

GROUNDING & METAPHYSICAL EXPLANATION

Work-in-Progress Group Semester 1, 2022–23

Work-in-Progress Group

Introduction

This is a work-in-progress group for philosophers interested in issues of grounding and metaphysical explanation. It is run by Will Moorfoot and James Ross, of the University of Southampton. Will works on contingentist formulations of ground physicalism. James works on the relationship between grounding and causation.

Sessions will be fortnightly during the autumn term. See the Termcard for our current schedule and list of abstracts. Each session will start at 1 pm (UK time), unless otherwise stated, and last for approximately 1 hour and 30 minutes. The session will consist of a 45-minute presentation followed by questions and discussion and will be run on a virtual platform (most likely Teams). An invite will be sent out on the morning of the session.

This group is particularly aimed at academics and postgraduate researchers. However, please do still get in contact if you are interested in joining and do not meet these criteria (contact details below).

Presenting

If you are interested in presenting to the group, please send an abstract of no more than 500 words to Will Moorfoot (W.A.Moorfoot@soton.ac.uk) and James Ross (J.C.Ross@soton.ac.uk). Papers should be suitable for a 45-minute presentation (e.g., about 5000 words). Please also give an indication of when you would be happy to present. Note, however, that our autumn schedule is already full.

We are happy to interpret the theme of grounding and metaphysical explanation broadly. However, we particularly welcome work in the following areas.

- Pure work on the metaphysics or logic of grounding and metaphysical explanation.
- Applications of grounding and metaphysical explanation to areas such as ethics, philosophy of mind, wider issues in metaphysics, philosophy of science, social ontology and philosophy of mathematics.
- More historically-minded approaches.

Last updated: December 7, 2022

Termcard

Wednesday 28th September

Damian Aleksiev University of Vienna

LIGHTWEIGHT AND HEAVYWEIGHT ANTI-PHYSICALISM

Ground functionalism is a version of physicalism recently defended by Jonathan Schaffer, where explanatory gaps are posited to be everywhere. In defending ground functionalism, Schaffer argues that since explanatory gaps are everywhere, arguments against physicalism based on the explanatory gap between the physical and the experiential facts fail. In response, first, I argue that some antiphysicalists are already safe from Schaffer's challenge. These anti-physicalists reject an underlying assumption of ground functionalism: the assumption that macrophysical entities are something over and above their fundamental grounds. I call this position "lightweight anti-physicalism." Second, I go on to argue that even if anti-physicalists accept Schaffer's underlying assumption, they can still argue that the consciousness explanatory gap is especially mysterious and thus requires a special explanation. I call the resulting position "heavyweight anti-physicalism." I conclude that whether explanatory gaps are sparse or abundant, the consciousness explanatory gap is a good way to argue against physicalism.

Wednesday 12th October

Alex Moran University of Oxford

GROUNDING PHYSICALISM AND THE KNOWLEDGE ARGUMENT

The knowledge argument is one of several major arguments against physicalism — construed here as the thesis that all facts are physical facts. It turns on two main premises: (1) that in her black and white room, Mary could know all of the physical facts, but that (2) upon seeing red for the first time, Mary would learn a new fact. Together, the claims imply that Mary learns a new non-physical fact and hence that physicalism is false. While there is much disagreement in the literature about the Mary argument, commentators tend to agree that physicalists must accept (1) and push back by denying (2). This paper, however, explores the options for denying (2) within a physicalist framework. In particular, the paper explores this option within the framework of a form of physicalism cast in terms of metaphysical grounding.

Wednesday 26th October

Petter Sandstad University of Reading

ESSENCES ON THE THRESHOLD BETWEEN METAPHYSICAL AND CAUSAL EXPLANATION

This paper is a contribution to the growing literature on the distinction between metaphysical and causal explanation — viz. non-causal and causal explanation, viz. grounding and scientific explanation. The specific concern of this paper is explanations with essences (viz. kinds, viz. forms) as explanantia. At least one common way to define a metaphysical explanation is an explanation "which accounts for the nature and/or existence of something with reference to something else on which the first thing non-causally and synchronically depends. Something which somehow (again, non-causally and synchronically) determines or makes the second thing exist and be the way it is." (Maurin 2019: 1574)

First, I will argue that this definition, although far from being without merit, has several problematic presuppositions when applied to essences. Second, I discuss a recent paper by Alastair Wilson, where he criticises six proposed criteria for distinguishing metaphysical from causal explanation, and presents his own criteria: the mediation criterion, where "causation is mediated by laws of nature; grounding is not." (Wilson 2020: 63) Wilson's own suggestion is ontologically fairly neutral, and even compatible with a Humean view of laws of nature. Third, I will apply Wilson's criteria to a neo-Aristotelian approach to essences and laws of nature.

This view is a development of Lowe's account, and defends the view that laws of nature simply are essences standing in a certain relation to each other (Sandstad & Jansen 2022). At least an aspect of this relation is that of grounding, or more specifically that of full immediate ground (Sandstad forthcoming). The end result of the application of Wilson's criterion is an account of how essences can be explanantia in metaphysical explanations directly, while also feature as explanantia in causal explanation indirectly. An essence can be an indirect explanans in a causal explanation by explaining why it is the case that a given law of nature obtains and is applicable to the causal explanandum.

Wednesday 9th November

Joaquim Giannotti & Markel Kortabarria Universidad de Chile & University of Barcelona

COULD SCIENTIFIC EXPLANATION BE A BETTER GUIDE TO GROUND?

A standard move to defend the intelligibility of grounding is to argue that metaphysical explanations of the constitutive sort guide us to its nature. Proponents of this approach attempt to defend instances of an argument that Skiles and Trogdon (2021) have recently called *inheritance*: It is because constitutive cases of metaphysical explanation display such-and-such features that we should regard grounding as having so-and-so properties. We believe that two problems hinder the success of this strategy.

The first is that examples of inheritance typically draw from metaphysical cases — such as the relationship between singleton sets and their members, determinates and determinables, parts and wholes — that are controversial to say the least. As we see it, for such cases to deliver the desired inheritance, we must presuppose a largely independent and pre-theoretical grasp of what a meta-physical explanation is (Kovacs 2017, Maurin 2019). We argue that pre-theoretical judgments on what counts as a metaphysical explanation undermines the reliability of this strategy (Miller and Norton 2022).

The second problem is that the appeal to metaphysical cases of inheritance restricts the scope of the argument problematically. Such instances are unconvincing for the naturalistically inclined metaphysician. For such a metaphysician, the theoretical legitimacy of a target metaphysical notion primarily hangs on the service it would perform to science. Accordingly, if grounding is supported by armchair metaphysics only, its acceptance remains unwarranted. Since we believe that grounding is serviceable for articulating and systematizing metaphysical aspects of scientific theorizing, we argue for exploring a more promising approach.

To escape the above problems, we advance a scientifically-friendly alternative to the inheritance view. We do so by exploring and defending a version of inheritance that allows naturalistic metaphysicians to accept ground without compromising their methodological commitments. The resulting strategy, we contend, is a less controversial and better-established justificatory route to grounding.

More concretely, we pursue a two-fold strategy. We begin by defending the reasons why naturalistic metaphysicians benefit from including grounding in their ideology. Then we proceed to identify true and substantial instances of *scientific inheritance*. We shall argue that these underlie various cases of non-causal yet constitutive scientific explanation. To illustrate this claim, we explore some examples from topology, quantum physics, and economics — arguing that a ground-theoretic interpretation allows us to gain insightful understanding of the explanandum phenomena and their obtaining. In closing, we discuss an objection that detractors of the view might advance: namely that grounding explanation is too amorphous to give us a fruitful classification of these scientific explanations. Unsurprisingly, we think that this objection can be successfully resisted or severely weakened.

Wednesday 23rd November

Andrew Stephenson University of Southampton

KANT AND KRIPKE: RETHINKING NECESSITY AND THE A PRIORI

I reassess the relation between Kant and Kripke on the relation between necessity and the a priori. Kripke famously argues against what he takes to be the traditional view that a statement is necessary only if it is a priori, where, very roughly, what it means for a statement to be necessary is that it is true and could not have been false and what it means for a statement to be a priori is that it is knowable independently of experience. Call such a view the "Entailment Thesis". Along with many Kant scholars, Kripke thinks that Kant endorses the Entailment Thesis. Thus Kripke and many others take his arguments against the Entailment Thesis to tell against Kant and to mark an important point of disagreement with him. I argue that this is a mistake. Kant does not endorse the Entailment Thesis that Kripke and many others attribute to him. He does endorse two quite different theses concerning the relation between necessity and the a priori, as he conceives them. One is a matter of definition and the other is a very substantial philosophical thesis indeed—to establish it is the aim of the entire *Critique of Pure Reason*. But Kripke's arguments against the Entailment Thesis tell against neither of Kant's theses, as they involve crucially different conceptions of necessity and the a priori, which Kant connects to grounding and metaphysical explanation. This superficial lack of disagreement masks deep disagreements, but these result from divergent views regarding matters such as realism, modal epistemology, and philosophical methodology; views which Kant does a lot, and Kripke very little, to argue for.

Wednesday 7th December

Will Moorfoot University of Southampton

INDETERMINISTIC GROUNDING AND PHYSICALITY

Events sometimes cause other events despite the failure of determinism. According to traditional collapse interpretations of quantum mechanics, the time at which a radioactive particle decays is left to chance. Even in classical Newtonian mechanics, a particle can move spontaneously from the top of a dome (Norton 2008). In both cases, the effect lacks a sufficient deterministic explanation: the future of the world was left partially to chance. Recently, there's been discussion of whether grounding could come in both deterministic and indeterministic varieties (Montero 2013, Craver 2017, Bader 2021, Zhong 2021, Alter 2021). Usually, when one fact fully grounds another fact, we take the groundee to be metaphysically necessitated by the ground. But perhaps, just like in the case of indeterministic causation, whether a full ground succeeds in doing its grounding work can be left up to chance. This points to a distinction between full deterministic grounding and full indeterministic grounding.

In this paper, I explore the implications of indeterministic grounding for the distinction between physicalist and anti-physicalist theories. *Prima facie*, indeterministic grounding is an anti-physical emergentist concept. First, it violates the metaphysical supervenience of groundees on their grounds and suggests that groundees are something over and above their grounds. Second, failure to classify indeterministic grounding as an anti-physicalist tool threatens the traditional boundary between physicalism and anti-physicalism. If a theory that rejects the metaphysical supervenience of groundees on their grounds counts as a version of physicalism, then the physical/anti-physical divide starts to look meaningless.

Against these worries, I argue that indeterministic grounding *sometimes* deserves to be counted as a physicalist tool. In fact, I argue that there is a reading of *indeterministic ground physicalism* (the view according to which physicalism is true even though the phenomenal is indeterministically grounded by the physical) that has more of a claim to physicality than either (i) deterministic ground physicalism in an infinitely decomposable world or (ii) Schaffer's (2017) theory of ground functionalism. However, reaching a form of indeterministic ground physicalism that is sufficiently physical does not come without costs. I suggest that a plausible version of indeterministic ground physicalism requires two non-standard commitments:

- 1. A non-standard interpretation of locutions such as "nothing over and above" and their relation to physicality.
- 2. A commitment to the pervasiveness of indeterministic grounding across higher-level domains.

I argue that (1) requires indeterministic ground physicalists to commit to a principle that I call *weak* containment, which has several counterintuitive consequences. (2) is also counterintuitive, though I argue that it highlights a significant upshot of indeterministic ground physicalism; namely that it can commit to a strong rationalist world picture that is unavailable to all other varieties of physicalism. I conclude that, though not for everyone, indeterministic ground physicalism is a coherent position and deserves to be taken seriously. More generally, my discussion contributes to the growing idea that metaphysical supervenience is not even a necessary condition for physicalism.