enrollment leaving open such questions as what a supply and demand model might imply about whether there will be an ongoing race between technology and schooling.

Thus, the book ends up treating the term "matters" in its title more as noun than verb, that is as a compilation of material. While it reflects substantial effort at both measurement and analysis, *Education Matters* leaves much for further work on both scores.

DAVID MITCH, University of Maryland

The Idea of History in Constructing Economics. By Michael H. Turk. London: Routledge, 2015. Pp. viii, 242. \$160.00, cloth.

doi: 10.1017/S0022050716001108

Contrary to the impressions of many, the history of economic thought differs from economic history. The history of thought is a branch of intellectual history—the history of ideas. Economic history can be thought of as the history of growth and development. My current interests are in economic history, although for a decade and a half early in my career I also taught thought, so I have some acquaintance with the field. At that time, I read many of the classic (and some not so classic) works in economics and found this often enlightening in ways that influenced my research. Old ideas weren't necessarily bad, and although much in our discipline's past has been appropriately discarded (e.g., the labor theory of value), and much incorporated in modern thinking, it is also true that concepts or ways of approaching problems have sometimes been prematurely discarded. I learned that a careful and critical reading of texts in economics with an eye to resurrecting approaches that have not outlived their usefulness could be useful, supporting the view that the study of thought (which often meant the history of economic theory) can be a valuable complement to historical and empirical research in economics.

When asked to review this book, I therefore approached it with some enthusiasm. I was not familiar with the author, but we sometimes learn a great deal when serendipity or happenstance moves us outside of our usual circle. But I also approached the review with a caution bred from experience. Although reading original texts in economics had proved rewarding, reading books or articles about texts in economics (history of economic thought) often had not.

Turk's book is entitled *The Idea of History in Constructing Economics*. It is actually more about the ideas of physics, mathematics, philosophy, and to a lesser extent, biology and economic history in constructing economics. It consists of ten chapters, five based on previously published articles. It includes, *inter alia*, detailed discussions of Leon Walras and general equilibrium theory, Joan Robinson and the arrow of time, Max Weber, and also the relationship between economics and economic history, with particular focus on the ideas of Brian Arthur, Paul David, and Paul Krugman. One finds as well chapters on puzzle solving vs. problem solving in economics, and on the nature and meaning of historical proof.

I wish I could say that I felt enlightened and invigorated after completing this book. The author has read a great deal and is clearly familiar with a wide range of literatures in economics, science (particularly physics and mathematics), the philosophy of science, and economic history. The book has its share of esoteric epistemological terms (you had best know what nomothetic and idiographic mean), but for this style of work the jargon is not excessive.

Honesty however compels me to say that getting through the book was a struggle. Perhaps others with different backgrounds or interests would react differently. I would read a sentence. My mind would wander. The words would not register. I would read the sentence again.

The book calls for an economics that would be more historical, but there is little practical advice on how to advance this. Most economic historians are attempting this every day in their work and could benefit from guidance and direction. Writings on economic methodology routinely fall prey to the vice of reification—the danger of treating as real what is only conceptual, and in so doing wandering further away from what is useful in explanation, prediction, or even understanding, to use the term preferred by the German historical school. It is a vice shared by the theory so often the object of critique. Perhaps this is one reason writings in the history of thought often do not succeed in transcending or moving beyond the limitations of the texts they study.

Many of the literatures covered I am only familiar with tangentially. But I did not feel that the author made a real effort to teach me more about them. I took particular note when he was discussing economists— for example, Eichengreen, Solow, or more recently Piketty—whose work I know well, and was struck by how little someone without deep familiarity with the originals would be able to glean from the author's discussion. Here's another example from the introduction: "... one can follow a trajectory from the logical positivism of the Vienna Circle through Karl Popper's demarcation of science through falsification, Carl Hempel's criteria for nomological-deductive systems, Thomas Kuhn's paradigmatic shifts, Imre Lakatos' scientific research programs, to the pluralism of a more naturalistic methodology by the century's end" (p. 6). I have read Popper, Kuhn, and Lakatos, so I understood most of what Turk was trying to say about them, but absent that, I would have been lost, and frankly not interested in fighting my way out of ignorance.

I can contrast this with Phil Mirowski's work, most of which I have read. At almost every turn, Mirowski's work provoked and engaged me, and I often had to read it very closely. But in spite of his rococo style, there is usually a clear argument, vigorously pursued, provocatively argued, and supported by ground breaking archival research. I contrast Mirowski's work with Turk's because of their shared interest in the relationship between the histories of mathematics, the physical sciences, and economics.

Many books that mix philosophy of science with history of economics and the physical sciences are obscure, some almost deliberately so (something similar might be said about much economic theory). Abstruse terminology is thrown in the readers face—perhaps as an intellectual barrier to entry, as if to say, if you have to ask what the words means, you cannot afford to be here. What disappoints me most about this book is that the writing manages to be opaque—without actually seeming to be so.

The author has read broadly in many disciplines. The scholarship is serious. But if one wants to study the role of history in constructing economics, it might be better to place more emphasis on the practice of economic history rather than the history of theory. Historians of economic thought are good at talking about how certain types of economic theory fail to give history its due. Economic historians must wrestle with the challenges of understanding historical contingency every day, as they struggle to come up with narratives that are both original and correct, in the sense that they can be validated by empirical evidence and can stand up to critical scrutiny.

ALEXANDER J. FIELD, Santa Clara University