



# UNIVERSITAT DE BARCELONA

## Grounding Legal Reality

Samuele Chilovi

**ADVERTIMENT.** La consulta d'aquesta tesi queda condicionada a l'acceptació de les següents condicions d'ús: La difusió d'aquesta tesi per mitjà del servei TDX ([www.tdx.cat](http://www.tdx.cat)) i a través del Dipòsit Digital de la UB ([diposit.ub.edu](http://diposit.ub.edu)) ha estat autoritzada pels titulars dels drets de propietat intel·lectual únicament per a usos privats emmarcats en activitats d'investigació i docència. No s'autoritza la seva reproducció amb finalitats de lucre ni la seva difusió i posada a disposició des d'un lloc aliè al servei TDX ni al Dipòsit Digital de la UB. No s'autoritza la presentació del seu contingut en una finestra o marc aliè a TDX o al Dipòsit Digital de la UB (framing). Aquesta reserva de drets afecta tant al resum de presentació de la tesi com als seus continguts. En la utilització o cita de parts de la tesi és obligat indicar el nom de la persona autora.

**ADVERTENCIA.** La consulta de esta tesis queda condicionada a la aceptación de las siguientes condiciones de uso: La difusión de esta tesis por medio del servicio TDR ([www.tdx.cat](http://www.tdx.cat)) y a través del Repositorio Digital de la UB ([diposit.ub.edu](http://diposit.ub.edu)) ha sido autorizada por los titulares de los derechos de propiedad intelectual únicamente para usos privados enmarcados en actividades de investigación y docencia. No se autoriza su reproducción con finalidades de lucro ni su difusión y puesta a disposición desde un sitio ajeno al servicio TDR o al Repositorio Digital de la UB. No se autoriza la presentación de su contenido en una ventana o marco ajeno a TDR o al Repositorio Digital de la UB (framing). Esta reserva de derechos afecta tanto al resumen de presentación de la tesis como a sus contenidos. En la utilización o cita de partes de la tesis es obligado indicar el nombre de la persona autora.

**WARNING.** On having consulted this thesis you're accepting the following use conditions: Spreading this thesis by the TDX ([www.tdx.cat](http://www.tdx.cat)) service and by the UB Digital Repository ([diposit.ub.edu](http://diposit.ub.edu)) has been authorized by the titular of the intellectual property rights only for private uses placed in investigation and teaching activities. Reproduction with lucrative aims is not authorized nor its spreading and availability from a site foreign to the TDX service or to the UB Digital Repository. Introducing its content in a window or frame foreign to the TDX service or to the UB Digital Repository is not authorized (framing). Those rights affect to the presentation summary of the thesis as well as to its contents. In the using or citation of parts of the thesis it's obliged to indicate the name of the author.

# GROUNDING LEGAL REALITY

Samuele Chilovi

Supervisors:

Dan López de Sa

José Juan Moreso

Tutor:

Dan López de Sa

University of Barcelona

Faculty of Philosophy

PhD Programme: Cognitive Science and Language

(EEES: HDK08 Ciència Cognitiva i Llenguatge)

Line of Investigation: Analytic Philosophy

(101133 Filosofia Analítica)

April 2019



# Contents

## Introduction

1. Metaphysics and Ground	1
2. Grounding and the Law	11
3. Structure, Method, and Outline	16
References	19

## 1. Grounding Entails Supervenience

1. Introduction	25
2. From Grounding to Supervenience?	29
3. Leuenberger's Type Supervenience	33
4. New Type Supervenience	40
4.1 The Problem of Under-Inclusion	40
4.2 The Problem of (relatively) Unnatural Types	41
4.3 The Problem of Heterogeneous Grounding Bases	44
5. Conclusion	47
References	49

## 2. Law-Determination as Grounding: A Common Grounding Framework for Jurisprudence

1. Introduction	51
2. Law-Determination and Grounding	53
2.1 Law-Determination as Grounding	55
2.2 Why Believe LDG	58
3. Rational Determination	60
3.1 The Argument from Epistemic Asymmetry	63
3.2 The Argument from Intuitive Difference	65
3.3 Plunkett's Alternative Interpretation	69
4. Hartian Explanations	71

4.1 Greenberg’s Indeterminacy Objection to Simple Positivist Accounts	71
4.2 Meeting the Challenge in a Hartian Spirit	73
5. Conclusion	76
References	78

### **3. Grounding-Based Formulations of Legal Positivism**

1. Introduction: The Positivism/Anti-Positivism Debate	83
2. Ground-Theoretic Assumptions	87
3. Exclusivity and Completeness	88
3.1 Completeness: Full Grounding	88
3.2 Exclusivity: Partial Grounding	95
4. The Grounding-Enablers View	98
4.1 In Defense of the Grounding-Enablers Proposal	102
5. Conclusion	106
References	107

### **4. Is Hume’s Law a Threat to Naturalism and Positivism?**

1. Introduction	113
2. The Status of Hume’s Law in Metaethics	115
2.1 Mind the Gap	116
2.2 Overgeneralization	121
3. The Status of Hume’s Law in Jurisprudence	123
4. Conclusion	128
References	129

<b>Summary</b>	135
----------------	-----

# Abstract

The four main chapters of this thesis, while each largely autonomous, collectively provide a study of the relation between grounding and supervenience, and a comprehensive application of grounding theory to the philosophy of law. Chapter 1 argues that a supervenience relation interestingly weaker than necessitation can be used to capture a substantive connection between grounding and modality. Chapter 2 argues that metaphysical grounding is the relation of dependence that connects legal facts to their determinants, and that the positivism/anti-positivism debate in legal philosophy involves competing claims on the grounds of legal facts. Chapter 3 criticizes extant grounding-based formulations of legal positivism offered by Rosen (2010) and Plunkett and Shapiro (2017), and puts forward a novel and insightful formulation that is capable of solving their problems, which crucially relies on the notion of a social enabler. Finally, Chapter 4 shows that Hume's Law – the thesis that one cannot derive an 'ought' from an 'is' – poses no significant threat to legal positivism or moral naturalism, both understood as views about grounding.



# Acknowledgements

For comments and discussions, I thank Juan Carlos Bayón, Ruth Chang, Aurelién Darbellay, Esa Díaz-León, Francesco Gallina, Manuel García-Carpintero, Mark Greenberg, Carl Hoefer, John Horden, Stephan Krämer, Max Kölbel, Stephan Leuenberger, Roberto Loss, Josep Macià, Teresa Marques, Brian McLaughlin, Charles Pigden, David Plunkett, David Rey, Sven Rosenkranz, Alessio Santelli, Jonathan Schaffer, Ted Sider, Matheus Valente, Chiara Valentini, Lisa Vogt, and Bruno Whittle. I also thank all my fellow PhD students at LOGOS, and the senior members at LOGOS, for creating a truly unique environment for doing philosophy.

Special thanks are due to Gloria Andrada, who patiently and stubbornly supported me throughout the ups and downs of the PhD roller coaster, and showed me the light while the night was dark and full of terrors. Special thanks are also due to Michele Palmira, who continuously provided me with insightful feedback, and whose friendship made the last three years much funnier than they would otherwise have been. Special thanks are further due to George Pavlakos, for being constantly by my side while I needed help and encouragement. Finally, special thanks are due to the co-authors of two of the papers in this dissertation, George Pavlakos and Daniel Wodak, for proving once more that team work in philosophical investigation can be fruitful and fun.

Above all, I thank my supervisors Dan López de Sa and José Juan Moreso, who kept challenging me, inspiring me, and who made it possible for me to love philosophy the way I do.



*To Fiorella, Vasco, Alessia, Sofia, Gloria,  
David Lewis and Ruth Barcan Marcus,  
my two philosophizing cats*

# INTRODUCTION

[P]hilosophy is often interested in questions of explanation – of what accounts for what – and it is largely through the employment of the notion of ontological ground that such questions are to be pursued. Ground, if you like, stands to philosophy as cause stands to science. (Fine 2012: 40)

[M]etaphysics as I understand it is about what grounds what. It is about the structure of the world. It is about what is fundamental, and what derives from it. (Schaffer 2009: 379)

## 1. Metaphysics and Ground

Our world comprises a great variety of things. It includes biological organisms, such as trees, humans, and cats; chemical compounds and molecules, along with the atomic and elementary particles of which they are made; it includes psychological states of pleasure and pain, belief and desire; social aggregates of people into mobs and clubs, and universities, nations and cities. It includes sentences and their meanings, numbers and sets, actions and their moral properties. It comprises systems of laws, together with the powers, permissions, and requirements they create.

One of the main concerns of metaphysics is to provide accounts of parts of reality in terms of the more basic parts that somehow constitute them, from which they derive. Assuming that every derivative aspect of reality must derive from more basic aspects, there remains a question of what – if anything – is basic, and, with respect to that which is not basic, of what accounts for it. To use one of David Lewis' evocative images (1994: 413):

Imagine a grid of a million tiny spots – pixels – each of which can be made light or dark. When some are light and some are dark, they form a picture, replete with

interesting intrinsic gestalt properties. The case evokes reductionist comments. Yes, the picture really does exist. Yes, it really does have those gestalt properties. However, the picture and the properties reduce to the arrangement of light and dark pixels. They are nothing over and above the pixels. They make nothing true that is not made true already by the pixels. They could go unmentioned in an inventory of what there is without thereby rendering that inventory incomplete. And so on.

In Frank Jackson's words (1998: 4):

Metaphysics is about what there is and what it is like. But it is not concerned with any old shopping list of what there is and what it is like. Metaphysicians seek a comprehensive account of some subject matter – the mind, the semantic, or, most ambitiously, everything – in terms of a limited number of more or less basic notions.

The problem of providing a comprehensive account of a subject matter in terms of more basic notions is what Jackson called 'the location problem'. If the location problem for a candidate entity cannot be solved – if no account of it can be given in more basic terms – the conclusion can only be either that the target entity is among the fundamental constituents of reality, or that – despite appearances – it does not really exist. But with respect to those entities for which the location problem *can* be solved, what does a solution amount to? What does it take to locate an entity within more basic parts of reality, to show that it somehow derives from them?

For Lewis, Jackson, and many other philosophers working during the second half of the twentieth century, it meant establishing that a strong modal connection holds between the target entity and the more basic entities that determine it, on which it depends. It meant showing that the target entity *supervenies on*, or *is necessitated by*, them.

Thus, immediately after the passage quoted above, Lewis went on to say (1994: 413-414):

The picture reduces to the pixels. And that is because the picture supervenes on the pixels: there could be no difference in the picture and its properties without some difference in the arrangement of light and dark pixels. Further, the supervenience is asymmetric: not just any difference in the pixels would matter to the gestalt properties of the picture. And it is supervenience of the large upon the small and many. In such a case, say I, supervenience is reduction. And the materialist supervenience of mind and all else upon the arrangement of atoms in the void – or whatever replaces atoms in the void in true physics – is another such case.

Likewise, Jackson thought that the right way of solving a location problem was by means of showing that the target entity is entailed by more basic ones, in the sense of being necessitated by them, with metaphysical necessity (Jackson 1998: 5):

[The] one and only way of having a place in an account told in some set of preferred terms is by being entailed by that account—a view I will refer to as the entry by entailment thesis.

There are subtle technical questions concerning the difference between supervenience and necessitation, not least because there are many different supervenience relations.<sup>1</sup> Yet all kinds of supervenience result from specifying the core idea that there *cannot* be a variation in one respect without a variation in another, that a variation in the existence or obtaining of the supervenient entity *requires* a variation with respect to the subvenient entity: supervenience – just like necessitation – is a modal notion.

Modal notions of supervenience or necessitation were thus taken to capture the connection between non-basic entities and their more basic determinants. Insofar as solutions to location problems were meant to reveal what a given entity is determined by,

---

<sup>1</sup> The first philosophical use of the term ‘supervene’ is usually traced back to Hare (1952). Berker (2018: fn. 5) notes that the notion of necessary co-variation appears without being named ‘supervenience’ already in Moore (1922: 261), Ross (1930: 109, 120, 122-3), and Sidgwick (1907: 209, 379). For an overview of the varieties of supervenience, see among others Kim (1993), Leuenberger (2008), McLaughlin (1995; 1996), McLaughlin and Bennett (2018), Paull and Sider (1992), Shagrir (2013), Sider (1999), and Stalnaker (1996).

or equivalently, what it depends on, such modal relations were used to cash out the target notion of determination or dependence in more tractable and familiar terms.<sup>2</sup>

Though it used to be common lore that either supervenience or necessitation could adequately specify the relevant type of determination, over the last twenty years two powerful criticisms have been raised towards their ability to do so. Two main sources of dissatisfaction have driven such criticisms, one having to do with their formal properties, and the other with their fineness of grain.<sup>3</sup>

The first problem is that supervenience and necessitation appear to have the wrong formal properties, since they are reflexive, non-symmetric (i.e. neither symmetric nor asymmetric) and monotonic, whereas the target notion of determination (dependence) should rather be irreflexive, asymmetric, and non-monotonic.<sup>4</sup> This problem crucially trades on the assumption that determination should have these features, and there are two distinct ways in which one could substantiate this claim.

One is through the contention that the relevant type of determination should be *explanatory*, and the other is through the connection between determination and *relative fundamentality*. For it seems plausible that (i) nothing [explains / is more fundamental than] itself; (ii) if  $x$  [explains / is more fundamental than]  $y$ , then  $y$  [does not explain / is not more fundamental than]  $x$ ; and (iii) it is not the case that if  $x$  [explains / is more fundamental than]  $y$ , then the collection of  $x$  together with an arbitrary entity  $z$  also [explains / is more fundamental than]  $y$ .<sup>5</sup>

In short, if explanation and/or relative fundamentality are irreflexive, asymmetric, and non-monotonic, and if determination inherits these properties from (either of) them, then determination also has them. If so, since determination and supervenience (necessitation) have different properties, they must be distinct.

A key step in this argument is that determination *inherits* the relevant features from explanation and/or relative fundamentality. The extent to which this assumption

---

<sup>2</sup> Here, I am using ‘determination’ and ‘dependence’ as converses of one another.

<sup>3</sup> For a recent discussion of these challenges in connection with grounding, see Kovacs (2018).

<sup>4</sup> This argument is given, *inter alia*, by Koslicki (2015: 308), McLaughlin and Bennett (2018: §3.5), Raven (2012: 690; 2013: 194), and Schaffer (2009: 364).

<sup>5</sup> I am assuming that in order for the collection of  $x$  and  $z$  to be more fundamental than  $y$ , each of  $x$  and  $z$  must be more fundamental than  $y$ .

may be justified turns on the way in which determination and explanation (relative fundamentality) are related. A straightforward way of vindicating this claim about inheritance would be to show that determination is *identical to* (a kind of) explanation. Yet since this claim, too, is controversial, it is unclear whether the argument ultimately succeeds.<sup>6</sup>

An underlying issue here is that the reason why it is unclear whether determination inherits the relevant formal properties is precisely that it is unclear what the relation between determination and explanation is. On the one hand, it could be maintained that metaphysical determination just is a type of explanation.<sup>7</sup> If that were correct, however, it would suffice to point out that supervenience and necessitation are not explanatory in order to rule them out as candidates for determination, and the argument from formal properties would become redundant.<sup>8</sup> If, on the other hand, determination is not an explanatory relation, assumptions about its desired formal features may be at risk of putting the cart before the horse, thereby losing their rationale.

Moreover, even if determination really was asymmetric and non-monotonic, it might still be possible to define it in terms of supervenience, by appealing to *one-way* supervenience (see Berker 2018: 8, and Kovacs 2018a). To illustrate, say that a set  $\Gamma$  one-way supervenes on a set  $\Delta$  iff (i)  $\Gamma$  supervenes on  $\Delta$ ; (ii)  $\Delta$  does not supervene on  $\Gamma$ ; and (iii)  $\Gamma$  does not supervene on any proper subset of  $\Delta$ . Then, we would have defined a

---

<sup>6</sup> Raven (2013: 193-194) is particularly explicit in his commitment to this claim with respect to the relation between grounding and explanation. Several philosophers have expressed analogous commitments in connection to some of these properties. See, e.g., Trogdon (2013a: 106) for the claim that grounding inherits irreflexivity from explanation, and Dasgupta (2014: 4), Rosen (2010: 116) and Trogdon (2013a: 109) for a similar claim with regard to non-monotonicity. For a critical discussion of the argument from inheritance in the context of the relation between grounding and explanation, see Maurin (2018).

<sup>7</sup> The question of whether (metaphysical) determination is identical to (a type of) explanation has been receiving growing attention within grounding theory. So-called unionists maintain that grounding is identical with explanation, whereas separatists take grounding and explanation to be distinct (the labels come from Raven 2015). Unionists include Dasgupta (2014; 2017), Fine (2012), Litland (2013), Raven (2012), and Rosen (2010). Separatists include Audi (2012), Schaffer (2012), and Trogdon (2013a).

<sup>8</sup> Kim (1993: 167), for instance, seems to be making this point directly when he claims: '[S]upervenience itself is not an explanatory relation. It is not a 'deep' metaphysical relation; rather, it is a 'surface' relation that reports a pattern of property covariation, suggesting the presence of an interesting dependency relation that might explain it.'

supervenience relation that is both asymmetric (hence irreflexive) and non-monotonic, thus possessing the desired formal features.<sup>9</sup>

Regardless of whether one regards the argument from formal properties as compelling, there appear to be further and independent reasons for taking any purely modal notion to be ill-suited for capturing metaphysical dependence.<sup>10</sup> The problem lies with the fact that supervenience and necessitation are *intensional* relations, and this makes them too coarse grained for the task. Specifically, modal characterizations of dependence yield a number of false positives: instances of related entities that the view entails are instances of metaphysical dependence, but that in fact are not. Cases of this sort can be classified as falling under at least two types.

The first class of cases involves necessary entities. Necessary facts, objects and properties supervene on – are necessitated by – anything whatsoever. Thus, for instance, the fact that either snow is white or it isn't supervenes on (is necessitated by) the fact that I'm writing, while clearly failing to depend on it. (The same goes for many other pairs of which at least one member is a necessary existent).

The second class of cases involves co-intensional entities, i.e. entities that, while possibly contingent, exist or obtain at exactly the same possible worlds. Given the modal nature of supervenience (necessitation), such entities will automatically supervene on (necessitate) one another, even though in some cases they won't stand in a dependence relation. Thus, Kit Fine (1994) famously drew attention to the case of sets and their members, which is particularly fit in this context. Plausibly, Socrates and {Socrates} (i.e. the set whose sole member is Socrates) are co-intensional entities: wherever one exists the other does, and vice versa. Nevertheless, it is clear that the existence of Socrates is not determined by the existence of its singleton, though necessitated by it.

Similarly, truths and their truth-makers are also co-intensional: for any given truthbearer, every world where it is true is also a world that hosts its truth-maker, and every world that hosts its truth-maker is a world where it is true. Yet it is the truth of the truthbearer which depends on the truth-maker, not the other way around.

---

<sup>9</sup> In fact, one-way supervenience meets a criterion of minimality, not just non-monotonicity.

<sup>10</sup> Berker (2018: 9) notes that similar considerations against the identification of dependence with supervenience can already be found in Dancy (1981) and DePaul (1987).

Notice further that one-way supervenience does not save supervenience from this type of argument. For cases of co-intensional entities, this time, become false negatives: the view that determination is one-way supervenience would entail, in such cases, that no dependence relation holds between them, since supervenience runs in both directions. Yet there *are* cases of co-intensional entities – including the case of sets and truth-making – which stand in a dependence relation (albeit only in one direction), and one-way supervenience rules them out.

This argument makes a strong case for thinking that constitutive determination (dependence) cannot be captured by modal notions of supervenience or necessitation. In addition to this, since supervenience and necessitation appeared to be the best candidates for providing adequate definitions of it, their failure prompted many philosophers to adopt a radical change of strategy. The new strategy consisted in stopping from trying to understand the target notion of determination in other terms, and start taking it at face value.

Grounding theory – as first developed in the works of Correia (2005; 2010), Fine (2001; 2012), Rosen (2010), and Schaffer (2009)<sup>11</sup> – is the result of this change in attitude. What the surge of interest in grounding reflects is, at bottom, the felt need to theorize about determination/dependence *directly*, without first having to appeal to some distinct notion that distorts or betrays the original concept.

Claims of constitutive determination/dependence can be expressed in various ways. In English, the more natural locutions to state them are probably ‘because’ and ‘in virtue of’, when used in their non-causal sense. In this context, the philosophical term ‘grounding’ is no more than a label for the type of determination already expressed by such locutions in ordinary English: for the notion of some thing holding *in virtue of* some (other) things, of something being the case *because* something (else) is the case, when these expressions are used non-causally. It is, nonetheless, a label worth having (at least in philosophy), since using it makes clear what the subject matter under discussion is, e.g. by disambiguating contexts where both causal and non-causal readings would otherwise

---

<sup>11</sup> For an overview, see the essays in Correia and Schnieder (2012).



be available. At any rate, every theory needs words, and ‘grounding’ seems as good as any for the subject matter of grounding theory.

To supplement this rough and minimal characterization, let me mention a few – in some case philosophically controversial – examples of grounding claims. As usual, this should only serve to clarify what the concept of grounding conveys, what notion it expresses. The following claims are drawn mainly from Correia (2010):

- (1) Mental facts obtain in virtue of neurophysiological facts;
- (2) Dispositional properties are grounded in categorical properties;
- (3) Legal facts are grounded in non-legal, e.g. social, facts;
- (4) Morally wrong acts are wrong in virtue of non-moral facts;
- (5) Normative facts are grounded in natural facts;
- (6) Semantic properties are exemplified in virtue of certain non-semantic properties being exemplified;
- (7) Determinables are exemplified in virtue of corresponding determinates being exemplified;
- (8) The existence of a whole is grounded in the existence of its parts;
- (9) The existence of a non-empty set is grounded in the existence of its members;
- (10) Events are grounded in facts about their participants;
- (11) Every truth is made true, i.e. given any truth, some entity (or entities) is (are) such that that truth is true in virtue of the existence of this entity (these entities);
- (12) Logically complex truths depend on simpler truths, e.g. the truth value of a conjunction depends on the truth values of its conjuncts.

Some of these examples make apparent the potential significance of grounding to philosophical inquiry, for a variety of debates in philosophy appear to be concerned with upholding or falsifying some of these claims. To illustrate, philosophical debates about mind, law, morality, normativity, meta-semantics, mereology, and truth-making are concerned, in part, with examining the truth of (1), (3), (4), (5), (6), (8) and (11) respectively. Each of these claims can be legitimately interpreted as part of a ‘location hypothesis’ for a given phenomenon or subject matter. And if location hypotheses are

best interpreted as conjectures on what grounds what, then grounding will have legitimate application to many areas of philosophy.

Saying that grounding is constitutive non-causal determination leaves open, of course, a great variety of issues regarding its nature. Grounding theorists have begun to investigate many such issues, including the following:

- (i) What is the logical form of statements of ground: whether they are best expressed by means of a relational predicate or rather a sentential operator;<sup>12</sup>
- (ii) What are the relata of grounding: whether they can be entities drawn from any ontological category, or only from particular categories (e.g. facts, properties, individuals);<sup>13</sup>
- (iii) What are the formal properties of grounding, including: whether grounding is (ir)reflexive, asymmetric, transitive, (non-)monotonic, or minimal;<sup>14</sup>
- (iv) What, if anything, grounds facts about grounding;<sup>15</sup>
- (v) What relation grounding bears towards cognate notions of philosophical interest, such as: explanation, nothing-over-and-aboveness, reduction, conceptual analysis, essence, and modality;<sup>16</sup>

---

<sup>12</sup> The view that grounding statements are best regimented through a non-truth-functional sentential connective has been endorsed by Correia (2010) and Fine (2012). The opposing view that they should be regimented with a relational predicate has been advocated by Audi (2012) and Rosen (2010). A contrastive variant of the latter view is defended by Schaffer (2012; 2016a).

<sup>13</sup> See Schaffer (2009) for the view that grounding can relate entities from a variety of ontological categories. The view that grounding relates just facts is prominent in the work of Rosen (2010; 2017).

<sup>14</sup> For challenges to the irreflexivity of grounding, see especially Jenkins (2011) and Kovacs (2018b). On asymmetry, see Thompson (2016). On transitivity, see Litland (2013), Loss (2017), Makin (2017), Schaffer (2012), and Tahko (2013). On non-monotonicity and minimality, see Audi (2012).

<sup>15</sup> Competing answers to the question of what grounds facts about grounding have been defended by Bennett (2011), Dasgupta (2014), deRosset (2013), Fine (2012), and Litland (2017).

<sup>16</sup> For discussion on the relation between grounding and explanation, see Audi (2012), Dasgupta (2014; 2017), Fine (2012), Litland (2013), Maurin (2018), Raven (2012; 2015), Rosen (2010), Schaffer (2017a; 2017b), Trogon (2013a), and Wilson (2018). On the relation between grounding and reduction, see especially Rosen (2010; 2015). On the distinction between metaphysical and conceptual grounding, see Horvath (2018) and Smithson (2018). On grounding's relation to essence, see Correia (2013), Correia and Skiles (2017), Fine (2012; 2015),

- (vi) What relation grounding bears to arguably more specific dependence relations, such as: realization, composition, set-formation, identity, and the determinable–determinate relation;<sup>17</sup>
- (vii) Whether there is but one notion of grounding, or rather a plurality of irreducible notions.<sup>18</sup>

This dissertation will to a large extent leave open how questions about the nature of grounding ought to be answered. The only respect in which it tries to make a novel contribution is by examining the relation between grounding and modality.

Chapter 1 tackles this question, and defends the view that grounding entails a particular kind of supervenience. In trying to vindicate a substantive connection between grounding and modality, Chapter 1 thus aims to deepen our understanding of grounding, by means of illuminating the connection it bears to another central (and much better understood) philosophical notion.

The main focus of this dissertation, however, lies with providing an *application* of grounding theory to the philosophical study of law. Legal philosophers have long been concerned with locating the legal features of the world. They have tried to locate such features by showing that they derive from a limited amount of more basic notions. And, as is usual, competing conjectures have given rise to heated debates.

The overall aim of this thesis is to develop a sound framework for conducting such debates, so as to sharpen the underlying issues and the space of available views about them. It is in the service of pursuing this objective that the concept of ground will be put to use. There are in philosophy as many location problems as there are phenomena that philosophers are interested in locating. Theories in ethics, meta-ethics, meta-semantics, philosophy of mind, and social ontology – to mention only a few – are concerned with locating the entities of interest in their respective domains. In the next section, I explain why the philosophy of law is no different.

---

Rosen (2010; 2017), and Trogdon (2013b). On the relation between grounding and modality, see Chilovi (2018), Leuenberger (2014a; 2014b), Rosen (2010), Skiles (2015), and Trogdon (2013b).

<sup>17</sup> See Schaffer (2016b) and Wilson (2014).

<sup>18</sup> On the debate between monism and pluralism about grounding, see Berker (2018), Fine (2012), Litland (2018), Richardson (2018), and Wilson (2014).

## 2. Grounding and the Law

Law is a pervasive aspect of human societies. It tells us how we may and may not act, by means of setting standards of conduct that purport to guide our action. It empowers certain agents to perform certain acts, and endows legal capacities and statutes on others. It constitutes a range of legal properties and relations, and determines the existence of organizations and institutions.

At the same time, many particular items of different kinds – actions, objects, states of affairs, ... – possess legal properties and stand in legal relations. They can be legal, illegal, contracts, corporations, liable for 1000 dollars of damages towards Marie, permitted to park on Fulton street, and so on. We might call ‘particular legal facts’ those facts that involve the instantiation of legal properties or the standing in legal relations by particular items.

In general, it seems plausible that particular legal facts obtain in virtue of what the law (of the relevant legal system) says, together with those facts whose obtaining is taken by the law to have a legally relevant impact or consequence (cf. Enoch forthcoming, Rosen 2017).

Suppose, for instance, that Laura can vote in the US presidential elections. How is this particular fact to be accounted for? An intuitive way of answering this question might proceed by mentioning the (legal) fact that it is the law in the US that any US citizen who is at least 18 years old can vote in the presidential election, together with the facts that Laura is a US citizen and that she is 18 years old.

Or take the fact that the EU Agency for Fundamental Rights exists. Why is this the case? Plausibly, it is because EU law says that if agents  $x_1, \dots, x_n$  engage in A-activities then the EU Agency for Fundamental Rights is thereby established, and because  $x_1, \dots, x_n$  did, in fact, engage in A-activities.

The general pattern is one where *facts about the content of the law* – facts about what the law of particular systems says – seem to play a crucial role in determining facts about the possession of legal properties and the standing in legal relations by particular items.

Let us follow the terminology introduced by Greenberg (2004), and call ‘legal content facts’, or more simply ‘legal facts’, the facts about the content of the law in a legal

system (at a world and time).<sup>19</sup> In English, we normally refer to legal facts by means of sentences of the following form: ‘according to the law of system *s*, *p*’, ‘*p* is law in *s*’, ‘it is the law in *s* that *p*’, ‘*p* is legally valid in *s*’, and the like. Irrespective of the language we use, legal facts appear to essentially involve *contents*, *systems*, and a binary relation holding between them – the relation of *legal validity*, or of *being law in*.

The law of a system *s*, at a world *w* and time *t*, may then be identified with the plurality of all the facts about the content of the law of *s*, at *w* and *t*. The totality of all the obtaining legal (content) facts, particular legal facts, and such further legal facts as are determined by them (e.g. generalizations from particular legal facts), on the other hand, may be taken to constitute the whole of legal reality at a given world.

Given this set up, one can naturally ask the question of what constitutes legal reality, of how the legal aspects of the world are to be located within more fundamental aspects of it. Since we have seen that particular legal facts are plausibly determined by the legal content facts together with those other facts that the law makes relevant, the residual open question of legal metaphysics is the question of what determines the legal content facts.

At first sight, this question may seem a bit odd. After all, there are, and have been, a great variety of legal systems, functioning in all sorts of ways and sustained by institutional settings whose workings vary greatly across times, regions, and cultures. There are absolute monarchies, dictatorships, and constitutional democracies; there are systems of common law, of civil law, and so on. And both the agents involved in lawmaking, and the processes through which laws are created, are historically contingent and diverse. Furthermore, it is certainly not the job of philosophy to inquire into the specifics of any particular legal system. So if there is anything of philosophical interest to be said in response to the question of what makes law, it should point to features that are general enough so as to be shared by even greatly diverse legal systems.

To some extent, early positivists such as Bentham and Austin fell prey to the temptation of paying too much attention to their political context. Famously, they held that law is the command of a sovereign backed by force.<sup>20</sup> And in holding this view, due

---

<sup>19</sup> One could work either with a linguistic conception of facts on which they are true propositions, or with an ontic conception on which they are states of affairs formed by particulars, the properties they possess or the relations in which they stand.

<sup>20</sup> See Austin (1832) and Bentham (1782).

in part to the historical accidents of their time, they overlooked a variety of possibilities both concerning what law could be and how it could be otherwise created.

Taking account of the distortions that derive from tying a general account of law to elements that are peculiar to particular environments, contemporary positivists have been more careful in singling out the right level of generality when stating their views. At least since the work of Hart (1961), the general theory of law called ‘legal positivism’ has been associated with the claim that law depends on descriptive social facts, and not on normative moral ones.

This view of the legal determinants, then, does not locate the sources of law at the level of any specific entity (agent, action, process) that might be thought to play a role in law creation. Rather, it is a view about the *kinds* of entities that (allegedly) play such a role. Hart’s own brand of positivism was, of course, more opinionated than that, as it is both typical and appropriate for theorists focusing on this question to try to specify in greater detail which social entities they consider relevant. Still, it is certainly a virtue of Hart’s view, and of the views of those who followed him, that they are not falsified by the existence of laws that are not commands, or that aren’t backed by threat or force. Hart’s view that being law is, at bottom, a matter of being recognized or accepted as such by a certain group of individuals may of course be tentative or inaccurate, but it takes more imagination to prove it wrong.

Four main objections have been raised against legal positivism, either in its specifically Hartian version or in its general form. The first is due to Dworkin (1977) and, in essence, challenges positivists to explain an aspect of the phenomenology of legal practice. Dworkin pointed out that judges often rely on moral considerations – what he called ‘principles’ – in order to decide cases. Crucially, he highlighted that judges often draw conclusions *about the content of the law* partially from moral premises, and then use them to arrive at further conclusions on the resolution of particular cases. Further, he claimed that it is part of the self-understanding of legal interpreters that they regard themselves as in the process of discovering *pre-existing* law when performing such reasoning, rather than creating it anew. So, he reasoned, if we are to take this aspect of legal practice at

face value, we must be able to find some antecedent set of law-determining facts that judges are appealing to in such cases.<sup>21</sup>

Dworkin thought that we should take this phenomenological datum at face value, and try to vindicate judges' self-understanding. Or, at least, he thought that it comes with a considerable cost if we fail to do so. He also pointed out that anti-positivists like himself have a straightforward explanation of why judges are correct in regarding themselves as discovering the law while appealing to moral considerations. The reason is that law *is* determined by the moral facts that such considerations are tracking. Positivists, in contrast, seem forced to deny that judicial reasoning is sound. They have to explain away the appearance that judges are discovering pre-existing law, either by claiming that their own beliefs about what they do are illusory, or that they are disingenuous. Neither option, however, seems especially palatable.

The second objection, also due to Dworkin, is his famous argument from theoretical disagreement (see Dworkin 1986). He claimed that Hartian positivists are unable to explain a core feature of legal adjudication (in the US and elsewhere), namely the fact that judges and other officials often appear to disagree about what it takes to be law, about the grounds of law. This is because Hartian positivists regard law as determined by the convergent practice of officials of accepting certain criteria of legal validity. And since there *is* determinate law (in the US and elsewhere), positivists are committed to the existence of such shared criteria as well. But, he reasoned, if judges and officials accept a common set of criteria for being law, they surely cannot engage in disagreement on what it takes to be law – on what are its grounds – and so theoretical disagreement between them becomes impossible.<sup>22</sup>

---

<sup>21</sup> This argument prompted a number of positivists to accept the weaker version of the view usually called 'inclusive legal positivism'. Inclusive positivists allow that moral facts can determine the law, while denying that they necessarily determine it. Thanks to this modification, they are not forced to reject the judicial phenomenology. See Coleman (1982), Hart's Postscript to *The Concept of Law* (1994), Moreso (2001), and Waluchow (1994). Exclusive legal positivist, by contrast, hold on to the idea that law never depends on morality, and so are bound to explain away the interpretative phenomenology that Dworkin drew attention to. Prominent contemporary advocates of exclusive positivism include Marmor (2001), Raz (1979), and Shapiro (2011).

<sup>22</sup> To this argument, positivists have typically responded by claiming either that theoretical disagreement is a marginal phenomenon, or that the relevant collective attitude is weaker than, and hence does not require, agreement.

The third objection was powerfully raised by Greenberg (2004). He argues that positivism entails an indeterminacy result, in that it implies that there are no determinate legal facts. The argument is fairly complex, but its kernel may be presented as follows. Greenberg aims to show that no amount of purely descriptive facts is ever able to fix a determinate outcome as regards the content of the law. This is so because, he claims, any set of purely descriptive facts is compatible with a variety of putative normative legal outputs deriving from that set. And this, in turn, is due to the fact that social practices and actions are unable, on their own, to determine whether, as well as how, they are relevant in determining the law. In order to fix what counts as a legally relevant aspect of a practice, together with the way it contributes to legal content, something more, and different from them, is needed.

The last of positivism's problems is an old one, but one whose clearest version was developed by Shapiro (2011).<sup>23</sup> The problem appeals to the principle, famously put forward by David Hume, that one cannot derive an 'ought' from an 'is'. Simply put, the problem is that insofar as legal positivism is committed to deriving normative legal facts – including facts about what one legally ought to do – from descriptive social facts, it implies a violation of Hume's Law.<sup>24</sup>

The present dissertation contributes to making progress with the debate between positivists and anti-positivists, in three ways.

First, it offers a novel understanding of the nature of positivist and anti-positivist theories of law, of what these theories are essentially about. Specifically, Chapter 2 argues that positivism and anti-positivism are best interpreted as putting forward competing claims on the grounds of legal facts. The notion of grounding, it is argued, provides the best regimentation of the type of determination these theories rely on.

Second, it is argued that by using grounding to formulate positivism, we can shed light on what this view exactly involves, on what are its distinctive claims and commitments. In this regard, Chapter 3 contends that once we avail ourselves of the tools and resources provided by grounding theory, a number of initially attractive ways of

---

<sup>23</sup> The first formulation of the problem can be traced back at least to Kelsen (1934; 1967: 6-8). Its prominence in analytic jurisprudence is mostly due to Raz (1990).

<sup>24</sup> Shapiro himself is a legal positivist, and the way he circumvents the (alleged) threat posed by this objection is by arguing that legal facts are not really normative in character.



defining positivism turn out to be unsatisfactory. Further, it shows how to use grounding in a way that yields a definition of positivism that is both precise and theoretically illuminating.

Third, it is argued that some of grounding's payoffs lie with the fact that it puts us in a better position to assess the truth of positivism. In particular, while Dworkin's arguments have received an extensive treatment in the literature, much less has been said on whether the arguments provided by Greenberg and Shapiro are successful. In this respect, Chapters 2 and 4 make substantive contributions. Chapter 2 argues that once we are clear on what a ground-theoretic version of positivism looks like, we can see how Greenberg's argument can be resisted. In a similar vein, Chapter 4 clarifies the relation between grounding and entailment, and, by drawing on considerations about their relation, argues that the challenge posed by Hume's Law is unsuccessful as a criticism of positivism.

### **3. Structure, Method, and Outline**

This dissertation has the structure of a compendium of papers. Part of it is aimed at investigating the nature of metaphysical grounding, specifically by examining its relation to supervenience. The remaining parts aim to provide a comprehensive application of grounding theory to the philosophy of law.

The thesis is concerned with theoretical issues, and the approach to deal with them relies on the methods proper to analytic philosophy:

- (i) Gathering pre-theoretical data, and formulating hypotheses that are compatible with, and capable of explaining, such data;
- (ii) Drawing the implications of rival views through logical reasoning, and examining if they rest on any logical fallacy;
- (iii) Testing alternative theories by subjecting them to the method of possible counterexamples;

- (iv) Assessing rival theories through a cost-benefit analysis, by comparing their respective advantages and disadvantages in terms of elegance, simplicity, and explanatory power.

Chapter 1 argues that every grounding claim entails a corresponding supervenience claim. This view is significant, since vindicating it would help grounding theorists address worries that their hyperintensional primitive is obscure, and also increase the argumentative strategies that are available within ground-theoretic frameworks for metaphysical inquiry. Furthermore, the view is controversial: Leuenberger (2014a) argues for its negation, by first specifying some candidate principles of entailment and then claiming that each of them is subject to counterexamples. This chapter critically assesses those principles and the objections he raises against them, and advocates a novel entailment principle that overcomes all the problems that they suffer. The principle it defends places a supervenience-based constraint on grounding claims, and secures a substantive connection between grounding and modality, weaker than necessitation.

Chapter 2 argues that metaphysical grounding is the relation of dependence that holds between law and its more basic determinants. It first makes a positive case for this claim, and then defends it from the potential objection that the relevant relation is rather rational determination. Against this challenge, it argues that the apparent objection is really no objection, for on its best understanding, rational determination is in fact identical to grounding. Finally, it clarifies the framework for theories on law-determination that results from embracing this view; by way of illustration, it offers a ground-theoretic interpretation of Hartian positivism and shows how it can defuse an influential challenge to simple positivist accounts of law.

Chapter 3 aims to provide an accurate grounding-based formulation of positivism in the philosophy of law. It starts off by discussing some intuitive ground-theoretic characterizations first put forward by Rosen (2010) and Plunkett and Shapiro (2017), and by raising a number of objections against them. Rosen's proposal rules out possibilities that are compatible with positivism, while Plunkett and Shapiro's fails to vindicate the distinctive role that is played by social facts within positivist accounts of law. Then, it

presents a more adequate and insightful formulation capable of solving their problems, which crucially relies on the notion of a social enabler. Finally, it models inclusive positivism and exclusive positivism on the same template, and sets out the advantages of the ground-enablers proposal.

Chapter 4 investigates the question of whether Hume's Law – roughly, the thesis that one cannot derive an 'ought' from an 'is' – poses any significant challenge to legal positivism or moral naturalism. Hume's Law used to be widely seen as a serious threat to moral naturalism, but this view has come under considerable fire in recent decades. Over the same period, Hume's Law has come to be viewed as a serious threat to legal positivism; 'Hume's Challenge', for example, is a central theme in Shapiro's book *Legality* (2011). This asymmetry is striking, since naturalism and positivism are taken to be analogous metaphysical theses. If Hume's Law is (not) a threat to one, wouldn't that be true for the other? The aim of this chapter is to establish that Hume's Law is not a threat to either positivism or naturalism. First, it argues that Hume's Law is not a threat to naturalism, on two grounds; one builds off work by Pigden (1989; 1991; 2010), the other is entirely novel. Second, it shows that Shapiro's explanation of why Hume's Law is a threat to positivism rests on implausible epistemological commitments. If the claim defended in this chapter is correct, then a supposedly central problem in philosophy of law turns out to be built on sand.

## References

- Aizawa, K. and Gillett, C. (eds.) (2016) *Scientific Composition and Metaphysical Ground*, Palgrave Macmillan.
- Audi, P. (2012) 'Grounding: Toward a Theory of the In-Virtue-Of Relation', *The Journal of Philosophy*, 109: 685-711.
- Austin, J. (1832) *The Province of Jurisprudence Determined*, Cambridge: Cambridge University Press.
- Bennett, K. (2011) 'By Our Bootstraps', *Philosophical Perspectives*, 25: 27-41.
- Bennett, K. and Zimmerman, D. (eds.) (2017) *Oxford Studies in Metaphysics*, Vol. 10, Oxford: Oxford University Press.
- Bentham, J. (1782) *Of Laws in General*, London: Athlone Press.
- Berker, S. (2018) 'The Unity of Grounding', *Mind*, 127: 729-777.
- Chalmers, D. J., Manley, D. and Wasserman, R. (eds.) (2009) *Metametaphysics: New Essays on the Foundations of Ontology*, Oxford: Oxford University Press.
- Chiassoni, P. (ed.) (2001) *The Legal Ought*, Torino: Giappichelli.
- Chilovi, S. (2018) 'Grounding entails supervenience', *Synthese*, First Online: <https://doi.org/10.1007/s11229-018-1723-x>.
- Coleman, J. (1982) 'Positive and Negative Positivism', *The Journal of Legal Studies*, 11: 139-164.
- Correia, F. (2005) *Existential Dependence and Cognate Notions*, Philosophia Verlag.
- (2010) 'Grounding and Truth-Functions', *Logique et Analyse*, 53: 251-279.
- (2013) 'Metaphysical Grounds and Essence', in Hoeltje et al. (eds.) (2013), 271-296.
- Correia, F. and Schnieder, B. (eds.) (2012), *Metaphysical Grounding: Understanding the Structure of Reality*, Cambridge: Cambridge University Press.
- Correia, F. and Skiles, A. (2017) 'Grounding, Essence, and Identity', *Philosophy and Phenomenological Research*, <https://doi.org/10.1111/phpr.12468>.
- Dancy, J. (1981) 'On Moral Properties', *Mind*, 90: 367-85.
- Dasgupta, S. (2014) 'The Possibility of Physicalism', *The Journal of Philosophy*, 111: 557-592.
- (2017) 'Constitutive Explanation', *Philosophical Perspectives*, 27: 74-97.

- DePaul, M. R. (1987) 'Supervenience and Moral Dependence', *Philosophical Studies*, 51: 425-39.
- deRosset, L. (2013) 'Grounding Explanations', *Philosophers' Imprint*, 27: 74-97.
- Dworkin, R. (1977) *Taking Rights Seriously*, Duckworth.
- (1986) *Law's Empire*, Harvard University Press.
- Enoch, D. (forthcoming) 'How Principles Ground', *Oxford Studies in Metaethics*, Vol. 14.
- Fine, K. (1994) 'Essence and Modality', *Philosophical Perspectives*, 8: 1-16.
- (2001) 'The Question of Realism', *Philosophers' Imprint*, 1: 1-30.
- (2012) 'Guide to Ground', in Correia et al. (eds.) (2012), 37-80.
- (2015) 'Unified Foundations for Essence and Ground', *Journal of the American Philosophical Association*, 1: 296-311.
- Greenberg, M. (2004) 'How Facts Make Law', *Legal Theory*, 10: 157-198.
- Guttenplan, S. (ed.) (1994) *A Companion to Philosophy of Mind*, Oxford: Blackwell Publishers.
- Hale, B. and Hoffmann, A. (eds.) (2010) *Modality: Metaphysics, Logic, and Epistemology*, Oxford University Press.
- Hare, R. M. (1952) *The Language of Morals*, Oxford: Oxford University Press.
- Hart, H.L.A (1961) *The Concept of Law*, 1<sup>st</sup> edition, Oxford University Press.
- (1994) *The Concept of Law*, 2<sup>nd</sup> edition, Oxford University Press.
- (2012) *The Concept of Law*, 3<sup>rd</sup> edition, Clarendon Press: Oxford University Press.
- Hoeltje, M., Schnieder, B. and Steinberg, A. (eds.) (2013) *Varieties of Dependence: Ontological Dependence, Grounding, Supervenience, Response-Dependence*, Munich: Philosophia Verlag.
- Horvath, J. (2018) 'Philosophical Analysis: The Concept Grounding View', *Philosophy and Phenomenological Research*, 97: 724-750.
- Jago, M. (ed.) (2016) *Reality Making*, Oxford: Oxford University Press.
- Jackson, F. (1998) *From Metaphysics to Ethics: A Defence of Conceptual Analysis*, Oxford University Press.
- Jenkins, C. (2011) 'Is metaphysical dependence irreflexive?', *The Monist*, 94: 267-276.
- Kelsen, H. (1934) *Reine Rechtslehre Einleitung in Die Rechtswissenschaftliche Problematik*, F. Deuticke.

- (1967) *The Pure Theory of Law*, 2<sup>nd</sup> edition, Lawbook Exchange.
- Kim, J. (1993) *Supervenience and Mind: Selected Philosophical Essays*, Cambridge: Cambridge University Press.
- Kovacs, D. M. (2018a) 'The myth of the myth of supervenience', *Philosophical Studies*, First Online: <https://doi.org/10.1007/s11098-018-1106-7>.
- (2018b) 'What is Wrong with Self-Grounding?', *Erkenntnis*, 83: 1157-1180.
- Koslicki, K. (2015) 'The Coarse-Grainedness of Grounding', *Oxford Studies in Metaphysics*, Vol. 9: 306-344.
- Leuenberger, S. (2008) 'Supervenience in metaphysics', *Philosophy Compass*, 3: 749-762.
- (2014a) 'From Grounding to Supervenience?', *Erkenntnis*, 79: 227-240.
- (2014b) 'Grounding and Necessity', *Inquiry*, 57: 151-174.
- Lewis, D. (1994) 'Reduction of Mind', in Guttenplan (ed.) (1994), 412-431.
- Litland, J. E. (2013) 'On Some Counterexamples to the Transitivity of Grounding', *Essays in Philosophy*, 14: 19-32.
- (2017) 'Grounding ground', in Bennett et al. (eds.) (2017), 279-315.
- (2018) 'In Defense of the Disunity of Grounding', *Thought: A Journal of Philosophy*, 7: 97-108.
- Loss, R. (2017) 'Grounding, Contingency and Transitivity', *Ratio*, 30: 1-14.
- Makin, M. (2017) 'Rigid/Non-Rigid Grounding and Transitivity', *Inquiry: An Interdisciplinary Journal of Philosophy*, 62: 136-150.
- Marmor, A. (2001) *Positive Law and Objective Value*, Oxford: Clarendon Press.
- Maurin, A. S. (2018) 'Grounding and metaphysical explanation: it's complicated', First Online: <https://doi.org/10.1007/s11098-018-1080-0>.
- McLaughlin, B. (1995) 'Varieties of Supervenience', in Savellos et al. (eds.) (1995), 16-59.
- (1996) 'Supervenience', in *Encyclopedia of Philosophy Supplement*, Borchert (ed.) (1996), 558-60.
- McLaughlin, B. and Bennett, K. (2018) 'Supervenience', The Stanford Encyclopedia of Philosophy (Winter 2018 Edition), Edward N. Zalta (ed.), URL = [<https://plato.stanford.edu/archives/win2018/entries/supervenience/>](https://plato.stanford.edu/archives/win2018/entries/supervenience/).
- Moore, G. E. (1922) 'The Conception of Intrinsic Value', *Philosophical Studies*,

- London: Routledge and Kegan Paul, 253- 275.
- Moreso, J. J. (2001) 'In Defense of Inclusive Legal Positivism', in Chiassoni (ed.) (2001), 37-63.
- Paull, R. C. and Sider, T. (1992) 'In Defense of Global Supervenience', *Philosophy and Phenomenological Research*, 52: 833-53.
- Pigden, C. R. (1989) 'Logic and the Autonomy of Ethics', *Australasian Journal of Philosophy*, 67: 127-151.
- (1991) 'Naturalism', in Singer (ed.) (1991), 421-431.
- (ed.) (2010) *Hume on Is and Ought*, Basingstoke: Palgrave Macmillan.
- Plunkett, D. and Shapiro, S. (2017) 'Law, Morality, and Everything Else: General Jurisprudence as a Branch of Metanormative Inquiry', *Ethics*, 128: 37-68.
- Raven, M. J. (2012) 'In Defence of Ground', *Australasian Journal of Philosophy*, 90: 687-701.
- (2013) 'Is Ground a Strict Partial Order?', *American Philosophical Quarterly*, 50: 191-199.
- (2015) 'Ground', *Philosophy Compass*, 10: 322-333.
- Raz, J. (1979) *The Authority of Law: Essays on Law and Morality*, Oxford: Clarendon Press.
- (1990) *Practical Reason and Norms*, Oxford University Press.
- Richardson, K (2018) 'Grounding Pluralism: Why and How', *Erkenntnis*, First Online: <https://doi.org/10.1007/s10670-018-0083-81>.
- Rosen, G. (2010) 'Metaphysical Dependence: Grounding and Reduction', in Hale et al. (eds.) (2010), 109-36.
- (2015) 'Real Definition', *Analytic Philosophy*, 56: 189-209.
- (2017) 'Ground by Law', *Philosophical Issues*, 27: 279-301.
- Ross, W. D. (1930) *The Right and the Good*, Oxford: Oxford University Press.
- Savellos, E. E. and Yalcin, U. D. (eds.) (1995) *Supervenience: New Essays*, Cambridge University Press.
- Schaffer, J. (2009) 'On What Grounds What', in Chalmers et al. (eds.) (2009), 347-383.
- (2012) 'Grounding, Transitivity, and Contrastivity', in Correia et al. (eds.) (2012), 122-138.
- (2016a) 'Grounding in the Image of Causation', *Philosophical Studies*, 173: 49-100.

- (2016b) ‘Ground Rules: Lessons from Wilson’, in Aizawa et al. (eds.) (2016), 143-70.
- (2017a) ‘The Ground between the Gaps’, *Philosophers’ Imprint*, 17: 1-26.
- (2017b) ‘Laws for Metaphysical Explanation’, *Philosophical Issues*, 27: 302-321.
- Shagrir, O. (2013) ‘Concepts of Supervenience Revisited’, *Erkenntnis*, 78: 469–485.
- Shapiro, S. (2011) *Legality*, Harvard University Press.
- Sider, T. R. (1999) ‘Global supervenience and identity across times and worlds’, *Philosophy and Phenomenological Research*, 59: 913-937.
- Sidgwick, H. (1907) *The Method of Ethics*, London: Macmillan.
- Singer, P. (ed.) (1991) *A Companion to Ethics*. Blackwell.
- Skiles, A. (2015) ‘Against Grounding Necessitarianism’, *Erkenntnis*, 80: 717-751.
- Smithson, R. (2018) ‘Metaphysical and Conceptual Grounding’, *Erkenntnis*, 1-25.
- Stalnaker, R. (1996) ‘Varieties of Supervenience’, *Philosophical Perspectives*, 10: 221-42.
- Tahko, T. E. (2013) ‘Truth-Grounding and Transitivity’, *Thought: A Journal of Philosophy*, 2: 332-340.
- Thompson, N. (2016) ‘Metaphysical Interdependence’, in Jago (ed.) (2016), 38-56.
- Trogon, K. (2013a) ‘An Introduction to Grounding’, in Hoeltje et al. (eds.) (2013), 97-122.
- (2013b) ‘Grounding: Necessary or contingent?’, *Pacific Philosophical Quarterly*, 94: 465-485.
- Waluchow, W.J. (1994) *Inclusive Legal Positivism*, Oxford: Clarendon Press.
- Wilson, A. (2018) ‘Metaphysical Causation’, *Noûs*, 723-751.
- Wilson, J. (2014) ‘No Work for a Theory of Grounding’, *Inquiry*, 57: 535-79.





# 1

## Grounding Entails Supervenience

Samuele Chilovi (University of Barcelona)

Article Published in *Synthese*, First Online: <https://doi.org/10.1007/s11229-018-1723-x>  
24 February 2018

**Abstract:** Do grounding claims entail corresponding supervenience claims? The question matters, as a positive answer would help grounding theorists address worries that their hyperintensional primitive is obscure, and also increase the argumentative strategies that are available within ground-theoretic frameworks for metaphysical inquiry. Stephan Leuenberger ('From Grounding to Supervenience?', 2014a) argues for a negative response, by specifying some candidate principles of entailment and then claiming that each of them is subject to counterexamples. In this paper, I critically assess those principles and the objections he raises against them, and advocate a novel entailment principle that overcomes all the problems suffered by those other principles. The principle I defend places a supervenience-based constraint on grounding claims, and secures a substantive connection between grounding and modality, weaker than necessitation.

### 1. Introduction

Many interesting and controversial philosophical theories make dependence claims. Physicalists about the mind claim that the mental depends on, and is nothing over and above, the physical; positivists in the philosophy of law maintain that legal facts depend solely on social facts; naturalists in meta-ethics hold that moral properties depend on natural ones. Until recently, it was common to understand the notion of metaphysical

dependence in terms of supervenience. Then, due to the work of Kit Fine (1994) and others, this was seen to be a mistake, since some supervenience claims are true when no dependence relation holds between the entities involved.

In response to this turn of events, attempts to understand dependence in terms of the notion of metaphysical grounding have become increasingly prominent in the last few years.<sup>1</sup> Some of the advantages of grounding over supervenience lie in the fact that it is a more fine-grained notion. For while it is possible that two facts necessarily co-obtain even though neither grounds the other, supervenience cannot fail to hold between co-intensional entities. Furthermore, grounding can draw distinctions that supervenience cannot. For it is possible for a fact A to be grounded in a fact B, even though A fails to be grounded in a fact that necessarily co-obtains with B, and it is possible that B grounds A, even though B fails to ground a fact that necessarily co-obtains with A, while supervenience allows for none of this.

Indeed, the examples that have been used to show that there can be supervenience without dependence are often invoked in support of the complaint that supervenience is *too weak* to capture metaphysical dependence. At the same time, it seems natural to think that dependence should at least require lack of independent variation – that if entities of a certain kind metaphysically depend on entities of some other kind, then the former should not be capable of varying independently of the latter (cf. Jackson 1998). For these reasons, it is tempting to think that any two things that stand in the grounding relation should also stand in a supervenience relation.

So the question naturally arises: does grounding entail supervenience? If it did, this would be beneficial to friends of grounding. For if a proper regimentation of grounding showed every grounding claim to entail a supervenience claim, then the benefits that were gained by trying to understand significant philosophical theses in terms of supervenience would not be lost. Instead such benefits could be retained by qualifying the relevant supervenience claim not as an analysis of the original thesis, but rather as one of its consequences.

---

<sup>1</sup> The grounding literature has by now become too large to cite in full. For a representative sample of some of the most important earlier work, see Correia (2005), Fine (2001), Rosen (2010), Schaffer (2009), and the essays contained in Correia and Schnieder (2012).

This, in turn, would produce two valuable effects. First, it would help to defuse the charge of obscurity that is sometimes leveled against the grounding idiom, for supervenience claims would then provide necessary conditions for the truth of grounding claims, and the modal idiom in which the former are framed lends itself to a neat formalism that we clearly understand.

Second, a recognition that grounding entails supervenience would increase the argumentative strategies that could be used in philosophical debates about the target views, since their opponents could defeat them by showing their entailed supervenience claims to be false.

To illustrate this point, consider the case of physicalism in the philosophy of mind. To a first approximation, physicalism is usually presented as the view that every mental property, state and fact is determined by, and is nothing over and above, physical ones. Since this view ought to be distinguishable from a form of dualism on which conscious states are caused by physical ones according to contingent causal laws (see Rosen 2010), the relevant notion of dependence must be of a metaphysical, not merely causal, kind.

While it used to be the case that the more precise formulations of physicalism would take the form of global supervenience claims,<sup>2</sup> a number of philosophers have recently turned to formulations crafted in ground-theoretic terms, in response to the problems that supervenience has been shown to have in capturing the intended notion of dependence.<sup>3</sup> At the same time, it remains fairly uncontroversial that if zombie worlds were possible – if it were possible for there to be a physical duplicate of our world which lacked consciousness – physicalism would then be false. For we do not think that reformulating the view in the new jargon has suddenly made it immune from the zombie argument.<sup>4</sup> But the conclusion of that argument amounts to the negation of a

---

<sup>2</sup> See, e.g., Chalmers (1996), Jackson (1998) and Lewis (1983) for some popular attempts along these lines.

<sup>3</sup> See, for instance, Rosen (2010) and Schaffer (2017) for grounding-based formulations of physicalism about the mental. Dasgupta (2014) presents a ground-theoretic version of ‘general’ physicalism.

<sup>4</sup> Indeed, none of the authors who have offered grounding-based formulations of physicalism has claimed that, in virtue of the new formulation, physicalism would avoid objections based on the (alleged metaphysical) possibility of worlds that are physically indiscernible and yet mentally different from the actual world. Of course the zombie argument remains controversial, but this is because the possibility of zombies is controversial. In fact, it seems plausible that if the ground-

supervenience claim, so an explanation is now needed of why this should be a problem for physicalism.

Here, then, is one way in which the thesis that grounding entails supervenience proves useful, as it provides an elegant way of reconciling these two plausible thoughts: that physicalism is a view about what grounds what, and that it is incompatible with the possibility of zombies. Furthermore, the supervenience thesis does this in a way that shows why it is no coincidence that there is a connection between them: for if grounding entails supervenience, physicalism *must* be false if the supervenience claim it entails is false. *Mutatis mutandis*, the same would be true of naturalism in meta-ethics, positivism in the philosophy of law, internalism about mental and semantic content, and analogous views. Despite its limitations, supervenience has often proved valuable for structuring debates around views throughout philosophy, and for clarifying such views by enabling us to evaluate their strengths and weaknesses. Establishing that supervenience is entailed by grounding would ensure that it continues to play such a role.

The aim of this paper is to argue in favor of a novel principle of entailment from grounding statements to corresponding supervenience claims, and to defend the view that grounding entails supervenience from the arguments to the contrary advanced by Stephan Leuenberger in his article ‘From Grounding to Supervenience?’ (2014a); where he presents four candidate entailment principles, and argues that each of them is subject to counterexamples. In response, I raise some objections to the principles he criticizes, and propose a different supervenience-based principle designed to avoid the problems which those other principles suffer. The principle I defend is logically weaker than a necessitation rule to the effect that if a class of facts  $\Gamma$  fully grounds a fact A, then  $\Gamma$  necessitates A. Because of this, it should be especially attractive to those who, while rejecting necessitarianism, think that there should be substantive modal constraints on grounding.<sup>5</sup>

---

theoretic ideology had made physicalism compatible with zombies, then the new formulation should have been viewed with suspicion.

<sup>5</sup> In recent literature, the view that if a class of facts  $\Gamma$  fully grounds a fact A, then  $\Gamma$  necessitates A, is called ‘grounding necessitarianism’. Advocates of this view include Audi (2012), Correia (2005), deRosset (2013), Loss (2017), Rosen (2010) and Trogon (2013) among others. Grounding necessitarianism has been criticized by Leuenberger (2014b) and Skiles (2015), and rejected by Schaffer (2016).

The rest of the paper is structured as follows. In section 2, I present the first two principles of entailment discussed by Leuenberger, review why the first should be rejected, and give some reasons for regarding the second – which is in fact equivalent to grounding necessitarianism – as problematic. Although there is room for debate as to whether necessitarianism should be rejected, the putative counterexamples that seem to falsify it are plausible enough to forcefully raise the question of whether there might be a substantive and valuable link between grounding and supervenience, weaker than necessitarianism, that is able to avoid them. Accordingly, the rest of the paper aims to articulate such a weaker principle, compatible with counterexamples to the necessitation of the grounded by its grounds. In section 3, I present a kind of supervenience claim capable of meeting this desideratum, and defend it from some powerful arguments that Leuenberger raises against principles based on it. In section 4, I diagnose the real problems that affect such principles, and articulate a novel principle that is able to avoid those problems.

## 2. From Grounding to Supervenience?

Let me start by outlining a few assumptions about the scope and nature of the present project that will be useful for structuring the discussion that follows. First, the sort of grounding claims that we are trying to provide with supervenience implications have the form ‘ $B_1, B_2, \dots$  ground  $A$ ’, where the capital roman letters denote facts, and grounding is taken to be a relation expressed by a predicate flanked by a plural term on the left and a singular term on the right. However, to simplify my presentation, instead of listing each grounding fact separately I will let Greek capitals stand for classes of facts, as with ‘ $\Gamma$  grounds  $A$ ’, where  $\Gamma$  is the class whose members are  $B_1, B_2, \dots$ .<sup>6</sup>

Second, ‘entailment’ is used here to mean strict implication, so that a set of formulas  $\Phi$  entails a formula  $\psi$  just in case in every world where all the members of  $\Phi$  are true,  $\psi$  is true as well. Third, as Leuenberger (2014a: 230) notes, given classical logic

---

<sup>6</sup> Although strictly speaking grounding bases are (typically) pluralities of facts rather than classes thereof, treating them as classes will allow us to model more neatly the notion of type that will later be introduced and the supervenience claims based on it.

there will be many supervenience claims that are entailed by every grounding claim, since they are entailed by any claim whatsoever. Because of this, our focus will be restricted to looking for principles of entailment that relate grounding claims with *corresponding* supervenience claims – claims that involve the same entities or, more adequately (for reasons that will become apparent), entities of the same types.

Lastly, given that for some things to supervene on some other things is for the former to co-vary with the latter, and given that we are interested in the supervenience of facts, the following kind of supervenience will suit our purposes:  $\Delta$  supervenes on  $\Gamma$  iff any worlds that are  $\Gamma$ -indiscernible are  $\Delta$ -indiscernible, where two worlds count as  $\Delta$ -indiscernible iff they are  $A$ -indiscernible for every  $A \in \Delta$ , and where  $A$ -indiscernibility holds iff either  $A$  obtains in both worlds or it obtains in neither.<sup>7</sup>

The first principle that Leuenberger canvasses is the following:

**S**     If  $\Gamma$  grounds  $A$ , then  $A$  supervenes on  $\Gamma$ .

This principle is both clear and elegant, so it is worth pausing to see why it is in fact untenable. As Leuenberger correctly points out, the principle fails due to the phenomenon of multiple realizability. For if  $A$  is multiply realizable, there can be a world  $v$  where no member of  $\Gamma$  obtains and  $A$  is grounded in, say,  $\Delta$ , and a world  $u$  where no member of  $\Gamma$  obtains and  $A$  does not obtain either, since none of the possible realizers of  $A$  obtains. Thus,  $v$  and  $u$  will be two  $\Gamma$ -indiscernible worlds that are  $A$ -discernible.

To illustrate, consider the case of a disjunction grounded in one of its true disjuncts.<sup>8</sup> Suppose that  $B$  and  $C$  are two modally independent facts such that  $B$  obtains

---

<sup>7</sup> The kind of supervenience employed here is therefore that of global supervenience, since the relevant supervenience claims state that any *worlds* (rather than individuals) that are alike with respect to the obtaining of the facts in  $\Gamma$  are alike with respect to the obtaining of the facts in  $\Delta$ . The same is true of the supervenience claims that will appear later in the paper, after the notion of type used to formulate them has been introduced (see sections 3 and 4).

<sup>8</sup> This is but one of the examples that can be used to illustrate the phenomenon of multiple realizability. Although it is not obvious that disjunctions are grounded in their disjuncts, the choice of example is convenient, both because of its simplicity and also because of its capacity to expose the general features of multiple realizability. If it were to turn out that disjunctions are not grounded in their disjuncts, other cases of multiple realizability could be used instead. For

at @ (the actual world) and C does not. If disjunctive facts are grounded in their disjuncts, then B grounds  $B \vee C$  at @ (with B standing in for  $\Gamma$  and  $B \vee C$  for A). Moreover, since B and C are modally independent, at some world  $u$  only C obtains and grounds  $B \vee C$  (with C standing in for  $\Delta$ ), and at some other world  $v$  neither B nor C obtains.  $u$  and  $v$  are therefore  $\Gamma$ -indiscernible (since they are alike with respect to whether B obtains), but are discernible as to whether  $B \vee C$  obtains, thus providing a counterexample to **S**.

In order to solve this problem, Leuenberger considers a second principle:

**S@** If  $\Gamma$  grounds A, then A actuality-sensitively supervenes on  $\Gamma$ ,

where, in general, to say that A actuality-sensitively supervenes on  $\Gamma$  is to say that any world that is  $\Gamma$ -indiscernible from @ is A-indiscernible from it (Leuenberger 2014a: 232). As he points out, **S@** is equivalent to the principle that full grounds necessitate what they ground, i.e. that if  $\Gamma$  fully grounds A, then, necessarily, if all the members of  $\Gamma$  obtain, then A obtains.<sup>9</sup> As noted above (fn. 6), acceptance of this principle is known as ‘grounding necessitarianism’, and any counterexample to it would *ipso facto* be a counterexample to **S@**.<sup>1011</sup>

---

motivated concerns targeting the idea that disjunctions are always grounded in their disjuncts (in the context of truth-maker theory), see López de Sa (2009).

<sup>9</sup> This is because of the factivity of grounding, and because actuality-sensitive supervenience and fact-necessitation are co-extensive at the actual world. That is to say, for any fact A that obtains at @, and any class  $\Gamma$  of actually obtaining facts, A actuality-sensitively supervenes on  $\Gamma$  if and only if  $\Gamma$  necessitates A. Leuenberger (2014a: 232, fn 11) gives a proof of this result, which may be illustrated as follows. First (right to left), assume that  $\Gamma$  necessitates A, and let  $w$  be an arbitrary world that is  $\Gamma$ -indiscernible from @. Since all the members of  $\Gamma$  obtain at @, they also obtain at  $w$ . Furthermore, since  $\Gamma$  necessitates A, A obtains at  $w$ ; and since A obtains at @,  $w$  is A-indiscernible from @. Therefore, A actuality-sensitively supervenes on  $\Gamma$ . Conversely, assume that A actuality-sensitively supervenes on  $\Gamma$ , and consider any world  $w$  such that every fact in  $\Gamma$  obtains at  $w$ . Since each member of  $\Gamma$  actually obtains,  $w$  is  $\Gamma$ -indiscernible from @; and because A actuality-sensitively supervenes on  $\Gamma$ ,  $w$  must be A-indiscernible from @. Then, since A obtains at @, A obtains at  $w$ . Hence  $\Gamma$  necessitates A.

<sup>10</sup> Grounding necessitarianism has been attacked by grounding contingentists like Leuenberger (2014b) and Skiles (2015); see fn. 6.

<sup>11</sup> It may be worth noting that **S@** is compatible with worlds that duplicate the actual world in all (relevant) respects and where further facts also obtain. Because of this, **S@** is compatible with



The case of multiple realizability that we just saw (and any analogous case) fails to provide a counterexample to this principle, since neither  $u$  nor  $v$  is  $\Gamma$ -indiscernible from  $@$ . However, Leuenberger argues that **S@** fails nevertheless, due to so-called blocker scenarios. Blockers are defined as follows: a fact  $B$  is a blocker for  $A$  relative to  $\Gamma$  iff  $\Gamma$  grounds  $A$  in the actual world and there is a possible world where all the members of  $\Gamma$  obtain and  $B$ , or  $B$  together with some members of  $\Gamma$ , grounds  $\neg A$ .<sup>12</sup> To take a simple case, if we assume that general facts are grounded in particular facts, and that worlds can have variable domains, we may suppose that at the actual world  $\Gamma = \{[Fa_1], \dots, [Fa_n]\}$  grounds  $[\forall xFx]$ ,<sup>13</sup> and that some world  $w$  is  $\Gamma$ -indiscernible from  $@$ , but discernible from it as to whether  $[\forall xFx]$  obtains, since there exists also another object,  $c$ , which is not  $F$ .

In reply, one could simply deny that general facts are fully grounded in their instances. However, although I am not entirely unsympathetic to this line of response, there seem to be other blocker cases which cannot be so easily dismissed, suggesting that **S@** is in fact more problematic than one might have thought. Let me illustrate with two cases in point.

The first draws on debates concerning material constitution, and is adapted from a related discussion in a different context by Leuenberger (2008). Consider the particular piece of marble (with a maximally determinate shape  $s$ ) that in the actual world is spatio-temporally coincident with Michelangelo's David. Plausibly, since the piece of marble constitutes David, the fact that the piece of marble exists, together with the fact that it has shape  $s$ , ground the fact that David exists. Now consider a world  $w$  where the ( $s$ -shaped) piece of marble exists but is an interior part of a marble cylinder. Since David no longer exists at  $w$ , the 'mereological difference' between the cylinder and the piece acts as a blocker for the fact that David exists, thus yielding a counterexample to **S@**.

---

duplicates of the actual world that also contain, say, ectoplasm or angels. For ectoplasm and angel worlds, see Chalmers (1996) and Lewis (1983).

<sup>12</sup> In order to make room for the possibility that a plurality of facts, none of which is in  $\Gamma$ , collectively form a blocker, it would be better to generalize the definition of blockers as follows:  $\Delta$  is a blocker for  $A$  relative to  $\Gamma$  iff  $\Gamma$  grounds  $A$  in the actual world and there is a possible world where all the members of  $\Gamma$  obtain and  $\Delta$ , or  $\Delta$  together with some members of  $\Gamma$ , grounds  $\neg A$ . Since this variation will not play a role in the discussion that follows, I will continue to rely on Leuenberger's definition. (Thanks to Stephan Krämer for pointing this out).

<sup>13</sup> As usual,  $[p]$  stands for 'the fact that  $p$ '.

For a second kind of example, consider what we might call ‘physical pain preventers’. In particular, suppose that in the actual world there is some neural state *N* that Sally is in, and assume (as is plausible) that it fully grounds the fact that Sally is in pain state *M*. In world *u*, Sally is in the same neural state, but instantiates a further physical property, *P*, which adds to her overall physical profile without changing the rest, though with the effect of preventing the emergence of her pain state. It seems then that in *u*, the physical fact that Sally instantiates the pain-preventer *P* is a blocker for her pain state, hence falsifying **S@**.

Although these arguments are not intended to provide conclusive reasons to reject **S@**, their *prima facie* plausibility strongly motivates the quest for a principle of entailment that would be true *even if S@* is not. A project of this sort should be of special interest not only to those who are convinced by the foregoing arguments, but also to those who already have independent reasons for thinking that necessitarianism is false.<sup>14</sup> By allowing for failures of necessitation, the entailment principle defended here will articulate a ‘contingentist’ connection between grounding and modality.<sup>15</sup>

### 3. Leuenberger’s Type Supervenience

The problem of blockers raises the question of whether an interesting link between grounding and supervenience may be found that is able to avoid such apparent counterexamples. To see what a better principle might look like, let us return for a moment to the putative counterexample involving general and particular facts.

On the one hand, we witnessed the failure of the supervenience of a general fact on the particular facts that – by hypothesis – grounded it. At the same time, it seems very plausible that general facts supervene on particular facts, in the sense that no two worlds that are alike with respect to particular facts could differ with respect to general facts.

The crucial question then is what kind of supervenience claim would allow us to accommodate both of these facts. As Leuenberger (2014a: 234) insightfully notes, when we say that general facts supervene on particular facts, we appear to be making a claim

---

<sup>14</sup> These would include grounding contingentists (see fn. 6).

<sup>15</sup> Thanks to an anonymous referee for helping me to clarify the dialectic on this issue.

about *types* of facts, about which types supervene on which others. This suggests that one way of carving out our principle might proceed by introducing a suitable notion of type, and then using it to shape the right sort of supervenience claims that should figure in our principle. *Pace* Leuenberger, I think that this idea points in precisely the right direction, and my main concern here will be with showing that there *is* a way of implementing it which yields the desired principle.

To start, a type  $TT$  (the type of a given class of facts  $\Gamma$ ) should be modeled as a function that maps a world to a class of facts that obtain at that world, so that two worlds  $w$  and  $w'$  would count as  $TT$ -indiscernible just in case  $TT(w) = TT(w')$ . Beyond this initial characterization, Leuenberger's types obey two further constraints. The first is:

(i)  $TT(@) = \Gamma$ ,

i.e. the actual members of the type of  $\Gamma$  are all and only the members of  $\Gamma$ ; and the second is:

(ii) Membership to a type is essential to a fact,

meaning that if a fact  $A$  obtains in both  $w$  and  $w'$ , then  $A \in TT(w)$  iff  $A \in TT(w')$ .<sup>16</sup>

With the relevant notion of type thus defined, a new entailment principle is presented by Leuenberger:

**TS** If  $\Gamma$  grounds  $A$ , then  $A$  supervenes on  $TT$ ,

where, in accordance with the outlined treatment,  $TT$  is a function to which all the members of  $\Gamma$  belong, and to which no other actual fact belongs.<sup>17</sup> This move appears to solve the problem of blockers, for although in the scenario above concerning general and

---

<sup>16</sup> In what follows I will stay neutral on whether condition (ii) is in fact appropriate. Nothing I say here should turn on this issue.

<sup>17</sup> Although it would be preferable to have a type also for the supervenient entity, and thus to substitute  $T_A (= T_{\{A\}})$  for  $A$  in the consequent of **TS**, since the difference plays no role in the discussion that follows, I will stick to **TS** as presented in the main text.

particular facts,  $w$  is  $\Gamma$ -indiscernible from  $@$ ,  $w$  is not  $TT$ -indiscernible from  $@$ , since some fact that belongs to  $TT$  obtains at  $w$  but not at  $@$ . This is so because the fact that  $c$  is not  $F$  (which obtains at  $w$  but not at  $@$ ) is of the same type as the facts in  $\Gamma$ , since they are all particular facts. (The treatment of the other blocker scenarios set out in the last section would be structurally analogous.)

Having set forth **TS**, Leuenberger raises two powerful objections against it. The first, which he calls ‘the reference type problem’, is that **TS** is not well-defined: given that  $\Gamma$  is simply a class of actual facts, and given the constraints (and only those constraints) which were set on  $TT$ , one is not entitled to call  $TT$  ‘the type of  $\Gamma$ ’, since there are a great many functions that satisfy those constraints and hence qualify as types of that class.<sup>18</sup> An amendment that Leuenberger suggests might solve this problem consists in adding a third condition, which invokes the Lewisian notion of naturalness, and accordingly selects the most *natural* of the candidate functions.<sup>19</sup> Since this suggestion is not elaborated in detail, and it is not clear how it would work in practice, I will try to expand on it by offering an orienting gloss.<sup>20</sup> The following remarks, in combination with the criticism I develop later in section 4.2, are intended to contribute to an improved understanding of naturalness-based criteria of type selection.

In light of the above, it seems reasonable to take the working notion of type to be captured by the following definition (‘LT’ for ‘Leuenberger’s type’):

---

<sup>18</sup> He illustrates this by reasoning that for any alien fact (any fact that does not obtain at  $@$ )  $A$ , if  $TT$  meets conditions (i) and (ii) and is such that  $A \in TT(w)$ , so does  $TT'$  which is just like  $TT$  except for being such that  $A \notin TT'(w)$ .

<sup>19</sup> See Lewis (1983).

<sup>20</sup> Leuenberger (2014a: 236) mentions the fact that the kind of inegalitarianism about functions he presents as a possible solution to the reference type problem is analogous to Lewis’ naturalness-based inegalitarianism about properties, and gives the following orienting example: ‘Some of the functions that satisfy the constraints are more natural than others, and have a better claim to correspond to types. [L]et  $\Gamma_m$  be the class that consists of all actual mass facts – instantiations of some determinate of mass by some individual. Then some alien facts have a much better claim to belong to the type of  $\Gamma_m$  than others. For example, the fact that alien individual  $a$  has a mass of 1 gram has a better claim to be in  $T\Gamma_m(w)$  than certain other facts of world  $w$  – say, that  $a$  has unit positive charge, or that Vienna is the capital of the United States. Nor does this appear to be a consequence of me describing  $\Gamma_m$  as the class of actual mass facts. Rather, it seems to be a matter of the objective resemblance among facts.’

**LT** For any non-empty class of facts  $\Gamma$ ,  $TT$  is the type of  $\Gamma$  iff  $TT$  is the most natural function that satisfies (i) and (ii),

where a function counts as being more natural than any other iff, in analogy with (and by extension of) the Lewisian distinction between more and less natural properties, the members of its range are more objectively similar to each other than the members of the range of any other function, and the latter are more different from the former than the former are from one another.<sup>21</sup> In the next section, I will argue against **LT**, and against entailment principles that are based on it. Before that, it will be convenient to look at the other problems that afflict **TS**, since they independently motivate rejecting it in favor of a certain weaker principle, which will subsequently serve both as the focus of my arguments against **LT**, and as the prototype for my preferred revision.

Having sketched a possible solution to the reference type problem, Leuenberger goes on to argue that, even if we use **LT** to obtain a well-defined version of **TS**, this new entailment principle is subject to a counterexample involving what he calls ‘heterogeneous realizers’, namely possible realizers that belong to different types.<sup>22</sup> In its general form, the troubling scenario runs as follows:

Suppose that  $\Gamma$  actually grounds  $A$ , and that  $\Gamma'$  is a heterogeneous realizer of  $A$  in  $w$ . Then barring brute necessary connections, there is a world  $w'$  where neither  $A$  nor any of its potential realizers obtains. Then  $w$  and  $w'$  are  $TT$ -indiscernible – because no facts of the type of  $\Gamma$  obtain in either world, say – and yet  $A$ -discernible. (Leuenberger 2014a: 237)

Indeed, that actually grounded facts can be heterogeneously realized is a consequence of the more general point that a fact being actually grounded in facts of a given type does not imply that the fact in question is necessarily grounded in facts of that type. The (actually) grounded fact could be realized by facts of other kinds at other worlds (as in

---

<sup>21</sup> For other extensions of Lewisian naturalness beyond properties, see Sider (2011).

<sup>22</sup> As an example of a possible heterogeneous realizer, he considers the following: ‘[If] the fact that Hillary believes that  $p$  is actually grounded by physical facts, but is grounded by ectoplasmic facts in some other world, it has a heterogeneous realizer in that world’ (Leuenberger 2014a: 236-237).

the scenario above), or it may just be fundamental at them – not realized by anything at all, and obtaining independently of every other thing. Even less contentiously, there is the problem that **TS** implies that views that are intended to make merely contingent statements of ground would rule out possibilities with which they are widely regarded as compatible. To illustrate with the case of physicalism, **TS** implies that even a contingent version of that view would be committed to the impossibility of mental variation without physical variation, something that – as we have learned from the long series of attempts to define physicalism in purely modal terms – such a view should certainly allow.<sup>23</sup>

Given the nature of these problems, a natural solution is to reject **TS** in favor of a weaker principle:

**TS@** If  $\Gamma$  grounds  $A$ , then  $A$  actuality-sensitively supervenes on  $TT$ .

Although this principle avoids all the previous problems, it is not obviously exempt from criticism. Leuenberger argues against it, and although I don't find his objection especially compelling – for reasons that will now become apparent – I think that there are other and better reasons to reject it, as discussed later in section 4.

This time, Leuenberger's counterexample involves so-called 'heterogeneous blockers', namely blockers as previously defined,<sup>24</sup> but also belonging to a different type from that of the actual grounds (of the fact with respect to which they are blockers). If there were any blockers of this kind, then, barring brute necessities, there could be a world which is  $TT$ -indiscernible from @ and where  $\neg A$  holds, thus falsifying **TS@**.

The main problem with heterogeneous blockers is that their existence, unlike that of their homogeneous counterparts (such as those we saw at work in section 2), would

---

<sup>23</sup> Jackson (1998), for instance, views physicalist supervenience as restricted to those worlds that are (minimal) physical duplicates of the actual world, and regards mental variation without physical variation as possible. Analogous remarks apply to Lewis (1983). More generally, and relating this point to current frameworks that interpret physicalism as a grounding thesis (see, e.g. Schaffer 2017), it is widely accepted that a physicalist can claim that mental facts are actually grounded in physical facts and still maintain that there are worlds that are physically but not mentally alike, precisely because they may regard the truth of physicalism as merely contingent.

<sup>24</sup> Recall that  $B$  is a blocker for  $A$  relative to  $\Gamma$  iff  $\Gamma$  grounds  $A$  in the actual world and there is a possible world where all the members of  $\Gamma$  obtain and  $B$ , or  $B$  together with some members of  $\Gamma$ , grounds  $\neg A$ .

undermine the truth of the very grounding claims they presuppose.<sup>25</sup> It is clear from how they have been characterized that heterogeneous blockers cannot be found in cases like the one concerning the dependence of the general on the particular. The case that Leuenberger proposes is the following:

Could there be heterogeneous blockers? Here is a potential example:  $\Gamma_P$  consists of the actual physical facts, and  $A_R$  is a phenomenal fact – that David has an experience of a particular shade of phenomenal redness, say. A physicalist will wish to say that  $\Gamma_P$  grounds  $A_R$ . But perhaps the instantiation of a non-physical alien fundamental property, which we might call ‘chromoplasm’, would prevent David’s physical duplicate in another world from having that experience. Together with  $\Gamma_P$ , that fact B would ground the negation of A. If physicalists are right, and if this scenario is possible, the instantiation of chromoplasm is a blocker in the technical sense defined earlier. Clearly, though, B as a non-physical fundamental fact, is not of the same type as  $\Gamma$ , so that it is a heterogeneous blocker. (Leuenberger 2014a: 238)<sup>26</sup>

This passage nicely illustrates that the following three claims are mutually inconsistent: the specific physicalist claim that  $\Gamma_P$  grounds  $A_R$ , the relevant instance of **TS@**, and the claim that there is chromoplasm. But crucially, Leuenberger also assumes that the physicalist claim in question is compatible with the possibility of chromoplasm, and thus infers that **TS@** is false.

Now, as Leuenberger is aware,<sup>27</sup> given that this assumption is very controversial, his case against **TS@** is not very strong dialectically. For notice that chromoplasm

---

<sup>25</sup> To be clear, I use ‘homogeneous blockers’ to refer to blockers that belong to the same type as that to which the actual grounds (of the fact with respect to which they are blockers) belong. So the blockers that provided counterexamples to **S@** in section 2 qualify as homogeneous on the current usage.

<sup>26</sup> To be precise, given a suitable constraint on grounding to the effect that nothing can ground a fact unless it is relevant for determining it, the claim that the class containing all the physical facts grounds  $A_R$  is most likely to be false. However, since nothing here hinges on this, for the sake of simplicity I will henceforth ignore this complexity.

<sup>27</sup> He concedes: ‘the claim that heterogeneous blockers are possible is, I take it, the most controversial of the possibility claims that have been seen to make trouble for putative entailment

scenarios are different from scenarios where a physical duplicate of @ *also* contains, say, ectoplasm or angels,<sup>28</sup> and are considerably more problematic than scenarios involving *homogeneous* blockers such as those we dealt with earlier, in connection with the counterexamples to necessitarianism – i.e. *physical* pain-preventers and *particular* blockers of universal generalizations.

Compared with the alternative scenarios involving ectoplasm or angels, the distinctive aspect of the chromoplasm scenario is that it does not involve a world that has all the features of the actual world, but also has further (purely epiphenomenal, or angelic) mental items in it – this much would be uncontroversially compatible with the claim that  $\Gamma_P$  grounds  $A_R$ .<sup>29</sup> Rather, the chromoplasm scenario concerns a world where some actual mental item *fails* to exist.

Now, as we saw in connection with homogeneous blockers, it is plausible that not even this is in itself incompatible with the claim that the physical facts ground  $A_R$ , provided that there is some *physical* difference between the two worlds to explain why this is so. In other words, the problem is not (merely) that  $A_R$  fails to be necessitated by  $\Gamma_P$ , since as long as one can blame a physical difference for the absence of  $A_R$ , the absence of  $A_R$  in a  $\Gamma_P$ -indiscernible world is consistent with the dependence of the mental on *the physical*, and no tension with the claim that every mental fact is grounded in some physical facts emerges.

The contrast with homogeneous blockers is clear. If a difference between two worlds with respect to the obtaining of a universal fact is explained by reference to further *particular* facts, that difference is compatible with the dependence of the general on the particular. Likewise, if a mental difference is explained in terms of further *physical* facts, that difference is compatible with the dependence of the mental on the physical. By contrast, since in the envisaged situation no such explanation would be available, it is the very dependence of the mental on the physical that is jeopardized by the alleged possibility of chromoplasm.

---

principles between grounding and supervenience' (2014a: 238). In a footnote, he cites Hawthorne (2002) as arguing that blockers are incompatible with physicalism, although Leueneberger himself defended the compatibility between the two in his (2008).

<sup>28</sup> For ectoplasm and angel worlds, see fn. 12.

<sup>29</sup> It is standard in the literature on physicalism to regard ectoplasm and angel worlds as compatible with physicalism (see fn. 24).



For an especially vivid presentation of this worry, notice that heterogeneous blockers can be used to construct zombie-like scenarios, whereby a world that is physically indiscernible from ours contains an individual, Davidz, whom chromoplasm has entirely deprived of consciousness. Although the possibility of Davidz may not threaten physicalism as seriously as Chalmers' zombies, it seems dangerous enough.<sup>30</sup> So it is dubious that the possibility of (things like) chromoplasm would falsify **TS@**. Rather, and more plausibly, it is the fact that **TS@** – or something analogous to it – holds which helps to explain why it seems so clear that if chromoplasm were possible, the claim that every mental fact is grounded in physical facts would then be false.

## 4. New Type Supervenience

Although we have seen that heterogeneous blockers do not provide compelling reasons to reject **TS@**, I think that there are more serious problems with it. These problems concern the way types are characterized by **LT**, and so affect any entailment principle based on that definition.

### 4.1 The Problem of Under-Inclusion

One condition that types have to obey according to **LT** is that the function  $TT$  that models the type of  $\Gamma$  must be such that  $TT(@) = \Gamma$ . The problem with this condition is that in many cases it allows too little into the function's range for that function to adequately capture the type of  $\Gamma$ . This is so because a collection of facts of a certain type may fully ground another fact, even though they are not the *only* facts that belong to that type.

To see this, consider for instance the following claim: the fact that Sally has physical property  $P$  grounds the fact that she has mental property  $M$ . Now, it is natural to think that the type to which the former fact belongs, which should therefore be relevant in deriving the supervenience implication of this grounding claim, is the type *physical* – i.e. the function that for any given world returns the class of physical facts which obtain

---

<sup>30</sup> Chalmers' (1996) zombies are, like Davidz, physical duplicates that lack consciousness, but, unlike Davidz, this is not due to blockers of sorts.

at that world. But if we impose (i) as a condition on types, this cannot be the case, since the world at which the fact that Sally has physical property P obtains, i.e. the actual world, is such that other physical facts obtain there too. So (i) prevents a function that intuitively qualifies as the type of a certain class from being its type, and this gives us reason to reject it.<sup>31</sup>

More generally, one might expect to find cases of this kind in connection with statements of ground that, while reporting dependence links that hold between particular facts (e.g. between particular physical and mental facts), are plausibly specific instances of general grounding patterns involving facts of the relevant types.

The natural and easy fix to this problem is to replace (i) with a more reasonable condition:

(i\*) A function  $TT$  models the type of  $\Gamma$  only if  $\Gamma \subseteq TT(@)$ .

Thus we ensure that all members of  $\Gamma$  are members of  $TT(@)$ , without requiring them to be its only members.

## 4.2 The Problem of (relatively) Unnatural Types

According to **LT**, a function counts as the type of a class of facts just in case it is the *most natural* function to which all and only its members belong. We have just seen that the word ‘only’ should be removed from this characterization. The naturalness constraint, on the other hand, is meant to be a criterion of type choice for selecting a particular function from the multiplicity of candidates available given the reference type problem. To adjudicate between competing functions, it selects among them the one that assigns to worlds the classes of facts whose members are more objectively similar to each other than those belonging to any other function. For instance, if  $\Gamma$  includes the fact that  $a$  is green and the fact that  $b$  is green, it would rule out the *grue* function in favor of the green

---

<sup>31</sup> Notice that even if one takes P to be a property of a more specific type, as long as it is not a property that only Sally instantiates (at @), and as long as not all other instantiations of it figure in the grounding base for the fact that Sally has M, a parallel case can be constructed accordingly which would provide a counterexample to the condition on types under consideration. Thanks to an anonymous referee for prompting me to clarify this.

function, since the members of the former (at a world) differ in all the respects in which the members of the latter do, besides differing as to whether they involve the property of being green or rather that of being blue.

However, I think that this condition is problematic, for it fails to assign certain classes the right type – the type that is intended by the proponent of the initial grounding claim, and that should figure in the supervenience base of the implied statement. For consider again an instance of the view that general facts are grounded in particular ones; suppose, for instance, that at a given world  $w$  there are only two individuals,  $a$  and  $b$ , and that each of them is  $F$ , where  $F$  is a fairly natural property – say, a chemical property of some sort. Given the initial assumption that general facts are grounded in their instances, someone may truly claim that the fact that  $a$  is  $F$  and the fact that  $b$  is  $F$  collectively ground the fact that everything is  $F$  (at  $w$ ). At the same time, as far as (i\*) is concerned (and also (i) and (ii), for that matter),<sup>32</sup> the type of the class  $\Delta$  (i.e. the class whose members are the two particular facts at issue) could be modeled either by the function  $T\Delta c$  that assigns to every world the class of chemical facts that obtain there, or by the function  $T\Delta p$  which assigns to every world the class of its particular facts. Moreover, it is plausible that the class of all possible particular facts is internally more miscellaneous and gerrymandered than the class of all possible chemical facts, since the things that can figure as constituents of particular facts differ far more from each other than those that feature in chemical facts. So, it would follow from the naturalness criterion that if at  $w$   $\Delta$  grounds the fact that everything is  $F$ , then this fact actuality-sensitively supervenes on  $T\Delta c$ , meaning that any world that is chemically indiscernible from  $w$  should be just like it with respect to whether everything is  $F$ . But this should not be so, for at least two reasons.

First, the would-be defender of the initial grounding claim clearly did not intend to say or imply anything to do with chemistry. Rather she made a claim about the dependence of the general on the particular, and it would greatly distort her view if we were to use some purported criterion of type choice to derive from it a claim about what chemically duplicate worlds have in common.

---

<sup>32</sup> Recall that (i) says that  $TT$  is the type of  $\Gamma$  only if  $TT(@) = \Gamma$  (the actual members of the type of  $\Gamma$  are all and only the members of  $\Gamma$ ), and (ii) says that membership to a type is essential to a fact. In contrast with (i), (i\*) say that a function  $TT$  is the type of  $\Gamma$  only if  $\Gamma \subseteq TT(@)$ .

Second, using such a criterion would render the initial grounding claim false, since – allowing worlds with varying domains, and barring brute necessities – there are worlds that are chemically indiscernible from  $w$  (i.e. worlds such that every chemical fact that obtains at them also obtains at  $w$ , and *vice versa*), but which also contain some extra entity, which thus fails to be F. This result is doubly problematic, as the initial claim was an independently plausible one, and besides, even if the initial claim were false, its falsity should be entirely independent of the failure of the supervenience claim at issue. So there are good reasons to think that naturalness cannot provide an adequate criterion of type choice.

How, then, should it be replaced? Given the great variety of subject matters of specific grounding claims, it seems unlikely that we could find a mechanical, context-invariant way of selecting the appropriate type in every single case. At the same time, it does seem reasonable that, given appropriate contextual information about the grounding claim whose supervenience implication is at issue in a given case, on reflection one may be in a position to identify the type that should figure in the relevant supervenience claim. If, say, one were to claim that a certain collection of particular facts grounds a given general fact, it would be natural to take the operative type to be the function that maps worlds to classes of particular facts, and so the claim in question should be taken to imply that any ‘particular duplicate’ of the base world should be indiscernible from it with respect to whether the general fact obtains.

Likewise, if one were to claim that Sally’s physical state P grounds her mental state M at  $w$ , it would be natural to take this claim to imply that any world where the same physical facts obtain as in  $w$  should be indiscernible from  $w$  with respect to whether Sally is in mental state M.

The question of how to identify the relevant type may at times be tricky or complex. But this shows neither that the question will be unsolvable, nor that this difficulty should bear directly on the formulation of a suitable entailment principle. For the nature of our problem, together with the way in which we saw that it might be solved, suggest that the question of which function counts as a type (in a given case) should not be settled on formal grounds by a general entailment principle connecting grounding to supervenience. Rather, we should frame the entailment principle in such a way that it

leaves open how that question should be answered, allowing it to be tackled separately at a later stage of inquiry.

By deploying a notion of type that makes the content of (the consequent of an instance of) our entailment schema context-dependent, we would leave the matter open in this way, thus achieving the needed flexibility. This, in turn, would relieve our principle from the (misplaced) obligation of assigning determinate types to arbitrary classes, and thereby prevent it from dictating solutions that would lead to the wrong supervenience implications. Accordingly, the most that seems appropriate to require for our purposes is that a function may qualify as the type of a given class of facts  $\Gamma$  only if it is the *relevant* function to which all the members of  $\Gamma$  belong. Thus, and in keeping with the preceding line of argument, what counts as a class's type in any given situation will be a potentially non-trivial, context-sensitive matter, to be settled case by case on the basis of an adequate interpretation of the grounding claim at issue.

### 4.3 The Problem of Heterogeneous Grounding Bases

The characterization of types that results from the preceding discussion is one according to which

**TC** For any non-empty class of facts  $\Gamma$ ,  $TT$  is the type of  $\Gamma$  iff  $TT$  is the relevant function to which all the members of  $\Gamma$  belong.

Yet even this account, as I will now argue, falls short in one important respect. In broad terms, the problem is that it fails to do justice to the fact that for some grounding claims there is no unique relevant function that constitutes *the type* of the class at issue. This is so because in some cases the grounding base (i.e. the class of grounds) involves facts that belong to different relevant types. For there can be – indeed, there are – heterogeneous grounding bases, and these are best modeled by distinct types if they are to respect the content of the initial grounding claim, and if they are to track the supervenience base that is needed for drawing its genuine modal commitments.

To illustrate: it would not be illegitimate to claim that, say, facts about cities are grounded in facts about geography and sociology, or that color properties depend on

dispositions to cause color experiences together with non-dispositional physical properties, or that social facts are grounded in biological and spiritual ones, and so on. So why suppose that every grounding base includes only facts of the same type?

For an actual and philosophically interesting example of heterogeneity, consider the case of anti-positivism in the philosophy of law.<sup>33</sup> This is the view that every legal fact (of any legal system, at any given time) is fully grounded in a collection of social and (non-social) moral facts taken together.<sup>34</sup> Simplifying in many respects, the antipositivist might explain the obtaining of the legal fact that killing is legally forbidden in system *s* at a given time by appealing to the fact that the law-makers of *s* enacted a text the content of which is that killing is forbidden, together with the moral fact that the law-makers of *s* possessed legitimate authority. Details aside, what is important here is simply that in constructing the grounding base that figures in claims such as this, one is forced to include grounds that belong to different relevant types, since it would neither be true that all the facts in the base are of the type *social*, nor that they are all of the type *moral*, although both of these types are clearly relevant. Indeed, this is reflected in the fact that if there were two socially indiscernible worlds that nevertheless differed legally, or legally different but morally indiscernible worlds, no one in the debate on anti-positivism would consider the view to thus be falsified.

The amendment I now propose to deal with this problem is to allow the supervenience relation to link the grounded fact to a plurality of types. By allowing the supervenience base to include different functions, the amended principle is able to accommodate grounding statements that involve heterogeneous bases, as it should. More precisely, the functions that count as types *vis-à-vis* a given class of facts  $\Gamma$  are all and only those that are relevant with respect to at least one member of  $\Gamma$ . In line with this, we should replace **TS@** with the following:

**GS** If  $\Gamma$  grounds A, then A actuality-sensitively supervenes on  $TT_1, \dots, TT_n$ ,

---

<sup>33</sup> Contemporary prominent advocates of this view include Dworkin (1986) and Greenberg (2004). For a ground-theoretic characterization of the debate between positivism and anti-positivism, see Rosen (2010).

<sup>34</sup> I am using the term ‘moral’ broadly so as to encompass also facts about political morality.

where two worlds  $w$  and  $w'$  count as  $TT_1, \dots, TT_n$ -indiscernible just in case  $TT_1(w) = TT_1(w'), \dots, TT_n(w) = TT_n(w')$ . The functions  $TT_1, \dots, TT_n$  qualify as the types of  $\Gamma$  in virtue of being the relevant types to which the members of  $\Gamma$  belong, meaning that each of them is the relevant type for some member of  $\Gamma$ , and that every member of  $\Gamma$  belongs to some of them.

One might resist the need to appeal to a plurality of types in such cases on the grounds that whenever a grounding claim involves a heterogeneous base, the plurality in question is dispensable in favor of the ‘disjunctive type’ whose disjuncts are the members of the plurality.<sup>35</sup> For instance, suppose that  $\Gamma$  grounds  $A$ , with  $\Gamma = \{B, C\}$ , and assume  $B$  and  $C$  to belong to distinct relevant types. According to the objector, in order to accommodate the heterogeneity of the grounding base we could shape the supervenience base of the implied statement by deploying the type  $T_{BVC}$ . Accordingly, a world  $w$  would be  $T_{BVC}$ -indiscernible from  $@$  just in case either  $TB(@) = TB(w)$  or  $TC(@) = TC(w)$ , and the implied supervenience claim would be to the effect that any world  $T_{BVC}$ -indiscernible from  $@$  should be  $A$ -indiscernible from it.

This move, however, fails to bring about the desired result, since it makes the indiscernibility requirement too weak and hence too easily satisfied. For consider again the case of anti-positivism. Given that on this view social and moral facts *together* ground the legal facts, we want the supervenience claim to which it is committed to be such that any world that is socially *and* morally indiscernible from the actual world is legally indiscernible from it. And for this to be the case, it is only the worlds that agree with  $@$  on the obtaining of all the facts in  $U$ , where  $U$  is the union of the set of social facts and the set of moral facts, which have to agree with  $@$  as to which legal facts obtain. So anti-positivism could be true even if the type *legal* failed to supervene on the type *social-or-moral*. *Mutatis mutandis* for other cases involving heterogeneous grounding bases.

I conclude that my proposed revision to the notion of type (and only this proposal) solves the problem posed by heterogeneous grounding bases. Since the kind of supervenience claim at work in **GS** solves all the problems we have encountered, it therefore yields a better principle of entailment from grounding to supervenience.

---

<sup>35</sup> Thanks to Stephan Leuenberger and Dan López de Sa for raising and discussing this objection.

## 5. Conclusion

In this paper, I have argued in favor of a novel principle of entailment from grounding statements to corresponding supervenience claims. My argument has proceeded largely via a negative path, through a series of objections and amendments to principles previously formulated by Leuenberger (2014a). By placing a supervenience-based constraint on grounding, my novel principle manages to establish a substantive, non-trivial link between grounding and modality, weaker than the necessitation of the grounded by its grounds. It should therefore be especially appealing to those who, while rejecting necessitarianism, had not given up on the idea that grounding statements should have systematic and substantive modal consequences. The principle deploys a supervenience relation that connects to a distinctive notion of type, in a way that deals with all the problems that have been raised so far. This makes it a better candidate link between grounding and supervenience than its predecessors, or so I have argued.

The wider picture underwritten by the principle is something like the following. Some facts depend on others, are grounded by them. When that is so, the grounded fact cannot simply float free of its grounds. There should be some pattern whereby the grounded is modally sensitive to the obtaining of facts of the same types to which its actual grounds belong. If *thus-and-so* are the types of the facts that actually ground it, then worlds that agree with the actual world on the distribution of facts of those types should agree with it on the obtaining of the grounded fact.

A restricted supervenience pattern thus holds, which in fact seems to be what we were after when we first tried to capture the idea that some facts metaphysically depend on others. Although we know that the supervenience pattern is not itself identical with the holding of the dependence relation, we should be able to provide an explanation of why such supervenience patterns in fact hold. As Jaegwon Kim once told us:

[S]upervenience itself is not an explanatory relation. It is not a ‘deep’ metaphysical relation; rather, it is a ‘surface’ relation that reports a pattern of property covariation, suggesting the presence of *an interesting dependency relation that might explain it*. (1993: 167, emphasis added)



If the entailment principle defended here is correct, we now know of some important and philosophically interesting supervenience claims what explains them and why.

## References

- Audi, P. (2012) 'Grounding: Toward a Theory of the In-Virtue-Of Relation', *The Journal of Philosophy*, 109: 685-711.
- Chalmers, D.J. (1996) *The Conscious Mind: In Search of a Fundamental Theory*, Oxford University Press.
- Chalmers, D. J., Manley, D. and Wasserman, R. (eds.) (2009), *Metametaphysics: New Essays on the Foundations of Ontology*, Oxford: Oxford University Press.
- Correia, F. (2005) *Existential Dependence and Cognate Notions*, Philosophia Verlag.
- Correia, F. and Schnieder, B. (eds.) (2012), *Metaphysical Grounding: Understanding the Structure of Reality*, Cambridge: Cambridge University Press.
- Dasgupta, S. (2014) 'The Possibility of Physicalism', *The Journal of Philosophy*, 111: 557-592.
- deRosset, L. (2013) 'Grounding explanations', *Philosophers' Imprint*, 13: 1–26.
- Dworkin, R. (1986) *Law's Empire*, Harvard University Press.
- Fine, K. (1994) 'Essence and Modality', *Philosophical Perspectives*, 8: 1-16.
- (2001) 'The Question of Realism', *Philosophers' Imprint*, 1: 1-30.
- Greenberg, M. (2004) 'How Facts Make Law', *Legal Theory*, 10: 157-198.
- Hale, B. and Hoffmann, A. (eds.) (2010) *Modality: Metaphysics, Logic, and Epistemology*, Oxford University Press.
- Hawthorne, J. (2002) 'Blocking Definitions of Materialism', *Philosophical Studies*, 110: 103-113.
- Jackson, F. (1998) *From Metaphysics to Ethics: A Defence of Conceptual Analysis*, Oxford University Press.
- Kim, J. (1993) *Supervenience and Mind: Selected Philosophical Essays*, Cambridge: Cambridge University Press.
- Leuenberger, S. (2008) 'Ceteris Absentibus Physicalism', in Zimmerman (ed.) (2008), 145-170.
- (2014a) 'From Grounding to Supervenience?', *Erkenntnis*, 79: 227-240.
- (2014b) 'Grounding and Necessity', *Inquiry*, 57: 151-174.

- Lewis, D. (1983) 'New Work for a Theory of Universals', *Australasian Journal of Philosophy*, 61: 343-377.
- López de Sa, D. (2009) 'Disjunctions, Conjunctions, and their Truthmakers', *Mind*, 118: 417–25.
- Loss, R. (2017) 'Grounding, Contingency and Transitivity', *Ratio*, 30: 1-14.
- Manley, D., Chalmers, D.J. and Wasserman, R. (eds.) (2009), *Metametaphysics: New Essays on the Foundations of Ontology*, Oxford University Press.
- Rosen, G. (2010) 'Metaphysical Dependence: Grounding and Reduction', in Hale et al. (eds.) (2010), 109-36.
- Schaffer, J. (2009) 'On What Grounds What', in Chalmers et al. (eds.) (2009), 347-383.
- (2016) 'Grounding in the Image of Causation', *Philosophical Studies*, 173: 49-100.
- (2017) 'The Ground between the Gaps', *Philosophers' Imprint*, 17: 1–26.
- Sider, T. (2011) *Writing the Book of the World*, Oxford University Press.
- Skiles, A. (2015) 'Against Grounding Necessitarianism', *Erkenntnis*, 80: 717-751.
- Trogon, K. (2013) 'Grounding: Necessary or Contingent?', *Pacific Philosophical Quarterly*, 94: 465-485.
- Zimmerman, D. W. (ed.) (2008) *Oxford Studies in Metaphysics*, Vol. 4, Oxford University Press.

# Law-Determination as Grounding: A Common Grounding Framework for Jurisprudence

Samuele Chilovi (University of Barcelona) and George Pavlakos (University of Glasgow)

Article Published in *Legal Theory*, Volume 25, Issue 1, pp. 53–76, 2019

**Abstract:** Law being a derivative feature of reality, it exists in virtue of more fundamental things, upon which it depends. This raises the question of what is the relation of dependence that holds between law and its more basic determinants. The primary aim of this paper is to argue that grounding is that relation. We first make a positive case for this claim, and then we defend it from the potential objection that the relevant relation is rather rational determination (Greenberg 2004). Against this challenge, we argue that the apparent objection is really no objection, for on its best understanding, rational determination turns out to actually be grounding. Finally, we clarify the framework for theories on law-determination that results from embracing our view; by way of illustration, we offer a ground-theoretic interpretation of Hartian positivism, and show how it can defuse an influential challenge to simple positivist accounts of law.

## 1. Introduction

In the metaphysical sense of ‘fundamental’, law is clearly not a fundamental feature of reality. If, say, it is the law in the U.S. that one ought to drive on the right-hand side of the road, or that one may freely walk on hills at night, this must be so *in virtue of* other, more fundamental things. Law being derivative, it owes its existence to more basic

entities, it *depends on* them. Correlatively, when someone wants to find out what the law is, an adequate way of doing so would involve precisely appealing to those things that the law is determined by. For we do not have direct epistemic access to the law, and when we treat something as a reason for regarding a hypothesis on the existing law as correct, we do so because we think that it is partly responsible for making the law as it in fact is.

Although this much is fairly uncontroversial, two interesting questions naturally arise if law is derivative in this way. What are the kinds of things that are responsible for determining it? And what is the nature of the dependence relation that ties it to its determinants?

The first question is familiar from the long-standing debate between positivist and anti-positivist theories about the nature of law, as the key dividing line between them is indeed whether the legal determinants are wholly social, or partly moral, in kind.

The second question, by contrast, has received considerably less attention in the literature. Though a number of philosophers have recently embraced the view that the relation of law-determination is metaphysical grounding,<sup>1</sup> this choice has seldom been backed by any explicit argument in its favour.<sup>2</sup> Furthermore, the author who has most closely focused on the nature of law-determination – Mark Greenberg, in his ‘How facts make law’ (2004) – has forcefully defended a view that is not clearly compatible with the idea that law-determination *really is* what metaphysicians now call ‘grounding’. The view in question, of course, is that law-determination is what he called ‘rational determination’.

Perhaps even more interestingly, Greenberg (2004) also argued that because the nature of law-determination is a certain way, legal positivism is open to objections from which its anti-positivist rivals are immune. Greenberg’s claims are both interesting on their own and possibly interwoven. They deserve serious consideration, and in this paper we will take them up in turn.

---

<sup>1</sup> See, for instance, Gizbert-Studnicki (2016), Plunkett (2012), Rosen (2010), and Stavropoulos (2014).

<sup>2</sup> An exception is Gizbert-Studnicki (2016), who compares grounding favourably to supervenience and reduction with respect to the ability to play the role of law-determination, and thereby provides indirect support in its favour (see also fn. 13 on this). Relatedly, Rosen (2010) gives an argument against viewing legal positivism and anti-positivism as making supervenience claims, and in favour of characterizing them in ground-theoretic terms.

In section 2, we argue that grounding is the relation of non-causal dependence that holds between law and its determinants – whatever these turn out to be. Section 3 defends this claim from the potentially rival view that law-determination is rational determination instead. The way we do so is by arguing that, on its best understanding, rational determination turns out to actually be grounding. Interestingly, as we shall see, reaching this conclusion requires taking rational determination to have a wider application than Greenberg took it to have. We then conclude this section by defending our stance against the rival conception of rational determination offered by Plunkett (2012). Finally, in section 4 we elucidate the grounding framework for theories about the nature of law previously developed, by providing a ground-theoretic interpretation of Hartian positivism. While doing so, we pursue a twofold aim: to better explicate our framework by looking at one specific application, and to use it for evaluating Greenberg’s (2004) contention that law being rationally determined poses a special problem for legal positivism. In this respect, we will see how certain ground-theoretic notions bear on the way Hartian positivists might be able to answer Greenberg’s powerful and influential challenge.

## 2. Law-Determination and Grounding

In the opening pages of *Law’s Empire*, Ronald Dworkin made the following claim:

Everyone thinks that propositions of law are true or false (or neither) in virtue of other, more familiar kinds of propositions on which these propositions of law are (as we might put it) parasitic. These more familiar propositions furnish what I shall call the ‘grounds’ of law. (1986: 4)

As controversial as this passage may be in certain (plausibly unnoticed and unwanted) respects,<sup>3</sup> there is little doubt that Dworkin is here drawing our attention to a central and

---

<sup>3</sup> In particular, Dworkin seems to assume that even *false* propositions require some things – falsemakers, to use Lewis’s (2001) phrase – to make them false, and that true propositions are made true by other *propositions*.

hardly deniable fact about law. Law is not a fundamental feature of reality, and so it can only be what it is in virtue of other, more basic things.<sup>4</sup> Though Dworkin was writing before contemporary work on grounding emerged, the idea that grounding might be the dependence relation holding between law and its determinants is of interest on its own.<sup>5</sup> The main goal of this paper is to explore and defend this view.

Let us first introduce some key notions. Start with a collection of legal facts, that is, facts about the content of the law in a given legal system at a given time. As many legal facts obtain at the actual world, and given that they are not fundamental, one may ask what it is in virtue of which they obtain. Although answers to this question can take a variety of different forms, a traditional and philosophically interesting dividing line has us concerned with the question whether the determinants of the legal facts are wholly social, or rather partly moral, in kind.

Exclusive positivists characteristically claim that social facts are always among the legal determinants, whereas moral facts never are. By contrast, inclusive positivists maintain that moral facts may or may not play a role in determining the law, and anti-positivists contend that they necessarily play such a role. Though all agree that social, descriptive facts are among the things in virtue of which the legal facts are as they are, there remains a disagreement as to whether moral facts also qualify as determinants – and if they do, to what extent.

For present purposes, the important point is that all the parties to the dispute are making claims about the determination base for law. Thus, if we are to fully grasp what these views are about, we need to know what the dependence relation that they invoke, and that seems so central to their enterprise, is.

---

<sup>4</sup> A similar line of thought was expressed, even earlier than Dworkin did, by von Wright (1983). He writes (1983: 68): ‘One important type of answer to the question: ‘Why ought (may, must not) this or that be done?’ is the following: *there is a norm* to the effect that this thing ought (may, must not) be done. The existence of the norm is here the foundation or truth-ground of the normative statement’. Thanks to José Juan Moreso for pointing our attention to this passage.

<sup>5</sup> For some of the early literature about grounding, see Correia (2005), Fine (2001; 2012a; 2012b), Rosen (2010), Schaffer (2009), and the essays contained in Correia and Schnieder (2012).

## 2.1 Law-Determination as Grounding

Let us neutrally call ‘law-determination’ the relation – whichever it is – that holds between law and the more basic things that metaphysically determine it. Given this terminological stipulation, our question can then be raised by asking what sort of relation law-determination is.

A preliminary point is that it is important not to confuse it with causation. Uncontroversially, ordinary empirical facts about the behaviour, mental states, and attitudes of the lawmakers are among the metaphysical determinants of the law. For instance, part of what makes it the case that according to US law smoking in public buildings is forbidden is that the US lawmakers performed certain actions and expressed certain attitudes in certain institutional contexts. These actions, in turn, stand in certain causal relations with past and future events, so that one may also look for the casual story that led to their actual occurrence and investigate their effects. But however interesting these causal links may be, they are not the ones that interest us when we ask about the relation between the *legal facts* on the one hand, and facts about officials’ actions, utterances and mental states on the other.

One reason for this is that what we are after is not the *diachronic* link between law-making actions and their causal effects, but rather the *synchronic* link between facts about law-making actions (and the like) and the legal facts. Moreover, unlike causation the target notion of determination is of a *constitutive* kind, and ought to ensure that the determinants are more basic, in a metaphysical sense, than what they determine. Relatedly, notice that when lawmakers write down legal texts or raise their hands in parliamentary rooms, it is not as if the raisings of their hands or their writing texts could cause legal facts to obtain in the way that raising one’s hands causes the surrounding air to move. To regard causation as the connecting link between (things of the sort of) legal facts and the underlying social practices seems to involve a category mistake of sorts.

If law-determination is not causation, then what is it? Starting with the work of Fine (2001; 2012a; 2012b), Rosen (2010), Schaffer (2009) and others, in recent years there has been a surge of interest in a constitutive or metaphysical type of determination called ‘grounding’. Theories in various areas of philosophy put forward determination claims,



whereby certain entities are said to be dependent on, or determined by, some others. For instance, physicalists in the philosophy of mind hold that mental properties and facts are determined by, and are nothing over and above, physical ones; likewise, naturalists in metaethics typically maintain that moral properties depend upon natural ones.

While for some time attempts were made to define the relevant notion of dependence in terms of well-understood modal notions such as supervenience and necessitation, these attempts ultimately met with unavoidable difficulties. In particular, Fine (1994) convincingly argued that neither supervenience nor necessitation is in general sufficient for dependence. To use one of his examples, although the fact that Socrates exists supervenes on, and is necessitated by, the fact that singleton Socrates exists, the latter fails to determine the former in any intuitive sense.

Taking the failure of modal definitions of dependence at face value, several metaphysicians introduced a primitive notion of grounding with a view to formally modelling and better capturing metaphysical dependence. This, in turn, led various authors to formulate ground-theoretic versions of dependence views in various areas of philosophy (e.g. physicalism and naturalism), viewing them as both more adequate and potentially illuminating.<sup>6</sup>

The assumptions about grounding that we make here are quite standard, and some of them are made for the sake of definiteness, since they will not play an essential role in the present dialectic.<sup>7</sup> Specifically, we take grounding to be a many-one relation which is synchronic, transitive, asymmetric (hence irreflexive), non-monotonic, and that holds (at least) between facts.<sup>89</sup> Most importantly for our purposes, grounding is commonly

---

<sup>6</sup> See Dasgupta (2014a: 557), Rosen (2010: 111–112) and Schaffer (2009: 364; 2017) for grounding-based formulations of physicalism, and Rosen (2017a) for a ground-theoretic formulation of meta-ethical naturalism.

<sup>7</sup> In particular, no role will be played in our argument by the transitivity of grounding.

<sup>8</sup> Some authors have argued in favor of pluralism about grounding, the view that there is not a unique notion of grounding but rather a plurality of distinct notions, which may be more or less unified or gerrymandered. See Fine (2012a) for a moderate pluralist view and Wilson (2014) for an extreme pluralist view. Here, we shall assume the standard unitary or monist view that there is but one kind of (metaphysical) grounding. For a defense of monism, see Berker (2018).

<sup>9</sup> Although standard regimentations of grounding ascribe to it those structural features, they have not gone unchallenged. In particular, see Dasgupta (2014b) for an argument that grounding can be irreducibly many-many, Fine (2012a) for the view that grounding is best regarded as an

thought to bear an intimate relation to *explanation*, where some articulate this thought through the idea that grounding is metaphysical explanation, and others vindicate it by holding that grounding, though not being (identical to) a type of explanation, backs or underwrites explanatory ‘because’-claims.<sup>10</sup>

Finally, we will rely on the usual distinction between full and partial ground, as well as on a distinction that is sometimes drawn between different kinds of partial grounds, namely structuring and triggering grounds.<sup>11</sup> A set of facts  $\Gamma$  fully grounds a fact  $A$  if nothing needs to be added to  $\Gamma$  in order to have a complete account of the obtaining of  $A$ , whereas  $A$  is partially grounded in  $\Gamma$  if for some  $\Delta$  such that  $\Gamma \subseteq \Delta$ ,  $A$  is fully grounded in  $\Delta$ .<sup>12</sup>

Within a full grounding base (a set of full grounds), partial grounds sometimes play different roles, thereby inducing a division of labour between them. In particular, some facts – the triggering grounds – are such that they play a grounding role only if certain other facts – the structuring grounds – enable them to play this role. In this way, the structuring grounds not only function as partial grounds, but also *enable* or allow other facts to be further grounds, so that the relevance and status of triggering facts *qua* grounds crucially depends on the presence of these structuring facts. In due course (section 4), we’ll elaborate on these notions, and will explain how they may be exploited by Hartian positivists to address a challenge that Greenberg (2004) raises against simple positivist accounts of law.

The aim of the preceding remarks was to introduce the notion of grounding appealed to in contemporary metaphysics, and to outline some of its features that will play a

---

operation rather than a relation, Jenkins (2011) for doubts about irreflexivity, and Schaffer (2012) for challenges to the transitivity of (non-contrastive conceptions of) grounding.

<sup>10</sup> See Dasgupta (2017), Fine (2001, 2012a) and Litland (forthcoming) for the view that grounding itself is (a non-causal type of) metaphysical explanation, and Audi (2012), Schaffer (2016) and Wilson (2017) for the view that it merely backs explanation. For more on the connection between grounding and explanation, and on the role that it plays in our argument, see sect. 3.

<sup>11</sup> For the distinction between structuring and triggering grounds, see Schaffer (forthcoming). This distinction will play a central role in answering Greenberg’s challenge on the inability of law practices to determine their own relevance in grounding legal facts (see sect. 4).

<sup>12</sup> For a distinction between partial and full ground along these lines, see Fine (2012a). For similar characterizations, see Audi (2012) and Rosen (2010).

significant role in the paper's arguments. Having done so, we are now in a position to state the main claim that we will defend:

*Law-Determination as Grounding (LDG)*: Metaphysical grounding is the relation of non-causal dependence that holds between legal facts and their determinants.

Although **LDG** has been endorsed by various philosophers in various ways (see fn. 1), a sustained defence of it has yet to be provided.<sup>13</sup> In the next two sections we aim to do just that, while also defending **LDG** from worries that may arise from Greenberg's (2004) influential argument that law-determination is rational determination.

## 2.2 Why Believe LDG

An important consideration in favour of **LDG** is that grounding has essentially the features that a relation of law-determination should have.<sup>14</sup> As was noticed, law-determination is not a causal relation, but rather a synchronic, constitutive type of determination. Further, unlike modal notions such as necessitation and supervenience, law-determination should be an explanatory relation, and allow us to keep track of the generative transitions that give rise to the legal facts on the basis of their more fundamental determinants. Crucially, grounding is the generative, synchronic relation designed to capture a constitutive type of determination, and has the appropriate formal properties to play this role (see sect. 2.1).

Relatedly, **LDG** has the benefit of allowing us to integrate constitutive accounts of law within general accounts of reality as a whole. As noticed above (sect. 2.1), grounding is an independently motivated notion, that is receiving increasingly widespread applications throughout philosophy. This is because every derivative entity depends on

---

<sup>13</sup> Gizbert-Studnicki (2016) provides various considerations for viewing grounding as a better candidate for law-determination than supervenience and reduction. While here we do not focus on reduction, and deal with different (though equally problematic) aspects of supervenience, the arguments he gives can be regarded as complementary to ours, as they provide additional reasons in favour of **LDG**.

<sup>14</sup> For a parallel argument that grounding offers the best characterization of (one notion of) social construction within contemporary debates around gender and race, and in social ontology, see Schaffer (2017a; forthcoming) and Griffith (forthcoming).

more fundamental entities, and because of grounding's aptness in capturing metaphysical dependence. So if grounding is the overarching relation that 'holds together' the whole of reality, and if legal facts are parts of it, **LDG** would enable accounts of legal reality to explain how law fits into reality overall.

Another consideration that supports **LDG** is that the hypothesis is useful. Grounding is a fairly well-understood relation, whose properties and relations to other notions like supervenience, necessitation, and explanation are becoming increasingly clear and studied within metaphysics. We already mentioned grounding's connection to explanation. Moving to its relation to modality, it is widely accepted that either grounding entails necessitation, or at least obeys a weaker principle to the effect that every grounding claim entails a corresponding global supervenience claim.<sup>15</sup> Because of its connection to these relations, grounding can be used to draw the modal consequences of metaphysical views, and in this way help us to evaluate their strengths and weaknesses.

Lastly, hyperintensionality. It has been noticed by Greenberg (2004) that under the assumption that the basic moral facts are necessary, framing the dispute between positivism and anti-positivism in terms of supervenience arguably meets with serious difficulties. For if positivism is understood as the view that legal facts supervene on social facts alone, and anti-positivism as claiming that they supervene on social and moral facts taken together, their claims will be true under exactly the same conditions. For if the moral facts are necessary (hence invariant across worlds), anti-positivism will be true just in case any variation in legal facts requires a variation in social facts, just as positivism is. The problem here is that, since supervenience is an intensional notion, it cannot discriminate between claims that feature intensionally equivalent supervenience bases (and the same supervenient entities).<sup>16</sup>

---

<sup>15</sup> To say that grounding entails necessitation is to say that if a set of facts  $\Gamma$  fully grounds a fact A, then, necessarily, if all the members of  $\Gamma$  obtain, then A obtains. Advocates of this principle include Audi (2012), Correia (2005), deRosset (2013), Loss (2017), Rosen (2010) and Trogdon (2013) among others. The principle has been criticized by Leuenberger (2014) and Skiles (2015), and rejected by Schaffer (2016). Chilovi (2018) argues in favour of a logically weaker global supervenience principle.

<sup>16</sup> In other words, since supervenience is an intensional relation, if A supervenes on B, A supervenes on anything that is co-intensional with B. In the case of positivism and anti-positivism in particular, on the assumption that the relevant moral facts are necessary, the two supervenience bases would be co-intensional if the anti-positivist's (supervenience base) simply results from

Grounding, by contrast, is widely regarded as hyperintensional, which means at least the following two things: first, that it can fail to hold between co-intensional entities (e.g. necessarily co-obtaining facts); second, that it is possible for a fact B to be fully grounded in a fact A, even though it fails to be grounded in a fact that necessarily co-obtains with A, and it is possible that A grounds B, even though it fails to ground a fact that necessarily co-obtains with B. Thanks to this, grounding is capable of marking distinctions in terms of which entities are related by it and which are not, even when these are co-intensional. And because of this, unlike supervenience it is capable of distinguishing the views that concern us here.

### 3. Rational Determination

While up to this point we have focused on building a positive case in favour of **LDG**, we now turn to defending it from a potential objection. In his seminal paper ‘How facts make law’ (2004), Mark Greenberg argued that the relation of law-determination is what he called ‘rational determination’. Partly because he was writing before the contemporary literature on grounding had developed, it is unclear what the relationship is between rational determination and grounding, and so it is an open question whether the claim that law-determination is rational determination is a rival of **LDG**.

In the opening remarks of his discussion, Greenberg makes clear that rational determination is not a purely modal notion. Since part of its job is to help us elucidate the distinction between positivism and anti-positivism, the problems that supervenience and necessitation have in this respect (see section 2.2) force the conclusion that it cannot be either of them.

After making this point, Greenberg goes on to introduce a distinction between two distinct kinds of constitutive relations. For him, constitutive determination can be either *rational* or *a-rational*. In his words (Greenberg 2004: 164), if the relation between some A facts and the B facts they determine is a-rational, ‘there need be no explanation of why the obtaining of particular A facts has the consequence that it does for the B facts’, that

---

adding necessary moral facts to the positivist’s. Another problem of supervenience is that it is monotonic, and so it allows for irrelevant or idle additions to supervenience bases.

is, the A facts *need not provide reasons why* the B facts they determine (rather than other facts) obtain. By contrast, the A facts *rationally* determine the B facts just in case the A facts constitutively determine the B facts *and* the A facts provide reasons why the B facts they determine obtain (Greenberg 2004: 163; 2006a: 265). The condition that if some A facts rationally determine a B fact then the A facts must provide reasons why the B fact obtains (the second conjunct of the definition) is what he calls the ‘rational-determination requirement’.

As the key notion of a *reason why* provides the distinctive feature of rational determination, it is crucial to be clear on what kind of reasons we are dealing with. Greenberg is in fact quite clear on this. Since his aim is ultimately to use the rational determination requirement to argue against legal positivism, he is at pains to highlight that the notion of reason relied upon is not of a moral or evaluative kind, for otherwise he would be begging the question against the positivist. The relevant notion of reason is rather epistemic or explanatory: reasons are considerations that make the explanandum intelligible (Greenberg 2004: 164).<sup>17</sup>

Although we shall follow Greenberg in understanding the view that law is rationally determined as involving the claim that the legal determinants must provide *explanatory* reasons for the obtaining of legal facts, it might be useful to clarify how rational determination relates to, and differs from, two other notions that have been discussed in the literature.<sup>18</sup>

One distinction to be drawn is with the notion of a determination relation being *transparent*, in a specific sense of transparency that has been salient in discussions of physicalism (see Block and Stalnaker 1999, Chalmers and Jackson 2001, Chalmers 1996, and Levine 1983). In this context, the connection between some metaphysical

---

<sup>17</sup> While Greenberg is explicit that the relevant reasons are not moral or evaluative in kind, sometimes he also suggests that they need not be normative either. For instance, Greenberg (2004: 165) notices that since a priori entailment is a kind of rational determination, it provides an example of a connection where the reasons given by the lower-level facts are non-normative. And Greenberg (2006b: 117) explicitly states that ‘the rational-relation requirement does not specify that the reasons it requires must be normative facts.’ However, as an anonymous reviewer points out, given that such reasons are epistemic in kind, and given the close connection between what epistemic reasons there are and what one ought to believe, it may be problematic to think that such reasons need not be normative.

<sup>18</sup> Thanks to two anonymous reviewers for inviting us to draw these connections and clarify how rational determination relates to these other notions.

determinants and what they determine is said to be transparent when the former *logically* or *a priori* entail the latter.<sup>19</sup> That is, in such cases it is not logically possible or a priori open that the determining entities exist without the determined entity also existing. As Greenberg (2004: 165; 2006a: 285) makes clear, however, rational determination is a broader and weaker notion than transparency so conceived. For while a priori and logical entailment both suffice for rational determination, rational determination can hold without either of them being present.<sup>20</sup> So although rational determination bears an intimate connection to transparency, the two are also relevantly different.

Secondly, it is important not to conflate the notion of reason involved in rational determination with that of *reasonableness*. Ram Neta (2004: 202), for instance, construes rational determination in such a way that ‘to say that one thing, A, ‘rationally determines’ another thing, B, is to say that A makes it the case that B, and makes it the case in a way that makes it at least somewhat reasonable for it to be the case that B.’ In similar vein, Barbara Baum Levenbook (2013) interprets rational determination as requiring that ‘[t]he content of law must be reasonable or sensible in relation to its base.’

However, Greenberg (2006b) has made clear that these renderings of rational determination misrepresent the core of the notion. For one thing, as he points out rational intelligibility – the notion in terms of which rational determination is spelled out – is a relation between determinant and determined facts, and not a monadic property of the latter. For another, there simply is no requirement that the rationally determined facts should be reasonable or rational (Greenberg 2006b: 117).<sup>21</sup> The rationally determined

---

<sup>19</sup> There has been some discrepancy in the literature on how exactly to understand transparency. In particular, while Chalmers (1996) understands it as involving logical entailment (see esp. Chalmers 1996: 107), Chalmers and Jackson (2001: 351) deal primarily with a priori entailment. As we’ll explain shortly, this does not make a substantive difference here since both types of transparency are distinct from rational determination (see next footnote).

<sup>20</sup> Greenberg (2004: 165) points out that rational determination does not require a priori entailment: ‘It may be that the way in which the A facts determine the B facts can be intelligible without its being the case that the B facts are an a priori consequence of the A facts’. He (2006a: 285) also makes clear that logical entailment is not required either: ‘The normative facts, with the law practices, do not logically entail the legal facts. Rational determination does not require logical entailment, however.’

<sup>21</sup> For additional considerations in favour of viewing the notion of reason involved in rational determination as distinct from reasonableness, see Pavlakos (2017). Relatedly, Pavlakos also argues that in order to build an effective case against positivism, law-determination should indeed

facts must rather be made intelligible by their determinants, and this is a matter of providing an adequate kind of explanation, not of producing a reasonable outcome.

Let us return to our main business. Given the distinction he draws between rational and a-rational determination, Greenberg is led to regard rational determination as a *special or unusual* relation, in the sense that it is distinct from ‘mere’ constitutive determination, and in the sense that it holds between law and its determinants but not among many other things which stand in a metaphysical dependence relation. As he puts it, ‘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.’ (Greenberg 2004: 160).

Now, it is clear that if grounding is the overarching, general relation it is meant to be, whereas rational determination is a special relation, holding between law and its determinants but not between many other things that stand in a metaphysical dependence relation, then rational determination and grounding could not be the same. So it is crucial that we examine whether rational determination really is special or unusual in this way.

### **3.1 The Argument from Epistemic Asymmetry**

One argument used by Greenberg to support the view that legal facts are rationally determined while other facts are not proceeds by inferring a conclusion about the nature of the relation at work in certain dependence claims from premises concerning the way we *know* about the facts that are so determined (according to such claims).

His reasoning may be reconstructed as follows. Let B be a derivative fact; if one knows that B obtains, there are at least three ways in which they could know this: (i) *directly* (e.g. perceptually or by introspection), without having to know the determinants of B. Plausibly, this might be what happens with respect to some mental facts, such as

---

involve the stronger notion of reason *qua* reasonableness. For present purposes there is no need to focus on this further contention, and we will set this issue aside.



when one knows that she is conscious, and with respect to facts which one knows through perception, like the fact that there are clouds in the sky (Greenberg 2004: 171).<sup>22</sup>

Second, (ii) One could know B through the A-facts that determine it, *via a non-rational*, perhaps hard-wired capacity to derive B from them. Greenberg illustrates this type of case with the example of aesthetic facts, such as when one knows that a painting has certain aesthetic properties by means of knowing the arrangement of shapes and colours on the canvas, or when one knows that a joke is funny by knowing ‘what was said and done’ (Greenberg 2004: 171).

Third, (iii) one may come to know B through the A-facts that determine it, *through a rational activity* by which they are cited as reasons why B obtains. Importantly, for Greenberg this is what happens when B is a legal fact.

We think that Greenberg is drawing an important and genuine distinction here. Cases (i)-(iii) reveal that there is an *epistemic* contrast between (i) and (ii) on one hand, and (iii) on the other, as only in cases (i) and (ii) the derivative fact can be known without invoking its determinants *qua* reasons.<sup>23</sup> Crucially, however, Greenberg infers from this that there is also a *metaphysical* contrast between the two types of cases. For he takes it that in (i) and (ii), as opposed to (iii), the relation between the A facts and B is *a-rational* (i.e. the determinants need not provide reasons why the derivative fact obtains), and he regards this conclusion as supported by the epistemic disparity in question.

Our reply is the following. Although there is an epistemic contrast in the ways we come to know facts in these different domains, no conclusion follows from this regarding the nature of the dependence relation involved. For from the fact that one need not *appeal to* the determinants of a given fact *qua* reasons in order to know that the determined fact obtains, it clearly does not follow that they do not *provide* such reasons. A fact may provide a reason even when we are utterly unaware that it does.

Now, one could reply that the epistemic considerations were intended to lend abductive support to the metaphysical conclusion. But even so, it is far from clear that

---

<sup>22</sup> Notice, indeed, that plausibly one does not need to know what the physical grounds of consciousness are (assuming that physicalism is true) in order to know that one is conscious, and that one does not need to know the micro-physical basis of weather facts in order to know that there are clouds.

<sup>23</sup> There are of course also epistemic differences between (i) and (ii), but they do not matter for current purposes.

positing distinct metaphysical relations provides the best explanation of the epistemic disparity in question. For it could just be a fact about *us* that we know certain things in certain ways and other things in other ways. The way we know things – by perception, introspection, reason, etc. – is one question, and one whose connection with the metaphysical issue of how the things we know are related to their grounds is all but straightforward. At the very least, then, our argument in favour of **LDG** (see sect. 2) and the common unitary assumption that there is but one relation of metaphysical dependence suggest that the burden of proof here lies with those willing to show that things are otherwise.<sup>24</sup>

### 3.2 The Argument from Intuitive Difference

Greenberg's second argument moves from the thought that there is an intuitive difference between (domains such as) law, where the relation of dependence appears to be necessarily reason-based, and other domains (for instance aesthetics) where this doesn't seem to be the case.

He describes the intuitive grip behind this thought as follows: 'Descriptive facts metaphysically determine aesthetic facts. A painting is elegant in virtue of facts about the distribution of color over the surface (and the like). But arguably there need not be reasons that explain why the relevant descriptive facts make the painting elegant' (Greenberg 2004: 160). And in a follow up paper, he puts it thus: 'a small difference in the arrangement of paint might make a clumsy scene elegant, without providing a reason for the difference. In contrast, it cannot be a brute fact that, say, a particular change in the wording of [a] statute would have a particular impact on the legal facts' (Greenberg 2006a: 269).

At this point, someone who wanted to deny that there is a difference between law and other domains in terms of whether the determinants provide reasons could choose one of two options: either claiming that also the determinants of (say) aesthetic facts provide reasons for them, or that law is not 'reason-based' either. We shall pursue the former strategy.

---

<sup>24</sup> See especially Berker (2018) for an argument in favour of monism. On the distinction between pluralism and monism about grounding, see fn. 8.

Let us start by flagging two assumptions that both Greenberg and us share. First, the relation between law and its determinants is reason-based; that is, for any legal fact, the facts that determine it provide epistemic, explanatory reasons why it obtains. Second, when derivative facts in other domains (such as aesthetics) obtain, there have to be more basic facts in virtue of which they obtain: all inter-level connections require the presence of some constitutive relation backing those connections. To follow Greenberg's example for illustrative purposes, when a painting is elegant, it is so *in virtue of* facts about the distribution of shapes and colours on the canvas. Then the question is, do these facts provide reasons why the painting is elegant?

We agree that the cases of law and aesthetics are intuitively different in *some* respect. For a start, the determination claims in the two cases clearly feature distinct grounds – social (and maybe moral) facts in one case, facts about shapes and colours in the other.

Less obviously, the truth of these claims is also explained by different facts. If one takes the grounding fact that certain social facts ground a legal fact and asks what grounds *this* fact, the answer will differ from the one they would get in the corresponding aesthetic case. Indeed, the main views on the general question of what grounds facts about grounding all yield this result.<sup>25</sup> This would already suffice to vindicate a substantial (as well as intuitive) difference between the two cases. What are, then, our reasons for thinking that the (relevant) differences stop here?

A key part of our response is rooted in the general connection between grounding and explanation. As was briefly mentioned in section 2, a central feature of grounding is that it should either itself be viewed as an explanatory relation, or else it should be able to back explanations whereby the grounds function as reasons why the facts that they ground obtain.<sup>26</sup> Indeed, it is this property of grounding that lies behind and motivates

---

<sup>25</sup> According to some (e.g. Bennett 2011 and deRosset 2013), the grounds of a derivative (B-) fact also ground the grounding fact, while according to others (e.g. Fine 2012a and Rosen 2010), it is facts about the essence of the grounded which ground the grounding facts. Either way, the grounds of the legal and aesthetic grounding facts would be different.

<sup>26</sup> Further, the connection between explanation and intelligibility is often in the background of discussions of explanatory relations in metaphysics. Here, for instance, is Kim (1994: 54): 'The idea of explaining something is inseparable from the idea of making it intelligible; to seek an explanation of something is to seek to understand it, to render it intelligible.' The view that

some of the core principles which are often thought to govern it. For instance, irreflexivity and asymmetry derive their appeal from the fact that nothing explains itself, and from a general ban on circular explanations (respectively).

Moreover, an informal requirement of relevance – to the effect that if a fact A is a ground for B, then A must be relevant for explaining B – also seems to characterize the grounding relation (see e.g. Fine 2012b: 2, Rosen 2017b: 293). Indeed, this requirement constitutes a core motivation for taking grounding to be a non-monotonic relation – that is, for thinking that it is not the case that for any  $\Gamma$  and  $\Delta$  such that  $\Gamma \subseteq \Delta$ , if  $\Gamma$  grounds B then  $\Delta$  grounds B. Additions to a grounding base do not always yield another grounding base, and this is because each ground must be relevant in accounting for the grounded fact (see Audi 2012: 693, Fine 2012a: 56). This suggests that there is an intimate relation between the notion of ground and that of a reason-why: if something is a ground for something else then it should be apt for figuring within an explanation of the grounded fact, and should be so apt in virtue of providing a reason why the grounded fact obtains.

Now, as per our first shared assumption, the legal determinants provide reasons for the obtaining of legal facts. Further, as per our second assumption, when a painting is elegant it is so in virtue of facts about its shapes and colours (and the like). The relation between the painting's elegance and its colours and shapes is clearly not a causal one. It is not merely modal either, since by themselves modal relations do not carry the import that the determined entity holds *in virtue of* its determinants. It is rather a grounding relation, as is supported by general considerations for regarding constitutive determination as adequately captured by the notion of grounding. But then, given the connection between grounding and explanation, it follows that the shape and colour facts *do* provide reasons why the painting is elegant.

Indeed, it is worth noticing that there is nothing counter-intuitive about this. If the grounding story about the painting is correct and one were asked why a particular painting was elegant (in the metaphysical, not causal sense of 'why'), an entirely appropriate answer would consist in saying that it is so *because of* its shapes and colours (and the like).

---

grounding is explanatory in the sense that the grounds should make what they ground intelligible is articulated and defended by Trogon (2013).

At this point, one may object that although both cases involve reasons of some kind, they involve reasons of two quite different kinds. That is, assuming that aesthetic facts are grounded while legal facts are rationally determined, it could be objected that the reasons involved in grounding and rational determination are different.

It is, however, far from clear that this is so. First, just as we saw that the notion of reason in play within rational determination is distinct from that of reasonableness, the notion of reason involved in grounding relations is equally distinct. Second, the same is true of transparency. As Schaffer (2017b) persuasively argues, the relation between grounds and grounded need not be transparent, for in many cases it is both logically possible and a priori open that the grounds obtain without the grounded fact also obtaining. So grounding and rational determination are alike in this respect as well.

Indeed, that there is such a similarity is no coincidence, given that both grounding and rational determination involve an epistemic, explanatory notion of reason. It thus seems that if one wished to draw a distinction between them, one would need to draw a distinction among different kinds of epistemic, explanatory reasons, and it is unclear just what the relevant difference might be.<sup>27</sup>

To conclude, if the preceding discussion is on the right track, there doesn't seem to be much reason to think that a-rational determination is anywhere instantiated. Although our discussion focused on the case of aesthetic properties, the considerations that led us to conclude that the determinants of aesthetic facts too provide reasons for their obtaining were entirely general, and not tied to the aesthetic character of the example.

At the same time, we noticed that rational determination appears to have essentially the same features of grounding. Both are relations of constitutive dependence whereby the determinant facts give reasons why the facts they determine obtain. Hence,

---

<sup>27</sup> Thanks to an anonymous reviewer for pressing us to mention this reply strategy. To be clear, we do not mean to rule out entirely the possibility that there might be a fruitful and real distinction between the kinds of explanatory reasons involved in grounding and rational determination. We do think, however, that from extant works on grounding and rational determination no distinction is evident, and we challenge our opponents to draw a distinction between different sorts of explanatory reasons that would vindicate a distinction between rational determination and grounding.

it appears that the best that can be said in favour of rational determination is that all constitutive determination is rational, and that rational determination is grounding.<sup>28</sup>

### 3.3 Plunkett's Alternative Interpretation

David Plunkett (2012) puts forward a different and less conservative interpretation of rational determination than the one we have offered. According to him, rational determination is a *species* of grounding definable from it via genus and differentia, wherein certain *epistemic facts literally play a constitutive role*. In particular, for him when some facts rationally determine another it is not merely that the former give reasons why the latter holds; rather, facts about intelligibility (by human-like creatures) are themselves among the grounds of that fact:

[On] the way I am reading it, what differentiates rational grounding from arational grounding is simply what sorts of facts are among the A facts: namely, in cases of rational-grounding, particular sorts of facts about what certain creatures under certain conditions are able to find intelligible are among the A facts. More specifically, in cases of rational grounding, among the A facts is the fact that certain specified creatures under certain specified conditions are able to find intelligible the obtaining of the B facts, given the other A facts. In contrast, such facts are not in the grounds of the B facts in cases of arational grounding. (Plunkett 2012: 157)

To pin down his position and put it on the table for consideration, let us offer the following definition as representative of his view:

---

<sup>28</sup> For an argument in favour of the view that all metaphysical determination requires that what is determined be rationally intelligible in relation to its determinants, see Pavlakos (2017). Though Pavlakos assumes law-determination to be grounding, he makes a distinctive case for thinking that all metaphysical determination is rational.

Plunkett's rational determination:  $A_1, A_2, \dots$  rationally determine  $B =_{df} A_1, A_2, \dots$  ground  $B$  and one fact among the  $A$ -facts is the fact that creatures like us are able to find intelligible how the other  $A$ -facts ground  $B$ .

We think that this conception of rational determination is problematic, in that it renders the claim that law is rationally determined unsupported by the considerations that make it interesting and plausible.

While the driving thought behind rational determination was that metaphysical determinants should provide reasons why the determined fact obtains, Plunkett's characterization goes beyond this, by making the stronger claim that facts about intelligibility are themselves metaphysical grounds. The main problem is that in doing so, the claim that law is rationally determined is no longer supported by the compelling evidence that Greenberg cites in its favour.

When Greenberg claims that the requirement should be uncontroversial in the legal domain, and that in fact it is implicitly assumed by most contemporary legal theorists, he mainly appeals to a piece of what might be called 'interpretive phenomenology'. The idea is that our experience as legal interpreters – as anyone who is trying to figure out what the legal facts are (or, which is the same, what the law says) – exhibits two characteristic features. First, we see that (setting testimony aside) legal facts are only knowable on the basis of their determinants.<sup>29</sup> It is not as if we could see what the law is directly; rather, we have to *work it out* from its sources.

Second, whenever we (as interpreters) regard a fact as relevant for determining the law, that fact is treated by us as a reason in support of our claim that the law is as we say it is.

In this respect, our conception of rational determination is not only supported by the interpretive phenomenology of legal practice, but does also a good job at explaining it: the reason that legal determinants are treated as reasons why the law is a certain way is precisely that in general these determinants do provide such reasons. By contrast, these

---

<sup>29</sup> Of course, a further way of achieving knowledge of the legal facts is through testimony by a reliable source. Since knowledge through testimony is ignored by Greenberg and Plunkett throughout their presentations, remarks to the effect that legal facts are only knowable on the basis of their sources are to be understood as implicitly restricted to the legal facts' 'first knowers'. For ease of exposition, we follow them in setting the case of testimony aside.

data are clearly silent on whether any fact about intelligibility plays any grounding role. Thus, absent independent reasons to think that law is rationally determined in Plunkett's sense, the inflation of the grounding base it entails seems to be gratuitous at best.

## **4. Hartian Explanations**

The last section concluded our defence of **LDG**. In this section, we move on to examine an influential challenge raised by Greenberg (2004) against simple positivist accounts of law, based on the idea that law being rationally determined poses a special problem for positivism.

In doing so, we provide an application of **LDG** by offering a grounding-based interpretation of Hartian positivism, and show how certain ground-theoretic resources can be relevant to addressing the challenge. However, apart from examining how Hartian positivism fares vis-à-vis Greenberg's criticism, it is not our goal here to conclusively defend this view. Though we shall remain noncommittal regarding its ultimate prospects and merits, it matters to see how the ground-theoretic framework, and in particular the distinction between triggering and structuring grounds, bears on addressing one of the strongest arguments levelled against positivism to date.

### **4.1 Greenberg's Indeterminacy Objection to Simple Positivist Accounts**

Many philosophers agree that some social facts at least partly determine legal content. The relevant social facts include ordinary empirical facts about the sayings, doings, and mental states of members of constitutional assemblies, legislatures, courts, administrative agencies, and the like. Let us follow Greenberg (2004) and call these social facts 'law practices'. It is also a point – convincingly made by Greenberg (2004) – that law practices on their own are not sufficient for determining any determinate set of legal contents.



Essentially, the problem is that there are many possible mappings from complete sets of law practices to sets of legal facts, and the law practices cannot determine which mapping is correct.<sup>30</sup>

In fact, there are two aspects to this problem; the law practices fail to settle *that* they are relevant for determining the law (as opposed to being completely irrelevant), as well as *how* they are relevant (i.e. the way in which they contribute to determining it). Something other than the law practices must determine which facts are relevant in fixing the law's content – that, for instance, enactment facts form part of the law practices – as well as how they are relevant – whether, for instance, they contribute semantic or rather pragmatic content to the law's content.

Therefore, given that determinate legal facts do obtain in our systems, and given that no determinate legal facts can be generated by the law practices on their own, law practices cannot fully determine the legal facts. The serious question then is not whether law practices can constitute a full grounding base for law, but what must be added for there to be one.

Let us briefly pause to notice something that the problem just outlined is not. At some points, Greenberg seems to suggest that the problem resides in a failure on the part of the law practices to meet the rational determination requirement. He writes (Greenberg 2006a: 271): 'saying that there have to be reasons for the contribution of law practices to the legal facts is just an intuitive way of summarizing why law practices by themselves do not provide reasons for legal facts', where a failure to provide reasons for legal facts constitutes a violation of the rational determination requirement. But given that the requirement is the condition that any fact that rationally determines something must be relevant for explaining it, it should be clear that law practices do meet the requirement. For law practices uncontroversially are (some of the) facts that determine the law, and so they ought to provide reasons for the obtaining of legal facts. The problem, rather, is that law practices are unable to determine their own relevance to fix legal content, and to determine how they themselves contribute to fixing it.

---

<sup>30</sup> In the original presentation, Greenberg (2004) uses considerations related to 'Kripkenstein's' paradox on rule following in order to raise this problem (see Kripke 1982).

## 4.2 Meeting the Challenge in a Hartian Spirit

Let us turn to Hartian positivism, as embedded within a grounding framework. Hart's model of the making of legal facts involves two types of metaphysical determinants. Along with the social facts that fall under the label of law practices, there are also the specific types of social rules that he called 'rules of recognition'.

A rule of recognition is something that specifies what it takes for propositions to be law or, in other words, something that sets conditions propositions must satisfy in order to be legally valid. The toy example given by Hart was that of a rule stating that what the Queen in Parliament enacts is law. Since their role is to specify conditions of legal validity, and since validity is a *relation* between propositions and systems, rules of recognition must also be relativized to particular legal systems.

In general, then, given a particular system  $s_I$ , the rule of recognition of  $s_I$  will have the form ' $(\forall p) (Lp_{s_I} \leftrightarrow Fp)$ ' – for all propositions  $p$ ,  $p$  is law in  $s_I$  iff  $p$  is  $F$ .<sup>31</sup> Of course, in many cases the property  $F$  will encode a long and logically complex condition, which need not be readily available to competent users of the term 'law'. (For the sake of concreteness, it could be a property like being the semantic content of a sentence contained in a text approved by most members of the parliament – or something along those lines). Hart also thought that rules of recognition depend for their existence on certain attitudes held by the officials of the legal system, attitudes that he called *collective acceptances*.

On a ground-theoretic interpretation, rules of recognition play a double role. First, since they are among the things in virtue of which the legal facts are as they are, they count as partial grounds of law. Secondly, by specifying conditions propositions must meet in order to be law, they enable certain facts to be further grounds, and determine the way in which these facts contribute to legal content. This happens thanks to the fact that the property  $F$  that forms part of the content of the rules 'encodes' a specification of the features that must be true of a proposition if it is to bear the validity relation to the legal system. Then, exemplifications of these features will count as further grounds of law –

---

<sup>31</sup> Lower-case letters without subscripts (' $p$ ', ' $q$ ', ...) are used as variables ranging over propositions, whereas the subscripted letters ' $s_I$ ' and ' $p_I$ ' are used as names referring to particular legal systems and propositions respectively.

i.e., will count as law practices. This is how, by discharging their second function, rules of recognitions establish which facts belong to the law practices, and how such practices have an impact on the existing law.

The distinction between the roles played by rules of recognition and law practices in a Hartian metaphysical account mirrors the distinction between the roles of ‘structuring’ and ‘triggering’ causes within causal accounts.<sup>32</sup> In the context of causation, Dretske (1988) draws the contrast between these two roles by considering (among others) the scenario of a dog that salivates upon hearing a bell ringing due to being classically conditioned.<sup>33</sup> The conditioning creates a state into her brain that causes her to salivate when the bell rings, while itself also being a cause of the salivation. In so doing, it creates a ‘structure’ that allows a certain causal role to be played by the bell’s ringing, which in turn ‘triggers’ the salivation process.

As Schaffer (forthcoming) persuasively argues, this kind of explanatory structure can be fruitfully extended to the case of metaphysical determination. In particular, he designs a framework based on precisely the same distinction while working with a case in social ontology concerning the grounds of money.

At the less fundamental level, the explananda are facts about particular pieces of paper being money. Then, the toy model involves two grounds for these types of facts: a rule stating that (say) all and only things printed by the Bureau of Printing and Engraving are money, together with the fact that a particular piece of paper was printed by the Bureau. Here, the rule plays the role of structuring ground, by allowing the fact that the piece of paper was printed to have the bearing it does on the fact that the piece of paper is money. And because of this, the fact about the piece of paper being printed is able to ground – via triggering – the fact that it is money.<sup>34</sup>

---

<sup>32</sup> The distinction between triggering and structuring causes was introduced by Dretske (1988).

<sup>33</sup> We owe the example to an unpublished version of Schaffer (forthcoming). Schaffer’s discussion originates from a response to Epstein (2015). In this paper, we are implicitly relying on a grounding-only view of the determination of laws, so we are in effect taking sides with Schaffer on this matter.

<sup>34</sup> Epstein (2015) presents a metaphysical account of social reality (including facts about money and law) that relies not only on grounding relations but also on what he calls ‘anchoring’. In the case of money, for instance, he claims that (the facts that we called) triggering grounds are the only grounds, while the facts that in our account function as structuring grounds are not grounds at all. Rather, they provide so-called ‘frame principles’, within which grounding relations hold, and which, in turn, are *anchored* (and not grounded) in facts about collective acceptances; similar

To conclude, let us illustrate how the Hartian account can reproduce the same explanatory structure. Consider a toy system  $s_1$ , and assume that we are looking for an explanation of why proposition  $p_1$  is law in  $s_1$  – equivalently, of why it is a fact that  $p_1$  is legally valid in  $s_1$ . In  $s_1$ , the law practices are constituted only by three facts: the fact that Rex enacted text  $t$ , that the semantic content of  $t$  (at its context of use) is the proposition that  $p_1$ , and that Rex is the authority of  $s_1$ . Further, suppose that the officials of  $s_1$  collectively accept the rule that for all propositions  $p$ ,  $p$  is law in  $s_1$  iff  $p$  is the semantic content of a text enacted by the authority of  $s_1$ , and call this rule ‘R’.

A Hartian should then say that this fact about the collective acceptance of R by the officials of  $s_1$  grounds the fact that R is the rule of recognition of  $s_1$ . Then, on the Hartian account the law practices of  $s_1$ , together with the fact that R is the rule of recognition of  $s_1$ , collectively ground the fact that  $p_1$  is law in  $s_1$ . The law practices function as grounds that trigger the higher-level legal fact into existence, while the fact that R is the rule of  $s_1$  creates a background state connecting them with the law of  $s_1$ . Crucially, the fact about R plays two roles at once: it grounds the legal fact, but it also explains *why* and *how* the triggering facts too count as grounds (see figure 1 on p. 76).

Altogether, this appears to provide a simple and elegant response to our initial challenge, a response which is also integrated within a general and independently motivated explanatory scheme, which already found application in the neighbour field of social ontology.

---

remarks apply to the case of law. Though an assessment of Epstein’s views goes well beyond the scope of this paper, we think that it is far from clear what the notion of anchoring exactly amounts to, and so it is unclear whether the complexity that results from adding anchoring and frame principles to the account is illuminating or even warranted. For a compelling criticism of anchoring, see Schaffer (forthcoming).

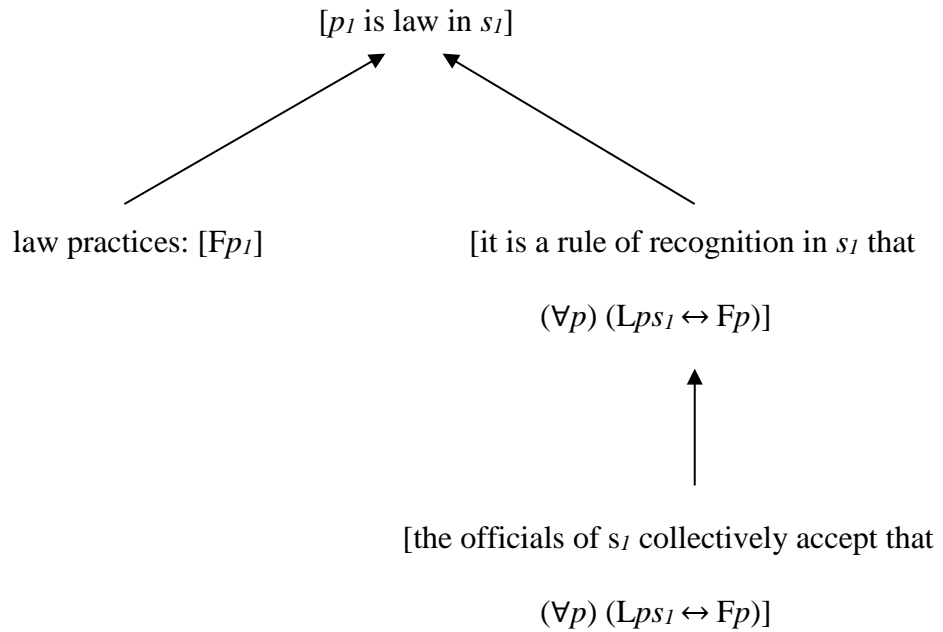


Figure1. Hartian Grounding Explanations<sup>35</sup>

## 5. Conclusion

Some entities are metaphysically derivative, they depend on more fundamental things. Since law is one such thing, we need an account of how it is related to its more basic determinants. And although some philosophers have claimed metaphysical grounding to be this relation, our main aim here was to give an argument for this claim.

After that, we clarified the link between grounding and another prominent candidate for the task, rational determination. Although we ended up agreeing with Greenberg that law-determination might very well be rational determination, we also argued that rational determination has a much wider application than Greenberg took it to have. Insofar as law-determination is rational determination, this is because the latter is in fact identical to grounding, which is why Greenberg's contention does not represent a threat to our main claim.

---

<sup>35</sup> All arrows mean 'metaphysically ground'. As usual, '[p]' stands for 'the fact that p'.

Finally, we applied the resulting framework for theories of law-determination and sketched a ground-theoretic interpretation of Hartian positivism. In so doing we pursued the two related goals of clarifying the framework itself, and of assessing how the Hartian proposal might answer a challenge raised by Greenberg (2004) against simple positivist accounts of law. Drawing on parallel explanatory models in social ontology, we saw that the structure of the Hartian ground-theoretic account determines a certain division of labour among partial grounds, which – perhaps surprisingly – provides to the account the resources to deal with the objection, opening the door to an unexpected way out for it.

## References

- Audi, P. (2012) 'Grounding: Toward a Theory of the In-Virtue-Of Relation', *The Journal of Philosophy*, 109: 685-711.
- Banas, P., Dyrda, A., and Gizbert-Studnicki, T. (eds.) (2016) *Metaphilosophy of Law*, Hart Publishing.
- Brożek, B., Rotolo, A., and Stelmach, J. (eds.) (2017) *Supervenience and Normativity*, Springer.
- Baum Levenbook, B. (2013) *Oxford Studies in Philosophy of Law*, Vol. 2, Oxford University Press.
- (2013) 'How to Hold the Social Fact Thesis: A Reply to Greenberg and Toh', in Baum Levenbook (ed.), 75-102.
- Bennett, K. (2011) 'By Our Bootstraps', *Philosophical Perspectives*, 25: 27-41.
- Berker, S. (2018) 'The Unity of Grounding', *Mind*, 127: 729-777.
- Block, N. and Stalnaker, R. (1999) 'Conceptual analysis, dualism, and the explanatory gap', *Philosophical Review*, 108: 1-46.
- Brozek, B., Rotolo, A., and Stelmach, J. (eds.) (2017) *Supervenience and Normativity*, Law and Philosophy Library, Vol. 120, Springer.
- Chalmers, D. (1996) *The Conscious Mind: In Search of a Fundamental Theory*, Oxford University Press.
- Chalmers, D. and Jackson, F. (2001) 'Conceptual analysis and reductive explanation', *Philosophical Review*, 110: 315-61.
- Chalmers, D. J., Manley, D. and Wasserman, R. (eds.) (2009), *Metametaphysics: New Essays on the Foundations of Ontology*, Oxford: Oxford University Press.
- Chilovi, S. (2018) 'Grounding entails supervenience', *Synthese*, First Online: <https://doi.org/10.1007/s11229-018-1723-x>.
- Correia, F. (2005) *Existential Dependence and Cognate Notions*, Philosophia Verlag.
- Correia, F. and Schnieder, B. (eds.) (2012), *Metaphysical Grounding: Understanding the Structure of Reality*, Cambridge: Cambridge University Press.
- Dasgupta, S. (2014a) 'The Possibility of Physicalism', *The Journal of Philosophy*, 111: 557-592.

- (2014b) 'On the plurality of grounds', *Philosophers' Imprint*, 14: 1-28.
- (2017) 'Constitutive Explanation', *Philosophical Perspectives*, 27: 74-97.
- deRosset, L. (2013) 'Grounding Explanations', *Philosophers' Imprint*, 27: 74-97.
- Dretske, F. (1988) *Explaining Behavior: Reasons in a World of Causes*, MIT Press.
- Dworkin, R. (1986) *Law's Empire*, Harvard University Press.
- Epstein, B. (2015) *The Ant Trap: Rebuilding the Foundations of the Social Sciences*, Oxford University Press.
- Fine, K. (1994) 'Essence and Modality', *Philosophical Perspectives*, 8: 1-16.
- (2001) 'The Question of Realism', *Philosophers' Imprint*, 1:1-30.
- (2012a) 'Guide to Ground', in Correia et al. (eds.) (2012), 37-80.
- (2012b) 'The pure logic of ground', *Review of Symbolic Logic*, 5:1-25.
- Gizbert-Studnicki, T. (2016) 'The Social Sources Thesis, Metaphysics and Metaphilosophy', in Banas et al. (eds.) (2016), 121-146.
- Greenberg, M. (2004) 'How Facts Make Law', *Legal Theory*, 10: 157-198.
- (2006a) 'Hartian Positivism and Normative Facts: How Facts Make Law II', in Hershovitz (ed.) (2006).
- (2006b) 'On Practices and the Law', *Legal Theory*, 12: 113-136.
- Griffith, A. M. (2017) 'Social construction and grounding', *Philosophy and Phenomenological Research*, 97: 393-409.
- Hale, B. and Hoffmann, A. (eds.) (2010) *Modality: Metaphysics, Logic, and Epistemology*, Oxford University Press.
- Hart, H.L.A. (1961) *The Concept of Law*, 1<sup>st</sup> edition, Oxford University Press.
- Hershovitz, S. (ed.) (2006) *Exploring Law's Empire: The Jurisprudence of Ronald Dworkin*, Oxford University Press.
- Jenkins, C. (2011) 'Is metaphysical dependence irreflexive?', *The Monist*, 94: 267-276.
- Kim, J. (1994) 'Explanatory knowledge and metaphysical dependence', *Philosophical Issues*, 5: 51-69.
- Kripke, S.A. (1982) *Wittgenstein on Rules and Private Language*, Harvard University Press.
- Leuenberger, S. (2014) 'Grounding and Necessity', *Inquiry*, 57: 151-174.
- Levine, J. (1983) 'Materialism and qualia: The explanatory gap', *Pacific Philosophical Quarterly*, 64: 354-61.



- Lewis, D. (2001) 'Truthmaking and Difference-making', *Noûs*, 35: 602–615.
- Litland, J. (2017) 'Grounding ground', in Bennett et al. (eds.) (2017), 279-315.
- Loss, R. (2017) 'Grounding, Contingency, and Transitivity', *Ratio*, 30: 1-14.
- McPherson, T. and Plunkett, D. (eds.) (2017), *The Routledge Handbook of Metaethics*, Routledge.
- Neta, R. (2004) 'On the Normative Significance of Brute Facts', *Legal Theory*, 10: 199-214.
- Pavlakos, G. (2017) 'The Metaphysics of Law: From Supervenience to Rational Justification', in Brožek et al. (eds.) (2017), 139-160.
- Plunkett, D. (2012) 'A Positivist Route for Explaining How Facts Make Law', *Legal Theory*, 18: 139-207.
- Rosen, G. (2010) 'Metaphysical Dependence: Grounding and Reduction', in Hale et al. (eds.) (2010), 109-36.
- (2017a) 'Metaphysical Relations in Metaethics', in McPherson et al (eds.) (2017), 151-169.
- (2017b) 'Ground by law', *Philosophical Issues*, 27: 279-301.
- Schaffer, J. (2009) 'On What Grounds What', in Chalmers et al. (eds.) (2009), 347-383.
- (2012) 'Grounding, Transitivity, and Contrastivity', in Correia et al. (eds.) (2012), 122-138.
- (2016) 'Grounding in the Image of Causation', *Philosophical Studies*, 173: 49-100.
- (2017a) 'Social construction as grounding; or: fundamentality for feminists, a reply to Barnes and Mikkola', *Philosophical Studies*, 174: 2449-2465.
- (2017b) 'The Ground Between the Gaps', *Philosophers' Imprint*, 17: 1-26.
- (forthcoming) 'Anchoring as Grounding: On Epstein's The Ant Trap', *Philosophy and Phenomenological Research*.
- Shapiro, S. (2011) *Legality*, Harvard University Press.
- Skiles, A. (2015) 'Against Grounding Necessitarianism', *Erkenntnis*, 80: 717-751.
- Stavropoulos, N. (2014) 'Legal Interpretivism', *The Stanford Encyclopedia of Philosophy* (Summer 2014 Edition), Edward N. Zalta (ed.) (2014), URL = <<https://plato.stanford.edu/archives/sum2014/entries/law-interpretivist/>>.

- Trogon, K. (2013) 'Grounding: Necessary or Contingent?', *Pacific Philosophical Quarterly*, 94: 465–485.
- Wilson, A. (2017), 'Metaphysical Causation', *Noûs*, 52: 723-751.
- Wilson, J. (2014) 'No Work for a Theory of Grounding', *Inquiry*, 57: 535–79.
- von Wright, G. H. (1983) *Practical Reason*, Cornell University Press.



# 3

## Grounding-Based Formulations of Legal Positivism

Samuele Chilovi (University of Barcelona)

**Abstract:** The goal of this paper is to provide an accurate grounding-based formulation of positivism in the philosophy of law. I start off by discussing some intuitive ground-theoretic characterizations first put forward by Rosen (2010) and Plunkett and Shapiro (2017), and raise a number of objections against them. Rosen's proposal rules out possibilities that are compatible with positivism, while Plunkett and Shapiro's fails to vindicate the distinctive role that is played by social facts within positivist accounts of law. I then present a more adequate and insightful formulation capable of solving their problems, which crucially relies on the notion of a social enabler. Finally, I model inclusive positivism and exclusive positivism on the same template, and set out the advantages of the ground-enablers proposal.

### 1. Introduction: The Positivism/Anti-Positivism Debate

Legal systems shape and regulate many aspects of our lives, by ensuring that a variety of legal facts obtain: that negligent actions of certain types trigger civil liability, that pluralities who meet certain requirements are married, and many others. Yet in legal theory and philosophy of law, the nature and status of such facts has long been disputed. While it is plausible that legal facts are not basic in the way that (say) facts about fundamental physics are, it remains unclear just how they derive from more basic facts, and which other facts determine them.

Legal positivism (LP) and anti-positivism (AP) are the two main families of views trying to answer the question of what determines the legal facts.<sup>1</sup> Though answers to this question may in principle focus on the relevance of facts (or other entities) of various kinds, the dividing line that has traditionally been regarded as of special philosophical interest, and that sets LP and AP apart, concerns the role of *social* and *moral* facts in determining the legal facts.

To a first approximation, the core idea that drives positivist thinking about law is that law is a social construction.<sup>2</sup> This claim, in turn, is typically cashed out by reference to the so-called social sources thesis, according to which the existence and content of the law is a function of its social sources.<sup>3</sup> In contemporary settings that conceive law as a plurality of legal facts, the view naturally translates into the claim that every legal fact is determined by – or equivalently, depends upon<sup>4</sup> – social facts.<sup>5</sup>

Antipositivists, by contrast, regard law not as a human creation that is in some sense ‘up to us’, but rather as necessarily determined partly by morality.<sup>6</sup> They thus reject the social sources thesis, and hold that necessarily, legal facts depend not only on social facts, but on moral facts as well.

---

<sup>1</sup> LP and AP are sometimes glossed as making competing claims on the nature of law. However, it is an open question whether (and how) determination claims are related to claims about the nature of things (see Audi 2012, Fine 2012, Rosen 2010, and Trogdon 2013). For related reasons, Plunkett and Shapiro (2017) compellingly argue that labeling the LP/AP debate as concerning the ‘nature of law’ can be inaccurate or misleading. Further arguments against conceiving of views in jurisprudence as aimed at providing an account of *the* nature of law are provided by Bayón (2013).

<sup>2</sup> For the idea that law being a social construction is a key feature of positivism, see e.g. Coleman (2009: 383), Marmor (2007: 36) and Schauer (2005: 496). Green calls it ‘Hart’s Message’ (see his introduction to Hart 2012: xvii), though he also claims that not all positivists are committed to it.

<sup>3</sup> See Coleman (2009), Gardner (2001: 199), Hart (2012), Marmor (2002), Moreso (2012), Raz (1979) and Waluchow (2001), who are also positivists themselves. Raz (1985) talks both in terms of social sources and facts.

<sup>4</sup> Here I take determination and dependence to be converses of one another.

<sup>5</sup> See, e.g., Greenberg (2004), Moreso (2012), Plunkett (2012), and Shapiro (2011) for formulations of the sources thesis as involving the determination of legal facts by social facts.

<sup>6</sup> See e.g. Dworkin (1977; 1986), Finnis (1980), and Greenberg (2004; 2006; 2014).

Within the positivist camp, it is customary to single out two types of positivist positions: *inclusive* and *exclusive* positivism (ILP and ELP respectively).<sup>7</sup> The traditional way of drawing the distinction between them is modal: while both subscribe to positivism's core tenet, inclusive positivists allow, whereas exclusive positivists disallow, that legal facts may sometimes depend on morality. In addition, inclusive positivists typically maintain that whenever a moral fact is responsible for determining a legal fact, there have to be some social facts that *make* moral facts so responsible. In other words, ILP allows moral facts to be legal determinants, but only in so far as it is social facts which *grant* them such a role. We shall see that one of the main difficulties in formulating ILP lies precisely with specifying what this 'making' or 'granting' amounts to. As I shall argue in §4, one of the advantages of my proposed definition is that it provides a satisfactory way of answering this vexed question.

The positivism/anti-positivism debate has both theoretical and practical significance. On the one hand, by inquiring into law's necessary building blocks – into the kinds of facts responsible for determining it – an attempt is made to elucidate what constitutes a certain phenomenon. And if a successful account of law were to be found, it would yield an explanation of legal reality in more fundamental terms, providing us with understanding of an important aspect of our shared reality.<sup>8</sup>

On the other hand, answers to this question have also a crucial practical import. For different views on what makes law carry different commitments concerning how the content of particular laws is determined. And since the resolution of judicial disputes partly turns on figuring out what the applicable law is (what the legal facts that are relevant to the case at hand are), different views of the legal determinants will at times support different conclusions on how judicial disputes should be solved (according to the law), a matter that is clearly of great practical significance.<sup>9</sup> This, indeed, is reflected in

---

<sup>7</sup> Waluchow (1994) introduced the labels 'inclusive' and 'exclusive' to refer to these variants of positivism. The first version of ILP is usually traced to Coleman (1982), while the first of ELP to Raz (1979).

<sup>8</sup> On the connection between grounding and understanding, see Schaffer (2017b).

<sup>9</sup> To be clear, LP and AP support different conclusions on how judicial disputes *legally* should be solved. Many positivists have noted that this may come apart from how disputes morally, or all-things-considered, should be resolved. Thanks to Daniel Wodak for suggesting this clarification.

the fact that legal philosophers often apply their positivist and anti-positivist views to particular cases and, in so doing, they often express conflicting judgments on what the law that governs particular cases says.<sup>10</sup>

Despite the centrality and significance of this debate, two issues that have a considerable bearing on it have remained largely unexplored: what is the nature of the determination relation relied on by positivism and its rivals, and how are these views best formulated in terms of it?

This paper will tackle the latter question. In doing so, it will make crucial, though not exclusive, use of the notion of *ground*, recently at the center of intense discussion and theorizing within metaphysics.<sup>11</sup>

A number of considerations militate in favor of interpreting LP and AP as making competing claims on the grounds of legal facts. I won't rehearse them here.<sup>12</sup> What is worth noting for current purposes is that though a number of philosophers have recently agreed that these views put forward competing grounding claims,<sup>13</sup> very few attempts have been made to formulate them ground-theoretically.<sup>14</sup>

The goal of this paper is to fill this gap, and provide precise and theoretically illuminating formulations of positivism as such, as well as of its inclusive and exclusive variants.<sup>15</sup>

---

<sup>10</sup> Dworkin's writings (e.g. 1977; 1986), for instance, are ripe with applications of his anti-positivist view to real-life cases.

<sup>11</sup> For some of the most important early work on grounding, see Correia (2005), the essays in Correia and Schnieder (2012), Fine (2001; 2012), Rosen (2010), and Schaffer (2009; 2016). For discussion, see Wilson (2014).

<sup>12</sup> For arguments in favor of ground-theoretic interpretations of positivism and anti-positivism, see Chilovi and Pavlakos (2019), and Rosen (2010). Relatedly, Greenberg (2004) presents an influential argument against modal formulations of these views. For discussion, see Wilson (2018).

<sup>13</sup> See, e.g., Plunkett (2012), Plunkett and Shapiro (2017), Rosen (2010), and Stavropoulos (2014).

<sup>14</sup> These are the proposals by Plunkett and Shapiro (2017) and Rosen (2010), which will be discussed in §3.

<sup>15</sup> The present project parallels analogous efforts in other areas of philosophy to frame dependence views in ground-theoretic terms. Grounding-based formulations of physicalism have been given by Dasgupta (2014) and Schaffer (2017a). Analogous formulations of metaethical naturalism have been given by Rosen (2017). Applications of grounding to social ontology have been proposed by Epstein (2015), Griffith (2017), and Schaffer (forthcoming). For more on how the present proposal relates to Epstein's and Schaffer's, see §4 and footnote 45.

Perhaps surprisingly, it will turn out that simple candidate definitions that rely exclusively on modal and ground-theoretic resources suffer from serious shortcomings. And this, I will argue, warrants an appeal to a further notion, that of a *social enabler*.

Here's the paper's plan. Following some preliminary remarks to introduce the relevant ground-theoretic notions and concepts (§2), I set out and discuss some intuitive grounding-based formulations of positivism, first put forward by Rosen (2010), and Plunkett & Shapiro (2017). I then raise a number of objections against them (§3), and present a more adequate definition capable of solving their problems, which crucially relies on the notion of a social enabler (§4). Finally, I model inclusive positivism and exclusive positivism on the same template, and outline the advantages of the ground-enablers proposal.

## 2. Ground-Theoretic Assumptions

Let me start by outlining the assumptions about grounding that will play an important role in the ensuing discussion. Though they are fairly standard in the grounding literature, it will help to pin them down, so as to be clear on what the arguments I will give rely on.

First, I take grounding to be a factive, transitive, many-one relation that holds (at least) between facts.<sup>16</sup>

Second, I rely on the familiar distinction between full and partial ground. A plurality of facts  $\Gamma$  fully grounds a fact  $A$  if nothing needs to be added to  $\Gamma$  in order to have a complete account of the obtaining of  $A$ .<sup>17</sup> Correlatively,  $A$  is partially grounded in  $\Gamma$  if there is some plurality  $\Delta$  such that  $A$  is fully grounded in  $\Delta, \Gamma$ .<sup>18</sup> Importantly, that  $\Gamma$  fully grounds  $A$  does not preclude that there be some plurality  $\Delta$  such that  $\Gamma, \Delta$  fully ground  $A$ . In other words, full grounding doesn't rule out the possibility of

---

<sup>16</sup> Though these assumptions about grounding are very widespread, they haven't gone unchallenged. In particular, Fine (2012) defends the view that grounding is best regarded as an operation, and Schaffer (2012) challenges the transitivity of (non-contrastive) conceptions of grounding.

<sup>17</sup> Capital roman letters denote facts, while Greek capitals denote pluralities of facts.

<sup>18</sup> See, e.g., Audi (2012), Fine (2012), and Rosen (2010).



overdetermining grounds,<sup>19</sup> and allows that a fact may have multiple non-overlapping grounding bases.<sup>20</sup> To illustrate, if A and B both obtain, each on its own constitutes a full ground for the obtaining of AVB, so that together they overdetermine the obtaining of the disjunctive fact.

### 3. Exclusivity and Completeness

A, if not *the*, central thought that guides positivist theorizing about law is that law is a social construction. This is common ground between inclusive and exclusive positivists, for although they hold different views on the role of morality in grounding the law, they both agree that the social plays a special, ineliminable, role as a legal determinant. But the idea of law being socially constructed is elusive, and thus in need of elucidation. In this section, I examine the two most influential proposals on how to elucidate it ground-theoretically, one by Rosen (2010) and the other by Plunkett & Shapiro (2017).

#### 3.1 Completeness: Full Grounding

Two ways of characterizing positivism that have been especially prominent in the literature, though they are rarely distinguished explicitly, are based on the notion of *completeness* or *sufficiency*, and on that of *exclusivity*. In a ground-theoretic setting, these two conceptions are naturally framed as the claim that legal facts are *fully* grounded in social facts, and that legal facts are, in some sense, *exclusively* grounded in social facts. Although these claims are related, they are not equivalent, and in fact each is problematic in its own way.

Let us start with the completeness-based view:

---

<sup>19</sup> Minimality, the stronger principle that adding something to a full grounding base never yields another grounding base, is very controversial and will not be assumed here. See Dixon (2016) for criticism of this principle, and Audi (2012) for a defense.

<sup>20</sup> That is, it allows that there be some fact A and some pluralities  $\Gamma$  and  $\Delta$  such that A is fully grounded in  $\Gamma$ , A is fully grounded in  $\Delta$ , and there is no fact that is both among  $\Gamma$  and among  $\Delta$ .

**Full Social** Necessarily, every legal fact is fully grounded in a plurality of social facts.

**Full Social** articulates the idea that for every legal fact a complete or full explanation of its obtaining can always be given by mentioning only facts that are social in character. The view that positivism should be identified with **Full Social** has been endorsed and made prominent by Rosen (2010).<sup>21</sup> Despite its intuitive appeal, I think that it is vulnerable to two sorts of objections. However, before I get to them let me briefly tackle a few preliminary worries that turn out to be inconclusive.

An objection that one could raise against **Full Social** is that it is, in some respect, too *permissive* with respect to the range of admissible grounds. For notice that **Full Social** allows moral facts to be necessary grounds of law, if morality is fully grounded in the social. This would be the case, for instance, on meta-ethical views according to which moral facts are determined by some kind of idealized collective attitude (Lewis 1989), or on contractualist views of morality (Scanlon 1998).<sup>22</sup>

That **Full Social** is compatible with this may be regarded as problematic for two reasons. One reason is simply that **Full Social** leaves open the possibility that law is grounded in morality. However, I think that this should not be seen as a problem, but rather as a virtue. For remember that we are dealing with positivism *in general*, that is, with a genus of which inclusive and exclusive positivism are species. So it is a good feature of a formulation of positivism that it is liberal enough so as to allow its more specific variants – and exclusive positivism in particular – to set further restrictions as regards the admissibility of morality in playing a grounding role.

The second reason has to do with the fact that **Full Social** leaves open that morality grounds law not just contingently, but of necessity. And, as has often been pointed out, one of positivism's core tenets is that there is 'no necessary connection

---

<sup>21</sup> Rosen endorses it in the following passage (2010: 113): '[Positivism] says that the legal facts are wholly grounded in the social facts; [anti-positivism] says that moral facts play a role in making the law to be as it is'. I am assuming the modal qualification to be implicit, as it is customary to interpret positivism as making a necessitated claim.

<sup>22</sup> Other candidates are views that combine Humeanism about reasons with the claim that moral facts are grounded in facts about reasons (e.g. Schroeder 2007). For discussion, see Plunkett (forthcoming).

between law and morality’,<sup>23</sup> precisely in the sense that law is not necessarily determined by morality.

While I regard this as a fair point, I also think that this problem is easily solved by supplementing **Full Social** with a clause to the effect that possibly, legal facts are not grounded in any moral fact. Thus, to the extent that positivism should be understood as the conjunction of the social sources thesis *and* the claim that there is no necessary connection between law and morality, this objection is no more than a reminder that **Full Social** is only meant to provide a definition of the first conjunct.

The third problem targets the level of generality of **Full Social**, and specifically the fact that, unless otherwise specified, the notion of the ‘social’ involved in it leaves room for scenarios that, while complying with positivism’s letter, certainly violate its spirit. To see this, notice that if it turned out that law was necessarily grounded in social facts of the kind that also ground morality (according, e.g., to the metaethical views previously considered), positivism should clearly be falsified. This is so not because law would be grounded in morality, but rather because the social facts involved would be of a *very* different sort from those that positivists are willing to countenance.<sup>24</sup>

I regard this as a serious worry. It is, nonetheless, a worry that virtually *any* appeal to the social sources thesis is subject to. In other words, what this objection points to is that there remains an underlying (complex and interesting) question as to how to delimit the range of positivist-friendly social facts. Oddly enough, the question of which notion of sociality is relevant for positivism – which notion is broad enough so as to cover any social entity positivists may legitimately appeal to, but no more than that – has not received any treatment in the literature, as far as I am aware. Nevertheless, it is not a question this paper will try to answer. Since this is a problem for anyone who relies on the notion of sociality to characterize positivism, suffice it to say that for present purposes the way I am using ‘social’ should be understood as ruling out entities that, despite being social, would offend positivist inclinations.

---

<sup>23</sup> For an early expression of this commitment, see Hart (1958: 601).

<sup>24</sup> In particular, on views such as Lewis’ (1989), values are determined by dispositions to desire to desire under ideal conditions. By contrast, the social facts that form part of positivist explanations are typically facts about conventions, authority, parliamentary votes, and the like.

Let us now turn to the problems that I think should lead us to reject **Full Social** as a formulation of positivism. The first problem is that **Full Social** rules out scenarios that are compatible with positivism. Specifically, positivism is compatible with legal facts being partly grounded in non-social facts, in ways that would falsify **Full Social**. These, then, are scenarios where legal facts are grounded in non-social facts in ways that show that the former are not fully grounded in the latter.<sup>25</sup> To be clear, the argument is not committed to the actuality, or even the metaphysical possibility, of these cases. The point is rather that these are scenarios that should be left open *as far as positivism is concerned*.

Here are three types of cases involving positivist-friendly grounding bases that falsify **Full Social**:

#### *Case 1 – Logical grounds*

According to some positivists, bodies of laws are closed under (a possibly non-classical notion of) logical consequence.<sup>26</sup> This means roughly that if according to the law of system  $s$ ,  $p$ , and if  $p$  entails  $q$ , then according to the law of  $s$ ,  $q$ : the logical consequences of what is legally valid are themselves valid.<sup>27</sup> The ground-theoretic analogue of this principle is that if a proposition  $p$  is law in a system  $s$ , and  $p$  entails  $q$ , then these two facts collectively ground the fact that  $q$  is law in  $s$ . If so, then logical facts (about what follows from what) will be partial grounds of law. And assuming (as is plausible) that logical facts of this sort are neither social, nor grounded in the social, we have a counterexample to **Full Social**.<sup>28</sup>

---

<sup>25</sup> Notice that in order to falsify the claim that facts of type A are fully grounded in facts of type B, it is not enough to show that facts of type A are grounded in facts that are not of type B.

<sup>26</sup> See, for instance, Alchourrón and Bulygin (1971).

<sup>27</sup> This closure principle could be fine-tuned in ways that don't affect the present discussion. In particular, the 'possibly non-classical' clause is due to the fact that relevance logics could be invoked to avoid the consequence that logical truths be legally valid.

<sup>28</sup> Thin arrows denote the grounding relation.

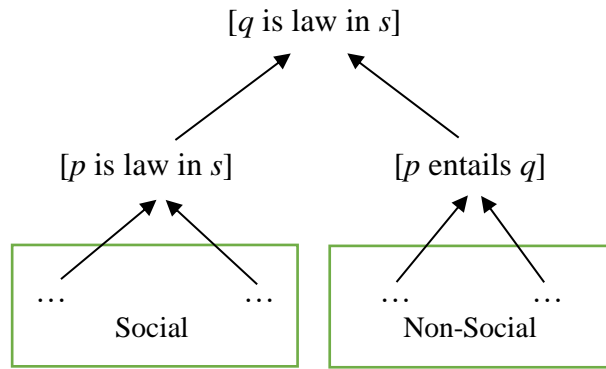


Figure 1. Logical Grounds

### Case 2 – Natural Grounds

The second case involves a grounding role being played by semantic facts under externalist assumptions. Suppose, for instance, that it is a legal fact in system  $s$  that everyone should have free access to water. Why is this the case? One could say – simplifying in respects that are immaterial in the present context – that it is in part because of the texts enacted by various law-making agents, and in part because of the meaning those texts have. Under externalist assumptions, meaning facts are sometimes grounded in facts about the make-up of the relevant referents. Thus, it is partly in virtue of water being made of  $H_2O$  that ‘water’ means what it does. But if meaning facts can be determined by facts about the external (non-social) environment, and these can be part of what grounds facts about the content of the law, then legal facts may not be fully grounded in social facts. Yet no positivist would (or should) ever worry that externalism about content be a threat to their view.<sup>29</sup>

The feature exploited by this type of case is that facts about the content of the law are as much about law as they are about content. Hence, one should expect them to be grounded not only in whatever is responsible for explaining legality, but also in that which is responsible for explaining content. Further, it seems clear to me that these cases should

---

<sup>29</sup> Note that this case has the same structure as *Case 1*. This is because the point being made is not that the natural grounds of social facts (if any) are themselves, by transitivity, grounds of law. Rather, it is that if some meaning facts are not socially constructed, while they are needed to ground some legal facts, then these won’t be fully grounded in social facts.

be entirely consistent with positivism, and so I think that the moral we should draw from them is that **Full Social** is deeply flawed.<sup>30</sup>

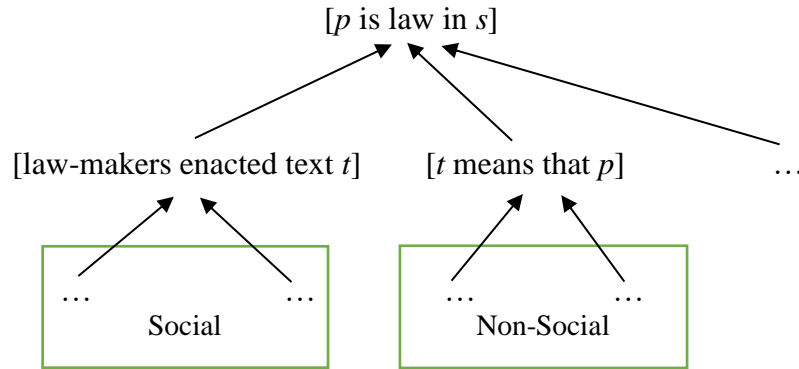


Figure 2. Natural Grounds

*Case 3 – Normative non-moral grounds*

The last problem arises from the fact that morality is not the only variety of normativity, and it is far from clear that positivism should be incompatible with normative facts of *any* kind being non-redundant partial grounds of law. It is unclear, for instance, why (non-social) epistemic facts should not in principle be available to positivist explanations. Even more remarkably, while semantic facts may well turn out to be normative and not socially constructed,<sup>31</sup> they are hardly dispensable from complete explanations of facts about the content of the law.<sup>32</sup>

---

<sup>30</sup> In §4, I'll present a new definition of positivism immune from the threat posed by these counterexamples. An alternative to the view I propose might consist in appealing to contrastivism about grounding (Schaffer 2016), and restrict **Full Social** to the grounds of legal facts that take as contrasts relations that differ from *being law in*. An adequate elaboration and assessment of this strategy goes beyond the scope of this paper. However, let me note that the view in question, while able to deal with *Case 2*, would still have problems in dealing with Cases of type 1. This is so since in *Case 1*, it is validity itself, rather than content, that is explained in non-social terms (i.e. by entailment).

<sup>31</sup> Cf. Kripke (1982) and the debate it sparked.

<sup>32</sup> Notice that this case has the same structure as the preceding two, since some facts that are neither social nor socially grounded, are needed to fully ground some legal fact.

To reiterate, notice that the argument I've given does not rest on the assumption that positivists must appeal to the facts in these cases to explain the obtaining of legal facts. Rather, the thought is that positivists should *be able to* appeal to facts of these kinds. In other words, the point is not that *Cases 1-3* are obvious, plausible, or even possible, but rather that it's wrong to think that the truth of positivism should hinge on their falsity.<sup>33</sup>

This concludes my first argument for the inadequacy of **Full Social** in defining positivism. The second reason why identifying positivism with **Full Social** is problematic is that **Full Social** fails to do justice to inclusive positivism, by ruling out possibilities that are left open by it.

As we saw, one of the key inclusivist tenets is that while legal facts aren't necessarily grounded in moral facts, it is possible that they be so grounded. At the same time, **Full Social** is compatible with legal facts being determined by moral facts, in two ways. One is by way of *over-determining* legal facts that are already fully grounded in social facts. The other is if morality is fully grounded in social facts, *modulo* the transitivity of grounding.

However, and crucially, **Full Social** is also more restrictive than ILP. For instance, ILP allows that legal facts could be (non-redundantly) grounded in fundamental moral facts, whereas **Full Social** precludes this possibility.<sup>34</sup> More generally, since the grounding role granted to morality by ILP is *not* conditional upon moral facts being either socially grounded or redundant, the range of possibilities left open by it goes well beyond those that are left open by **Full Social**. The way in which ILP does constrain morality's grounding role is by holding that moral facts may ground the law only if social facts allow them to. This, however, is an altogether different matter, having to do not with the grounds of morality, but rather with the explanation of morality's grounding role.<sup>3536</sup>

---

<sup>33</sup> Notice that *Case 1 – Logical Grounds* provides a counterexample also to the claim that legal facts are *immediately* fully grounded in social facts, so this modification wouldn't succeed in fixing **Full Social**. Moreover, a formulation based on immediate grounding would also be subject to a second set of objections, which I am about to raise.

<sup>34</sup> I'm assuming that it is implausible that fundamental morality would ground social facts.

<sup>35</sup> For more on this distinction, see §4.

<sup>36</sup> One might think that although **Full Social** fails as a formulation of positivism as such, it still succeeds in providing a good definition of exclusive positivism in particular. However, for reasons that are related to those just discussed, I think it is clear that this cannot be right. **Full**

### 3.2 Exclusivity: Partial Grounding

Let's turn, then, to conceptions of LP centered around the notion of exclusivity. As the name suggests, the core of exclusivity-based conceptions is the idea that social facts are, in some sense, the *only* facts responsible for grounding the legal facts. A characterization of this type can be inferred from Plunkett & Shapiro's recent and influential discussion of the positivism/antipositivism debate (2017: 56):<sup>37</sup>

Consider again the positivism/antipositivism debate. This debate concerns whether the ultimate grounds of legal facts are social facts alone or moral facts as well. To claim that moral facts are among the 'ultimate' grounds of legal facts is to claim that they are necessary grounds, rather than being contingent grounds in virtue of social facts. Antipositivists hold the former view, whereas 'inclusive' legal positivists accept the possibility of the latter. (This means that the talk of 'ultimate' grounds is thus compatible with either social facts or moral facts being grounded in further facts).

Plunkett and Shapiro's characterization of the debate involves competing views about the *ultimate* grounds of legal facts. Antipositivists claim that legal facts are ultimately grounded in social and moral facts taken together, whereas positivists claim that law's ultimate grounds are social facts *alone*. As the authors make clear that by 'ultimate' they mean 'necessary', antipositivism clearly becomes the view that legal facts are necessarily grounded in both social and moral facts. But what about positivism?

Notice, first, that it would be uncharitable to interpret the claim that law's ultimate grounds are social facts alone unrestrictedly, as excluding all non-social facts from grounding any legal fact, since this would imply that social facts are fundamental (if they

---

**Social** is in one respect more restrictive, and in another more permissive, than exclusive positivism is, with regard to the range of possible legal grounds. On one hand, while **Full Social** is falsified by *Cases 1-3*, exclusive positivism ought to be compatible with them, just as positivism is. On the other hand, exclusive positivism places an *absolute* ban on morality being a legal determinant, while we've seen that **Full Social** does not.

<sup>37</sup> A view in the vicinity has also been put forward by Shapiro (2011: 269). For more on Shapiro's view, see footnote 39.



weren't, then their grounds would also be grounds of law). Rather, the expression 'alone' should be interpreted as expressing a contrast with the alternative that moral facts are also ultimate grounds.

Second, notice that the contention that legal facts are necessarily grounded in social facts alone should be taken to express a claim of *partial* ground, as otherwise it would be subject to the problems raised earlier: the inability to make room for inclusive positivism, and the incompatibility with positivist-friendly grounding bases.

Accordingly, Plunkett and Shapiro's characterization should be taken as the claim that legal facts are necessarily partly grounded in social facts, and not necessarily grounded in moral facts:

**Partial Social**      Necessarily, every legal fact is partly grounded in a plurality of social facts, and possibly, some legal fact is not grounded in any moral fact.

Building on this characterization of positivism, Plunkett and Shapiro also formulate its two variants, inclusive and exclusive positivism, each of which adds to **Partial Social** some distinctive claims:

**PS ELP**      Necessarily, every legal fact is partly grounded in a plurality of social facts, and not by any moral fact.

**PS ILP**      Necessarily, every legal fact is partly grounded in a plurality of social facts; &  
Possibly, some legal fact is grounded in some moral fact; &  
Necessarily, whenever a legal fact is grounded in moral facts, it is in virtue of social facts.

So much for the exegetical bit. I believe that these formulations are subject to two fundamental difficulties. The first, and most straightforward, is that it is left unsettled just what the 'in virtue of' invoked by inclusive positivism (which in the introduction I referred to by means of 'making' or 'granting') means. In the next section, I'll explain

why ground-theoretic interpretations of it are implausible, and will offer an alternative characterization. For now, what is important is simply that it remains unclear what ILP says.

The second and deeper problem is that, thus defined, the claim expressed by positivism appears to be too weak. **Partial Social** says that legal facts are necessarily grounded in part by social facts. But this is something that nearly any antipositivist would agree on. And although one still finds a difference between the two views in terms of whether moral facts are necessary grounds, it is also clear that this isn't the *only* difference between them. According to LP, the social enjoys a special, privileged status in grounding the law, a status that antipositivists are unwilling to acknowledge.<sup>38</sup>

One might express this key commitment by saying that for every legal fact there is some fragment or part of the grounding chain leading to its obtaining that is occupied by social facts alone. Or one may try to recover it by saying that social facts are the only ultimate grounds of law, in a sense of 'ultimate' that differs both from 'necessary' and from 'fundamental'. These claims rightly carry the information that the social, while being only a part of what makes law, plays a special, distinctive role.

On the flipside, though, the hard question for this stance is to specify in a general and principled way, which part of those grounding chains is exclusively social in character. In other words, the challenge is to clarify what it means that social facts are ultimate, if this cannot be taken either as a boring reminder that they are necessary, or as expressing the incredible view that they are basic. Plunkett and Shapiro give no answer to this question,<sup>39</sup> and the remainder of this paper is devoted to answering it.

---

<sup>38</sup> For the view that the dividing line between positivist and anti-positivist views lies in the contention that law is a social construction, rather than, or in addition to, the separability between law and morality, see inter alia Coleman (2009) and Marmor (2007).

<sup>39</sup> Note that saying – as Shapiro (2011: 269) does, when spelling out his notion of ultimacy – that social facts are those that determine law at the 'highest level' is problematic for precisely the same reason that either the highest level means 'fundamental' (in which case LP becomes an absurd doctrine), or else it is unclear what it means.

## 4. The Grounding-Enablers View

We are looking for a way of defining positivism that is able to account for the special role it assigns to the social. Our problem is how to identify and isolate that fragment of grounding chains leading to the obtaining of legal facts which should be occupied by social facts alone. To solve this problem, I suggest that we appeal to an additional, though familiar, bit of ideology.

The present proposal relies on the notion of an *enabler*, already used in other branches of metaphysics and normative theory.<sup>40</sup> In causation, an enabler is a condition that makes it possible for one event to cause another, something that causes a thing to be in a state that allows for causation tokens of a given type to occur.<sup>41</sup>

To illustrate with a familiar case, consider the state of a match being dry. The dryness of the match is part of what makes it possible for the match to light upon being struck. It is because the match is dry that the striking causes the lighting; had the match not been dry, it would not have lit. So we say that the match being dry *enables* the match's striking to cause the match's lighting, and forms part of the explanation of the latter event.

Similarly, in normative theory (and reasons theory in particular), enablers are conditions that determine whether a given consideration or fact grounds a particular reason.<sup>42</sup> In one of the classic examples from Dancy (2004), the fact that one made a promise only grounds a corresponding obligation if, *inter alia*, the promise wasn't given under duress: that one's promise was not given under duress enables the fact about promising to ground the obligation. In such cases, the obtaining of a relation of full or partial ground is subject to the satisfaction of certain conditions, so that a fact's ability to ground another crucially rests on their fulfilment.

Analogous remarks apply to the case of law-determination. Positivists and their foes tend to agree that ordinary empirical facts about the sayings, doings, and mental states of lawmakers – the members of constitutional assemblies, legislatures, courts and the like –

---

<sup>40</sup> Many thanks to Jonathan Schaffer for discussions of this use of enablers in legal philosophy.

<sup>41</sup> On causal enablers, see especially Lombard (1990).

<sup>42</sup> See Bader (2016) and Dancy (2004).

are among the grounds of law. These are what Greenberg (2004; 2006) calls ‘law practices’, and I shall follow him in using this expression. In fact, for the positivist virtually anything could, *in the appropriate setting*, be relevant for determining the law. The law could in principle be determined by the content of a religious text, of the notebook on your desk, or what have you. The crucial and divisive issue concerns what makes it possible for certain things to ground the law, what enables them to be legal determinants – law practices – in the first place.

The distinctively positivist stance is that if the notebook, the bible, the parliamentary vote, or whichever array of entities turn out to ground the law, in fact *is* a ground of law, it is because there are certain social facts enabling it to play such a role. Social facts of the appropriate sort – typically (though not necessarily), facts about conventions, dispositions, and authority – are taken to serve as the background conditions that put those other entities in a position to ground the law. Once the appropriate social facts are in place, grounding connections between law practices and legal facts can unfold; not so without them.

This naturally leads to formulating positivism in the following way:

**Enabler Positivism**                      Necessarily, all the enablers responsible for the grounding of legal facts are social; &  
Possibly, no legal fact is grounded in any moral fact.

A few aspects of the proposal are worth clarifying.

First, an enabler responsible for the grounding of legal facts is something that sets conditions the satisfaction of which allows an entity to count as a legal determinant. Legally relevant enablers, then, put a determinate range of entities in a position to be grounds of law. This, however, should not be read as meaning that only what satisfies the conditions set by enablers can ground the law, as this would be far too restrictive. Rather, it should be understood that also the facts that the enabled facts ground, as well as the facts that the enabled facts are grounded in, can be grounds of law. Moreover, the enablers themselves, their grounds, and what they are grounded in, should also be allowed to be grounds of law. Accordingly, what the first conjunct of **Enabler Positivism** implies is

that something is a ground of law iff (i) it is a legally relevant enabler; or (ii) it is enabled by a legally relevant enabler; or (iii) it is grounded in something that satisfies (i) or (ii); or (iv) it is a ground of something that satisfies (i) or (ii). The key thought expressed by **Enabler Positivism** is that anything that grounds law is either a social enabler, or something enabled by it, or something that grounds / is grounded in an enabling or enabled fact.

Second, saying that all enablers are *social* means that they must be strictly, and not just broadly, social. That is, it means that things that are (even fully) grounded in the social need not count as social, and thus need not count as enablers. Hence, for instance, even if morality turned out to be socially constructed, it would not count as social on the way the expression is used in **Enabler Positivism**. This qualification is needed in order to prevent socially grounded morality from playing the privileged role that positivists assign to the social alone.

Third, note that the second conjunct of the definition is needed to express positivism's distinctive commitment that there is 'no necessary connection between law and morality', and thereby rule out that law could be necessarily grounded in morality despite all enablers being social.<sup>43</sup>

Fourth, being a legally relevant enabler does not preclude a fact from also being a ground of law: just as a causal enabler can be a cause, a grounding enabler can be a ground.<sup>44</sup> When this is so, the enabling and enabled facts together combine to ground a given fact. This is significant in the present context, for if legal enablers are grounds, then by characterizing positivism as a view about their (social) nature, we are in effect singling out a fragment of the grounding chain that is occupied by social facts alone, thereby meeting one of our key desiderata.

---

<sup>43</sup> See pp. 89-90.

<sup>44</sup> See especially Mackie (1991) for this point in connection to causal enablers. Importantly, that enablers can be grounds doesn't mean that they must be grounds. For instance, absences can sometimes be enablers, but plausibly they aren't grounds. See Bader (2016) and Cohen (2018) for discussion.

Furthermore, in the case at hand there *are* good reasons to regard enablers as grounds.<sup>45</sup> For one thing, the facts we're dealing with are plausibly viewed as part of the 'metaphysical reasons why' legal facts obtain. Positivist explanations do not just rely on facts about lawmakers' actions, mental states and the like, but on facts about conventions and authority as well.

Secondly, facts about law practices, on their own, fail to necessitate the legal facts they ground. This means that, assuming the common principle that full grounds necessitate what they ground,<sup>46</sup> law practices can at most be mere *partial* grounds.<sup>47</sup> To illustrate, consider a Hartian conventionalist position on which rules of recognition play the role of enablers (see below at pp. 103-104 for a detailed formulation of Hartian positivism in a ground-enablers setting). If one duplicates the actual lawmaking facts in a possible world *w*, but fails to duplicate the rules of recognition that exist in actuality without providing a suitable replacement thereof, the actual legal facts would clearly fail to obtain at *w*. More generally, since the social facts that for the positivist function as enablers are contingent, and since they are needed for the lawmaking acts to have the impact they have on the obtaining of legal facts, removing them can lead to a failure in law-creation.

Now, one could take the grounding-necessitation link, together with the fact that the connection between law practices and legal facts is contingent, to indicate that the

---

<sup>45</sup> The present proposal is in the same spirit as the one offered by Schaffer (forthcoming). In particular, both of our views oppose Epstein's (2015) anchoring-framing-grounding framework, which models social rules not as grounds but rather as what he calls 'frame principles', which in turn are 'anchored' by collective acceptances. However, while Schaffer's view treats social rules as 'functioning roughly as' structuring grounds, the present account develops, and takes seriously the idea that they are, quite literally, grounding enablers. That said, I do find Schaffer's criticism of Epstein entirely compelling. For additional objections to Epstein's view, see also Chilovi and Pavlakos (2019).

<sup>46</sup> Advocates of the view that full grounds necessitate what they ground include Audi (2012), Correia (2005), deRosset (2013), Loss (2017), Rosen (2010) and Trogdon (2013). For discussion, see Chilovi (2018), Leuenberger (2014), and Skiles (2015). In fact, I think that the connection between grounding and modality is best modeled via a supervenience relation that is weaker than necessitation. However, the point I make in this paragraph can analogously be made through the principle that grounding entails my favored kind of supervenience, so I frame it through the grounding-necessitation link only for the sake of simplicity.

<sup>47</sup> An analogous point has been made in connection with the grounds of money (and social ontology more generally) by Schaffer (forthcoming).

relation between law practices and legal facts is not grounding.<sup>48</sup> However, in previous work I have given independent arguments for thinking that grounding *is* the relation that connects law practices and legal facts.<sup>49</sup> So I rather take these modal considerations as evidence that social background facts should be part of positivist grounding bases as well, functioning both as enablers and as grounds.

The last clarification I wish to make relates to a further job that enablers can do. In the theory of reasons, a distinction is sometimes drawn between conditions that determine whether a fact constitutes a reason at all, and things that affect the weight of a reason by intensifying or attenuating it, so-called ‘modifiers’.

Analogously to the role of modifiers with respect to reasons, social enablers in law-determination may not only set conditions for being part of the law practices, but also for *the way* the law practices ground the law. By looking again at a paradigm of social enabler – rules of recognition – we can see why this is the case. Although such rules may be limited to determining whether certain facts are sources of law, they need not be so limited, since they can also determine the *impact* such sources have on legal content. For instance, a rule of recognition may just provide that texts enacted in certain ways are grounds of law period, but it may also establish the ways in which enactments contribute to legal content.<sup>50</sup>

#### **4.1 In Defense of the Grounding-Enablers Proposal**

We’ve seen how positivism can be formulated in terms that involve not only modal and ground-theoretic concepts, but also the notion of an enabler. I now turn to motivating the proposed definition, highlighting why it is an option worth taking seriously.

First, the current proposal succeeds in providing a ground-theoretic interpretation of the positivist contention that law is a social construction. This is because it manages to

---

<sup>48</sup> In the context of social ontology, a parallel line of reasoning has been put forward by Mikkola (2015).

<sup>49</sup> See Chilovi and Pavlakos (2019).

<sup>50</sup> A rule of recognition may, e.g., establish that when a text is duly enacted, it contributes its semantic (or pragmatic, or morally best) content to the law of the relevant system.

articulate the special role assigned to the social by it, without being prey to the objections that affect **Full Social**.<sup>51</sup> To see why it is immune from these objections, notice that **Enabler Positivism** is both compatible with *Cases 1–3*, and able to accommodate ILP.<sup>52</sup> The compatibility with the grounding role of moral facts (ILP), logical facts (*Case 1*), natural facts (*Case 2*), and normative non-moral facts (*Case 3*), derives from the fact that **Enabler Positivism** does not in principle forbid any of these facts from being grounds of law. Rather, it simply states that if anything is a ground of law, it is so because social facts *enable* it to play such a role.

The second benefit is that **Enabler Positivism** manages to account for the *paradigms* of positivism. We already hinted at this when noting that Hartian rules of recognition appear to be doing precisely the work that enablers do. But let us now take a closer look at why a ground-enablers interpretation of Hartian positivism is indeed accurate.

On Hart's (1961) view, legal facts are grounded in a combination of law practices together with what he called 'rules of recognition'. Rules of recognition are second-order rules that specify what it takes for a norm or content to be law: they set conditions norms must satisfy in order to be legally valid. They are *social* rules in that they depend for their existence on a *collective attitude* – acceptance – possessed by a certain group of officials (mainly judges). The toy example given by Hart was that of a rule stating that what the Queen in Parliament enacts is law (in the UK). In general, for any legal system *s*, a rule of recognition for *s* has the form ' $(\forall p) (Lps \leftrightarrow (C_1p \& \dots \& C_np))$ ': a proposition *p* is law in *s* iff it satisfies conditions  $C_1$  to  $C_n$ .

It is easy then to see that what a rule of recognition does is enabling the satisfaction of certain conditions by contents or norms to count as (partial) grounds of legal facts. A rule of recognition behaves somewhat like a 'master switch' that governs the bearing that the pressing of certain buttons has on the lighting of certain lamps.<sup>53</sup> If the master switch is on, causal connections of various sorts can unfold between pressings of buttons and lightings of lamps; conversely, nothing happens when the switch is off. Similarly, once a rule of recognition is in place – once a sufficient number of officials bears the right sort

---

<sup>51</sup> That is, Plunkett and Shapiro's (2017), Rosen's (2010), and Shapiro's (2011).

<sup>52</sup> See below at pp. 104-105 for elaboration on this latter point.

<sup>53</sup> Thanks to Jonathan Schaffer for discussion of this parallel.



of attitude towards certain types of acts – tokens of these types are able to determine the obtaining of legal facts. Conversely, if no such rule is in force, no system of law may come into existence.

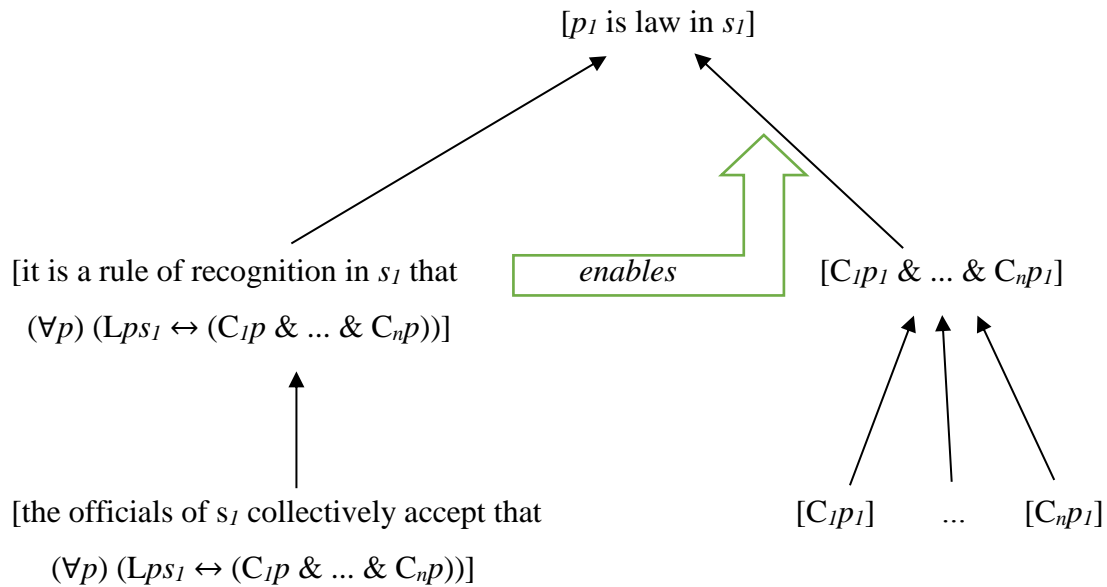


Figure 3. Hartian Explanations<sup>54</sup>

Finally, the last advantage of the proposal is that it provides an adequate basis to define exclusive and inclusive positivism from it. For while it articulates the common ground that all positivists share, it also allows ILP and ELP to take different stances vis-à-vis the connection between law and morality. In so doing, **Enabler Positivism** is able to accommodate the fact that ILP and ELP are *species* of positivism.

It is easy to see how to formulate them as the conjunction of **Enabler Positivism** and a further claim:

- |                             |  |
|-----------------------------|--|
| <b>Exclusive Positivism</b> | Necessarily, all legal enablers are social, &<br>Necessarily, no legal fact is grounded by any moral fact. |
|-----------------------------|--|

<sup>54</sup> The thick arrow denotes the enabling relation, which holds between facts and grounding facts. Lower-case letters without subscripts ('p', 'q', ...) are used as variables ranging over propositions, whereas the subscripted letters 's<sub>1</sub>' and 'p<sub>1</sub>' are used as names referring to particular legal systems and propositions respectively.

**Inclusive Positivism**

Necessarily, all legal enablers are social, &  
Possibly, some legal facts are grounded by moral facts.

Probably the most notable aspect of the ground-enablers framework concerns the way in which **Inclusive Positivism** does justice to inclusivism's key but elusive feature. As was noted in the introduction, when inclusive positivists say that legal facts are possibly grounded in morality, they don't mean this possibility to be unrestricted. Rather, they intend it to be subject to the constraint that it be always in virtue of social facts that morality plays this role, when it does.

It has been notoriously hard to spell out exactly what this 'in virtue of' amounts to. A *prima facie* option might be to interpret the constraint ground-theoretically, as involving iterated ground. Thus construed, the claim would be that whenever a legal fact is grounded in morality, this grounding relation is itself *grounded* in social facts.

This proposal, however, is hard to reconcile with any available theory of iterated ground (of what grounds the grounding facts). On the so-called 'collapse' view, facts of the form  $\Gamma$  grounds  $A$  are always grounded in  $\Gamma$  itself.<sup>55</sup> On essentialist views, it is the essences of the grounding and/or grounded entities that ground the grounding relations between them.<sup>56</sup> And on the 'zero-grounding' account, grounding facts are zero-grounded, i.e. grounded in the empty set.<sup>57</sup> Setting aside details immaterial to the present discussion, the important point is that all these views are incompatible with an iterated-ground-theoretic interpretation of ILP.

The enabler proposal, by contrast, carries no unorthodox assumptions in this regard. It maintains that the social facts in virtue of which moral facts bear on the legal facts (when they do) are simply ordinary, first-order grounds of the target legal facts. However, they also *enable* moral facts to play this grounding role. And it is by discharging

---

<sup>55</sup> See Bennett (2011) and deRosset (2013)

<sup>56</sup> See especially Dasgupta (2014), Fine (2012), Rosen (2010), and Trogdon (2010) for this view. Dasgupta (2014: 568) outlines alternative options on which grounding facts are explained by other types of general connections, such as laws of metaphysics, necessary truths or conceptual truths. For present purposes, the important point is that none of them is compatible with the position we're assessing.

<sup>57</sup> See Litland (2017).

this enabling function that they vindicate the inclusivist contention that morality's contribution depends on the social.

To conclude, notice that the relation (posited by ILP) between moral facts and the social facts that make them relevant is but one instance of the general relation (posited by LP) between any legal determinants and their social enablers. The core insight of LP was that social facts have, in some sense, control over which kinds of things make law (and the ways in which they do). Because of this, any adequate theoretical framework should be able to reflect this structure, and accommodate the fact that the social's function within LP, ELP and ILP, though applying to different kinds of facts, is fundamentally the same. It is therefore a virtue of the ground-enablers framework that it not only substantiates a key inclusivist contention, but also situates it within a unified account of the structure of positivist explanation more generally.

## **5. Conclusion**

The view that legal positivism is best understood as a thesis about grounding has been increasingly accepted in recent years. Nevertheless, very few attempts to define positivism ground-theoretically have been made, and they all suffer from significant flaws, which I have brought out in this paper. Rosen's (2010) full grounding proposal rules out possibilities that positivism in general, and inclusive positivism in particular, are compatible with. Plunkett & Shapiro's (2017) partial grounding definition fails to vindicate the distinctive role that is played by the social within positivist accounts. These problems led us to look for a novel definition, based on the notion of an enabler. The grounding-enabler proposal, I have argued, not only is immune from the counterexamples affecting the other definitions, but is also able to elucidate the distinctive way in which law is said to be socially constructed.

## References

- Alchourrón, C.E. and Bulygin, E. (1971) *Normative Systems*, Springer Verlag.
- Audi, P. (2012) 'Grounding: Toward a theory of the in-virtue-of relation', *The Journal of Philosophy*, 112: 685–711.
- Bader, R. (2016) 'Conditions, modifiers and holism', in Lord et al. (eds.) (2016), 27-55.
- Bayón, J.C. (2013) 'The Province of Jurisprudence Underdetermined', in *Neutrality and Theory of Law*, Ferrer et al. (eds.) (2013), Springer, 1-16.
- Bennett, K. (2011) 'By Our Bootstraps', *Philosophical Perspectives*, 25: 27-41.
- Bennett, K. and Zimmerman, D. (eds.) (2017) *Oxford Studies in Metaphysics*, Vol. 10, Oxford: Oxford University Press.
- Berker, S. (2018) 'The Unity of Grounding', *Mind*, 127: 729-777.
- Chalmers, D.J., Manley, D. and Wasserman, R. (eds.) (2009), *Metametaphysics: New Essays on the Foundations of Ontology*, Oxford: Oxford University Press.
- Chilovi, S. (2018) 'Grounding entails supervenience', *Synthese*, First Online: <https://doi.org/10.1007/s11229-018-1723-x>.
- Chilovi, S. and Pavlakos, G. (2019) 'Law-Determination as Grounding: A Common Grounding Framework for Jurisprudence', *Legal Theory*, 25: 53-76.
- Cohen, S.W. (2018) 'Not All Partial Grounds Partly Ground: Some Useful Distinctions in the Theory of Grounding', *Philosophy and Phenomenological Research*, First Online: <https://doi.org/10.1111/phpr.12524>.
- Coleman, J. (1982) 'Positive and Negative Positivism', *The Journal of Legal Studies*, 11: 139-164.
- (2003) *The Practice of Principle: In Defence of a Pragmatist Approach to Legal Theory*, Oxford University Press.
- (2009) 'Beyond inclusive legal positivism', *Ratio Juris*, 22: 359-394.
- Coleman, J., Himma, K.E., and Shapiro, S. (eds.) (2004) *The Oxford Handbook of Jurisprudence and Philosophy of Law*, Oxford University Press.
- Correia, F. (2005) *Existential Dependence and Cognate Notions*, Philosophia Verlag.
- Correia, F. and Schnieder, B. (eds.) (2012) *Metaphysical Grounding: Understanding the Structure of Reality*, Cambridge: Cambridge University Press.

- Craig, E. (ed.) (2001) *Routledge Encyclopedia of Philosophy*, London: Routledge.
- Dancy, J. (2004) *Ethics Without Principles*, Oxford University Press.
- Dasgupta, S. (2014) 'The Possibility of Physicalism', *The Journal of Philosophy*, 111: 557-592.
- (2017) 'Constitutive Explanation', *Philosophical Perspectives*, 27: 74-97.
- deRosset, L. (2013) 'Grounding Explanations', *Philosophers' Imprint*, 27: 74-97.
- Dixon, T. S. (2016) 'Grounding and Supplementation', *Erkenntnis*, 81: 375–389.
- Dworkin, R. (1977) *Taking Rights Seriously*, Duckworth.
- (1986) *Law's Empire*, Harvard University Press.
- Enoch, D. (2011) *Taking Morality Seriously. A Defense of Robust Realism*, Oxford University Press.
- Epstein, B. (2015) *The Ant Trap: Rebuilding the Foundations of the Social Sciences*, Oxford University Press.
- Ferrer Beltrán, J. and Battista Ratti, G. (eds.) (2012) *The Logic of Legal Requirements: Essays on Defeasibility*, Oxford University Press.
- Ferrer Beltrán, J., Moreso, J.J., Papayannis, D. (eds.) (2013), *Neutrality and Theory of Law*, Springer.
- Fine, K. (2001) 'The question of realism', *Philosophers' Imprint*, 1: 1-30.
- (2012) 'Guide to Ground', in Correia et al. (eds.) (2012), 37-80.
- Finnis, J. (1980) *Natural Law and Natural Rights*, Oxford Clarendon Press.
- Gardner, J. (2001) 'Legal Positivism: 5½ Myths', *American Journal of Jurisprudence*, 46: 199-227.
- Greenberg, M. (2004) 'How Facts Make Law', *Legal Theory*, 10: 157-198.
- (2006) 'Hartian Positivism and Normative Facts: How Facts Make Law II', in Hershovitz (ed.) (2006).
- (2014) 'The Moral Impact Theory of Law', *Yale Law Journal*, 123: 1288-1342.
- Griffith, A.M. (2017) 'Social construction and grounding', *Philosophy and Phenomenological Research*, 97: 393-409.
- Hale, B. and Hoffmann, A. (eds.) (2010) *Modality: Metaphysics, Logic, and Epistemology*, Oxford University Press.
- Hart, H.L.A. (1958) 'Positivism and the Separation of Law and Morals', *Harvard Law Review*, 71.

- (1961) *The Concept of Law*, 1<sup>st</sup> edition, Oxford University Press.
- (2012) *The Concept of Law*, 3<sup>rd</sup> edition, Clarendon Press: Oxford University Press.
- Hershovitz, S. (ed.) (2006) *Exploring Law's Empire: The Jurisprudence of Ronald Dworkin*, Oxford University Press.
- Kripke, S.A. (1982) *Wittgenstein on Rules and Private Language*, Harvard University Press.
- Leuenberger, S. (2014) 'Grounding and Necessity', *Inquiry*, 57: 151-174.
- Lewis, D. (1989) 'Dispositional Theories of Value', *Proceedings of the Aristotelian Society*, suppl. vol. 631: 13-38.
- Litland, J. E. (2015) 'Grounding, Explanation, and the Limit of Internality', *Philosophical Review*, 124: 481-532.
- (2017) 'Grounding ground', in Bennett et al. (eds.) (2017), 279-315.
- Lombard, L.B. (1990) 'Causes, Enablers, and the Counterfactual Analysis', *Philosophical Studies*, 59: 195- 211.
- Lord, E. and Maguire, B. (eds.) (2016) *Weighing Reasons*, Oxford: Oxford University Press.
- Loss, R. (2017) 'Grounding, Contingentism and Transitivity', *Ratio*, 30: 1- 14.
- Mackie, P. (1991) 'Causing, Enabling, and Counterfactual Dependence', *Philosophical Studies*, 62: 325- 330.
- Marmor, A. (2004) 'Exclusive Legal Positivism', in Coleman et al. (eds.) (2004), 104-124.
- (2007) *Law in the Age of Pluralism*, Oxford: Oxford University Press.
- McPherson, T. and Plunkett, D. (eds.) (2017), *The Routledge Handbook of Metaethics*, Routledge.
- Mikkola, M. (2015) 'Doing Ontology and Doing Justice: What Feminist Philosophy Can Teach Us about Meta-Metaphysics', *Inquiry*, 58: 780–805.
- Moreso, J.J. (2012) 'Legal Defeasibility and the Connection between Law and Morality', in Ferrer et al. (eds) (2012), 225-237.
- Plunkett, D. (2012) 'A Positivist Route for Explaining How Facts Make Law', *Legal Theory*, 18: 139-207.
- (2019) 'Robust Normativity, Morality, and Legal Positivism', in Plunkett et al. (eds.).
- Plunkett, D. and Shapiro, S. (2017) 'Law, Morality, and Everything Else: General

- Jurisprudence as a Branch of Metanormative Inquiry’, *Ethics*, 128: 37-68.
- Plunkett, D., Shapiro, S. and Toh, K. (eds) (2019) *Dimensions of Normativity: New Essays on Metaethics and Jurisprudence*, Oxford University Press.
- Raz, J. (1979) *The Authority of Law: Essays on Law and Morality*, Oxford: Clarendon Press.
- (1985) ‘Authority, Law, and Morality’, *The Monist*, 68: 295–324.
- (1995) *Ethics in the Public Domain: Essays in the Morality of Law and Politics*, Oxford University Press.
- Rosen, G. (2010) ‘Metaphysical Dependence: Grounding and Reduction’, in Hale et al. (eds.) (2010), 109-36.
- (2017) ‘Metaphysical Relations in Metaethics’, in McPherson et al. (eds.) (2017), 151-169.
- Scanlon, T.M. (1998) *What We Owe to Each Other*, Cambridge MA: Harvard University Press.
- Schaffer, J. (2009) ‘On What Grounds What’, in Chalmers et al. (eds.) (2009), 347-383.
- (2012) ‘Grounding, Transitivity, and Contrastivity’, in Correia et al. (eds.) (2012), 122-138.
- (2016) ‘Grounding in the Image of Causation’, *Philosophical Studies*, 173: 49-100.
- (2017a) ‘The Ground between the Gaps’, *Philosophers’ Imprint*, 17: 1-26.
- (2017b) ‘Laws for Metaphysical Explanation’, *Philosophical Issues*, 27: 302-321.
- (2017c) ‘Social construction as grounding; or: fundamentality for feminists, a reply to Barnes and Mikkola’, *Philosophical Studies*, 174: 2449-2465.
- (forthcoming) ‘Anchoring as Grounding: On Epstein’s The Ant Trap’, *Philosophy and Phenomenological Research*.
- Schauer, F. (2005) ‘The Social Construction of The Concept of Law’, *Oxford Journal of Legal Studies*, 25: 493-501.
- Schroeder, M. (2007) *Slaves of The Passions*, Oxford: Oxford University Press.
- Shapiro, S. (2011) *Legality*, Harvard University Press.
- Skiles, A. (2015) ‘Against Grounding Necessitarianism’, *Erkenntnis*, 80: 717-751.
- Stavropoulos, N. (2014) ‘Legal Interpretivism’, *The Stanford Encyclopedia of Philosophy* (Summer 2014 Edition), Edward N. Zalta (ed.) (2014), URL = <<https://plato.stanford.edu/archives/sum2014/entries/law-interpretivist/>>.

- Trogon, K. (2013) 'Grounding: Necessary or contingent?', *Pacific Philosophical Quarterly*, 94: 465-485.
- Waluchow, W.J. (1994) *Inclusive Legal Positivism*, Oxford: Clarendon Press.
- (2001) 'Legal positivism, inclusive versus exclusive', in Craig (ed.) (2001).
- Wilson, J. (2014) 'No Work for a Theory of Grounding', *Inquiry*, 57: 535-79.
- (2018) 'Grounding-Based Formulations of Physicalism', *Topoi*, 37: 495-512.





# Is Hume's Law a Threat to Naturalism and Positivism?

Samuele Chilovi (University of Barcelona) and Daniel Wodak (Virginia Tech)

**Abstract:** Hume's Law that one cannot derive an 'ought' from an 'is' used to be widely seen as a serious threat to moral naturalism, but this view has come under considerable fire in recent decades. Over that same period, Hume's Law has come to be viewed as a serious threat to legal positivism; 'Hume's Challenge', for example, is a central theme in Scott Shapiro's *Legality*. This asymmetry is striking, since naturalism and positivism are taken to be analogous metaphysical theses. If Hume's Law is (not) a threat to one, wouldn't that be true for the other? Our main aim in this paper is to establish that Hume's Law is not a threat to positivism or naturalism. First, we argue that Hume's Law is not a threat to naturalism on two grounds; one builds off work by Charles Pigden, the other is entirely novel. Second, we show that Shapiro's explanation of why Hume's Law is a threat to positivism rests on implausible epistemological commitments. If we're right, a supposedly central problem in philosophy of law is built on sand. But even if we're wrong, we hope to have made progress by connecting two extensive parallel discussions of the implications of Hume's Law.

## 1. Introduction

Hume's Law is, roughly, the thesis that one cannot derive an 'ought' from an 'is'. Here's a striking sociological observation. It was once widely thought that if Hume's Law is true, it poses a serious threat to moral naturalism; but due most notably to the work of Charles Pigden (1989; 1991; 2010), this line of thought has largely been abandoned in

contemporary metaethics. Yet over this same time period, Hume's Law has come to be viewed as *a*, if not *the*, central challenge to legal positivism in philosophy of law.<sup>1</sup> This line of thought dates back at least to Hans Kelsen (1934; 1967: 6-8), but it has become prominent in large part due to Joseph Raz (1990: 171-177), and its most developed recent defense is in Scott Shapiro's *Legality*. Shapiro argues that legal positivism 'appears to violate the famous principle introduced by David Hume [...], which states that one can never derive an ought from an is'; this is regarded as 'an extremely serious challenge' (Shapiro 2011: 47), and is a central theme in the book.

The sociological observation is that Hume's Law ceased to be regarded as a serious threat to moral naturalism exactly as it came to be regarded as a serious threat to legal positivism. This is striking in part because naturalism and positivism (as we will call these theories from now) are often understood similarly as metaphysical theses about grounding:<sup>2</sup> moral/legal 'ought' facts are fully grounded in natural/social 'is' facts. If Hume's Law is (not) a threat to one, wouldn't that be true for the other?

The observation calls for an explanation. The explanation we defend is that the metaethicists have it right and the philosophers of law have it wrong: Hume's Law is not a serious threat to naturalism or positivism.

Here's the plan. In §2 we offer two arguments for the view that Hume's Law is not a threat to naturalism. The first identifies the gap between Hume's law (which concerns entailment) and naturalism (which concerns grounding) and argues that it cannot plausibly be bridged. The second shows that any argument from Hume's Law to the negation of naturalism would over-generalize: it would also rule out plausible forms of moral non-naturalism. (The first argument builds off Pigden's ground-breaking work but makes novel points along the way; the second is entirely new).<sup>3</sup>

---

<sup>1</sup> See Bix (2015: 129), Green (1999: 35), Marmor (2009: 158; 2010: 17), and Raz (1974; 1979).

<sup>2</sup> See especially Chilovi and Pavlakos (2019), Plunkett and Shapiro (2017: 38, 42, fn. 11), and Rosen (2010: 110; 2017).

<sup>3</sup> We make explicit what's novel in our discussion of these arguments at the end of §2.1. We would like to thank Charles Pigden for discussion on the relationship between our arguments and his.

In §3 we argue that Hume’s Law is not a threat to positivism either. To defend this, we take up Shapiro’s explanation of why Hume’s Law is a threat, and show that it depends on highly implausible epistemological premises. Interestingly, Shapiro’s explanation does promise to bridge the gap between Hume’s Law and grounding views, so it deserves special attention in the present context. Crucially, however, in the extensive critical discussion of *Legality*, Shapiro’s discussion of ‘Hume’s Challenge’ has either been endorsed or has gone unquestioned;<sup>4</sup> no one has noted, let alone diagnosed, the error in his explanation for why Hume’s Law is a threat to positivism. This is significant: if we’re right, a major theme of contemporary philosophy of law is built on sand, and Hume’s Law can motivate neither legal anti-positivism nor any specific versions of positivism, like Shapiro’s, that circumvent the alleged threat.<sup>5</sup> But even if we’re wrong, we still hope to have made progress by connecting two extensive parallel discussions of the implications of Hume’s Law.

## 2. The Status of Hume’s Law in Metaethics

James Rachels noted that ‘Hume is credited with first observing that we cannot derive ‘ought’ from ‘is’ (2000: 75-76). Rachels continued: ‘It is commonly assumed that, if this is true, the naturalistic project is doomed’. Similarly, Pigden noted that ‘it is often assumed that if moral judgements can be derived from non-moral propositions, naturalism is true. If not, naturalism is false’ (1991: 422-3). These assumptions are far less common now; several arguments show Hume’s Law to be no threat to naturalism.

We will offer two such arguments here. The first concerns the gap between Hume’s Law and naturalism, and how hard it is to bridge. The second shows that if the gap could be

---

<sup>4</sup> Shapiro’s discussion of why Hume’s Law poses a challenge to positivism is endorsed, among others, by Bix (2012: 445), Guest (2012: 553), and Sciaraffa (2011: 611). It is otherwise unmentioned, including in long critical responses (e.g., Hershovitz 2014).

<sup>5</sup> Or at least, that *supposedly* circumvent the threat. See Wodak (forthcoming) for objections to Shapiro’s semantic theory as a way of defusing the threat posed by Hume’s Law.

bridged, the argument would overgeneralize: it would rule out many versions of non-naturalism.

## 2.1 Mind the Gap

As Pigden has pointed out (1989; 1991; 2010), once we have a clear formulation of Hume's Law and naturalism, there is a conspicuous gap between the two. Moreover, as we will show here, the most obvious ways of bridging the gap rely on highly contentious metaphysical views.

Let's start with the relevant formulations of Hume's Law and naturalism. We take Hume's Law to express a putative 'implication barrier' between 'ought' and 'is' statements.<sup>6</sup> In other words, Hume's Law asserts that no set of 'is' statements can logically entail any 'ought' statement.

This characterization of Hume's Law as a thesis about logical entailment is a near-orthodoxy,<sup>7</sup> and is shared by most of our opponents in this project. Shapiro writes that 'Hume's Law states [that] no normative conclusion can follow from statements that report [descriptive facts]'. (Shapiro 2011: 48)

There are several choice points in how to formulate Hume's Law as a barrier to implication. We follow others in taking its scope to be with the categories of *normative* and *descriptive* statements, rather than 'ought' and 'is' statements *per se*: 'is' statements that ascribe goodness or wrongness, for instance, are regarded as being within the ambit of Hume's Law.<sup>8</sup> For expository convenience, we also assume that the *relata* of the entailment are propositions.<sup>9</sup> Given this, we can formulate Hume's Law precisely:

---

<sup>6</sup> See Russell and Restall (2010), Russell (2010)

<sup>7</sup> See e.g. Pigden (1989), Russell and Restall (2010), Russell (2010), Schurz (1997), and Singer (2015). See also every chapter in the recent volume on Hume's Law, Pigden (2010).

<sup>8</sup> See the examples cited by Maguire (2015: 432).

<sup>9</sup> Though see Fine (forthcoming) for an argument for this assumption.

**Hume's Law**            No normative proposition  $p_n$  is logically entailed by any collection of descriptive propositions  $\Delta_d$ .<sup>10</sup>

We take no stand on whether Hume's Law, so formulated, is true. Since Prior (1960), it has been disputed whether it faces counterexamples.<sup>11</sup> (This leads some to adopt non-logical characterizations of Hume's Law).<sup>12</sup> Whether this thesis about logical entailment is true is a significant matter. But so is the matter that we will focus on: if it is true, (how) does that threaten naturalism? That this *conditional* claim is our focus is a further reason why we adopt the above logical characterization of Hume's Law.<sup>13</sup>

Having characterized Hume's Law, let's turn to naturalism. While it is sometimes framed as a thesis about property identity or reduction,<sup>14</sup> we think there are compelling reasons to formulate the theory in terms of the *metaphysical grounding* of moral facts by certain descriptive facts:<sup>15</sup>

**Naturalism**            For every moral fact  $[p_m]$  there is some collection of natural facts  $\Gamma_n$  such that  $[p_m] \leftarrow \Gamma_n$ .<sup>16</sup>

---

<sup>10</sup> Some conventions on notation. We use ' $p$ ' to denote a proposition, ' $[p]$ ' to denote 'the fact that  $p$ ', and Greek capitals to denote sets of propositions or facts depending on the context. Subscripts—' $p_d$ ' and ' $[p_d]$ '—denote that the proposition/fact is descriptive (or...).

<sup>11</sup> See Pigden (1989), Schurz (1997), Singer (2015), and Russell and Restall (2010); cf. Woods and Maguire (2017).

<sup>12</sup> Maguire (2015: 434) treats Prior's counterexamples as the primary motivation for considering metaphysical or epistemological (à la Dworkin 2011: 17, 44, and 426-7 fn. 6; see also Ehrenberg 2016: 4) interpretations of Hume's Law. Maguire then raises problems for each (2015: 436-441).

<sup>13</sup> To be clear, we are not committed to the view that this is 'the correct' characterization of Hume's Law. We simply take the characterization above to be sufficiently dominant, interesting and precise to warrant investigation of its significance for metaethics.

<sup>14</sup> Pigden (1989: 128): 'I define naturalism (for the purposes of this paper) as the doctrine that though there are moral truths, there are no peculiar or irreducibly moral facts or properties'. Pigden (1991: 421): 'naturalism is (in a loose sense) a reductive doctrine. [For the naturalist], goodness can be further analyzed or explained; reduced to something else or identified with some other property'. See also Pigden (2010: 219).

<sup>15</sup> For discussion, see especially Rosen (2010; 2017).

<sup>16</sup> ' $[p] \leftarrow \Gamma$ ' means 'the fact that  $p$  is fully grounded by the facts in  $\Gamma$ '.

**Naturalism** says that for every moral fact there is a collection of natural facts that fully grounds it, so facts about what one morally ought to do are fully grounded in descriptive facts. (This simple formulation can be fine-tuned in various ways that don't affect the discussion that follows).

So formulated, it is understandable that philosophers might declare that if Hume's Law is true, then naturalism is false, as both concern relations between the normative and the descriptive. But they involve different relations. A barrier to *entailment* between descriptive to normative propositions does not, on its own, bear on whether normative facts are *grounded* by descriptive facts. One cannot pull a metaphysical rabbit out of a logical hat, at least not without the help of some auxiliary hypotheses.

This last point raises a further question which warrants attention. Pigden argued that Hume's Law *on its own* does not pose a threat to naturalism: 'Naturalism, it seems, is logically independent of [Hume's Law]. Whether [Hume's Law] is true or false, naturalism could be true or false'.<sup>17</sup> This raises a question: can Hume's Law be coupled with auxiliary hypotheses that would bridge the gap, thereby posing a threat to naturalism?

In a word: Yes. To see why, we will show that two auxiliary hypotheses that some philosophers have accepted can bridge the gap between grounding and entailment. So Hume's Law can pose a threat to positivism. But the threat posed is extremely weak, because the *conjunction* of these auxiliary hypotheses is highly contentious.

The first hypothesis links grounding to metaphysical necessitation:

**G2N Link**    If  $[p] \leftarrow \Gamma$ , then  $\Box_M(\wedge \Gamma \rightarrow p)$ .<sup>18</sup>

**G2N Link** says if the fact that  $p$  is fully grounded in a collection of facts  $\Gamma$ , the corresponding conjunction of propositions  $\wedge \Gamma$  metaphysically necessitates  $p$ . There is no

---

<sup>17</sup> Pigden (2010: 224). See also Pigden (1989; 1991).

<sup>18</sup> ' $\wedge \Gamma$ ' denotes the conjunction of the propositions that correspond to the facts in  $\Gamma$ .

metaphysically possible world where the full grounding base obtains, yet the grounded fact does not. **G2N Link** is widely accepted:<sup>19</sup> grounding is such an intimate connection between distinct entities that what is grounded cannot ‘float free’ of its grounds.

The second hypothesis links metaphysical necessitation to entailment:

**N2E Link** If  $\Box_M(\wedge \Gamma \rightarrow p)$ , then  $\Gamma$  entails  $p$ .

**N2E Link** says that if  $p$  is metaphysically necessitated by a conjunction of propositions  $(\wedge \Gamma)$ ,  $p$  is logically entailed by (the set corresponding to) that conjunction. Some find this view attractive because they adopt a modal characterization of logical entailment,<sup>20</sup> and take metaphysical necessity to be unrestricted: If  $p$  is metaphysically necessitated by  $\Gamma$ , it is absolutely impossible for  $p$  to be false if the propositions in  $\Gamma$  are all true; and if this is true,  $\Gamma$  entails  $p$ .

The conjunction of these principles shows that there are ways of bridging the gap between Hume’s Law and naturalism, so naturalists face a threat: if **Naturalism** and **G2N Link** are true, ‘is’ facts metaphysically necessitate ‘ought’ facts, and if **N2E Link** is true, the corresponding ‘is’ propositions logically entail ‘ought’ propositions. So **Naturalism** violates **Hume’s Law**.

But this is a very weak threat: naturalists are on firm ground if they reject the conjunction of **G2N Link** and **N2E Link**. Although **G2N Link** is quite plausible, ‘grounding contingentists’ make a good case for denying it. Say universal generalizations are grounded in their instances: at the actual world the facts  $[Fa_1], \dots, [Fa_n]$  collectively ground the fact  $[\forall xFx]$ . Now consider a possible world where  $[Fa_1], \dots, [Fa_n]$  all obtain but  $[\forall xFx]$  does not: some further entity,  $c$ , is not  $F$ , and thereby *disables*  $[Fa_1], \dots, [Fa_n]$  from grounding  $[\forall xFx]$ . So  $[Fa_1], \dots, [Fa_n]$  ground, but don’t necessitate,  $[\forall xFx]$ .<sup>21</sup>

---

<sup>19</sup> Audi (2012), Correia (2005), Rosen (2010), Trogdon (2013).

<sup>20</sup> See, e.g., Ridge (2006), who recants in (2014: 154-155).

<sup>21</sup> See Leuenberger (2014) and Skiles (2014), as well as Bricker (2006), Schaffer (2010), Schnieder (2006), and Zangwill (2008). Bliss and Trogdon (2016) offer similar normative examples of *disablers*, drawing on Dancy (2004): At the actual world a descriptive fact grounds



**N2E Link**, however, is where the real trouble starts. The orthodox view is that metaphysical necessitation does not suffice for entailment, for two reasons. First, because entailments must be necessary *and formal*.<sup>22</sup> For  $\Gamma$  to entail  $p$ , it is not enough that  $p$  is true whenever  $\Gamma$  are all true. This must hold *in virtue of the form* of the propositions involved (in some sense).<sup>23</sup> Second, because metaphysical necessity may be *restricted*. For instance, Schaffer (2016; 2017) takes metaphysically possible worlds to be the logically possible worlds with the same metaphysical laws. If metaphysical necessity is nested in such a manner, it does not suffice for logical necessity. In other words: it could be that in all *metaphysically* possible worlds certain ‘is’ propositions guarantee certain ‘ought’ propositions, but in some *logically* possible worlds they don’t.

So far, we have identified one good reason to think that the metaethicists have it right: Hume’s Law is not a threat to naturalism because of the gap between logical entailment and metaphysical grounding, and how hard it is to find a plausible way to bridge that gap. Here we have been building off what we take to be the best of Pigden’s arguments for the compatibility of Hume’s Law and naturalism.<sup>24</sup> For interested readers, we will now be more explicit about which of the points in this subsection are new. (Uninterested readers can skip ahead to the next subsection). Pigden’s key point was that there is a gap between Hume’s Law and naturalism, where the latter is understood in terms of property identity or reduction. We have shown that this gap also exists when naturalism is formulated in terms of grounding; that this gap can be bridged by auxiliary hypotheses; and that the

---

a normative fact (that you promised to  $\varphi$  grounds the fact that you have a reason to  $\varphi$ ), but other facts could *disable* this (that the promise was made under duress). For discussion, see Chilovi (2018).

<sup>22</sup> See Tarski (1936: 414). Cf. Dutilh Novaes (2012), Etchemendy (1983), Read (1994).

<sup>23</sup> On formality, cf. Sagi (2014: 945), Shapiro (1998: 132) and Sher (1996: 668).

<sup>24</sup> Pigden’s two other arguments for this conclusion are as follows. First, Hume was a naturalist and endorsed Hume’s Law, so the two theses are compatible (see Pigden 2010: 134, 187; 2016). We doubt this works for several reasons; the most important is that Hume’s key passage in the *Treatise* is best interpreted as a thesis about *motivation* rather than *entailment*, so Hume may not have endorsed Hume’s Law (see Finnis 1980: 37-48). Second, Hume’s Law is merely a specific instance of the conservativeness of logic: it is equivalent to the point that one cannot derive ‘hedgehog’ conclusions from hedgehog-free premises (Pigden 1991). We have doubts about this too: some think Hume’s Law is a provable logical theorem that is more exciting than a specific instance of conservativeness (see especially Schurz 1997, and Russell and Restall 2010).

problems with those auxiliary hypotheses are numerous.<sup>25</sup> We think these novel points are important. But those who disagree need not despair; our second argument offers an entirely new reason why Hume's Law is no threat to naturalism.

## 2.2 Overgeneralization

Our second argument is oddly unappreciated. If Hume's Law threatens naturalism, it also threatens many plausible varieties of non-naturalism. So arguing from Hume's Law to the negation of naturalism proves too much.

Recall that moral naturalism is *universally* quantified. This leads to *existentially* quantified formulations of non-naturalism (e.g., Rosen 2017):

**Non-Naturalism** For some moral fact  $[p_m]$ , there is no collection of natural facts  $\Gamma_n$  such that  $[p_m] \leftarrow \Gamma_n$ .

That formulation allows non-naturalists to accept a modest commitment:

**Modest** For some normative fact  $[p_m]$ , there is a collection of natural facts  $\Gamma_n$  such that  $[p_m] \leftarrow \Gamma_n$ .

Non-naturalists can (and indeed should) accept this modest commitment for two reasons. First, because it provides important explanatory resources. For instance, for Leary, the supervenience of *sui generis* moral properties on natural properties is explained in terms of intermediary 'hybrid' moral properties, the facts about which are fully grounded in natural facts (2017: 99).

---

<sup>25</sup> One of Pigden (1989)'s main points is that property identity doesn't suffice for entailment because property identities can be *a posteriori*. This is related to one of our reasons for rejecting **N2E Link**. However, we also identified two further reasons to reject the conjunction of the relevant auxiliary hypotheses. In doing so, we have identified further significant obstacles to arguing from Hume's Law to the negation of naturalism.

Second, because non-naturalism may be more plausible for some normative domains than others. Perhaps moral non-naturalism is true, yet prudential facts are normative and fully grounded in natural facts.<sup>26</sup>

Importantly, if **Hume's Law** threatens **Naturalism**, it threatens **Modest** too. This holds if we embrace **G2N Link** and **N2E Link**, but it should also hold for any plausible alternative way of bridging the gap between entailment and grounding. If the fact that *no* normative proposition is entailed by a set of descriptive propositions falsifies the claim that *every* normative fact is fully grounded in non-normative facts, it will also falsify the claim that *some* normative fact is fully grounded in non-normative facts. If so, non-naturalism must be universally quantified. This ratchets up the non-naturalist's commitments (her thesis must hold for morality and prudence and...), and depletes her explanatory resources (there can be no 'hybrid' moral facts to explain the supervenience of the moral on the non-moral).

There's a kicker here. Non-naturalists may be left not only without an explanation of supervenience. They may be left *denying* supervenience. If supervenience holds, the relevant moral facts are metaphysically necessitated by the relevant natural facts.<sup>27</sup> If supervenience holds *and* **N2E Link** is true, Hume's Law is violated. So Hume's Law and **N2E Link** imply the negation of the supervenience of the moral on the natural. But supervenience is a core commitment of most non-naturalists.<sup>28</sup> So by wielding Hume's Law and **N2E Link** to challenge their rivals, non-naturalists risk undermining their own commitments. And similar reasoning holds *apropos* the supervenience of the legal on the social.<sup>29</sup>

---

<sup>26</sup> Notice indeed that Hume's Law concerns the general category of normative statements, of which moral statements are but one specific type. This point, then, may be even stronger with 'merely formal' normative standards like etiquette (McPherson 2011), where naturalism is harder to reject. Some deny that such domains are 'normative' in the right sense, but we're not sure if that move is plausible here since Hume's Law, if true, holds for all propositions which have the same form.

<sup>27</sup> This claim about metaphysical necessity may also be conceptually necessary.

<sup>28</sup> Rosen (2017) calls the former 'the least controversial thesis in metaethics'. (Though he rejects it, along with some others, e.g., Hattiangadi 2018).

<sup>29</sup> Many anti-positivists – e.g., Greenberg (2004: 160) – accept this supervenience thesis.

### 3. The Status of Hume's Law in Jurisprudence

We've offered two arguments for the conclusion that Hume's Law is not a serious threat to naturalism. Why, then, is it widely regarded in philosophy of law as a serious threat to positivism?

The answer is not obvious, in part because philosophers of law who appeal to Hume's Law say remarkably little about whether it is true, despite Prior (1960)'s putative counterexamples, or about the gap between grounding and entailment identified above. This is an area, unfortunately, where parallel discussions of the same philosophical problem have proceeded in isolation from each other.

That said, despite not engaging with this parallel discussion, it could be that philosophers of law have it right after all. It could be that philosophers of law have identified a compelling explanation for why Hume's Law poses a serious threat to positivism. And this explanation could carry over to naturalism (in which case metaethicists have it wrong) or it could be *sui generis* to law (in which case philosophers of law and metaethicists were both right, despite the symmetry in their views).

To test this, we need to consider why Hume's Law is supposed to pose at least a *prima facie* threat to positivism. While this line of reasoning originates from Kelsen (1934; 1967: 6-8), early discussions of it – e.g., in Green (1999: 35) and Raz (1974; 1979: 124-125; 1990: 171-177) – have not been particularly clear. For this reason, we will focus on what we take to be the clearest, best developed, and most recent explanation of why Hume's Law poses a *prima facie* threat to positivism. This comes in what is arguably the most important book on positivism in over a decade: Shapiro's *Legality*.

Though *Legality* has received a great deal of critical attention, Shapiro's explanation of Hume's Challenge – a central theme in the book – has surprisingly not been subject to much scrutiny.<sup>30</sup> Indeed, many critics have suggested that they agree with the nature of

---

<sup>30</sup> There have been many critical discussions of *Legality*, including a book symposium in *Analysis* (2012), a volume of collected papers (Canale and Tuzet 2013), and several book reviews (e.g.

the challenge identified by Shapiro. No one has noted that Shapiro's explanation of it fails, let alone diagnosed why it fails.<sup>31</sup>

Like us, Shapiro formulates Hume's Law as a thesis about logical entailment, and positivism as a metaphysical thesis about grounding:<sup>32</sup>

**Positivism**            For every legal fact  $[p_l]$  there is some collection of social facts  $\Gamma_s$  such that  $[p_l] \leftarrow \Gamma_s$ .

That is, for every legal fact, there is some set of social facts that fully grounds it. While he does not explicitly acknowledge the gap between this thesis and Hume's Law, he offers a way to bridge it via epistemology:

According to the legal positivist, the content of the law is ultimately determined by social facts alone. To know the law, therefore, one must (at least in principle) be able to derive this information exclusively from knowledge of social facts. But knowledge of the law is normative whereas knowledge of social facts is descriptive. How can normative knowledge be derived exclusively from descriptive knowledge? That would be to derive facts about what one legally ought to do from judgments about what is the case. Legal positivism, therefore, appears to violate the famous principle introduced by David Hume (often called Hume's Law), which states that one can never derive an ought from an is. (Shapiro 2011: 43)

---

Hershovitz 2014). Nevertheless, Shapiro's explanation of Hume's Challenge, though crucial to his project in *Legality*, has not been subject to much criticism in the many responses to the book; indeed, it is endorsed by several prominent philosophers of law, including Guest (2012: 553), Bix (2012: 445), and Sciaraffa (2011: 611).'

<sup>31</sup> This is discussion of philosophy of law is another respect in which our discussion is novel. Pigden (2016) offers positivist-friendly accounts of 'oughts' associated with the institutions of promising and dueling, and notes (correctly, in our view) that these accounts are compatible with Hume's is/ought gap. But neither Pigden nor anyone else has engaged with Shapiro's epistemological explanation for why Hume's Law poses a *prima facie* threat to positivism. Showing why this explanation fails is important.

<sup>32</sup> Shapiro (2011: 48, 269-271). Shapiro's formulation of the positivist thesis is slightly different, but in ways that don't matter for the present discussion.

This passage is key, so we will spend some time unpacking it. Shapiro implicitly appeals to two distinct epistemological claims to bridge the gap, but neither of them is made explicit or defended at any length. We think both should be rejected, but we don't need to convince you of that: the dialectically important point is that *their conjunction* should be rejected.

First, Shapiro needs to justify the inference from the first sentence above to the second. The general principle that he relies on here seems to be:

**G2K Link**            If facts about A are fully grounded in facts about B, one can in principle derive knowledge of A exclusively from knowledge of B.<sup>33</sup>

We think this claim should be rejected. A rival view is more attractive:

**Attractive Rival**    If facts about A are fully grounded in facts about B, one can in principle derive knowledge of A from knowledge of B *in conjunction with* knowledge of the relevant grounding principles.

To appreciate the issue here, consider cases where the relevant grounding principles are *a posteriori*, or conceivably false, or otherwise opaque.<sup>34</sup> Take a mereological case: facts about distributions of hydrogen and oxygen fully ground facts about water. If so, according to **G2K Link** one can in principle derive knowledge of the presence of water from knowledge of the presence of distributions of hydrogen and oxygen. But plausibly, one can only derive this if one knows that H<sub>2</sub>O grounds water. There are ways of restricting **G2K Link** to accommodate such cases,<sup>35</sup> but it is unclear how such restricted views apply to a thesis like positivism.

---

<sup>33</sup> Arguably, **G2K Link** plays a role in debates about physicalism. See Levine (1983). Cf. Block and Stalnaker (1999), and Chalmers and Jackson (2001).

<sup>34</sup> Schaffer (2017).

<sup>35</sup> See, e.g., Chalmers (2012).

Say we spot Shapiro **G2K Link**. He still needs to justify the inference in the second half of the passage above: that if ‘normative knowledge [can] be derived exclusively from descriptive knowledge’, this violates Hume’s Law. The epistemological principle Shapiro seems to be relying on here is:

**E2K Link**                    If propositions about A do not logically entail propositions about B, one cannot in principle derive knowledge of B from knowledge of A.

We think **E2K Link** generates untenable skepticism in two ways.

First, note that the is/ought gap has a similar status to other barriers to implication: that no set of particular propositions logically entails a universal proposition; and that no set of propositions about the past logically entails a proposition about the future (see Russell 2010: 154-159). Coupled with **E2K Link**, these barriers to implication would show that one cannot derive knowledge of a universal from knowledge of particulars, and that one cannot derive knowledge of the future from knowledge of the past. That is, it generates skepticism about induction.

Second, note Harman (1984)’s famous point that human reasoning rarely fits the model of deductive inference. We see *a, b, c, ...* and observe that *Fa, Fb, Fc, ...*, and infer from this alone that  $\forall xFx$  – without believing any further premise that would make this inference deductively valid. If **E2K Link** is true, such conclusions are not doxastically justified (even if they’re propositionally justified). So skepticism looms: we know little. Similarly, Horty (2004; 2011) argues that legal reasoning is often best modeled on a non-monotonic logic. If **E2K Link** is true, legal reasoners’ conclusions are not known: they’re not based on premises that deductively entail them.

Just in case this seems uncharitable to Shapiro, it is worth noting that he explicitly frames Hume’s Law in terms of good reasoning and inference:

Because normative conclusions cannot be derived exclusively from descriptive premises, normative reasoners must conform to a certain pattern of inference: they must ensure that their reasoning takes a normative judgment as input if a normative judgment is the output. Call this ‘normative in, normative out’ pattern of inference a ‘NINO’ pattern. Hume’s Law is violated, therefore, if a normative judgment comes out but only descriptive judgments went in. Call this offending sequence a ‘DINO’ pattern.

The worry about legal positivism [...] is that it violates Hume’s Law by licensing DINO patterns of inference. [...] Call this objection to legal positivism ‘Hume’s Challenge’. (Shapiro 2011: 48)

This passage assumes that good forms of reasoning and inference must be deductively valid. As a *reductio*, consider a parallel argument about time:

Because it is a Law that conclusions about the future cannot be derived exclusively from premises about the past, predictors must conform to a certain pattern of inference: they must ensure that their reasoning takes a judgment about the future as input if a judgment about the future is the output. Call this ‘future in, future out’ pattern of inference a ‘FIFO’ pattern. The Law is violated, therefore, if a judgment about the future comes out but only judgments about the past went in. Call this offending sequence a ‘PIFO’ pattern.

Unless inferences must be deductively valid, that propositions about the future cannot be logically derived from propositions about the past does not preclude us from engaging in knowledge-yielding PIFO inferences. And since Hume’s Law about ‘is’ and ‘ought’ is equivalent to the barrier to implication about the past and the future, it provides no reason to allow PIFO patterns of inferences but forbid DINO patterns of inference.

One might try to jettison **E2K Link** at this point. But if one adopts a weaker commitment than it, one needs a stronger commitment than **G2K Link** to support the Challenge. Shapiro sometimes suggests one: that if the content of the law is ultimately determined by social facts alone, one can *only* derive knowledge of the law from knowledge of social



facts.<sup>36</sup> This just shifts the bump in the rug. Your testimony can give us knowledge of facts about your mental states, without that knowledge being derived from knowledge of what grounds those facts. Likewise, even if positivism is true, we can learn the content of the law via testimony from legal experts, not just via learning the social facts that ground the legal facts.

Given these problems with this appeal to epistemological principles, we think Hume's Challenge is a non-starter (or at least, that no one in philosophy of law has shown it to be otherwise). Hence our view: Hume's Law is not a serious threat to naturalism or positivism. But if we're wrong, it is worth noting that Hume's Challenge would not be *sui generis*: Hume's Law, coupled with **G2K Link** and **E2K Link**, would also rule out naturalism (and modest versions of non-naturalism and anti-positivism).<sup>37</sup>

## 4. Conclusion

It is striking that Hume's Law ceased to be regarded as a serious threat to naturalism while coming to be regarded as a serious threat to positivism. Given the similarities between the metaphysical commitments of the naturalist and the positivist, you would expect that Hume's Law is either a threat to both or a threat to neither. Our view is that it is a threat to neither. We think Pigden was right to push against the then prevailing wisdom that Hume's Law undermines naturalism: indeed, we've offered additional reasons to think that Pigden was right, in that the best ways to bridge the gap he identified fail, and the threat would overgeneralize. We also think philosophers of law who take Hume's Law to be a threat to positivism have offered no compelling explanation of *why* it is a threat. If we're right, philosophers of law should follow metaethicists and cease to vest Hume's Law with such central significance in jurisprudence.

---

<sup>36</sup> 'To obtain the answer [to whether the death penalty is constitutional], positivism *requires* the reasoner to take note of certain social facts' (Shapiro 2011: 48, emphasis ours).

<sup>37</sup> In this respect, it would provide a way to vindicate the long-standing (but to our minds, quite obscure) idea in philosophy of law that Hume's Law threatens *rivals* to positivism. See, e.g., Bix (2002: 74-75), who claims that Hume's law 'undermines a major strand of natural law theory', and is responsible for pushing 'natural law theory to the sidelines'.

## References

- Audi, P. (2012) 'Grounding: Toward a Theory of the In-Virtue-Of Relation', *The Journal of Philosophy*, 109: 685-711.
- Araszkievicz, M., Banas, P., Gizbert-Studnicki, T., and Pleszka, K. (eds.) (2015) *Problems of Normativity, Rules and Rule-Following*, Law and Philosophy Library, Springer.
- Bix, B. (2002) 'Natural Law: The Modern Tradition', in Coleman et al. (eds.) (2002). (2012) 'Scott J. Shapiro, Legality', *Ethics*, 122: 444-448. (2015) 'Rules and Normativity in Law', in Araszkievicz et al. (eds.) (2015).
- Bliss, R. and Trogdon, K. (2016) 'Metaphysical Grounding', *The Stanford Encyclopedia of Philosophy* (Winter 2016 Edition), Edward N. Zalta (ed.), URL = <<https://plato.stanford.edu/archives/win2016/entries/grounding/>>.
- Block, N. and Stalnaker, B. (1999) 'Conceptual Analysis, Dualism, and the Explanatory Gap', *Philosophical Review*, 108: 1-46.
- Bricker, P. (2006) 'The general and the particular: supervenience vs. entailment', in Zimmerman (ed.) (2006), 251-287.
- Canale, D. and Tuzet, G. (eds.) (2013) *The Planning Theory of Law: A Critical Reading*, Springer.
- Chalmers, D. (2012) *Constructing the World*, Oxford University Press.
- Chalmers, D. and Jackson, F. (2001) 'Conceptual analysis and reductive explanation', *Philosophical Review*, 110: 315-61.
- Chalmers, D. J., Manley, D. and Wasserman, R. (eds.) (2009), *Metametaphysics: New Essays on the Foundations of Ontology*, Oxford: Oxford University Press.
- Chilovi, S. (2018) 'Grounding entails supervenience', *Synthese*, First Online: <https://doi.org/10.1007/s11229-018-1723-x>.
- Chilovi, S. and Pavlakos, G. (2019) 'Law-Determination as Grounding: A Common Grounding Framework for Jurisprudence', *Legal Theory*, 25: 53-76.
- Coleman, J., Himma, K.E., and Shapiro, S. (eds.) (2004) *The Oxford Handbook of Jurisprudence and Philosophy of Law*, Oxford University Press.
- Corcoran, J. (ed.) (1983) *Logic, Semantics, Metamathematics*, Indianapolis: Hackett.

- Correia, F. (2005) *Existential Dependence and Cognate Notions*, Philosophia Verlag.
- Correia, F. and Schnieder, B. (eds.) (2012), *Metaphysical Grounding: Understanding the Structure of Reality*, Cambridge University Press.
- Dancy, J. (2004) *Ethics without Principles*, Oxford: Oxford University Press.
- Dutilh Novaes, C. (2012) ‘Reassessing logical hylomorphism and the demarcation of logical constants’, *Synthese*, 185: 387–410.
- Dworkin, R. (2011) *Justice for Hedgehogs*, Belknap Press.
- Ehrenberg, K. (2016) *The Functions of Law*, Oxford University Press.
- Etchemendy, J. (1983) ‘The doctrine of logic as form’, *Linguistics and Philosophy*, 6: 319–334.
- Fine, K. (2001) ‘The Question of Realism’, *Philosophers’ Imprint*, 1: 1-30.
- (2012) ‘Guide to Ground’, in Correia et al. (eds.) (2012), 37-80.
- (forthcoming) ‘Truthmaking and the is–ought gap’, *Synthese*, First Online: <https://doi.org/10.1007/s11229-018-01996-8>.
- Finnis, J. (1980) *Natural Law and Natural Rights*, Oxford Clarendon Press.
- Green, L. (1999) ‘Positivism and Conventionalism’, *Canadian Journal of Law and Jurisprudence*, 12: 35–52.
- Greenberg, M. (2004) ‘How Facts Make Law’, *Legal Theory*, 10: 157-198.
- Guest, S. (2012) ‘GLOP, The Moral Aim of Law and Trusting Judges’, *Analysis*, 72: 552–563.
- Hale, B. and Hoffmann, A. (eds.) (2010) *Modality: Metaphysics, Logic, and Epistemology*, Oxford University Press.
- Harman (1984) ‘Logic and reasoning’, *Synthese*, 60: 107-127.
- Hattiangadi, A. (2018) ‘Moral Supervenience’, *Canadian Journal of Philosophy*, 48: 592-615.
- Hershovitz, S. (2014) ‘The Model of Plans and the Prospects for Positivism’, *Ethics*, 125: 152-181.
- Horty, R. (2004) ‘The result model of precedent’, *Legal Theory*, 10: 19-31.
- (2011) ‘Rules and reasons in the theory of precedent’, *Legal Theory*, 17: 1-33.
- Kelsen, H. (1934) *Reine Rechtslehre Einleitung in Die Rechtswissenschaftliche Problematik*, F. Deuticke.
- (1967) *The Pure Theory of Law*, 2<sup>nd</sup> edition, Lawbook Exchange.

- LaFollette, H. (ed.) (2000) *The Blackwell Guide to Ethical Theory*, Blackwell.
- Leary, S. (2017) 'Non-naturalism and normative necessities', in Landau (ed.) (2017), 151-174.
- Leuenberger, S. (2014) 'Grounding and Necessity', *Inquiry*, 57: 151-174.
- Levine, J. (1983) 'Materialism and qualia: The explanatory gap', *Pacific Philosophical Quarterly*, 64: 354-61.
- Maguire, B. (2015) 'Grounding the Autonomy of Ethics', *Oxford Studies in Metaethics*, Vol. 10, 189-215.
- (2017) 'The Autonomy of Ethics', in McPherson et al. (eds.) (2017), 431-442.
- Marmor, A. (2009) *Social Conventions: From Language to Law*, Princeton NJ: Princeton University Press.
- (2010) *Philosophy of Law*, Princeton University Press.
- McPherson, T. (2011) 'Against quietist normative realism', *Philosophical Studies*, 54: 223-240.
- McPherson, T. and Plunkett, D. (eds.) (2017), *The Routledge Handbook of Metaethics*, Routledge.
- Pigden, C. R. (1989) 'Logic and the Autonomy of Ethics', *Australasian Journal of Philosophy*, 67: 127-151.
- (1991) 'Naturalism', in Singer (ed.) (1991), 421-431.
- (ed.) (2010) *Hume on Is and Ought*, Basingstoke: Palgrave Macmillan.
- (2016) 'Hume on Is and Ought: Logic, Promises and the Duke of Wellington', in Russell (ed.) (2016), 401-415.
- Plunkett, D. and Shapiro, S. (2017) 'Law, Morality, and Everything Else: General Jurisprudence as a Branch of Metanormative Inquiry', *Ethics*, 128: 37-68.
- Prior, A. (1960) 'The Autonomy of Ethics', *Australasian Journal of Philosophy*, 38: 199-206.
- Rachels, J. (2000) 'Naturalism', in La Follete (ed) (2000).
- Raz, J. (1974) 'Kelsen's Theory of the Basic Norm', reprinted in Raz (1979).
- (1979) *The Authority of Law*, Oxford: Clarendon Press.
- (1990) *Practical Reason and Norms*, Oxford University Press.
- Read, S. (1994) 'Formal and material consequence', *Journal of Philosophical Logic*, 23: 247-265.

- Ridge (2006), 'Ecumenical Expressivism: Finessing Frege', *Ethics*, 116: 302-336.
- (2014) *Impassioned Belief*, Oxford University Press.
- Rosen, G. (2010) 'Metaphysical Dependence: Grounding and Reduction', in Hale et al. (eds.) (2010), 109-36.
- (2017) 'Metaphysical Relations in Metaethics', in McPherson et al. (eds.) (2017), 151-169.
- Russell, G. (2010) 'In Defence of Hume's Law', in Pigden (ed.) (2010), 151-161.
- Russell, G. and Restall, G. (2010), 'Barriers to Implication', in Pigden (ed.) (2010).
- Russell, P. (ed.) (2016) *The Oxford Handbook of David Hume*, New York: Oxford University Press.
- Sagi, G. (2014) 'Models and Logical Consequence', *Journal of Philosophical Logic*, 43: 943–964.
- Shafer-Landau, R. (ed.) (2017) *Oxford Studies in Metaethics*, Oxford University Press.
- Schaffer, J. (2009) 'On What Grounds What', in Chalmers et al. (eds.) (2009), 347-383.
- (2010) 'The least discerning and most promiscuous truthmaker', *Philosophical Quarterly*, 60: 307–324.
- (2016) 'Grounding in the Image of Causation', *Philosophical Studies*, 173: 49-100.
- (2017) 'The Ground between the Gaps', *Philosophers' Imprint*, 17: 1-26.
- Schirn, M. (1998) *The philosophy of mathematics today*, Oxford: Oxford University Press.
- Schnieder, B. (2006) 'A certain kind of trinity: Dependence, substance, and explanation', *Philosophical Studies*, 129: 393–419.
- Schurz, G. (1997) *The Is-Ought Problem. An Investigation in Philosophical Logic*, Springer.
- Sciaraffa, S. (2011) 'The Ineliminability of Hartian Social Rules', *Oxford Journal of Legal Studies*, Vol. 31, No. 3: 603-623.
- Shapiro, S. (1998) 'Logical consequence: Models and modality', in Schirn (ed.) (1998), 131-156.
- Shapiro, S. (2011) *Legality*, Harvard University Press.
- Sher, G. (1996) 'Did Tarski commit Tarski's fallacy?', *The Journal of Symbolic Logic*, 61: 653–686.
- Singer, J. (2015) 'Mind the Is-Ought Gap', *The Journal of Philosophy*, 112: 193-210.
- Singer, P. (ed.) (1991), *A Companion to Ethics*, Blackwell.

- Skiles, A. (2015) 'Against Grounding Necessitarianism', *Erkenntnis*, 80: 717-751.
- Tarski, A. (1936). 'On the concept of logical consequence', in Corcoran (ed.) (1983), 409-420.
- Trogon, K. (2013) 'Grounding: Necessary or contingent?', *Pacific Philosophical Quarterly*, 94: 465-485.
- Wodak, D. (forthcoming) 'What Does 'Legal Obligation' Mean?', *Pacific Philosophical Quarterly*.
- Woods, J. and Maguire, B. (2017) 'Model Theory, Hume's Dictum, and the Priority of Ethical Theory', *Ergo: An Open Access Journal of Philosophy*, 4: 419-440.
- Zangwill, N. (2008) 'Moral dependence', in Shafer-Landau (ed.) (2008), 109–127.
- Zimmerman, D. (ed.) (2006) *Oxford Papers in Metaphysics*, Vol. 3, Oxford University Press.



## Summary

In this dissertation, I have defended a view on the relationship between metaphysical grounding and supervenience, and provided a comprehensive application of grounding theory to the philosophy of law. In Chapter 1, I have argued that a supervenience relation interestingly weaker than necessitation can be used to capture a substantive connection between grounding and modality. In Chapter 2, I have argued that metaphysical grounding is the relation of dependence that connects legal facts to their more basic determinants, and that the positivism/anti-positivism debate in legal philosophy involves competing claims on the grounds of legal facts. In Chapter 3, I have criticized the main extant grounding-based formulations of legal positivism, and offered a novel and insightful formulation that is capable of solving their problems. Finally, in Chapter 4, I have shown that Hume's Law – the thesis that one cannot derive an 'ought' from an 'is' – poses no significant threat to legal positivism or moral naturalism, when both are understood as views about grounding.



