policy designers, tax law students and taxpayers. It is very clear and well informed. And it is definitely insightful.

Axel Gosseries
Fonds National de la Recherche Scientifique and
Université Catholique de Louvain
Chaire Hoover d'Éthique Économique et Sociale
Place Montesquieu, 3
1348 Louvain-la-Neuve, Belgium
gosseries@etes.ucl.ac.be

***How We Act: Causes, Reasons, and Intentions*,** by Berent Enç. Oxford: Clarendon Press, 2003, xiv + 252 pp., £31.50/$45.

This book is a valuable addition to the literature of philosophy of action. The author Berent Enç, who was a long-time professor of philosophy at the University of Wisconsin-Madison, died shortly after submitting the typescript of the book. His friend and former colleague, Fred Dretske, oversaw the book through to publication.

A central question in the philosophy of action, what Enç calls 'the First Problem of Action Theory,' is how to understand the difference between *actions*, things that we intentionally or voluntarily do, and *mere behaviors*, things that we simply undergo or happen to us. It seems natural to draw the distinction between voluntary action and mere behavior through identifying some special class of causes located within the agent: a behavior is an action because it is the effect of some proper internal causes. According to a traditional school of thought, your doing something is an action because it is preceded by a *volition*: your making a decision, issuing a motor command, performing an act of will, etc. But Enç rejects this school of thought. In Chapter 1 he develops a series of considerations against volitional theories of action based on analogies drawn from theories of knowledge and of perception. The deep problem with this tradition, as Enç sees it, is on the very notion of volitions as unanalyzable, irreducible mental acts in order to avoid infinite regress arguments: volitions are basic mental actions standing apart from an agent's other actions in that they are what render the other actions voluntary. This treatment typically invites an inherently mysterious notion of agent-causation or non-causal accounts of volition, which appears at odds with naturalistic

approaches to agency. Enç's worry, I think, is well motivated. But he may have overstated the threat of the infinite regress arguments to a volitional theory of action. Elsewhere I have argued that we need not take the regress arguments at face value, and that a volitional theory of action is not entirely incompatible with a naturalistic understanding of agency (Jing Zhu, 'Understanding Volition,' *Philosophical Psychology* 17, 2004, pp. 247–273).

The central project of this book is to develop a sustained account of the causal theory of action, which holds that actions are the behavioral outputs caused in the right way by reasons that, construed as adequate combinations of an agent's beliefs and desires, the agent has for producing the behaviors. This has been the standard view since Donald Davidson's influential essay 'Actions, Reasons, and Causes' was published in 1963 (reprinted in his *Essays on Actions and Events.* Oxford: Oxford University Press, 1980, pp. 3–19). What is novel in Enç's account is a careful formulation of a foundationalist conception of action, in which actions are divided into two subcategories: basic acts and non-basic acts. Chapter 2 is devoted to a detailed naturalistic account of basic actions. The notion of basic action was first introduced by Arthur Danto in the 1960s ('Basic Actions,' *American Philosophical Quarterly* 2, 1965, pp. 141–148). Roughly speaking, an action is basic in that it is *not* achieved by the agent's performing of *another* action. For example, my picking up a book from the shelf is not a basic action since it is achieved by my moving my arm, which is a basic action. And in order to pick up the book, I need to know how to move my arm properly, which I know in a direct, immediate manner, without using my knowledge of how to do something else to make the moving. Whereas the notion of basic action has been heavily employed in contemporary philosophical theories of action, few attempts have been made to explicate it. Enç's endeavor is thus a welcome remedy to this shortcoming. Drawing on studies of animal behavior, Enç proposes that a basic action is a complex unit of behavior, a packaged whole, something an agent knows how to bring about without using her knowledge of how to do something else in order to achieve it. Alternatively, Enç suggests, a basic action can be internally triggered by an agent's higher cognitive center, where practical reasoning takes place and where an intention is formed and issued, and effectively carried out by the lower (subdoxastic) systems without cognitive control. In Chapter 3 Enç develops his account of non-basic actions, conceived as one's bringing about more complex events whose causes

can be traced back to the events that constitute one's basic acts. Enç also defends a certain principle of action individuation based on his treatment of basic and non-basic actions.

In Chapters 4 and 5 Enç defends the causal approach to understanding action against two powerful objections. A technical problem that has long plagued causal theories of action is the so-called 'deviant (or wayward) causation,' which generates certain types of counter-examples. A much-discussed example is Davidson's unnerved climber ('Freedom to Act,' reprinted in his *Essays on Actions and Events*, pp. 63–81). A mountain climber wants to relieve himself of the danger he is in from holding up another climber. He realizes that he can get rid of the danger by just loosening his grip. This idea makes him so nervous that he is actually caused to loosen his hold. In this case, the climber's mental states obviously figure in the production of the behavior of loosening his grip, but this behavior can hardly be qualified as an action. When an action is defined as a behavioral output caused by a certain mental antecedent (e.g., an intention), it is always possible to show that the definition does not give a sufficient condition for action: intentions can cause behavioral outputs through unusual (deviant) pathways; and when they do, these behaviors do not constitute rationalizable actions. A general strategy to which causal theorists of action appeal is to introduce the qualification that actions must be caused *in the right way* as opposed to deviant causal pathways. But how to specify 'the right way' has been a challenging task for a causal theory of action. Enç rightly observes that the problem of causal deviance generalizes for all causal theories (of perception, knowledge and mental representation, as well as action). After critically examining various attempts to exclude causal deviance and showing why they are all unsuccessful, he proposes that 'conceiving the agent as a well-functioning system and locating cases of deviance in those instances when the system does what 'it is supposed to do,' but 'not in the way it is supposed to do it,' gives a better chance of confronting the charge' (p. 131). This is to appeal to a teleological notion of function, which has been exploited in addressing some profound issues in the philosophy of mind and has a controversial history itself. Notwithstanding its many alleged pitfalls, Enç contends that the use of functions in naturalizing agency can be healthy and helpful in the framework of his foundationalist causal theory of action.

A second objection to causal theories of action, which has become especially influential in the last decade or so, states that conceiving of

action as the result of a chain of causally connected events/states removes the *agent* from the picture altogether. David Velleman expresses the worry succinctly: 'reasons cause an intention, and an intention causes bodily movements, but nobody — that is, no person — does anything' ('What Happens When Someone Acts?', *Mind* 101, 1992, pp. 461–481). Enç takes this objection seriously and attempts to meet it in Chapter 5, where he develops a causal model of deliberation. First, he calls attention to a qualitative difference between hard-wired behavior, such as the work of a temperature-maintaining system consisting of a thermostat and feedback circuit, a moth's diving upon detecting a high-pitched sound (likely from a bat) and many learnt behaviors of lower animals, on the one hand, and rational behavior, on the other hand. The key idea is that the causal connections embodied in the former are 'not the right kind to yield rational action,' whereas 'the instrumental beliefs that make up part of one's *reasons* for one's actions have conditional content,' whose causal role is 'what makes the resultant behaviour rational' (p. 136). Then Enç goes on to develop and defend two major claims (pp. 136–137):

> (1) The essential element in rational action is a computation that involves deliberation, the weighing of pros and cons of the consequences of one's prospective actions. (2) This process of deliberation can be explained by reference only to events, states, and the causal relations among them, *provided* that some of these states are representational, and the causal role played by these representational states is in virtue of their conditional content.

Enç's solution to the problem of 'the absence of the agent' looks ingenious and promising, but I suspect that it can only work to alleviate but not to remove the worry. Conceiving the process of deliberation as a computation that consists of: (i) searching for alternatives of courses of action in light of the agent's instrumental beliefs represented as a set of conditionals (the functioning of the What-If Generator in Enç's model), (ii) selecting one of these alternatives by calculating which alternative has the consequent that represents the most attractive outcome as determined by a set of higher order priorities of the agent, and (iii) the actual course of action that is chosen as a direct causal result of (ii), has not done enough to bring the agent back into the picture. The process of deliberation is still a causal chain of certain events/states, even if 'some of these states are representational, and

the causal role played by these representational states is in virtue of their conditional content,' as required by the causal model of deliberation. It remains unclear what an active role the agent needs to play in her practical reasoning. In his discussion of the phenomenal feeling of free choice (pp. 168–169), the experience that when we take ourselves to be making a rational decision, we typically think that the future is open, that we can do this or we can do that, and that it is up to us which we do, Enç suggests that the running of what-if scenarios in the causal model of deliberation can essentially capture the sense of freedom of the will. However, as John Searle points out in *Rationality in Action* (Cambridge, MA: MIT Press, 2001, pp. 12–17), in your deliberation, you cannot simply sit back and let the reasons cause the decision; you need to exercise your agency and effort to make a choice. In some decision-making situations, you may have conflicting reasons or several different reasons for performing an action. The reasons do not operate on you. Rather you *choose* one reason and act on that one. You make that reason effective by acting on it.

Chapter 6 contains a nice and sensitive survey of a number of philosophical issues related to intentions and intentional action. Enç advocates a conception of intending that he calls 'the holistic view of intention,' in which an intention is a psychological state whose content is 'the whole act-tree constructed during the deliberation process, including all the expected generative relations, causal connections, and fall-back plans, and the relevant probability assignments' (p. 215). This conception, Enç suggests, can help understand the relation between the dual roles that intentions are usually supposed to play, namely, the functional role of initiating, co-ordinating, and guiding intentional behavior and practical reasoning, and the explanatory role of rationalizing intentional actions. Furthermore, Enç shows how it helps to make better sense of some of the disagreements over features of intentions among philosophers. Finally, in Chapter 7 Enç briefly discusses the notions of individual autonomy, voluntary actions, will power, and the freedom of agency, and argues, based on the causal model of deliberation developed in Chapter 5, that they are not beyond the reach of the causal theory of action.

Overall, this book offers a comprehensive development and defense of the causal theory of action, covering a wide range of fundamental issues in action theory. It is clearly written and carefully argued. Whereas its text is rich of insightful analyses and detailed arguments, it never loses sight of the large picture about human

agency. Moreover, this book exhibits some distinctive features that may be called 'philosophy of action, Wisconsin style' (Dretske's *Explaining Behavior: Reasons in a World of Causes* (Cambridge, MA: MIT Press, 1988) is its forerunner): a thoroughly naturalistic orientation, smooth combinations of both teleological and causal explanations, and skillful applications of biological and computational models, which, on the whole, make it a remarkable contribution to contemporary philosophical literature of action theory.

Jing Zhu
Department of Philosophy
Florida State University
Tallahassee, FL 32306, USA
humanwill@yahoo.ca

Department of Social Sciences
Graduate School of the Chinese
Academy of Sciences
Beijing, 100049, China

***The Cambridge Companion to Bertrand Russell*,** edited by Nicholas Griffin. Cambridge: Cambridge University Press, 2004, xvii + 550 pp., $28.00, £19.99.

The purpose of each volume in the Cambridge Companion series is to introduce the philosophical novice to great thinkers in the annals of philosophy. Some editions of the series have succeeded in this endeavor while others have failed — and sometimes miserably. The *Cambridge Companion to Bertrand Russell* has a few shortcomings, but inaccessibility is not one of them. Anthologies placing a premium on accessibility have tended to sacrifice depth for breadth. Nicholas Griffin has managed to edit an anthology where contributors address all of the main components of Bertrand Russell's work in a clear and concise way without surrendering rigor.

Nine of the fifteen essays address Russell's logical, metaphysical, or epistemological views. It is arguable that Russell's greatest contribution to philosophy was his views in philosophy of language and philosophy of logic. Among Russell's greatest accomplishments were the theory of types and theory of denoting. A good question to consider is how and why these theories arose in the first place. Some essays in the volume try to answer this very question. They attempt to evaluate Russell's intellectual evolution from mathematics to philosophy.

I. Grattan-Guinness argues that Russell's motivation for doing logic was largely the result of his mathematical aims. Russell's primary