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# The Explanatory Demands of Grounding in Law

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**Abstract.** A new strategy in philosophy of law appeals to explanatory gap arguments to attack legal positivism. We argue that the strategy faces a dilemma, which derives from there being two available readings of the constraint it places on legal grounding. To this end, we elaborate the most promising ways of spelling out the epistemic constraints governing law-determination, and show that each of the arguments based on them has problems. Throughout the paper, we evaluate a number of explanatory requirements, ultimately with a view to shedding light on the explanatory nature of both grounding in general, and legal grounding in particular.

## 1. Introduction

On recent prominent accounts, legal positivism and physicalism about the mind are viewed as making parallel claims about the metaphysical determinants or grounds of legal and mental facts respectively.<sup>1</sup> On a first approximation, while physicalists claim that facts about consciousness, and mental phenomena more generally, are fully grounded in physical facts, positivists similarly maintain that facts about the content of the law (in a legal system, at a time) are fully grounded in descriptive social facts.<sup>2</sup>

Explanatory gap arguments have long played a central role in evaluating physicalist theories in the philosophy of mind, and as such have been widely discussed in the literature.<sup>3</sup> Arguments of this kind typically move from a claim that an epistemic gap between physical and phenomenal facts implies a corresponding metaphysical gap, together with the claim that there is an epistemic gap between facts of these kinds, to the negation of physicalism. Such is the structure of, for instance, Chalmers' (1996) conceivability argument, Levine's (1983) intelligibility argument, and Jackson's (1986) knowledge argument.

Though less prominently than in the philosophy of mind, explanatory gap arguments have also played some role in legal philosophy. In this area, the most incisive and compelling use of an argument of this kind is constituted by Greenberg's (2004,

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<sup>1</sup> For some of the early literature on metaphysical grounding, see Correia (2005, 2010), Fine (2001, 2012), Rosen (2010), Schaffer (2009), and the essays in Correia and Schnieder (2012).

<sup>2</sup> For the view that physicalism and positivism make parallel claims about metaphysical grounding, see Rosen (2010). Grounding-based formulations of physicalism have been defended by Dasgupta (2014) and Schaffer (2017). For the view that positivism is best interpreted as a grounding thesis, see Atiq (2020), Berman (2018; forthcoming), Chilovi (2020), Chilovi and Pavlakos (2019), Chilovi and Wodak (forthcoming), Plunkett (2012), Plunkett and Shapiro (2017), Rosen (2010). For the view that Dworkin's nonpositivism makes a grounding claim, see Stavropoulos (2021).

<sup>3</sup> See Block and Stalnaker (1999), Chalmers (1996), Chalmers and Jackson (2001), Jackson (1986), Levine (1983), and the long literature sparked by these articles.

2006a, 2006b) powerful attack on positivism. His argument moves from a claim about the epistemic requirements of law-determination, together with the claim that such requirements would be violated under positivistic assumptions, to the negation of positivism. Yet despite the influence and strength of Greenberg's argument, an in-depth treatment and scrutiny of the issues it raises is still lacking in the literature.

The goal of this paper is to give the explanatory argument against positivism the prominence and attention it deserves, and to develop a new line of response to it. Some (e.g. Baum Levenbook 2013 and Neta 2004) have misconstrued the nature of the argument, by assimilating the (epistemic) notion of reason appealed by it to the notion of reasonableness. Others (e.g. Plunkett 2012) have responded to the argument by trying to show that positivists in fact do have the resources to meet the epistemic demands placed by Greenberg on law-determination.

By contrast, we will argue that the explanatory argument faces a dilemma, which derives from there being two available readings of the epistemic constraint it places on the grounding of legal facts. On the first horn, the epistemic requirement is assigned a strong interpretation which, though rendering the argument formally valid, raises serious doubts as to the tenability of the requirement itself. On the second horn, the epistemic requirement is given a weaker interpretation which, though itself very plausible, fails to yield a valid argument when combined with the remaining premise.

The paper's structure is as follows. In section 2, we start by presenting and clarifying the explanatory argument against legal positivism (based on Greenberg 2004, 2006a, 2006b). We focus closely on unpacking the argument, for various reasons. First, because there are respects in which the original presentation is open to different interpretations, so the argument can be precisified in different ways (in at least two different ways, as we shall see). Second, and relatedly, because the argument has been widely misinterpreted in the literature, and so we think that settling on an adequate interpretation makes a worthwhile contribution to it. Our work in this section may be read as an exercise in constructive interpretation, whereby we try to make the object of interpretation the best it can be.<sup>4</sup> We think that engaging in this exercise has theoretical value, not only because the explanatory argument against positivism constitutes one of the most significant recent contributions to the positivism/nonpositivism debate, but also because the argument provides an original way of unpacking the epistemic requirements it imposes on the metaphysical account it targets, as well as a new rationale for believing that the requirement holds, which makes it of general philosophical interest.

Finally, in section 3, we take issue with the argument by showing that it faces a dilemma, and that neither of its horns is easily dealt with. Throughout the paper, we elaborate and assess a number of candidate explanatory requirements on the grounding of legal facts in particular, as well as on grounding in general. While doing so, we hope to contribute to a deeper understanding of the explanatory demands of constitutive

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<sup>4</sup> Cf. Dworkin (1986).

determination, both in general, and in the specific case of law-determination that forms the main focus of the paper.

## 2. The Explanatory Argument Against Legal Positivism

As noticed in the introduction, explanatory gap arguments move from a premise that a metaphysical view is subject to a certain epistemic constraint, together with a claim that the epistemic constraint in question is violated, to the falsity of the metaphysical view. Arguments in this family differ as to the kind of metaphysical view they take issue with, depending on whether it is one about property identity, reduction, or grounding.<sup>5</sup> Furthermore, they vary with respect to the nature and strength of the epistemic constraint they impose, depending on whether it is cashed out in terms of (say) a connection between conceivability and metaphysical possibility (Chalmers 1996), intelligibility (Levine 1983), deducibility (Jackson 1986), *a priori* entailment (Chalmers and Jackson 2001), or in some other way.

Our main concern in this paper is with explanatory arguments aimed at refuting legal positivism, the view that legal facts are metaphysically determined by descriptive social facts. In the relevant sense, the notion of a social fact is meant to include facts about collective attitudes and conventions, as well as facts about the sayings, doings, and mental states of lawmakers – members of constitutional assemblies, legislatures, courts and the like (what Greenberg 2004 calls ‘law practices’). Importantly, the type of determination at work in the debate over positivism is constitutive, rather than causal, epistemic, or modal, in character. Here, we follow current developments in metaphysics that cash out constitutive determination in ground-theoretic terms.<sup>6</sup> As a consequence, we interpret positivism as a view about the grounds of legal facts, and the argument against it as involving the contention that the grounding of legal facts is liable to an epistemic constraint.

Subject to various clarifications, the argument can thus be formulated through a premise that connects grounding to explanation, and a premise that asserts the existence of an explanatory gap under positivist assumptions, in the following way:

EXPLANATION    A collection of facts  $\Delta$  fully ground a legal fact L only if  $\Delta$  explain L  
GAP            There is an explanatory gap between legal facts and descriptive social facts

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$\therefore$  Legal positivism (the view that legal facts are fully grounded in social facts) is false

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<sup>5</sup> See especially Schaffer (2017) for discussion of explanatory gap arguments aimed at refuting grounding theses.

<sup>6</sup> For arguments that metaphysical grounding is the relation of determination that is relevant in this context, see Chilovi and Pavlakos (2019) and Rosen (2010).

As previously mentioned, Greenberg (2004, 2006a, 2006b) has mounted a powerful attack on positivism through a case that has essentially this shape, since it argues from the violation of a certain epistemic constraint on the constitutive determination or grounding of legal facts.<sup>7</sup> Let us now look at the way in which the argument schema above is best developed in the spirit of his remarks.

## 2.1 EXPLANATION

Starting with the first premise, the idea is that if a collection of facts  $\Delta$  fully grounds a legal fact  $L$ , then  $\Delta$  must be able to fully explain the obtaining of  $L$ . Otherwise said, each legal determinant must individually contribute to an explanation of the legal fact it (partially) grounds, and any full ground must be able to collectively provide a complete explanation of the legal fact it (fully) grounds.<sup>8</sup>

What kind of explanatory constraint is at issue, however, is not an obvious matter. As a first stab at elucidating it, it might be useful to highlight some things that the epistemic requirement is not. Firstly, as Greenberg (2004, 2006a) himself notices,<sup>9</sup> and later emphasizes in a response to Neta (2004),<sup>10</sup> the constraint does not require that the grounds should be able to justify – in a moral (non-epistemic) sense – what they ground, nor that legal facts should somehow be reasonable or rational. (As Greenberg (2004:165) rightly points out, to assume otherwise would also beg the question against the positivist). Secondly, as noted by Greenberg (2006a: 271), the idea EXPLANATION intends to express is *not* that whenever some facts  $\Delta$  ground a legal fact  $L$ , there should be some facts  $\Gamma$  that explain the fact that  $\Delta$  ground  $L$ ; while this question of iterated grounding is a legitimate and interesting one, it is not one that is tackled by EXPLANATION. Thirdly, as we have argued at length in previous work (see Chilovi and Pavlakos 2019), the requirement also does not amount to the contention that facts about

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<sup>7</sup> Though Greenberg's presentation of the argument differs in some respects (Greenberg calls 'rational determination' what we call 'explanation', and 'rational determination doctrine' what we call 'EXPLANATION'), we think the terminology employed here has some comparative advantages, especially tied to the fact that the term 'rational' has been widely misinterpreted in the subsequent literature (see section 2.1).

<sup>8</sup> In this paper, we will rely on the usual distinction between full and partial ground. A plurality of facts  $\Delta$  fully grounds a fact  $A$  if nothing needs to be added to  $\Delta$  in order to have a complete account of the obtaining of  $A$ . Derivatively,  $\Delta$  partially grounds  $A$  just in case there is some plurality  $\Gamma$  such that  $\Delta, \Gamma$  fully grounds  $A$  (see Audi 2012, Fine 2012, and Rosen 2010).

<sup>9</sup> Greenberg (2004: 164): 'In the relevant sense, a reason is a consideration that makes the relevant explanandum intelligible'; Greenberg (2004: 165): 'It bears emphasis that what must be rationally intelligible is not the content of the law but the relation between determinants of legal content and legal content. ... The rational-relation doctrine does not build in any assumption that there must be normative (or evaluative) reasons for the law's content—that it must be good for the law to have particular content.' Greenberg (2006a: 270): '[T]he rational-relation requirement is not a requirement that the legal facts be shown to be good or valuable.'

<sup>10</sup> See Greenberg (2006b: 119).

intelligibility – about what explanations people like us are able to find intelligible – be *themselves* among the grounds of legal facts (cf. Plunkett 2012).

Having foreclosed some possible misunderstandings, let's now turn to consider some positive ways of conceiving the grounding-explanation connection. Greenberg makes use of three main notions in order to clarify the type of explanation involved in the connection: those of intelligibility, transparency, and reason why:

- (Intelligibility)      The legal determinants must make the legal facts they ground intelligible. (Greenberg 2004: 160-166, 195)
- (Transparency)      It should always in principle be possible to understand how (a change in) the legal determinants bear on (a change in) the obtaining legal facts (Greenberg 2004: 170). That is, the relation between the legal facts and their grounds should not be opaque, where for 'the relation to be opaque would be for it to be the case that any change in law practices could have, so far as we could tell, any effect on the content of the law. The effects on the content of the law could be unfathomable and unpredictable, even if fully determinate.' (Greenberg 2004: 164-165)
- (Reason-Giving)      The legal determinants must provide epistemic, explanatory reasons why the legal facts they ground obtain. (Greenberg 2004: 160, 164; 2006a: 265, 268)

It is not entirely clear what the relation between these notions is, nor how to derive a fully precise characterization of EXPLANATION from them. Yet what they all seem to point to is the fact that the grounds of legal facts should somehow be able to provide the basis for an *inference* to the legal facts they ground. The driving insight, in other words, appears to be that the content of the law should in principle be *accessible* to someone who is aware of the law-determining facts, so that it should be possible for someone who possesses knowledge of all the legal determinants to acquire knowledge of the legal facts on the basis of this prior knowledge.

Greenberg (2004: 169–173) offers a compelling argument for this thesis, which in a nutshell can be summarized as follows. Because there are (many) legal facts that we know, legal knowledge (i.e. knowledge of legal facts) is possible. Yet in order for legal knowledge to be possible, it must be possible to derive such knowledge from knowledge of its grounds. For it's not as if knowledge of the law could be obtained in other ways: barring derivative epistemic methods – such as testimony – that are parasitic on further methods, the only way knowledge of the law can be acquired is by means of working out the existing law from its sources. Thus, since legal knowledge is possible, and since this requires it being possible to inferentially derive legal facts from

their grounds, it must be possible to derive knowledge of the law from knowledge of its grounds.

Now let us go through this reasoning more carefully and slowly. Central to the rationale for adopting EXPLANATION is the idea that the epistemology of law must “track its metaphysics.”<sup>11</sup> In general, for any given domain D, there is a question as to how – if at all – knowledge of the facts in D can be obtained. For some domains, knowledge of the facts in them can be acquired through *direct* – i.e. non-inferential – access to them. This is the case, for instance, with respect to some facts about one’s conscious mental states, which can plausibly (at least sometimes) be known by means of introspection, and with respect to some facts about the external environment, which can be known through perception (Greenberg 2004: 170-171, Greenberg ms).

Secondly, a distinct type of knowledge acquisition results from performing what Greenberg calls ‘lateral’ derivations, which consist in *inferring* a given fact from other facts to which it does *not* bear a grounding relation. This happens, for instance, when one infers a certain fact from its causal effects – say, a fact about someone’s mental state from the behaviour that was caused by it.

Crucially, the epistemology of law seems to be different from both direct and lateral knowledge acquisition. In the legal domain, the primary way of coming to know the facts that belong to it is by means of performing an *inference from their grounds* (Greenberg 2004: 171, Greenberg ms). The hedge ‘primarily’ is needed because trivially, one can also come to know a legal fact through testimony, as when one is told what the law is by a reliable source. Testimony, however, is only a derivative way of knowledge acquisition, since it is always parasitic upon a prior and different method through which the transmitted knowledge was originally obtained. And, in the legal case, there appears to be but one way that a “first knower”, sitting at the bottom of a testimonial chain, could have acquired such knowledge. This is by way of working the law out from its sources, where those are precisely the things (or, as we shall see, *some* of the things) that are responsible for determining it.<sup>12</sup>

The contrast between the epistemology of legal and (many) non-legal facts is stark: even if physicalism is true, one doesn’t need to know anything about the brain in order to know that they are conscious, just as one doesn’t need to know anything about chemistry in order to know that it’s cloudy. By contrast, in the legal case one *does* need to know the sources of law in order to know what the law is, since no other method is ultimately available. In short, what justifies EXPLANATION is that in the legal case, a

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<sup>11</sup> See Greenberg (ms).

<sup>12</sup> Other derivative methods of knowledge acquisition, such as being taught the content of the law by an instructor, will also exhibit the same structure as testimony. Ultimately, at the beginning of any “instruction chain”, there will need to be someone who has acquired legal knowledge in some other way. And at this point, for the reasons rehearsed above, the relevant method will plausibly consist in inferring the legal facts from their grounds. This point also applies to the most fundamental legal facts (e.g., those concerning constitutional law), where access, e.g., to the semantic content of the text, to the actions and mental states of the lawmakers, or to other (possibly moral) facts will be needed to gain access to these legal facts. We thank an anonymous reviewer for prompting us to clarify this.

principle of this kind seems to be needed to vindicate the possibility of knowledge in this domain.

## 2.2 GAP

The argument's second premise asserts the existence of an explanatory gap between legal facts and descriptive social facts. The basic idea is that no matter how many descriptive facts about agents' actions, dispositions and mental states one takes into consideration, there'll always be multiple sets of (putative) legal facts compatible with them. Equivalently, the idea is that for any given set of descriptive social facts one starts with, there will be multiple possible mappings from that set to different sets of (putative) legal facts – different models of the contribution of the social facts to the content of the law, as Greenberg puts it (2004: 178, 2006a: 268). Distinct sets of legal facts can thus be seen as supported by the same set of base social facts, so that it will be indeterminate which among them are the actual legal facts.

A few comments regarding this are worth making. Firstly, notice that the modality involved in the claim that there are different *possible* mappings from the social to the legal facts – different models of the social facts' contribution to the content of the law – should not be understood as metaphysical modality, as doing so would have two unwelcome consequences. For one, it would build into GAP a claim that is *by itself* already (plausibly) incompatible with the truth of positivism,<sup>13</sup> and so it would trivialize the argument by rendering the appeal to EXPLANATION useless or superfluous. For another, it would also turn GAP into a highly contentious claim, a claim that would be outright rejected by (nearly) any positivist.<sup>14</sup>

The two worries are related, as they both rely on the assumption that the grounded metaphysically supervenes on its grounds. That is, they rely on the (widely shared) principle that (roughly) if facts of type A are fully grounded in facts of type B, then no A-difference is metaphysically possible without a B-difference.<sup>15</sup> So having GAP saying that any set of social facts (no matter how comprehensive) is *metaphysically* compatible with different sets of legal facts would imply the negation of the supervenience of the legal on the social. And this, in combination with the grounding-supervenience connection, would imply the falsity of positivism, *without any need to appeal to EXPLANATION*.

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<sup>13</sup> Though see Leuenberger (2008; 2014a) for the view that grounding theses are compatible with this sort of modal independence.

<sup>14</sup> While in principle a positivist might follow Leuenberger (2014a) and Skiles (2015), and accordingly accept the metaphysical possibility of worlds with the same social facts but distinct legal facts, we know of no actual positivist who has done so.

<sup>15</sup> The view that grounding entails some form of supervenience (either necessitation or a weaker kind of supervenience) is standard in the grounding literature. Advocates of it include Audi (2012), Chilovi (2021), deRosset (2013), Loss (2017), Rosen (2010) and Trogdon (2013). For discussion, see Leuenberger (2014a; 2014b), and Skiles (2015).



In principle, one may of course respond by denying the grounding-supervenience connection, so as to render GAP compatible with positivism. But then, the point of having GAP within an argument against positivism would become utterly obscure, just as it would be obscure how GAP might conjure up with EXPLANATION to yield a sound argument against positivism.

What the preceding considerations suggest is that the modality in GAP should be understood in a different way. GAP's claim is rather that even once one *knows* every social fact that might be relevant in grounding the law, this knowledge will still be compatible with a variety of different sets of legal facts. What GAP says, in other words, is that the epistemic situation of someone who knows everything there is to know about the relevant social facts doesn't settle which of alternative sets of legal facts really obtains, for it doesn't settle which of alternative candidate mappings is actual. The relevant modality – that is – is not metaphysical, but rather epistemic, modality.

Secondly, let us highlight what the argument's upshot is meant to be. The first thing to notice is that the intended upshot is not that all such (putative) legal facts do in fact obtain. The idea is rather that (many of) the models and mappings in questions, as well as the sets of legal facts they return as values, are *deviant*. GAP'S function, in other words, is to point towards the indeterminacy that would result *if* positivism were true, not to show that such indeterminacy is real. For what is regarded as an absurd consequence is then used as a *reductio* of positivism itself. In keeping with this, the thought is that the fact that one can always “cook up” a positivistically acceptable legal output for any social-source input is meant to show that positivism lacks the resources to discriminate deviant from non-deviant mappings, to tell real from merely putative law.<sup>16</sup>

Moreover, the intended upshot is also not that legal facts don't really exist, nor that they are metaphysically basic. These are the morals that are drawn from somewhat related arguments given by a sceptical reading of Kripke's Wittgenstein (Kripke 1982) with regard to semantic facts, and by Chalmers (1996) with regard to mental facts.

Differing from both, the moral Greenberg wants to draw is instead that we should *supplement* positivist grounding bases, adding to them such (non-legal) facts as are needed in order to rule out the deviant mappings, i.e., to tell the legally correct model of the descriptive facts' contribution to legal content from bogus ones. Doing so will, in turn, resolve the indeterminacy, and allow us to perform correct derivations from the base facts to the legal facts they ground. On this basis, Greenberg then argues that in order for there to be determinate legal requirements, the content of the law must also depend on facts about value, whose role is to support some models over others – to help determine which features of law practices matter and how they matter (2004: 197).

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<sup>16</sup> As Greenberg (2004: 181-183) puts it, the problem is that without substantive standards that determine the relevance of different aspects of law practices, the (total set of) law practices will support too many models: for any putative legal proposition, there will always be a model supported by the practices that yields that proposition.

This is then used as a key consideration in support of his preferred nonpositivist position.<sup>17</sup>

### 3. A Dilemma for the Explanatory Argument

Thus far we've engaged in a kind of constructive interpretation aimed at showing that there's a distinctive explanatory argument targeting legal positivism, understood as a grounding thesis. The argument's engine is constituted by an explanatory constraint on the grounding of legal facts, coupled with the observation that positivism leaves open epistemic scenarios that would violate the constraint. While Greenberg's writings – from which the argument can be extrapolated – have exerted much influence on the subsequent literature, the nature of the argument has not been adequately appreciated. That is what called for the “constructive” part aimed at clarifying it.

Now we turn to evaluating the argument on its merits, by offering a diagnosis of where we think it goes wrong, and what this tells us about the explanatory nature of the grounding of legal facts. In outline, our thesis is fairly simple. For the argument to be successful, its two premises must both be plausible, and align so as to yield a valid inference to the negation of positivism. Although we've gone at some length towards elucidating how the two premises should be understood, some of their key features are yet to be unpacked, leaving indeterminate whether they really are plausible, as well as whether they do align in the right way. This is because it remains unclear what exactly EXPLANATION amounts to, as the nature of the epistemic requirement it involves is yet to be spelled out in full detail. In what follows, we distinguish two interpretations of the requirement, one strong and one weak. On the strong interpretation, the argument is valid, but there are grounds for doubting that its premises are true. On the weak interpretation, EXPLANATION is plausible, but it doesn't align with GAP to yield a valid argument.

#### 3.1 Strong EXPLANATION: Transparency

Two of the properties that guided our *prima facie* understanding of EXPLANATION – Intelligibility and Transparency – suggest a strong reading of the constraint in it. In this vein, several remarks by Greenberg (see especially 2004: 160, 164, 165, 170) revolve around the idea that though in general metaphysical determination can be brute, in the sense that even a perfectly rational creature may not be able to see how a certain derivative fact is related to its determinants, this is not so in the legal case. The case of legal grounding is *special*, in that the explanantia must make the explanandum intelligible, and the relation between legal facts and their grounds be transparent: legal facts – unlike perhaps other sorts of facts – should in principle be accessible to a

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<sup>17</sup> Later (see section 3.1.1.1) we shall come back to the question of whether this further claim is indeed justified.

rational creature who is aware of their grounds. In Greenberg’s words (2004: 160), ‘[i]f it is not in principle intelligible why the determinants of legal content—the relevant descriptive facts—make the law have certain content, then it does not have that content.’

These considerations point toward an interpretation of EXPLANATION that follows familiar arguments in the philosophy of mind,<sup>18</sup> where the epistemic constraint has been variably cashed out in terms of conceivability, logical or a priori entailment. For current purposes, it is not entirely clear what the best way to go is. In order not to foreclose any relevant option, it is best to leave open which of these implementations should ultimately be adopted, so as not to beg any question against the proponent of the argument.

Accordingly, the argument’s first premise would correspond to the principle that if a collection of facts  $\Delta$  fully grounds a legal fact L, then the link between  $\Delta$  and L is transparent, where the link between the grounded and its grounds is transparent iff [ $\Delta$  a priori entails L /  $\Delta$  logically entails L / it is not conceivable that every member of  $\Delta$  is true and L is false].<sup>19</sup> In other words:

TRANSPARENCY      If a collection of facts  $\Delta$  fully grounds a legal fact L, then the proposition that  $\Delta$  obtains without L obtaining is not [conceivable / logically possible / a priori open].

The first thing to notice is that under this construal of the argument’s first premise, the explanatory argument is clearly valid. For assume, *as per* TRANSPARENCY, that it is a requirement on the full grounding bases of any legal fact that the conjunction of the propositions that correspond to the facts in the base [logically / a priori entail] the proposition corresponding to the grounded fact, or that it should be inconceivable (for a suitably idealized agent) that the former could be true while the latter being false. And suppose, *as per* GAP, that for someone who knew every social fact that might be relevant in grounding the law it is still open which of alternative sets of legal facts holds.<sup>20</sup> Then, this would show that propositions about social facts do not suffice to [logically / a priori entail] propositions about the content of the law, or to rule out the

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<sup>18</sup> This interpretation is further supported by the analogies, drawn by Greenberg (see e.g. 2004: 160, fn. 18), with Davidson (1973) on radical interpretation, and with Kripke’s (1982) Wittgenstein. According to the former (as well as to Lewis 1974), physical facts determine content in a way that must be intelligible or transparent. Kripke (1982) similarly assumes that we must be able to “read off” facts about content from their determinants. Arguably, common to all these theorists is a commitment to the thesis that facts about meaning or content must be *a priori* entailed by their constitutive determinants.

<sup>19</sup> This formulation of transparency reflects Schaffer’s (2017) formulation of opacity.

<sup>20</sup> Notice that, as is customary in parallel discussions in the philosophy of mind, the knowing subject in terms of which the epistemic requirement is formulated is idealized to some degree. For instance, they should have unrestricted deductive powers, be fully competent with respect to the relevant concepts, and be lacking in any cognitive limitations that would stand in the way of performing the needed derivations.

conceivability of alternative pairings between legal and social facts. Therefore, social facts would not fully ground any legal fact, and positivism would be false.

The key question for this version of the argument, then, is not whether it is valid, but rather if its premises are true. Plunkett's (2012: 184-186) strategy, in effect, is to resist it by arguing against GAP, while assuming – for the sake of the argument – that the epistemic constraint is sound. The way he does so is by appealing to a distinction between revelatory and non-revelatory concepts, and then claiming that the relevant legal concepts are revelatory.<sup>21</sup> Roughly, this means that mastery of them would reveal what it takes for the property they designate to be instantiated (or the nature of the entity they denote, depending on the ontological category of the referent). So, Plunkett argues, given that the concept LAW is revelatory, someone who possesses it and who is also aware of the social facts in the grounding base *would* be in a position to correctly deduce the legal facts. The gap between the social and the legal can be bridged once the interpreter is provided with the relevant concepts, and acquires competence in their application.

However, as Greenberg (2004: 187-188) himself notices, it can be doubted whether the concept LAW is revelatory. First, the kind of disagreement that there is about the grounds of law appears to be substantive in character. Second, as Dworkin (1986) famously emphasized, the very existence of such disagreement seems to stand in the way of there being shared criteria by which a transparent concept of LAW might be determined (at least on an internalist metasemantics). Moreover, even if the concept LAW were revelatory, it could be doubted that what it reveals are *positivistically-friendly* ground-theoretic conditions of instantiation, and not rather nonpositivist conditions. In what follows, we shall remain agnostic over the ultimate prospects of this argumentative strategy; for present purposes, it only bears emphasis that the existence of such problems motivates looking for an alternative solution.

### **3.1.1 Transparent Explanations Need Grounding Principles**

The explanatory burden placed on a metaphysical account of law by TRANSPARENCY is heavy. In this section, we argue that this burden cannot be discharged without the aid of auxiliary grounding principles. Grounding principles are needed to explain the obtaining of legal facts, in the strong sense of 'explain' involved in TRANSPARENCY, and this holds for positivists and nonpositivists alike. We reach this conclusion by means of two arguments: first, we contend that the rationale of EXPLANATION does not warrant requiring strong explanations that are free from an appeal to grounding principles; second, we show that in the absence of such principles, nonpositivism equally fails to meet the strong explanatory demands imposed by TRANSPARENCY, so a requirement of strong explanations without appeal to bridge principles would overgeneralize.

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<sup>21</sup> Sometimes revelatory concepts are also called 'transparent' or 'super rigid'.

The first thing to notice when dealing with TRANSPARENCY is that a principle like this has been subjected to powerful criticisms outside of legal philosophy. A generalized version that applies to all inter-level connections has been harshly criticized on a variety of grounds. As emphasized by a number of authors (see e.g. Block and Stalnaker 1999), it is [conceivable / a priori open / logically possible] that water is not (grounded in) H<sub>2</sub>O, even though water *is* (grounded in) H<sub>2</sub>O. Similarly, type-B physicalists have forcefully argued that the connection between the physical and the phenomenal is analogously opaque, by making a strong case that mental facts can be fully determined by physical facts even without being *a priori* deducible from them.<sup>22</sup> More recently, mereological principles of composition have also been claimed to be non-transparent. In this vein, Schaffer (2017) argues that even if mereological nihilism is false in the actual world, its truth would plausibly still be [conceivable / a priori open / logically possible]; for even if there are composite objects in the actual world, it's not as if the truth of nihilism is inconceivable or contradictory – rather, appreciating its falsity is a matter of subtle weighting of the evidence for and against it.

These considerations point towards the fact that, without the aid of grounding principles that would bridge the gap between different “levels of reality”, it is implausible that derivative facts could in general be transparently explained by more fundamental facts. This leaves open, of course, that the legal case could be *special*, in that here (though not elsewhere) transparent explanation could instead be expected. In the next section, we address this question, and argue that it would be wrong to regard law as special in this way.

### 3.1.1.1 *Against Specialness: Lack of Support and Overgeneralization*

Notice, first, that what might be thought as the primary motivation for taking law to be special does not really yield this result. The original idea that the grounding of legal facts must be able to yield an explanation of them was motivated by the thought that there is something special about the epistemology of law. The idea was that unlike with respect to facts about (say) consciousness or the weather, in the case of law knowledge of its grounds is *needed* to gain knowledge of the legal facts.

Crucially, however, this means neither that the explanatory link between legal facts and their grounds must be deductive in character, nor that – even assuming a (broadly) deductive interpretation of the inferential link – the explanatory base need not include other facts as well.<sup>23</sup> First, for although considerations tied to the epistemology of law suggest that it should be possible to acquire inferential knowledge of the legal facts on the basis of their grounds, this leaves open that the inference in question could

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<sup>22</sup> See e.g. Block and Stalnaker (1999), Díaz-Leon (2008), Lycan (1996), and Tye (1995).

<sup>23</sup> By a “deductive” explanatory link we mean one of those involved in TRANSPARENCY, i.e. [logical / a priori] entailment, or a lack of conceivability of the grounds without the grounded.

be non-deductive in character.<sup>24</sup> And second, because even if the epistemology of law established that a (suitably idealized) interpreter should be capable of deductively deriving knowledge of the legal facts from the underlying grounds, there would still be no requirement that those be the *only* elements involved in such derivations. As far as legal epistemology is concerned, law's grounds could only be a part – even if a necessary one – of the inferential base: knowledge of the grounds of law may be necessary to acquire legal knowledge even if it is not *sufficient*. So it is compatible with the rationale of EXPLANATION that (say) grounding principles are *also* needed to acquire knowledge of the law. And while this, on its own, is no reason to think that knowledge of grounding principles *is* needed, we shall now see that independent considerations support this further conclusion.

Our main argument for the thesis that strong explanations of legal facts require an appeal to grounding principles has the form of an overgeneralization problem. As we saw when dealing with GAP, the reason why positivism fails to meet the explanatory requirement is that social facts leave open (indefinitely) many ways in which law practices could contribute to the content of the law. Starting with any given set of social facts, there remain a number of (epistemically) possible mappings from it to putative legal facts, and it is left indeterminate which mapping is the legally correct one. For instance, keeping fixed both the facts about lawmakers' actions and mental states, and the collective dispositions of officials, it remains open whether such facts contribute to legal content according to (say) an intentionalist model on which the content of the law is a function of the lawmakers' communicative intentions, a textualist model on which it is a function of the semantic content of the texts they enacted, or yet another model. From the situation of an interpreter who is trying to figure out the existing law, knowledge of social facts is insufficient to rule out deviant mappings to the wrong set of legal requirements.

In contrast, Greenberg claims that adding value facts to the grounding base resolves the indeterminacy that causes the positivist predicament, closing the gap between legal facts and their grounds. In his words (2004: 187), 'value facts are well suited to determining the relevance of law practices, for value facts include facts about the relevance of descriptive facts. For example, that democracy supports an intentionalist model of statutes is, if true, a value fact (...).' And similarly, that fairness supports a statute's contributing its plain meaning would be a pertinent value fact (Greenberg 2006a: 275).<sup>25</sup> By further appealing to value facts such as those, the claim is that nonpositivists are able to bridge the gap left open by social facts.

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<sup>24</sup> We refrain from saying "inductive" because on various understandings of induction, this notion would not be applicable here. Rather, as we will see in the next section, the non-deductive inference at issue is the one that holds between epistemic reasons and that which they are reasons for (where this inferential relation is possibly different from induction).

<sup>25</sup> Other facts that are given as examples of value facts that would bridge the gap are that fairness requires giving some precedential weight even to incorrectly decided past court decisions, and that democratic

But now consider a grounding base composed of (say) the fact that democracy supports an intentionalist model of statutes, together with the relevant law practices (in this case, facts about enactments and about the legislature's intentions). Even a perfectly rational creature who knew all these facts would not be in a position to deduce knowledge that the obtaining legal facts correspond to what the legislature meant. For even an interpreter who knew both the facts about law practices that are needed to determine the law on an intentionalist model, and the fact that democracy supports an intentionalist model, could not rule out that it's a different value (say, fairness) that determines the correct model. That is, even granting knowledge that the relevant value(s) support(s) a certain model over all the other models, knowing this and the relevant law practices isn't enough to rule out that the law is in fact determined according to the model supported by another value.

As a general way of putting the point, the problem is that it is metaphysically indeterminate what the legally correct model is because it is still epistemically indeterminate what the authoritative value is. The knowledge possessed by the nonpositivist is merely that a certain value (the one they regard as relevant) *supports* a given model; yet even if this value is in fact authoritative (i.e. it supports the correct model), the truth of alternative (false) models would still be consistent with, as well as conceivable relative to, this prior knowledge.

One possible reply, at this point, might be to appeal to a "holistic" understanding of the moral facts' contribution to legal content. In this vein, one could deny that different values conflict with each other by supporting incompatible models of the law practices' contributions to legal content, and rather hold that all relevant values – when properly understood – support the same model.<sup>26</sup>

But crucially, even if this were the case (and assuming the truth of nonpositivism), the relevant moral and social facts would still fail to strongly explain the legal facts they ground. For knowing that a certain collection of values supports a unique model will not, in and of itself, rule out the possibility of alternative models on which such values play no role. For instance, even if nonpositivism is true, knowing the relevant moral and social facts would still leave open that the legal facts are determined by law practices and social conventions instead (*as per* a positivist model), or that the legally correct model returns the empty set when given social and/or moral facts as input (*as per* an eliminativist model), or that the law is determined in yet other ways.

Of course, if one were to add to their epistemic base, in addition to the grounds of law, also the correct model, *this* would allow one to perform the relevant derivations. Yet knowing this would amount to having access to the true grounding principles, going

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values cut against legislative history's having any impact on the content of the law (see especially Greenberg 2006a: 285).

<sup>26</sup> For instance, on a Dworkinian conception of the role of morality in grounding the law, the legally correct model will be the one that strikes the best balance between fit with the social facts and overall justifiability. Thanks to Seana Shiffrin and to an anonymous reviewer for suggesting that we consider this reply strategy.

beyond the resources one has access to on the argument we are criticizing.<sup>27</sup> Without further information that, in addition to specifying the legal determinants, also specifies the way these combine together to determine legal content, the gap remains open.

### 3.1.1.2 *The Structure of Transparent Explanation*

The last section concluded our argument that if positivists and nonpositivists are to meet the demands of TRANSPARENCY, they're in equal need of grounding principles. Before we turn to addressing some objections to this view, let us pause to briefly elaborate on what the nature and role of such principles could be.

As for their role, we've said that grounding principles constitute an essential part of strong explanations of derivative facts. Just as one doesn't get a complete explanation of mental facts without principles that specify how these arise out of their physical realizers (see Schaffer 2021), and one doesn't get a transparent explanation of wholes in terms of their parts without principles of (restricted or unrestricted) composition (Schaffer 2017), one also cannot transparently explain the obtaining of legal facts without principles that specify how these derive from their social – and perhaps moral – sources.

Apart from this, there are two ways in which positivists and nonpositivists can think about the role of these principles, depending on what they take the relation between grounding and explanation to be. On a so-called *unionist* view (the label is from Raven 2015), grounding is taken to be identical with metaphysical explanation. On this approach, grounding principles would naturally be regarded as additional partial grounds of the target facts, insofar as they're deemed necessary for explanation. By contrast, on a *separatist* view, grounding and explanation are viewed as distinct, and grounding is viewed as the underlying worldly relation that *backs* metaphysical explanations.<sup>28</sup> On this view, grounding principles are naturally taken as explanantia, but *not* as grounds.

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<sup>27</sup> Of course, no one should deny that knowledge of the grounds, together with knowledge of the grounding principles, puts one in a position to know the grounded. As a consequence, if knowledge (say) of the nature of law gave one access to the grounding principles specifying how the legal facts are determined as a function of their grounds, then knowing both the grounds and the nature of law would allow one to derive complete legal knowledge. Crucially, however, in order to turn this consideration into an argument against positivism (or nonpositivism), one should also show that the nature of law reveals the truth of nonpositivist grounding principles, something that requires separate and independent argument. Absent such an argument, if one were to merely assert that knowledge of the nature of law would put one in a position to know the legal facts only when combined with knowledge of the moral facts (in addition to that of social facts), this would beg the question against the positivist, by assuming that grounding principles make essential reference to moral facts. We thank an anonymous reviewer for suggesting that we discuss this point.

<sup>28</sup> Advocates of unionism include Dasgupta (2014), (2017), Fine (2012), Litland (2013), and Rosen (2010), (2017); advocates of separatism include Audi (2012), Trogdon (2013), and Schaffer (2016). For criticism of the claim that grounding backs metaphysical explanations, see Kovacs (forthcoming).



Depending on whether one combines their account of law with a unionist or a separatist stance, one will have a subtly different diagnosis of where the argument from TRANSPARENCY goes wrong. A unionist positivist may well grant TRANSPARENCY, but deny that GAP holds, due to the fact that the positivist grounding base has been mischaracterized. On a unionist account, grounding bases should also be taken to include the explanatory principles, which in turn serve to bridge the explanatory gap (with the consequence that GAP would in effect be false).

A separatist positivist, in contrast, will reject TRANSPARENCY. On this combination of views, grounds are viewed as only a proper part of a complete explanatory account, so that strong explanations could only be provided by appealing to grounds coupled with the grounding principles that connect grounds and grounded.

For current purposes, however, this can be seen as a minor dispute, since both strategies agree on the key point that grounding explanations require appeal to grounding principles, and merely disagree on whether to apply the word ‘ground’ to the latter.<sup>29</sup>

The nature and content of grounding principles is also a disputed matter. The two main options are: (i) nomicism, on which they are viewed as “laws of metaphysics” – structurally analogous to laws of nature – modelled as universally quantified conditionals (Wilsch 2015) or via structural equations (Schaffer 2016); and (ii) essentialism, on which they are expressed by general connections – either as conditionals, or as grounding statements – that are taken to lie in the nature of the grounded and/or grounding entities (see e.g. Trogon 2013, Fine 2012, Rosen 2017, and Dasgupta 2014).<sup>30</sup>

For the legal case, Greenberg (2006a: 276, 285) provides two examples of candidate bridge principles:<sup>31</sup>

(Hartian Bridge) For all possible legal systems, for any possible rule R (that specifies that standards with certain features are law), officials’ Hartian dispositions for R make it the case that a system’s law practices contribute to the system’s legal content in accordance with R, and only with R.

(Nonpositivist Bridge) For every possible legal system *s*, that the law practices in

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<sup>29</sup> Greenberg anticipates these two possible ways of classifying the elements needed to bridge the gap between legal facts and their determinants. As he (2004: 167) points out, one can either view law practices as the only determinants, yet claim that an account of legal facts must do more than specifying constitutive determinants, or think that law practices must be supplemented through the aid of additional grounds in order to determine legal facts.

<sup>30</sup> Rosen (2017: 283, 285) provides the following as candidate facts about essence that would provide the needed ingredient to explain facts about disjunction: it lies in the nature of disjunction that for all  $\varphi, \psi$ :  $\varphi \supset (\varphi \vee \psi)$ ; and it lies in the nature of disjunction that for all  $\varphi, \psi$ :  $\varphi \supset ([\varphi]$  grounds  $[\varphi \vee \psi])$ .

<sup>31</sup> We sometimes use the expression ‘bridge principles’ to refer to grounding principles.

s should contribute to the content of the law in accordance with model M makes it the case that they do contribute to the law in accordance with M.

To these, one could also add a more specific nonpositivist Dworkinian principle, along the following lines:

(Dworkinian Bridge) For all possible legal systems, the law practices of the system contribute to its legal content according to the model supported by the set of principles of political morality that best fit and justify the institutional history of the system.

As we've seen, all these formulations are tentative, since there remain various choice points concerning how they should ultimately be expressed. (These include whether they should be expressed by means of structural equations, universally quantified conditionals, grounding claims, and whether they should be prefixed by an essentialist operator.) The key point for our purposes is that irrespective of which of these precisifications is ultimately adopted, any such principle – when included among the explanantia of the target facts – will serve to bridge the gap between ground and grounded.

To put the point another way, one can distinguish between an explanation of a given phenomenon that is correct or successful, and one that is *viable*, i.e. successful given its background assumptions (see Schaffer 2021). The question of whether positivist or nonpositivist explanations are ultimately *correct* is not one that we have aimed to settle here. Rather, our aim was to show that both sides to the debate are capable of providing viable explanations once they appeal to grounding principles, and that no (strong) explanation can be viable without them.

### 3.1.1.3 Challenges to Grounding Principles I: A Dilemma

We have argued that grounding principles are necessary in order for any strong explanation to be viable. But do *positivist* principles offer plausible candidates in this regard? To tackle this question, we need to deal with some challenges against them that have been raised by Greenberg (2006a).

A preliminary point is that the truth of a given principle surely cannot be *assumed*, and will rather have to be defended by any account that makes it its principle of choice.<sup>32</sup> In this regard, let us be clear that our aim was neither to argue that TRANSPARENCY is a sound constraint on the grounding of legal facts, nor that some particular grounding principle is better than the others. Rather, our aim was to show that

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<sup>32</sup> In this vein, Greenberg (2006a: 279) is surely right to point out that taking Hartian Bridge for granted would beg the question in favour of Hartian positivism. Any grounding principle should be argued for, and cannot be assumed to be true.

positivists and nonpositivists are in equal need of such principles, once certain (particularly strong) explanatory demands are placed on metaphysical accounts of law.

Secondly, there remains a question as to whether grounding principles stating general connections between legal facts and their grounds should be considered as derivative or fundamental. Greenberg (2006a: 279-280) raises this issue in the form of a dilemma for the legal positivist: either grounding principles are legal facts or they are not. If they are (because they involve legal notions), then positivists who appeal to them must be able to explain them in more fundamental terms, since no legal fact is basic. And if they are not, then appealing to them runs the risk of committing to objectionable brute truths.

The issue raised by this challenge is not a trivial one. In fact, a reasoning with this shape lies at the core of Sider's (2011) influential and much-debated challenge to ground-theoretic conceptions of metaphysical structure. Though the way the problem is raised by Sider is slightly different, it shares the same key features. To take a concrete implementation of the challenge (discussed by Dasgupta 2014), when a physicalist claims that every mental fact is grounded in physical facts, they commit to the existence of further grounding facts involving particular physical and mental facts (e.g. that Mary's C-fibers firing grounds Mary's pain). And with respect to any such fact, there will be a question as to whether it is derivative or fundamental. If it is derivative, then the physicalist owes an explanation of its obtaining, and it is unclear what that could be; if it is fundamental, then this violates "purity", the plausible principle that fundamental truths only involve fundamental notions (Sider 2011), and also seems to undermine the very physicalist project by leaving unexplained facts that involve manifestly mental items.

Greenberg's challenge likewise draws our attention towards the fact that grounding principles connecting legal facts with their grounds are either themselves in need of explanation, or – if they are regarded as fundamental – commit to brute truths that are objectionable precisely because they involve manifestly non-fundamental items.

While we don't mean to solve this problem here, we flag this issue to highlight two points: first, that there are solutions to it that, at the time when Greenberg raised the challenge, as well as in the literature that followed, might have been ignored; second, that the dialectical context of the positivism/nonpositivism debate has specific features that bear on the way in which the challenge can(not) be used here (as an argument against positivism).

To better grasp the nature of the problem, note first that it would be pointless to argue over whether (legal) grounding principles should really be regarded as "legal facts" or not. One could have a more restrictive notion of 'legal fact' that only applies to facts about the content of the law (in a system, at a time), and so classify the principles as non-legal; or one could have a more inclusive one, on which any truth that involves a legal notion automatically qualifies as a legal fact. But, independently of which linguistic choice one makes, the fact remains that such principles involve legal items, and this suffices for their status to be problematic.

Second, the key question of whether grounding principles should be regarded as derivative or not – and if they are, of what grounds them – crucially turns on what form and content they are taken to have.

Let's therefore outline the main options in this regard. If they are taken to have a universally quantified form ('in all legal systems, ...') then, as with any universal generalization, they would plausibly be grounded in their instances (see Fine 2012, Rosen 2017). For this reason, this option is especially unattractive for those who invoke *explanatory* grounding principles. For there is an obvious tension between this conception of principles and the role they should play in governing the way their instances are determined (as principles cannot both explain and be explained by their instances.)

The more plausible options, as we mentioned earlier, are to regard grounding principles either as prefixed by a modal or essentialist locution ('in all possible legal systems, ...', 'it lies in the nature of law that, ...'), or as modelled by structural equation models.

The modal conception naturally invites the question of what, if anything, grounds truths of this sort. This is a difficult question, which clearly goes beyond the scope of this paper. For current purposes, what is worth emphasizing is that, unlike in the case of structurally analogous debates in the metaphysics of mind (between physicalism and dualism) and morality (between naturalism and non-naturalism), positivists and nonpositivists are exactly in the same situation here. For while dualists and non-naturalists regard (some) mental or moral items as *fundamental*, and therefore can more easily (than physicalists and naturalists) accept that grounding principles involving mental or moral items are basic, there is no parallel in the legal case. Nonpositivists are as committed to the derivative status of legal features and items as positivists are: both agree that the legal aspects of the world aren't basic, so they would be equally troubled by having to posit fundamental law-involving grounding principles.

Similar considerations hold with respect to the essentialist and nomicist conception of grounding principles. It remains an open question whether, and how, essence facts and metaphysical laws may be grounded. Some – e.g. Dasgupta (2014) – regard essence facts that encode ground-theoretic relations as *autonomous*, i.e. not apt for being grounded. On this view, essence facts provide the "scaffolding" around which a hierarchically structured reality is built, and with respect to which the question of what grounds them 'does not legitimately arise' (Dasgupta 2014: 563).

Similarly, on Schaffer's nomicist view, grounding principles are viewed as 'separate factors that play the distinctive role of linking grounds to groundeds' (2017: 21), and which it would be misguided to view as akin to any other fact, about which one could wonder whether it grounds/is grounded in other facts. (This, on Schaffer's view, parallels the way in which it would be misguided to think of inference rules as further premises in reasoning, or of laws of nature as further causes in causal explanations.) Connecting principles are simply a different kind of entity, and must be treated as such on pain of committing a category mistake.

Here, again, our aim is not to adjudicate between these different views. Rather, our point is a dialectical one: since it is incumbent on *any* (grounding-based) account (of law) to deal with such issues, having to deal with them poses no special problem for accounts of law in general, or for positivist accounts in particular.

#### 3.1.1.4 Challenges to Grounding Principles II: Counterexamples

To conclude this part, we wish to take up a challenge that Greenberg (2006a: 281-284) raises for Hartian Bridge in particular. Given the strength of the challenge, we believe that examining it is of independent theoretical value. In addition, we shall see that doing so will also help us dispel some residual doubts regarding the structural features of the explanatory framework we've presented.

Greenberg argues that Hartian Bridge in particular is an unpromising candidate as a grounding principle for law, by presenting a scenario that would falsify it. He starts by imagining a possible legal system where all the officials accept a rule of recognition according to which the plain meaning of what the tallest person in the country pronounces is law. He then invites us to imagine that at some point, a legal theorist called 'Themis' contends that those dispositions were flawed, in that they were conflating wisdom for height as the relevant criterion (since the sovereign at the time was both tall and wise). Greenberg then points out that, independently of whether the other officials agree with her or not, it seems *possible* that Themis is right. And this is problematic, for if it's wisdom – not height – that is relevant for determining the law, the officials' acceptance of a rule would not be determinative of legal content, and Hartian Bridge would be falsified.

This case poses a serious challenge for Hartian Bridge, as well as for positivist principles more generally. Our aim, in what follows, is to explain how a proper appreciation of the role and content of bridge principles may be able to afford a strategy to meet the challenge.

To this end, it may be useful to start by noting that Hartian Bridge is *not* equivalent to the claim that in all possible legal systems, law practices and Hartian dispositions for a rule fully explain the legal facts. Hartian Bridge states that the law practices of a system contribute to determining its legal facts according to the rule accepted in the system. But this is not to say that law practices and collective dispositions are the full explanantia of the legal facts. To regard Hartian Bridge as having this implication would be to assign it a Humean interpretation on which grounding principles are mere generalizations of grounding patterns across modal space.<sup>33</sup> Rather, on the explanatory framework under consideration, grounding

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<sup>33</sup> If grounding principles were just Humean generalizations, then Hartian Bridge would commit to law practices and dispositions fully explaining the legal facts. 'Humean' here is used in analogy with a Humean conception of the laws of nature. That Greenberg may be assuming a Humean interpretation of Hartian Bridge is suggested by his remark that 'the Hartian bridge principle is just a way of formulating the Hartian's claim about the relevance of Hartian dispositions' (2006a: 285.)

principles are conceived as *governing* principles, which themselves play a crucial role in constitutive explanations. As a consequence, it should be implicitly understood that if a grounding principle assigns a grounding role to (say) facts of type X and Y, such facts should only be seen as *partial* explanantia – and, *modulo* unionism, only partial grounds – of the target facts.

Under this interpretation (see Schaffer 2017), grounding principles carve out a slice of logical space (the set of possibilities where they hold), demarcating the boundaries of what is (not) metaphysically possible by imposing a restriction on logical possibility. Principles of material composition, for instance, delimit the set of worlds where composition occurs (in a certain specific way); if the actual world is in that set, then nihilism – though conceivably true – is false (both in actuality and in all other worlds in that set). Similarly, principles of mental realization determine a set of worlds within which mental facts are realized (in a particular way), and necessitated by, physical ones. Zombie scenarios, on this (type-B physicalist) view, are then viewed as epistemically possible – they can consistently be conceived, so they are part of logical/conceptual space – but metaphysically impossible, since they lie outside the boundaries set by actual principles of realization.

An analogous reply will then be available to what we might call a ‘type-B positivist’. This type of positivist will concede that the scenario envisaged by the putative counterexample is *epistemically* possible: it is logically consistent as well as positively conceivable, so it occupies an area of conceptual space. However, they will also deny that this contradicts Hartian Bridge, for the portion of logical space occupied by Themis’ system lies outside the sphere of metaphysically possible worlds, since these are the worlds where the obtaining of legal facts is governed by their principle.

To be clear, this is not to say that Hartian Bridge must be true: for all we’ve said, it might be worlds that are governed by *it* that are mere conceptual possibilities, remote from the actual world. To stress a point we made earlier, it will be incumbent on the positivist to argue that this bridge is better than the alternatives, just as it is incumbent on the physicalist to explain why a physicalist worldview is preferable to the dualist alternative. But the point we want to make is a dialectical one: just as it’s unclear that the conceivability of zombies would suffice for their metaphysical possibility, it is likewise unclear that conceiving a world where Themis (rather than her colleagues) is right could be enough for it to be a genuine possibility. On a type-B positivist view, worlds where Themis is right and – despite collective intentions of officials to the contrary – it is wisdom that makes law, lie outside the sphere of worlds governed by Hartian Bridge, and are therefore no threat to it.

### **3.2 Weak EXPLANATION: Reasons Why**

We have argued at some length that the explanatory argument based on TRANSPARENCY fails to pose a special problem for positivism. Positivism and nonpositivism are in equal trouble when it comes to meeting its demand, and need to appeal to the same kind of

resources if they are to fulfil it. In the remainder of this paper, we will focus on whether a different interpretation of EXPLANATION can be given that would lend support to a distinctive argument against legal positivism. After all, Greenberg is right in holding that legal epistemology is special. So it is still an open question, and one of consequential import, whether some requirement on the metaphysics of law can be derived from its epistemology, that would give rise to a distinctive challenge for positivist explanations.

As was noted in section 2.1, one of the key notions used by Greenberg to characterize the requirement is that of an epistemic reason. As he (2006: 265) puts it,<sup>34</sup> ‘the constitutive determinants of legal facts must provide reasons for the obtaining of legal facts.’ And he also makes clear that the relevant notion of reason here is epistemic: ‘reasons, in the relevant sense, are considerations that make the explanandum intelligible in rational terms’ (2006a: 268).

Moving from these preliminary remarks, and subject to various clarifications, we can start by stating the constraint that would provide a new first premise to the explanatory argument in the following terms:

REASONS WHY            If a collection of facts  $\Delta$  fully grounds a legal fact L, then the facts in  $\Delta$  provide epistemic, explanatory, reasons why L obtains.

As with TRANSPARENCY, it will help to start by clarifying the meaning and import carried by this principle. First, the intended reading of the contention that grounds provide reasons why the grounded holds is that of establishing an epistemic constraint, not merely equivalent to the claim that grounds determine or generate the existence of the grounded (and, in this sense, are the “metaphysical reasons why” the grounded holds). This latter claim is obviously correct, but it amounts to nothing more than the assumption, widely accepted in the grounding literature, that grounds must be relevant to determining what they ground.<sup>35</sup>

Second, the question of whether (and how) the grounds of law provide reasons for the legal facts should be kept distinct from the question of whether (and how) the law provides its subjects with reasons to act in the way it prescribes – i.e. the issue of the normativity of law. This should be clear both due to the different *relata* involved in the two cases (legal facts and their grounds in the former, legal facts and people’s

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<sup>34</sup> See also Greenberg (2004: 160): ‘Rational determination is an interesting and unusual metaphysical relation because it involves the notion of a reason, which may well be best understood as an epistemic notion. If so, we have an epistemic notion playing a role in a metaphysical relation.’

<sup>35</sup> This is often thought to distinguish grounding from non-explanatory notions such as supervenience, and to motivate the common assumption that grounding is non-monotonic. On the way in which the connection between grounding and explanation supports the non-monotonicity of grounding, see Audi (2012), Dasgupta (2014: 4), Rosen (2010: 116) and Trogdon (2013: 109).

actions in the latter), and due to the distinct notions of reason involved (epistemic reasons in the former, and reasons for action in the latter).<sup>36</sup>

Third, we should be careful to distinguish the epistemic notion of a reason that figures in REASONS WHY from related notions studied within epistemology. The epistemic reasons that interest us here differ from those usually called ‘explanatory’ and ‘motivating’ reasons within epistemology. There, explanatory reasons are those that explain why an agent has formed a certain belief, and motivating reasons are those an agent takes to provide some justification for their beliefs.<sup>37</sup> Otherwise said, explanatory reasons are the reasons *why* agents believe what they do, whereas motivating reasons are the reasons *for which* they believe as they do.

Clearly, neither explanatory nor motivating reasons are normative, since propositions can be (and often are) believed for the wrong reasons. Rather, normative reasons are the reasons *there are* to believe a certain proposition, considerations that count in favour of bearing an attitude of belief towards it. They provide propositional justification for belief, and make it rational to hold that belief. They’re things that can be possessed, and, when enough of them are indeed possessed, they are responsible for providing the agent with doxastic justification for their belief, or even for putting them in a position to know what they justifiably (and truly) believe.<sup>38</sup> Furthermore, normative reasons are usually regarded as having a *pro tanto* and defeasible character: facts (or propositions) can provide reasons to believe false propositions, different facts can provide reasons to believe different (incompatible) propositions, and a fact can cease to provide a reason for believing a certain proposition once new evidence comes into light.

It seems pretty clear that the best candidate for being the notion of reason involved in REASONS WHY is provided by the epistemological notion of a *normative* reason. While REASONS WHY does invoke explanatory reasons, these are clearly not meant to be the reasons that would explain why anyone has formed the beliefs they have, nor the reasons anyone would take themselves to have for holding such beliefs. Rather, REASONS WHY offers a way of elucidating EXPLANATION through the idea that the grounds of legal facts should always provide normative (epistemic) reasons to believe that the facts they ground obtain. According to REASONS WHY, grounds offer epistemic support for the truth of the legal propositions they determine, by constituting evidence that the legal facts are as they are: if some facts  $\Delta$  ground a legal fact L, then  $\Delta$  provide objective reasons for L, so that knowing the facts in  $\Delta$  – or possessing the

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<sup>36</sup> This is so even though, as we shall see shortly, both notions of reason are normative in some sense.

<sup>37</sup> For example, an explanatory reason why someone believes in creationism may be that they were brought up in a creationist community; this fact may constitute an explanatory reason for their belief even if it is not a motivating reason. See Star (2018a) for an introduction to these issues.

<sup>38</sup> Though this characterization of reasons is fairly uncontroversial, it leaves open a number of issues. Amongst them are the question of whether all reasons are facts, of what it takes for a reason to be possessed, and what relation there is between reasons and evidence. None of this, however, will play a role in the present discussion.



reasons they give – would provide one with subjective reasons to believe that L is the case.

Finally, notice that the resulting requirement is clearly weaker than TRANSPARENCY, since facts can provide reasons for the truth of a proposition even without there being an a priori or logical entailment from the former to the latter, and even if it remains conceivable that the proposition in question is false. Any case of induction (of a proposition on the basis of propositions that provide reasons for it) will provide an example of this kind.

### 3.2.1 REASONS WHY and the Explanatory Argument

The constraint imposed on grounding by REASONS WHY seems especially plausible, both when applied to full and to partial grounding. If (say) the legislature enacts a text whose semantic content is  $p$ , and this (partly) grounds the fact that  $p$  is law, then knowing what the legislature did clearly provides one with some reason to believe that  $p$  is law. Similarly, if democratic values combined with law practices fully ground the legal facts, then knowing the relevant value facts and the relevant law practice will provide even stronger reasons to believe the legal facts so determined.

In fact, the principle established by REASONS WHY appears to be sound not just in the legal case, but for grounding in general. Standard cases seem to pass the test without problems: knowing that the ball is crimson provides one with reason to believe that the ball is red; knowing the propositions that snow is white and that grass is green gives one reason to believe their conjunction; if causing unjustified pain grounds the wrongness of an act, then knowing the former fact is clearly a reason to believe the latter; if physicalism is true and pain is grounded in C-fibers firings, then knowing that Mary's C-fibers are firing provides one with reasons for believing that Mary is in pain.

One could therefore even speculate that a principle like REASONS WHY constitutes the correct explication of the often assumed, but hard to pin down, contention that grounding is explanatory in a distinctively epistemological sense.<sup>39</sup> We do not mean to defend this view here. However, let it be noticed that the principle is in general plausible enough that REASONS WHY (in the legal case) may even be regarded as justified in virtue of being a straightforward consequence of it.

So let us assume – as seems reasonable – that REASONS WHY is correct. The question is whether it aligns with GAP to provide a sound argument against positivism. Here, we think, is where the trouble begins. Start with GAP, and suppose that there is an explanatory gap between legal and social facts: law practices – possibly augmented with collective dispositions or social conventions – do not epistemically rule out deviant mappings to false propositions about the content of the law. Granted this, what follows about the ability of law practices (and the like) to provide reasons for the legal facts?

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<sup>39</sup> On the question, very much up for debate, of what it could mean for grounding to be *epistemically* explanatory, see *inter alia* Maurin (2018) and Thompson (2016).

On the one hand, one may think that social facts cannot provide such reasons because they are not, in fact, grounds of law. Yet this would be clearly problematic. For one thing, that a fact isn't a ground of another doesn't necessarily mean that it cannot provide a reason for its obtaining: after all, many facts provide reasons for others without being ground-theoretically related to them. (For example, that the street is wet may be a reason to believe that it rained, but it surely does not ground this fact.)

Even more importantly in the present context, it would be clearly dialectically illegitimate to claim that social facts do not provide reasons because they aren't grounds, for this would put things backward: the aim of the explanatory argument was to show that social facts aren't grounds *because* they don't provide reasons, not the other way round.

So the real issue is rather whether *the existence of an explanatory gap* between two propositions would preclude them from standing in an (epistemic) reason-giving relation. For this *would* vindicate the reasoning that – because of GAP – social facts don't provide reasons, and so – given REASONS WHY – social facts cannot be full grounds.

The problem, however, is that it is doubtful that the existence of an explanatory gap would impede social facts from being reason-givers. In general, the reasons there are (and the reasons one has) to believe a proposition are not transparently connected to the proposition (belief) they are reasons for. Testimony, perception, and induction provide clear cases of this. (If Mary tells Bill that her name is 'Mary', this gives Bill a reason to believe that Mary's name is 'Mary' even though it is open to him that her name is different – she might have joked, lied, or forgotten; similarly, the fact that the chair you are looking at appears to you as green gives you a reason to believe that the chair is green, even though it is consistent with this appearance that the chair in fact is not green – perhaps it is illuminated by a green light, perhaps you are hallucinating.)

The same is true of cases where reasons and the facts they are reasons for are ground-theoretically related. If causing unjustified pain is a wrong-making feature, then knowing that Bill caused unjustified pain gives one reason to believe that Bill did something wrong, even if wrong-making features are tied to moral properties via synthetic laws that can't be known a priori. More generally, we pointed out earlier that explanatory gaps appear to be pervasive in the grounding hierarchy. Yet when we recognized that a generalized version of REASONS WHY seems indeed very plausible, the existence of such gaps in no way seemed to undermine our judgment that grounds provide reasons why the facts they ground hold. So it shouldn't be at all implausible that although social facts leave open multiple hypotheses about the contribution of law practices to legal content, this does not undermine their ability to provide reasons for the law being a certain way.

Finally, a general consideration is that if we're right that there is also an explanatory gap between legal facts and nonpositivist grounding bases (see sect. 3.1.1.1), then any valid argument premised on the existence of such a gap and on REASONS WHY would falsify positivism just in case it also falsifies nonpositivism

(REASONS WHY being a general principle that does not discriminate between positivist and nonpositivist grounding bases). For if it's *the existence of a gap* that prevents the relevant facts from providing the right sort of reasons, then nonpositivism is in equal trouble. Therefore, since we take both GAP *and* REASONS WHY to be correct, we regard this overgeneralization problem as a further reason to take the argument based on them to be invalid.

### 3.2.1.1 Strengthening REASONS WHY?

The fact that a generalized version of REASONS WHY is plausible may be viewed as problematic. We were after a precisification of EXPLANATION that was able to vindicate something *special* about legal epistemology. Yet if the connection between grounding and epistemic reasons holds in general, one may legitimately wonder whether specialness isn't lost. Even more importantly, the motivation behind EXPLANATION was to account for the possibility of legal knowledge, and it is unclear how REASONS WHY could do so.

This takes us to consider whether REASONS WHY might be strengthened in a way that would both vindicate the epistemic specialness of the legal domain, and provide a sufficiently strong principle to yield a valid argument against positivism when combined with GAP. We've already seen where the resources for such strengthening may come from, when we rehearsed the role that is played by normative reasons in epistemology. As was noted, normative epistemic reasons are the kind of thing that provides *justification* for belief, and that can put one in a position to *know* the proposition they are reasons for. In this vein, the connection between reasons and doxastic attitudes is usually cashed out in terms of the notion of a *sufficient* set of reasons, i.e. via the contention that the possession of sufficient (normative epistemic) reasons is both necessary and sufficient to yield knowledge (when combined with truth and belief) and/or justification.<sup>40</sup> In turn, a set of reasons is regarded as sufficient for holding a certain belief if it is at least as weighty as (i.e. if it is not outweighed or undercut by) the set of reasons for any other option.<sup>41</sup>

Based on this, we can formulate a strengthened (though admittedly vague) version of the principle, in the following way:

**SUFFICIENT REASONS** If a collection of facts  $\Delta$  fully grounds a legal fact L, then the facts in  $\Delta$  provide sufficient epistemic, explanatory, reasons why L obtains.

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<sup>40</sup> See Lord (2018) and Schroeder (2015) for a defence of this view. See also Star (2018b), and Sylvan and Sosa (2018).

<sup>41</sup> According to Lord (2018: 606), the weight carried by a set of reasons for *p* is sufficient just in case it is at least as weighty as the set of reason for any other option. Similarly, according to Sylvan and Sosa (2018: 560), 'a sufficient epistemic reason for belief is one that is not outweighed or undercut by the epistemic reasons for disbelief and suspension'.

The idea implicit in this principle is that if  $\Delta$  fully ground L, then possessing all the reasons given by the facts in  $\Delta$  (i.e. having access to them) will put one in a position to know L, or at least justify, their belief that L is the case. SUFFICIENT REASONS will thus vindicate the thought that knowledge of law's grounds leads to knowledge of the law, thereby accounting for the specialness of legal epistemology, as well as for the possibility of legal knowledge.

There are two separate questions regarding this principle that are relevant for current purposes. The first question (obviously critical to the soundness of an explanatory argument based on SUFFICIENT REASONS) is whether this principle is true. The second is whether, assuming that the principle is true, the argument based on it would create a distinctive problem for positivism, in that social and moral facts together, but not social facts alone, would be able to provide sufficient reasons for the legal facts they ground. Let us take them up in turn.

The first question boils down to the issue of whether knowledge of law's full grounds is always enough to justify, or put one in a position to know, the facts they ground. A crucial point here is that plausibly, even when a fact provides strong evidence – and therefore, strong reasons – for a proposition, a subject who knows this fact may yet be unable to derive knowledge of the proposition supported by it. To take an example used by Kelly (2016), 'although the presence of Koplik spots is in fact a reliable guide to the presence of measles, one who is ignorant of this fact is not in a position to conclude that a given patient has measles, even if he or she is aware that the patient has Koplik spots.' He continues: 'Someone who knows that Koplik spots are evidence of measles is in a position to diagnose patients in a way that someone who is ignorant of that fact is not. In general, the extent to which one is in a position to gain new information on the basis of particular pieces of evidence typically depends upon one's background knowledge.'

We think this point is, *mutatis mutandis*, equally significant in the legal case. For even someone who knows everything relevant to determining the law (law practices, collective dispositions or value facts, depending on the correct account) may not be able to know the content of the law, if they don't know how the legal determinants *bear on* it. Simply put, someone who knows nothing about the workings of a legal system will clearly be unable to know the law, even if they know everything about its grounds.<sup>42</sup> "Background knowledge" of the *way* in which the grounds of law combine to determine the legal facts is sometimes needed to acquire knowledge of the law from knowledge of its grounds.<sup>43</sup>

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<sup>42</sup> This way of putting the point relies on a separatist view of the relation between grounding and explanation. Under unionist assumptions, SUFFICIENT REASONS will of course be true, but GAP will be false for reasons explained in an earlier section (see sect. 3.1.1.2).

<sup>43</sup> We say 'sometimes' because, as we'll see later in this section, such knowledge is not needed when all relevant grounding principles yield the same result.

A key question therefore concerns the epistemic status of the ways in which the grounds of law combine to determine the legal facts. For if knowledge of these is sometimes needed in order for knowledge of the grounds to lead to knowledge/justification of the law, then without it, knowing the law's grounds will sometimes not be enough to justify, or put one in a position to know, the legal facts.

The ways in which grounds of law determine the legal facts – what Greenberg (2004, 2006a) calls ‘models’ of the contribution of the grounds of law to legal facts – can be stated at different levels of generality. At the most general level, they are what we have called ‘grounding’ or ‘bridge’ principles, and they are the focus of theorizing within legal philosophy. At a particular level (within particular legal systems), partial models for how law practices contribute to the legal facts – e.g. intentionalist and textualist models – are routinely relied upon by legal practitioners to argue for certain conclusions on what the law on a particular issue is.<sup>44</sup>

Now it is unclear that knowledge of such principles, either at the general or at the particular level, can always be had by someone who knows all the relevant base facts. Though we do not hope to settle this question here, we will mention two considerations that seem to cast doubts on this.

First, (at least) with respect to general models, there are familiar epistemic worries concerning our doxastic status vis-à-vis the truth of philosophical theses. These include doubts over the reliability of current methods of inquiry, as well as problems having to do with the underdetermination of available theories by the evidence,<sup>45</sup> which seem no less serious when it comes to knowledge of grounding principles in the legal case.

In addition to this, there's also a further problem having to do with peer disagreement.<sup>46</sup> At the general level, the fact that epistemic peers in legal philosophy (implicitly) dispute each other's principles arguably can be taken to have the consequence of defeating knowledge and justification of the principles they advocate. Similarly, at the particular level, legal practitioners in courtrooms are routinely engaged in disputes not only over what the grounds of law are, but also of the *way* these grounds determine legal content. And in this case too, the very fact that they are peers and that

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<sup>44</sup> The connection between general (complete) and particular (partial) models can be articulated in the following way. For the sake of concreteness, let us illustrate this with a broadly Hartian account. A general Hartian grounding principle will be (roughly) that it lies in the nature of law that for any possible norm *n* and system *s*, if *n* is law in *s*, then this fact is fully grounded in there being some set of conditions *C* for being law in *s* that are collectively accepted by the officials of *s*, together with the fact that all the conditions in *C* are satisfied by *n*. Given this, a particular model for a particular system will state that the satisfaction of the relevant conditions (those accepted there) partly grounds the validity of norms in that system.

<sup>45</sup> See Bennett (2009: 71), Goldberg (2009), and Schaffer (2017: 6).

<sup>46</sup> On the issue of whether peer disagreement is a defeater of knowledge or justification, see especially Chistensen (2007) (2011), Elga (2007), Feldman (2006), Frances (2018), Goldberg (2009) (2013), Hawthorne and Srinivasan (2013), Lasonen-Aarnio (2010) (2014), and Weatherson (2019).

they disagree over the correct model can be thought to undermine their epistemic status vis-à-vis their preferred models.

Crucially, however, notice that these considerations would not make legal knowledge impossible. For luckily, in many cases the rival models (or principles) advocated by different parties will yield the same result. And in cases where all plausible models make the same predictions, knowledge of the law will be achieved even in the absence of shared models. Accordingly, such problems do not sceptically undermine the very possibility of acquiring knowledge of the law. Rather, by only threatening knowledge of grounding models, they give reasons to think that in disputed cases, SUFFICIENT REASONS will turn out to have counterinstances.<sup>47</sup>

But now set all of this aside. For even if SUFFICIENT REASONS were true, there would still remain the question of whether positivist grounding bases *alone* are unable to satisfy it (this being required in order to raise a distinctive problem for positivism). We wish to make two sorts of observations in this regard.

First, notice that, for reasons explored earlier, it would be implausible to reach this conclusion on the basis of GAP, since we have seen that there remains an explanatory gap between law and its grounds even when these are taken to include moral facts. (If GAP were the reason why positivist grounds fail to satisfy SUFFICIENT REASONS, nonpositivist grounds would equally fail to satisfy it.)

Another possibility might be to claim that access to the true grounding principles would yield sufficient epistemic support for the legal facts only when combined with knowledge of moral facts (in addition to that of social facts).<sup>48</sup> This claim, if true, would no doubt vindicate the asymmetry between the ability of positivist and nonpositivist grounding bases to provide epistemic access to the legal facts. And, coupled with SUFFICIENT REASONS, it would create a distinctive problem for positivism.

Notice, however, that an argument of this sort would need to be *very* different from the one we have examined. For the explanatory argument was designed to move from considerations about the (putative) grounding base to the (in)availability of certain derivations from the grounds to the grounded – and, as a consequence, to the (un)truth of certain grounding principles. Here, by contrast, we are invited to draw an inference from the truth of certain grounding principles to the grounding base being a certain way. And although such an inference would, indeed, be valid, its premise that the true principles of law-determination are nonpositivist in nature will need to be defended on separate grounds.

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<sup>47</sup> Moreover, notice that even if peer disagreement had the consequence of undermining our knowledge of grounding principles, philosophical inquiry about them would still be justified, as it would be entirely legitimate for philosophers to defend, argue for, and (arguably) even prefer the adoption of certain principles over others. For an elaboration of this claim and its application to philosophical disputes, see Barnett (2019), Goldberg (2013), and Palmira (2019).

<sup>48</sup> We thank an anonymous reviewer for suggesting this strategy. Both this strategy and the remarks that we make in reply parallel the points we make in fn. 27.

## 4. Conclusion

We have argued that no explanatory argument succeeds in posing a distinctive challenge to legal positivism. To this end, we first elaborated the two most promising ways of constructing such an argument, each of them based on a particular way of spelling out the epistemic constraints that govern law-determination. We then showed that each version of the argument has problems of its own, but also that these problems all lead to a common upshot: positivist and nonpositivist (putative) grounding bases turn out to be on a par with respect to their ability to satisfy a variety of epistemic requirements on legal grounding. More importantly, by taking the legal case as our focus and examining a variety of candidate epistemic requirements, we sought to shed light on the explanatory nature of both grounding in general, and legal grounding in particular.<sup>49</sup>

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