pruss (2006) defines a proposition P to be self-evident iff "necessary, anyone who understands it correctly understands it to be true, and it is possible to understand it" (206). Pruss goes on to provide two error theories that are meant to explain why there are philosophers who seem to understand the PSR yet do not take it to be true.

<sup>&</sup>lt;sup>10</sup> There are too many examples of non-explanatory arguments for the PSR to cover all of them here, but let me briefly mention a few other examples. Dasgupta (2016) argues that, although rationalists are committed to a strong universal claim about explanation in endorsing the PSR, anyone who rejects the PSR must similarly think that some strong universal claim about explanation is true. Dasgupta uses this to argue that rejecting the PSR should not be the "default" position in contemporary metaphysics. However, while this dialectical point is important, it doesn't give an explanation for why the PSR is true. Similarly, Della Rocca (2010) provides an argument for the PSR which he claims would be question begging to deny, but for similar reasons his argument does not amount to an explanation for why the PSR is true. Lastly, Pruss (2006: 231-248) has argued that the PSR can be derived from weaker rationalist principles, but in the absence of any explanation for those weaker rationalist principles, the PSR still does not have a satisfactory explanation.

<sup>&</sup>lt;sup>11</sup> Although there have been some other attempts to explain the PSR, to my knowledge none of them satisfy the two conditions of (i) not implicitly presupposing the PSR and (ii) not relying on very controversial assumptions. For an example of (i), at one point Leibniz tries to explain why the PSR is a conceptual truth by appealing to the concept of a sufficient reason and the concept of a "requisite", but such an argument is widely agreed to presuppose the PSR (see

in his "conceptual containment" theory of truth. At least for truths in subject-predicate form, such a theory implies that "the concept of the predicate is contained in the concept of the subject" (Melamed and Lin 2021), which would make all such truths analytic truths that are explicable by means of the conceptual connection between the subject and the predicate. Although such a theory might be able to explain why the PSR is true, it clearly needs much more defense. Prima facie, it seems highly implausible that, for example, the fact that Caesar crossed the Rubicon can be explained by reference to the fact that the concept *crossed the Rubicon* is contained in the conceptual containment theory of truth was driven by his antecedent commitment to the PSR. However, it would be circular to explain the conceptual containment theory in terms of the PSR if the conceptual containment theory is supposed to explain the PSR.<sup>12</sup>

A second explanation for the PSR appeals to theological resources. For example, one might claim that the PSR is true because God must have had sufficient reasons for creating the world in the way that he did, and whatever those reasons are will fully explain why the world is the way it is. In justifying the claim that God must have had sufficient reasons for his act of creation, Leibniz writes "A mere will without any motive, is a fiction, not only contrary to God's perfection, but also chimerical and contradictory" (Alexander 1977: 36). There are, of course, many ways to object to this kind of theological explanation. One could argue that God doesn't exist, or one could argue that the existence and nature of God would still remain inexplicable (contrary to the PSR), or one could argue that even if God does exist, there might still be inexplicable facts that do not depend on God. I won't enter into all of these controversies here, but I think it's fair to say that the Non-Humean Rationalist has a lot of work cut out for them if they attempt to fully explain the PSR by appealing to God.<sup>13</sup>

Lastly, the Non-Humean Rationalist might try to explain the PSR in a way that is analogous to the kinds of explanations that Non-Humeans about laws provide for the uniformity of nature. For example, perhaps the Non-Humean Rationalist can say that it is a "law of metaphysics" that everything must be explained. This kind of explanation also faces an uphill battle. What exactly is a law of metaphysics? What explains why there is such a law in the first place, and why should we

Melamed and Lin 2021). With respect to (ii), it is certainly (epistemically) possible that the true metaphysical explanation of the PSR rests on highly controversial assumptions. However, from an epistemic point of view, insofar as the best version of Non-Humean Rationalism must appeal to such highly controversial assumptions, that makes Humean Rationalism comparatively more plausible.

<sup>&</sup>lt;sup>12</sup> See Adams (1994) and Melamed and Lin (2021) for further discussion of Leibniz' conceptual containment theory of truth and its relationship to the PSR.

<sup>&</sup>lt;sup>13</sup> See Pruss (2006: 299-320) for further defense of a theological explanation for a restricted version of the PSR, according to which every contingent proposition has an explanation.

believe that there is such a law?<sup>14</sup> Alternatively, some Non-Humeans about laws appeal to facts about the essences of natural properties in order to explain natural regularities.<sup>15</sup> Perhaps the Non-Humean Rationalist can defend a similar proposal. Maybe it is essential to *being a fact* that facts have explanations, or maybe it is at least essential to *being a substantive fact* (in Dasgupta's (2016) sense of being a fact that is "apt to be explained") that substantive facts have explanations.

Whether any of these potential explanations for the PSR is at all plausible will partly be a matter of one's antecedent philosophical commitments. Still, I think it is fair to conclude that all of these potential explanations are very speculative.

## 4. The Case Against Humean Rationalism

While the case for Humean Rationalism is straightforward, the case against Humean Rationalism is more subtle. To my mind, there are two main objections to Humean Rationalism.

The first objection is epistemological. In particular, one might worry that Humean Rationalism undercuts some of the reasons why rationalists have been attracted to the PSR in the first place. For example, many rationalists have been attracted to the PSR by an inductive argument. Perhaps our success at explaining so many things suggests that everything can be explained.<sup>16</sup> However, with respect to the analogous debate concerning natural regularities, some Non-Humeans have argued that an inductive inference from (say) "All observed Fs are Gs" to "All Fs are Gs" is only rational in the presence of some overarching Non-Humean law that all Fs are Gs. Perhaps this is true because the best explanation for why all observed Fs are Gs appeals to a Non-Humean law, but it is controversial whether Humean laws are genuinely explanatory.<sup>17</sup> For similar reasons, one might think that an inductive inference to the conclusion that all facts have explanations can only be rational given Non-Humean Rationalism. Another epistemological objection to Humean Rationalism concerns the alleged fact that the PSR is supposed to be highly intuitive, even to the point of being "self-evident". Although many rationalists have been attracted to the PSR on these grounds, it is hard to see how Humean Rationalism could be highly intuitive or self-evident. If there was some simple Non-Humean explanation for why the PSR had to be true, then perhaps such an explanation could be ascertained by means of some a priori insight. But, if the only reason

<sup>&</sup>lt;sup>14</sup> The notion of a "law of metaphysics" has been discussed within the context of grounding for different purposes (e.g. see Schaffer 2007 and Wilsch 2020), but to my knowledge no rationalist has appealed to the notion in defense of the PSR.

<sup>&</sup>lt;sup>15</sup> Non-Humeans who appeal to facts about the essences of natural properties are often called "dispositional essentialists". For defenses of dispositional essentialism, see Chakravartty (2003) and Bird (2007).

<sup>&</sup>lt;sup>16</sup> In the Leibniz-Clarke correspondence, Leibniz justifies the PSR inductively in his Fifth paper to Clarke (see Alexander 1977). See Pruss (2006: 254-279) for a more detailed discussion.

<sup>&</sup>lt;sup>17</sup> Armstrong (1983), Ellis (2002), Bhogal (2021), and Builes (2022a) have argued that Humeans have a harder time than Non-Humeans with the problem of induction.

why the PSR is true is because of the first-order explanations for all other facts, then it is much harder to see how the PSR could be justified *a priori* in this way.

I want to grant that these objections have some force, but they could also be resisted in various ways. In defense of the inductive argument for the PSR, the Humean Rationalist can appeal to the same kinds of considerations that Humeans about laws appeal to. Perhaps the kinds of metaphysical posits that Non-Humeans appeal to simply add metaphysical mysteries without helping the prospects of induction<sup>18</sup>, or perhaps the rationality of induction is a basic tenet of rationality that it would be misguided to provide any deeper justification for. In addition, perhaps other standard theoretical virtues, such as simplicity and non-arbitrariness, allow the Humean to rationally conclude that, when all observed Fs are Gs, the simplest and least arbitrary conclusion to draw is that all Fs are Gs. After all, it seems that even the Non-Humean) law that all Fs are Gs. Such a law seems to be the simplest and least arbitrary explanation for why all observed Fs are Gs, but it is conceivable that there could complicated gerrymandered laws (e.g. "it is a law that all Fs are Gs until tomorrow") that similarly account for the fact that all observed Fs are Gs, yet do not support inductive inference.<sup>19</sup>

With respect to the fact that the PSR is allegedly highly intuitive or self-evident, the Humean Rationalist could deny that the intuitiveness or self-evidence of the PSR is undermined by the fact that the *grounds* of the PSR are not immediately intuitive or self-evident. For example, perhaps it is self-evident that 2+2=4, even though philosophers of mathematics sharply disagree about the grounds for such a truth.<sup>20</sup>

Lastly, even if these epistemological objections succeed, they aren't reasons for thinking that Humean Rationalism is *false*. At best, these objections only show that, in the absence of a Non-Humean explanation for the PSR, we should be less confident in some of the arguments in favor of the PSR. One might be tempted to strengthen this first epistemological objection to conclude that there couldn't be *any reason at all* to endorse Humean Rationalism (at least until we have surveyed and successfully explained every fact). However, even if arguments from induction or intuition are undermined by the Humean PSR, there are a variety of arguments for the PSR that don't seem to presuppose the Non-Humean PSR. For example, Pruss (2006) has argued that the rationality of inference to the best explanation depends on the PSR, and Pruss and Koons (2021) has argued that the falsity of the PSR leads to inductive skepticism. Combining these arguments

<sup>&</sup>lt;sup>18</sup> See Beebee (2011) for an influential argument that Non-Humean posits do not help with the problem of induction. <sup>19</sup> For more on this problem of complex/gerrymandered laws of nature, see Hildebrand (2013). Lastly, following Loewer (2023), the Humean can agree that in some sense physical events are "metaphysically" independent from one another, but they can deny the inference that they are therefore *probabilistically* independent from one another.

<sup>&</sup>lt;sup>20</sup> For example, some argue that "2+2=4" is true by convention (e.g. see Warren 2020), others argue that it is true because of the existence of certain abstract Platonic objects (e.g. see Linnebo 2018), others argue that it is true because of certain ontologically neutral modal claims (e.g. see Hellman 1989), etc.

with standard anti-skeptical premises directly leads to the PSR. To take another kind of example, Della Rocca (2010) and Dasgupta (2016: 409-412) argue that those who reject the PSR still need to endorse a strong and controversial view about *exactly which* facts must have explanations, and they argue in different ways that such a view ends up being no more antecedently plausible than the rationalist's strong and controversial claim that *all* facts must have explanations.

A second kind of objection to Humean Rationalism is that it would make the PSR a mere coincidence if it were true, but (allegedly) it would be very implausible if the PSR were simply true by coincidence. Although the relevant notion of coincidence here is a bit murky, a natural thought is that, according to Humean Rationalism, not only would there be no unifying reason as to why the PSR is true, but the grounds of the PSR would also be massively complicated and conjunctive.<sup>21</sup>

The Humean Rationalist could respond to this argument in several ways. First, they could point out that there are well-known arguments that the PSR implies that every truth (including itself) is a necessary truth, and these arguments do not depend on whether Humean or Non-Humean Rationalism is true.<sup>22</sup> So, if these arguments work, they would establish that the PSR is metaphysically necessary. Although one could still object that the PSR would be a metaphysically necessary coincidence, it at least seems that the necessary status of the PSR makes it less of a "coincidence" then it otherwise might be. For example, it is natural to think that if something is a coincidence, then it could have easily been false. However, if the PSR is metaphysically necessary, then there are no nearby possible worlds in which it is false.<sup>23</sup> Second, the Humean Rationalist could try to reduce the apparent massive complexity of the grounds of the PSR. For example, suppose the Humean Rationalist claims to have an (autonomous) explanation for the particular initial conditions of the universe and an (autonomous) explanation for the particular deterministic laws of nature. Then, the Humean Rationalist could use these two explanations to explain everything else about the physical world. What this example shows is that the Humean Rationalist is *not* committed to finding infinitely many separate and independent explanations for everything: they might be able to find an elegant, simple, and unified explanation that ultimately explains

<sup>&</sup>lt;sup>21</sup> For further discussion of the nature of coincidences, see Lando (2017) and Bhogal (2020a).

<sup>&</sup>lt;sup>22</sup> Van Inwagen (1983: 202-204), Bennett (1984), Dasgupta (2016), and McDaniel (2019) have argued that the PSR implies that every truth is a necessary truth. See Dasgupta (2016) for further discussion of why this consequence should not be regarded as absurd.

<sup>&</sup>lt;sup>23</sup> The fact that the PSR might imply that every truth is a necessary truth also threatens to trivialize some contemporary accounts of coincidence. For example, Bhogal's (2020a) account of coincidence appeals to a notion of "explanatory goodness", which requires looking at the space of possible worlds where an explanandum is true and comparing it to the space of possible worlds in which an explanans is true. However, if there is only one possible world, such an account of explanatory goodness becomes trivial and can't be used to distinguish coincidences from non-coincidences. In response, one could point out that there is some precedent for thinking that there might be metaphysically necessary coincidences in the form of mathematical coincidences. For example, Lange (2010) argues that some mathematical facts are coincidental if they don't have a "unified" explanation. However, as I'm about to argue, Humean Rationalism is compatible with the view that the PSR has a (non-immediate) unified explanation.

everything else. In other words, although the Humean Rationalist is committed to the view that the *immediate* grounds of the PSR are massively complicated and disunified (since the immediate grounds of the PSR will include every fact), the Humean Rationalist is perfectly free to think that there is a simple and unified *non*-immediate ground for the PSR. The disagreement between the Humean and the Non-Humean Rationalist is not about whether there is a simple and unified ultimate explanation for everything. They can both agree that there is. Their disagreement is only about the *structure* of the explanation of the PSR.

Lastly, even if Humean Rationalism does imply that the PSR is a "coincidence" (in some sense), it is not clear why this would be so problematic. After all, everyone agrees that there are plenty of true coincidences. Moreover, when comparing Humean and Non-Humean Rationalism, the alleged coincidental nature of Humean Rationalism must be weighed against the fact that there doesn't seem to be any plausible account of how Non-Humean Rationalism could be true in the first place.

# 5. Explanatory Differences

Having given a preliminary defense of Humean Rationalism, it is worth highlighting an important "first-order" explanatory difference between Humean and Non-Humean Rationalism.

There are many historically influential examples of rationalist arguments with the following general structure:

- 1) If P, then the PSR would be false.
- 2) The PSR is true.
- 3) Therefore, not-P.

One famous example of such an argument is Leibniz' argument against substantivalism about space. If space were an infinite and homogeneous substance, then there would be no reason why material objects should be oriented one way with respect to space rather than another way. So, no matter how material objects are oriented with respect to substantival space, the PSR would be violated. Therefore, given that the PSR is true, space must be relational rather than substantival. To take another historical (but controversial) rationalist argument, one can also argue for the "Principle of the Identity of Indiscernibles" (PII) on the basis of the PSR. There are many formulations of the PII, but according to one formulation, any two objects that share all of the same qualitative properties and relations must be identical.<sup>24</sup> Given this formulation, we might argue as follows. If the PII were false, then there could be two objects that share all the same qualitative properties and relations but were nonetheless distinct. However, in such a situation there would be no reason why material objects were distinct rather than identical, since there would be

<sup>&</sup>lt;sup>24</sup> See Forrest (2020) for further discussion of different formulations of the PII.

(qualitative) difference between them. So, if the PII were false, then the PSR would be false. But, since the PSR is true, the PII must be true. One can certainly question whether such an argument is sound, but it is another example of a historically influential argument that shares the same argumentative structure.<sup>25</sup>

Both the Humean and Non-Humean Rationalist are able to endorse the soundness of these kinds of arguments. However, the Non-Humean Rationalist can use these arguments to explain their conclusions, while the Humean Rationalist cannot. To take the example of the nature of space, it would be objectionably circular for the Humean Rationalist to explain why space is relational rather than substantival in terms of the PSR, because the PSR is explained in virtue of the fact that everything else (including the nature of space) can be explained! Intuitively, the PSR comes "late" in the explanatory order for the Humean Rationalist: the only reason why the PSR is true is because of the independent explanations that exist for everything else. However, the Non-Humean Rationalist is able to explain why space must be relational rather than substantival using the above argument. More precisely, the Non-Humean Rationalist can explain why space cannot be substantival by appealing to whatever it is that grounds the PSR. For example, suppose the Non-Humean Rationalist appeals to a "law of metaphysics" to ground the PSR. Then, that law of metaphysics would be able to explain why space is not substantival: after all, if space were substantival, the laws of metaphysics would be violated. Similarly, a Non-Humean about laws could (for example) explain why some particular object does not move faster than light by means of the fundamental laws of nature. After all, if an object did move faster than light, the laws of nature would be violated.<sup>26</sup>

This explanatory difference between Humean and Non-Humean Rationalism can be seen from different perspectives. On the one hand, this difference seems to favor Non-Humean Rationalism, because it shows that the Non-Humean Rationalist has an easier time explaining things than the Humean Rationalist. The Non-Humean Rationalist can appeal to the PSR itself (or whatever is the Non-Humean ground of the PSR) in order to explain why things are the way they are, while the Humean Rationalist must explain things *without* appealing to the PSR. However, this feature of Non-Humean Rationalism can also be seen as a bug. The Humean Rationalist claims that there are "neutral" explanations for why things are the way they are, where neutral explanations are

<sup>&</sup>lt;sup>25</sup> For more on how to explain facts about identity and distinctness, and the relationship between the PSR and the PII, see Shumener (2017, 2020). Contemporary "anti-arbitrariness" arguments, such as in Builes (2022b), could also be seen as presupposing (at least a restricted) version of the PSR.

<sup>&</sup>lt;sup>26</sup> The fact that Humean Rationalists seem to face an explanatory circularity problem if they use the PSR to explain particular first-order facts parallels a similar debate between Humean and Non-Humean accounts of the laws of nature. In particular, many Non-Humeans about laws have argued that if Humean laws were capable of explaining particular physical events, then because Humean laws are themselves explained by (the totality of) particular physical events, this would result in an explanatory circle. Some of the responses that Humeans about laws have made to this challenge (e.g. distinguishing different kinds of explanation) could also be made by the Humean Rationalist. For more on this debate, see Loewer (2012), Lange (2013, 2018), Shumener (2019), and Bhogal (2020b).

explanations that are in principle acceptable to everyone, regardless if they are antecedently committed to the PSR. As a consequence, the rationalist project of the Humean Rationalist is in a sense more ambitious than the rationalist project of the Non-Humean Rationalist. Only the Humean Rationalist claims to be able to explain everything in ways that we can all appreciate.

#### 6. Conclusion

Upon hearing the view that everything must have an explanation, it is very natural to ask why that should be so. Although those who reject the PSR don't always have to answer every why-question, rationalists don't have that luxury. My goal here has been to challenge a presupposition that has been common to all attempts at explaining the PSR: that rationalists must be Non-Humean Rationalists. If such a presupposition were true, then the failure of (Non-Humean) attempts at explaining the PSR would show that the PSR is self-refuting. However, this presupposition is false. Even if every version of Non-Humean Rationalism is mistaken, that does not imply that the PSR is mistaken. Instead, rationalists are free to be Humean Rationalists.<sup>27</sup>

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