Grounding and the Structure of Reality

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Overview

What are the properties of the structure of reality and how it is structured? More importantly, in virtue of which this structure and its nodes stand as it is? Philosophers, recently, use grounding for answering these questions. Grounding is a newly introduced non-causal priority relation which metaphysicians use to show the different layers of reality with. This research will examine the nature of the structure of reality by probing the properties of grounding, and it aims to answer what grounds the grounding facts?

Most adherents of grounding have some background assumptions regarding this topic. They assume the structure of reality to be well-founded, i.e. the structure of reality bottoms out, or in some cases, it has a top-level without any bottoms. We can call them metaphysical foundationalists. They think that grounding is a linear structure which is asymmetrical, irreflexive and transitive. By asymmetrical, I mean if a grounds b, then b does not ground a. By irreflexive I mean nothing grounds itself, and by transitivity I mean if a grounds b and b ground c, then a grounds c. On the contrary, most recently, some philosophers point to these assumptions and they talk about an opposite view, namely metaphysical coherentism. It means that the structure may be non-linear in virtue of the three mentioned properties of grounding being under attack.

Another most adhered camp is realism about grounding. Philosophers usually believe grounding, if it exists, to be a real relation; however, we can be irrealists about grounding. It means that we can agree that it is a useful relation to describe reality, but we will take it to be not real.

In this research, I want to investigate the relation between metaphysical coherentism and irrealism about grounding. By doing this, I will show that not only these cohere with each other but also they are better responses to other puzzles of grounding. Most importantly, they answer the met-ground question in which we ask, what, if anything, grounds the grounding facts? while doing this task, I will also use ontic structural realism thesis, in which philosophers of science believe that the most fundamental thing, in reality, is the structure. The application of ontic structural realism to this view will show how a non-real notion can be attached to the structure of reality. I want to defend a monistic view of the structure of reality. It means that the grounds of all things is the structure of reality itself.

Literature review

Grounding and its usage in characterising the structure of reality is one of the most important notions in recent literature. Initial works on grounding had several assumptions which backfired many problems such as the MGQ. Probing into the properties of grounding and also the structure of reality will lead us to a better understanding of this notion. Additionally, when the core talk of metaphysical notions is bright, other areas of philosophy can use the results as a tool. For example, in ethics, we can say that what grounds ethical facts, or in the philosophy of mind, we can characterise physicalism by stating that every fact is grounded in a physical fact.

Metaphysical foundationalists think that reality has a fundamental layer. There are two notions of fundamentality, relative and absolute fundamentality, which philosophers define by using grounding. Schaffer (Schaffer J. , 2009) defines absolute fundamentality like this: if an entity is ungrounded, then it is fundamental. Moreover, relative fundamentality can be defined by grounding too. If an entity is grounded by another entity,

then the second one is more fundamental than the other.[1] Now, going to the meta-ground question (MGQ) which is what, if anything, grounds the grounding facts?[2]

Sider (Sider, 2011)and deRosset (deRosset, 2013) point that if we consider grounding facts to be fundamental, then other layers collapse to the fundamental layer and then reality would have just one layer; consequently, they think that grounding facts should have grounds.

The introduced collapse problem lead philosophers to answer the MGQ differently[3]; however, all the extant literature is in a realistic camp. So, there is a gap needed to be filled regarding the irrealists camp.

Initially, Most of the adherents of grounding assumed grounding to be a real notion, and those who rejected grounding[4] , whom we call sceptics about grounding, never talked about the possibility of an irrealistic camp. Thompson (Thompson N. , 2018) argues that although the problems cited by sceptics about grounding are correct, we can still be irrealists about grounding and accept that the propositions about grounding have a truth value. Therefore, we can still be non-eliminativist about the grounding notion, although we accept it as a non-real notion.

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[1] Bennet (Bennett, 2017), gives a full account of relative and absolute fundamentality by using her introduced notion of building.

[2] If a grounds b, then the fact that [a grounds b] is a grounding fact.

[3] Among them I should mention these papers: (Bennett, By Our Bootstraps, 2011) (Dasgupta, 2014) (Litland, 2017) (deRosset, 2013). I will discuss them later in this research proposal.

[4] Some philosophers, like Hofweber (Hofweber, 2009), thought grounding is an esoteric term used only by metaphysicians. He thought grounding is not a real relation, and we should dismiss it and replace talk of it with other familiar notions such as determination, supervenience, existential dependence, reduction, etc. Some others, like Wilson (Wilson J. , 2014), made a distinction between small-g and big-G grounding. Small-g grounding is the family of type identity, functional realisation, the classical mereological part-whole relation, the causal composition relation, the set membership relation, the proper subset relation, and the determinable–determinate relation, and the big-G grounding is the relation that realists adhered to. They argued that although we can talk about small-g grounding, there is no big-G relation that we should talk about. Therefore, they argue for the elimination of big-G grounding.

It is not just that the extant answers to MGQ are realist; they are also metaphysical foundationalists who think of the structure of reality as a linear one. They all agree that the structure of reality should have a fundamental layer which is the foundations of all the other layers. For example, Schaffer argues for a concrete ground for everything. Others, like Bennet or deRosset, may refer to a fundamental layer with more than one entity. Some others, like Bernstein (Bernstein, forthcoming), refer to a middle level, like molecules or tables, which is the grounds of everything.

However, in recent years, both of their assumptions, the three properties of grounding[5] and the identity of fundamentality and having a foundation, are under attacks. Raven (Raven M. J., 2016) argues that we can have fundamentality without any foundations. He separates these two notions and argues for a world that can have limitless layers but can have foundations. Rabin (Rabin, 2018) argues for a metaphysical coherentism view in which the structure of reality is not linear, and the properties of grounding are non-symmetrical, non-transitive and non-irreflexive. He refers to Barnes (Barnes, 2018) (Rabin, 2018, p. 43) arguing for the possibility of symmetric relations and Jenkins (Jenkins, 2011) (Rabin, 2018, p. 44) for her arguing that identity relations can be reflexive. Furthermore, he refers to Schaffer (Schaffer J. , 2012) (Rabin, 2018, p. 46) for his counterexample that shows grounding can be non-transitive. Consequently, if we accept the possibility of metaphysical coherentism, we can examine answers to MGQ by a metaphysical coherentist point of view. This will guide us to our new positive answer to MGQ.

In the realists camp who are metaphysical foundationalists there are these three different answers for MGQ:

1- Straight forward account: Bennett (Bennett, 2011) (Bennett, Making Things Up, 2017) and deRosset (deRosset, 2013) introduce the left

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[5] Being asymmetric, transitive and irreflexive

side of the grounding relations as a ground for the grounding facts. For example, if A grounds B, then A grounds [A grounds B].

2- Zero grounding account: Litland (Litland, 2017) by using Fine's (Fine, Guide to Ground, 2012) distinction between factive and non-factive ground, put non-factive grounds as a ground for factive ones and then introduces zero or empty sets as the ground of non-factive grounding relations. Factive grounding is the grounding relation whose relata are true, and non-factive is the one with the possibility of being true. This account is more of a technical/logical account.

3- Essential grounding: Dasgupta's account is like the straight forward account, but instead of just using the left relata as grounds, he also adds the general facts about the essence of the right relata to it, that is if A grounds B, then (A with the essence of B) grounds [A grounds B].

Research Questions

In this research, I need to investigate whether the extant answers to the MGQ can also be correct in an irrealist camp which is a metaphysical coherentist. In this respect, I will also examine the coherence of irrealism about grounding and metaphysical coherentism. In epistemology, philosophers reject coherentism for being circular and not informative. However, this cannot be an objection to an irrealist camp. Nevertheless, another question will arise that how an irrealist can still talk about the reality if there is no correspondence to it? Because all the thing an irrealist is referring is a coherent structure in her mind.

For answering this question, I will use structural realism in the philosophy of science. In the philosophy of science, there is a thesis called structural realism which both antirealists, who think metaphysical objects are unreal, and realists both agree on the reality of its existence. Some of the

structuralists like Ladyman (Ladyman, What is structural realism?, 1998) (Ladyman, Structural Realism, 2014) are ontic structural realists. They think that the structure is prior to its nodes or objects which is about. Some others, even go further and say that the only real object is the structure. I want to argue for the latter by stating that if we consider MGQ, the best possible answer is that there is a structure that is the ground of all things. By doing this I will separate foundations from fundamental entities. I will argue for the existence of fundamental entities other than the structure while I refer to the structure as the foundation of everything, even itself.

I will argue that Dasgupta's use of the general facts best to be substituted with the monistic structure itself. This will lead us to an irrealistic and coherentist approach regarding the grounding talk and the structure of reality.

By doing these, I will answer the debates between metaphysical coherentism and metaphysical foundationalism, and irrealism vs realism. I will elaborate on the relation between metaphysical coherentism and irrealism. Then, I will give a positive answer to the MGQ which is in coherence with irrealism about grounding and metaphysical coherentism.

Methodology

Philosophy mostly is an armchair task. So, I will primarily be reading, writing and discussing with my supervisors and the other academics in my field. Also, I aim to go to workshops and conferences and present my work before the end of my PhD, and also attend seminars and present work in progress internally. This will help me to revise and improve my research outcome.

References

Audi, P. (2012). A Clarification and Defense of the Notion of Grounding. In Correia , & Schneider, *MetaphysicalGrounding: Understanding the Structure of Reality* (pp. 101-121). UK: Cambridge University Press.

Barnes, E. (2018). Symmetric Dependence. In R. Bliss , & G. Priest, *Reality and Its Structure* (pp. 50-69). UK: Oxford.

Bennett, K. (2011). By Our Bootstraps. *Philosophical Perspectives*, 27-41.

Bennett, K. (2017). *Making Things Up.* Oxford : Oxford University Press.

Bernstein, S. (forthcoming). Could a Middle Level be the Most Fundamental? *Philosophical Studies*.

Bliss, R. &. (2018). *Reality and its Structure: Essays in Fundamentality*. Oxford University Press.

Bliss, R. (2014). VICIOUSNESS AND CIRCLES OF GROUND. *Metaphilosophy*, 245-256.

Cameron, R. P. (2008). Turtles all the way down: Regress, priority and fundamentality. *Philosophical Quarterly*, 1-14.

Correia, F., & Schnieder, B. (2012). Grounding: An Opinionated Introduction. In F. Correia , & B. Schnieder, *Metaphysical Grounding: Understanding the Structure of Reality* (pp. 1-36). UK: Cambridge University Press.

Dasgupta, S. (2014). The Possibility of Physicalism. *The Journal of Philosophy*, 557–592.

deRosset, L. (2013). Grounding Explanations. *Philosophers' Imprint*.

Fine, K. (2001). The Question of Realism. *Philosophers' Imprint*, 1-30.

Fine, K. (2012). Guide to Ground. In F. Correia, & B. Schnieder, *Metaphysical Grounding: Understanding the Structure of Reality* (pp. 37-80). Cambridge : Cambridge University Press.

Hofweber, T. (2009). Ambitious, Yet Modest, Metaphysics. In D. Chalmers, D. Manley, & R. Wasseman, *Metametaphysics: New Essays on the Foundations of Ontology* (pp. 260-289). Oxford: Oxford University Press.

Jenkins, C. S. (2011). Is Metaphysical Dependence Irreflexive. *The Monist* , 267-276.

Ladyman, J. (1998). What is structural realism? *Studies in History and Philosophy of Science*, 409-424.

Ladyman, J. (2014). Structural Realism. *he Stanford Encyclopedia of Philosophy*.

Litland, J. (2017). Grounding Ground. In K. Bennett, & D. Zimmerman, *Oxford Studies in Metaphysics 10* (pp. 279-315). Oxford University Press.

Quine. (1948). On What There Is. *Review of Metaphysics* , 21-38.

Rabin, G. O. (2018). Grounding Orthodoxy and the Layered Conception. In R. Bliss, & G. Priest, *Reality and its Structure* (pp. 37-49). Oxford University Press.

Raven, M. (2015). Ground. *Philosophy Compass*, 322-333.

Raven, M. J. (2016). Fundamentality without Foundations. *Philosophy and Phenomenological Research*, 607-626.

Rosen, G. (2010). Metaphysical Dependence: Grounding and Reduction. In B. Hale, & A. Hoffmann, *In Modality: Metaphysics, Logic, and Epistemology* (pp. 109-136). Oxford: Oxford University Press.

Schaffer, J. (2009). On What Grounds What. In D. Manley, Chalmers, & R. Wasseman, *Metametaphysics: New Essays on the Foundations of Ontology* (pp. 347-383). Oxford: Oxford University Press.

Schaffer, J. (2010). Monism: The Priority of the Whole. *Philosophical Review*, 31–76.

Schaffer, J. (2010). The Internal Relatedness of All Things. *Mind*, 341-376.

Schaffer, J. (2012). Grounding, Transitivity, and Contrastivity. In F. a. Correia, *Metaphysical Grounding:Understanding the Structure* (pp. 122-38). Cambridge: Cambridge University Press.

Sider, T. (2011). *Writing the Book of the World*. Oxford: Oxford University Press.

Thompson, N. (2016). Metaphysical Interdependence. In M. Jago, *Reality Making* (pp. 38-56). Oxford: Oxford University Press.

Thompson, N. (2018). Irrealism about Grounding. *Royal Institute of Philosophy Supplement*, 23-44.

Trogdon, K. (2013). An introduction to grounding. In M. Hoeltje, B. Schnieder, & A. Steinber, *Varieties of Dependence* (pp. 97-122). Munich: Philosophia Verlag.

Wilson, A. (2019). Making Things Up, by Karen Bennett. *Mind*, 588–600.

Wilson, J. (2014). No Work for a Theory of Grounding. *nquiry*, 535–579.