Helen Beebee, Christopher Hitchcock, & Huw Price, eds. *Making a Difference: Essays on the Philosophy of Causation*. Oxford University Press 2017. 360 pp. \$85.00 USD (Hardcover ISBN 9780198746911).

Making a Difference is a collection of fifteen original essays centred around Peter Menzies' work in the philosophy of causation. The first nine chapters revolve around general issues within the metaphysics of causation, and the latter six chapters revolve around the specific issues of mental causation and free will.

In 'Causal Counterfactuals and Impossible Worlds,' Daniel Nolan looks for a solution to the deviation problem, which amounts to understanding the mechanics of how nearest possible worlds end up deviating from the actual world. Nolan outlines three desiderata for solving this problem, including common laws of nature, a common past, and determinism, which jointly render it difficult to imagine the counterfactual world deviating from the actual world. Most accounts, Nolan argues, must abandon at least one of the necessary desiderata, whereas his account, an adoption of impossible worlds as well as possible worlds, need not forfeit any desiderata.

In 'Two Interpretations of the Ramsey Test,' Rachael Briggs focuses on how to evaluate the truth of counterfactual conditionals. She introduces two interpretations of the Ramsey test for evaluating counterfactual conditionals, the Adams test and Stalnaker's counterfactual semantics. These two interpretations lead to triviality problems. Briggs argues that Stephan Kaufmann's reworked Adams' thesis leads to 'local triviality' problems as well. Briggs solves the problem by revising Stalnaker's semantics through using 'generalized imaging functions' (34).

Cei Maslen argues, in 'Pragmatic Explanations of the Proportionality Constraint on Causation,' that the contrastive approach to causation is better suited than Yablo's account to explain the proportionality constraint on causation. The proportionality constraint is the view that causes are both *required* and *enough* for their effects. Maslen considers Bontly's view that the proportionality constraint is used for pragmatic explanations: Socrates' drinking hemlock is the more pragmatic explanation of Socrates' death than Socrates' guzzling hemlock since Socrates' drinking hemlock is required and enough. Maslen then argues that the contrastive approaches of Menzies and Woodward support this pragmatic explanation.

In 'Causation, Intervention, and Agency,' Huw Price defends the agency view of causation, which is the view that causation is a secondary quality, against four main criticisms from Woodward. Price suggests that the agency view can overcome these concerns by embracing its subjective nature. Price suggests the Menzies-Price agency view is not too different from Woodward's account, and the ways it is different are advantages.

In 'The Glue of the Universe,' David Braddon-Mitchell introduces 'structural causal connectedness' (100) to the debate on the metaphysics of causation. Braddon-Mitchell motivates the need for a model of causation that is true of the world, yet weaker than production. He introduces structural causal connectedness, which captures the intuition that the world's particles and time slices are glued or attached together. While Braddon-Mitchell does not definitively propose what the glue is, the causal glue is weaker than causal production, emphasizes micro-structural attachments and is a symmetrical relation.

Next, Christopher Hitchcock, in 'Actual Causation,' connects two themes in Menzies' work, the agency theory of causation and the structural equations model. Hitchcock aims to show what use knowledge of actual causation has. Causes are often considered 'handles' (116), and Hitchcock looks to discern exactly what kind of handles they are. Hitchcock argues that handles are contexts in goal-

oriented reasons plus interventions. Causation ought to be forward looking, and focused on context, rather than the backward usage most literature is used to.

Nancy Cartwright takes up Menzies' structural equations model in 'Can Structural Equations Explain How Mechanisms Explain?' Cartwright's account contrasts with Menzies' view, as she suggests the interventionist approach to causation does not properly explain mechanisms. Cartwright first argues for a 'Ballung concept' (134), which denotes causation as a general idea, that only becomes specific with context. Then, Cartwright offers a two-tiered account, combining mechanisms and surface phenomena, noting that both are causal. This approach avoids causation being too narrow or two wide, and avoids the transitivity issue that Menzies' account enables.

In the first paper by Peter Menzies, 'The Problem of Counterfactual Isomorphs,' the counterfactual approach to causation is defended against the problem of counterfactual isomorphs by proposing an interventionist solution. First, Menzies unpacks the causal modeling or structural equations framework, then he provides examples of the problem of counterfactual isomorphs, which cannot be explained with normal counterfactual considerations. Menzies then suggests that an ideal-conditions consideration avoids the isomorphs problems, which is explained by two additions to an interventionist theory: an adjustment rule and a new definition.

In 'Cause without Default,' Thomas Blanchard and Jonathan Schaffer argue against the inclusion of default-relativity in structural equation causal modelling. After outlining the structural equation model of causation, Blanchard and Schaffer discuss default and deviant events in causal modelling: the gardener and the queen both fail to water the flowers, but the gardener's failure is a deviant or unexpected event, while the queen's failure is an expected or default event, since she doesn't normally water the flowers. Where some deploy this distinction to solve problems with the structural equations model, Blanchard and Schaffer reject this move and ultimately endorse aptness conditions on causal models.

Brad Weslake engages with recent attempts to resolve the exclusion problem, in 'Difference-Making, Closure, and Exclusion,' by appealing to a difference-making conception of causation. An objection to this approach is that it jeopardizes physical causal closure. Weslake overcomes this problem by pairing the difference-making model with the interventionist theory of causation.

In 'The Program Model, Difference-Makers, and the Exclusion Problem,' Philip Pettit compares and contrasts the List and Menzies difference-making model with the Jackson and Pettit program model. The difference-making account stipulates that special science properties are difference-makers, hence causes of lower level properties, but the program model stipulates that special science properties are merely causally relevant, where their realizers are the causes. Pettit then outlines how both models respond to Kim's exclusion problem. Pettit concludes with a symmetry problem that the difference-making account faces, and an outline of how the difference-making account is more similar to the program account than previously imagined.

In 'Intervening in the Exclusion Argument,' James Woodward articulates how his interventionist account of causation responds to the exclusion problem, handles objections, and contrasts with Menzies' view. Critics argue that it is impossible to intervene on mental events without changing the subvening physical event as well, which poses problems for the interventionist strategy. Woodward argues that the special nature of the supervenience relation overcomes this problem. Woodward responds to the concern that 'Had P not occurred, P* would not have occurred' is false, by pointing out that the different realizer P' may bring about a different effect P*'.

In 'My Brain Made Me Do It,', Christian List and Peter Menzies apply the exclusion argument to the free will problem: since behaviour has a sufficient neural cause, the distinct free will of the agent is excluded from causing behaviour. They overcome this problem via their difference-

making conception of causation, which falsifies the exclusion principle. They show how their difference-making conception of causation indicates that behavioural effects have sufficient physical causes/conditions, and a distinct mental cause, falsifying the exclusion principle. This position calls into question the causal efficacy of the physical cause, which overcomes the concern that physical causes exclude free will.

In Chapter 15, 'Epiphenomenalism for Functionalists,' Helen Beebee suggests that epiphenomenalism may be the only answer to the causal role problem. The causal role problem is distinguished from the problem of metaphysically necessitated effects, which, she argues, is no issue for functionalism. Beebee argues that current solutions to the exclusion problem do not solve the causal role problem, and that epiphenomenalism is the only remaining answer for non-reductive physicalists. Beebee then provides three arguments for epiphenomenalism.

Peter Menzies uses the structural equations model in 'The Consequence Argument Disarmed,' to refute Van Inwagen's consequence argument. Menzies first defends a counterfactual analysis of the ability to do otherwise before rejecting the first premise of the consequence argument. Menzies approaches the consequence argument from both a local and global scale, suggesting the flaw in the first premise applies in both cases. List then responds to the objection that Menzies is simply denying determinism, which leaves the consequence argument's point intact.

A number of these articles centre on common themes, such as the context sensitivity of causation (Ch. 4-6), the structural equations model of causation (Ch. 8-10), and the exclusion problem (Ch. 11-14). While some articles only briefly mention Menzies, others are substantially devoted to his philosophical views, while three are written by Menzies himself (Ch. 9, 14, 16).

One drawback of this collection is that the essays do not directly interact with one another. This is unfortunate, considering that numerous papers touch on common themes, so interaction among the essays seems warranted. Another drawback is that most of the essays presuppose that the reader already possesses substantial knowledge of Menzies' work, and the various issues therein. Accordingly, this collection may not be suitable to introductory readers. On the whole, however, this collection is a timely celebration of the life and work of Peter Menzies, and carries numerous flourishing fields forward.

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