University of Nebraska - Lincoln
DigitalCommons@University of Nebraska - Lincoln

Faculty Publications - Department of Philosophy | Philosophy, Department of

4-2013

Review of *Getting Causes from Powers* by Stephen Mumford and Rani Lill Anjum

Jennifer McKitrick
University of Nebraska-Lincoln, jmckitrick2@unl.edu

Follow this and additional works at: http://digitalcommons.unl.edu/philosfacpub

Part of the Metaphysics Commons

McKitrick, Jennifer, "Review of *Getting Causes from Powers* by Stephen Mumford and Rani Lill Anjum" (2013). *Faculty Publications - Department of Philosophy*. 50.
http://digitalcommons.unl.edu/philosfacpub/50

This Article is brought to you for free and open access by the Philosophy, Department of at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Faculty Publications - Department of Philosophy by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

University of Nebraska Lincoln
digitalcommons.unl.edu

Published in *Analysis*, Vol 73, Number 2 (April 2013), pp 402–404.
doi 10.1093/analys/ant016
Copyright © 2013 Jennifer McKitrick. Published by Oxford University Press
on behalf of *The Analysis Trust*. Used by permission.

Book Review

Getting Causes from Powers
Stephen Mumford and Rani Lill Anjum

Oxford University Press, 2012. xvi+254 pp. £35.00

reviewed by

Jennifer McKitrick

University of Nebraska – Lincoln
Lincoln, NE, USA
jmckitrick2@unl.edu

Some philosophers have suggested that having powers in one's ontology has the advantage of providing resources for an account of causation (see Cartwright 1999; Harré 1970; Mill 1843; Whitehead 1929). But what would a theory of causation look like if we assume that powers are real? In *Getting Causes from Powers*, Mumford and Anjum make what is perhaps the first sustained attempt to answer that question. The basic idea is that, if there are powers, understood as property-like entities that have manifestations which can be merely possible, then causation is a matter of powers manifesting. According to the authors, their dispositional account of causation is a radical departure from Humean orthodoxy and has a number of surprising implications, including: causes do not necessitate their effects; a cause and its effect are simultaneous; and causation is non-transitive and non-symmetrical. Although it is not always clear whether all of the claims that they defend stand or fall together, each represents a fresh perspective on some very well-trodden ground. Such bold and innovative ideas are bound to provoke discussion and disagreement, a sampling of which is indicated below.

The first chapter sets out the basics of their account of causation, a view they call 'causal dispositionalism.' The authors' ontological starting point is pandispositionalism, according to which all properties are clusters of powers (Shoemaker 1980). An implication of this view is that a manifestation of a power must also be accounted for in terms of powers. While some have suggested that this leads to a problematic regress (Armstrong 2005), the authors embrace this 'passing around of powers' as an attractive way of understanding causation. When powers manifest, they give something another power. Causation, then, is fundamentally a relation between powers: the power that manifests and the power whose instantiation constitutes that manifestation. Other true causal claims, such as those involving objects or events, are true in virtue of these more fundamental facts about powers. The authors stress that powers typically produce manifestations in complex combinations. Furthermore, since the relation between powers and their manifestations is causal in nature, causal dispositionalism is non-reductive, a consequence that the authors gladly accept, given inductive skepticism about reductive analyses of causation.

In Chapter 3, the authors argue that even a total cause does not necessitate (i.e. is not sufficient for) its effect. A dispositional account of causation lends itself to denying necessity, since the concept of 'disposing towards a certain outcome' includes the idea that the outcome is not thereby guaranteed. The authors' case against necessity rests primarily on the antecedent strengthening argument, according to which any necessity relation worthy of the name survives antecedent strengthening (Schrenk 2010). That is, if A necessitates B, A and ϕ also necessitate B, for any ϕ. Due to possibilities of interference and prevention, causal relations do not have this feature, and consequently 'to cause' is not 'to necessitate.' However, there is much here that a causal necessitarian can agree with: it is possible that exactly the same cause would have the same effect, provided nothing else were added (67, 76); a cause makes its effect happen (84); when causal factors pass a certain threshold, they are enough for their effect (73); and determinism may be true (75).

In Chapter 5, 'Simultaneity,' Mumford and Anjum argue that causes do not precede their effects but instead overlap in a continuous causal process. For those who claim that causes precede their effects, they present the following dilemma. Either an effect starts occurring as

soon as all the causal factors are present, or there is some delay. If the effect starts occurring as soon as the total cause exists, then cause and effect are simultaneous. If there is a temporal gap, it is not clear what stands in the way of the effect commencing (111). Other support for simultaneity comes from examples, such as two books propping each other up in an A-frame structure (114) and sugar in water becoming a sweet solution (121). Apparent counterexamples to simultaneity are accounted for in terms of causal processes providing powers for subsequent causal processes, but not causing those processes (125). Within a genuine causal process, the cause is said to 'become' its effect (119, 200). But since, on their view, this would suggest that one power turns into a different power, perhaps the authors are more accurate when they say one power is gradually replaced by another (124). However, this cannot be a general characterization of causation, since many powers, such as magnetism, do not typically diminish while their effects occur.

If cause and effect are simultaneous, causal relations can be symmetrical. The authors offer the mutually supporting books as an example (118). Book *a* causes Book *b* to stand and Book *b* causes Book *a* to stand. But in order for this to be a case of symmetrical causation for causal dispositionalism, a power would have to be a manifestation of its own manifestation. In other words, if causation is a matter of one power manifesting by bringing about the instantiation of a second power, then for this relation to be symmetrical, this second power must manifest by bringing about the first power. It is not clear that the book example illustrates powers that stand in such a relation.

Mumford and Anjum go on to argue that causation is non-transitive. When *a* caused *b* and *b* caused *c*, whether *a* caused *c* depends on whether *a* disposed towards *c*. Intuitively, in some cases, it does not (173). But sometimes 'causation can travel down a chain' (110). However, non-transitivity poses a problem for simultaneity. Suppose that *a* having power_1 at t_1 caused *b* to have power_2 at t_1; that *b* retained power_2 until t_2; and that *b* having power_2 at t_2 caused *c* to have power_3 at t_2. If causation is not intransitive, it is possible that *a* having power_1 at t_1 caused *c* to have power_3 at t_2. This conflicts with Mumford and Anjum's claim that causes do not precede their effects.

In other chapters, the authors: explain how and why to model causation with vectors (Ch. 2); elaborate a number of ways in which

powers combine (Ch. 4); give an account of causal explanation and apparent causation by absence (Ch. 6); distinguish conditionals that express causal claims from those that express identity and essentialist claims (Ch. 7); elaborate the notion of dispositional modality as something more than pure contingency but less than pure necessity (Ch. 8); argue that we perceive powers directly in our roles of causal agents and patients (Ch. 9); and finally offer causation in biology as an exemplification of causal dispositionalism.

References

Armstrong, D.M. 2005. Four disputes about properties. *Synthese* 144: 309–20.

Cartwright, N. 1999. *The Dappled World*. Cambridge: Cambridge University Press.

Harré, R. 1970. Powers. *The British Journal for the Philosophy of Science* 21: 81–101.

Mill, J.S. 1843. *A System of Logic*. London: Parker.

Shoemaker, S. 1980. Causality and properties. In *Identity, Cause and Mind*, 206–33. Oxford: Oxford University Press, expanded edition, 2003.

Schrenk, M. 2010. The powerlessness of necessity. *Noûs* 44: 725–39.

Whitehead, A.N. 1929. Chapter II: The Extensive Continuum. In *Process and Reality: An Essay in Cosmology*, eds D.R. Griffin and D.W. Sherburne, 61–82. New York: Free Press, corrected edition, 1978.