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Explanation and Justification

Explanationism is the view that one’s normative standing in the space of reasons is constituted by one’s explanatory position. My goal in this chapter is to turn this claim into a clear and feasible theory of epistemic justification. I begin by discussing the nature of explanation and the explanatory virtues. I argue that explanation is a primitive relation between propositions. People offer explanations in an aim to remove a mystery. But what it is to actually remove cognitive dissonance lacks a non-trivial analysis into necessary and sufficient conditions. Next, I present the explanationist theory of justification. I argue that explanationism is a mentalist evidentialist account of epistemic justification. Finally, I examine supporting cases and discuss putative counterexamples with an eye to explaining the plausibility of explanationism.

Explanation is a fecund concept in epistemology. Gilbert Harman has argued that all inference is explanatory inference which helps to explain both why enumerative induction fails in many cases and why false background assumptions can produce Gettier cases.\(^1\) Harman extends his explanationist treatment to handle skepticism.\(^2\) Jonathan Vogel pursues the anti-skeptical power of explanationist reasoning, arguing that the explanatory virtues of the common-sense hypothesis provide good reasons for it over its skeptical competitors.\(^3\) Explanatory inference has been put to other work. Timothy Williamson defends the view that only propositions which one grasps are evidence on the basis of

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\(^1\) Harman (1965).
\(^2\) Harman (1973).
\(^3\) Vogel (1990).
the fact that only propositions function in one’s inferences to the best explanation. Earl Conee and Richard Feldman suggest that “fundamental epistemic principles are principles of best explanation.” William Lycan argues that “all justified reasoning is fundamentally explanatory reasoning that aims at maximizing the explanatory coherence of one’s total belief system.” This chapter continues this theme by arguing that one’s explanatory position determines what doxastic attitudes are epistemically appropriate.

4.1 Explanation and its virtues

People offer explanations to remove a mystery. When one grasps an explanation accounting for the occurrence of some phenomenon one understands why it occurred. Why do stars twinkle in the night sky? Because light is refracted by the earth’s atmosphere analogously to the way light is distorted as it travels through water. The result is that stars do not actually twinkle; rather light from the star is affected as it travels through our atmosphere. The mystery is removed by tying it to other things we understand.

Is there a successful formal explication of the nature of explanation? Such an explication would provide a substantive, counterexample-free analysis of explanation having this form: a group of statements \( \phi \) explain another statement \( \psi \) if and only if \( X \), where \( X \) is some set of non-trivial conditions. Six decades of analysis provide strong evidence that such an explication is not to be had. Hempel and Oppenheim provide the first formal explication of explanation. They propose the deductive-nomological model of explanation according to which a group of statements—the explanans—constitute an explanation for another statement—the explanandum—if and only if the explanans contains a law, has empirical content, and entails the explanandum. An explanation becomes the explanation when the explanans are true.

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5 Feldman (2008, 97).
7 How-possible explanations account for the possibility of the phenomenon, not its actual occurrence.
8 Hempel and Oppenheim (1948).