
Roger Ariew, Dennis Des Chene, Douglas M. Jesseph, Tad M. Schmaltz, and Theo Verbeek. *Historical Dictionary of Descartes and Cartesian Philosophy*. 2nd ed. Lanham, MD: Rowman & Littlefield, 2015. Pp. 408. \$115.00 (cloth); \$109.99 (ebook).

In the midst of the usual philosophical reading that professional philosophers engage in—monographs with a relatively tight organizing theme, and articles—reading a historical dictionary is an unusual, and often very interesting and satisfying, experience. This is certainly true of this volume, a historical dictionary on Descartes and the general philosophy he spawned. The five authors have all written extensively on the philosophy of Descartes, the individuals and context that shaped him, and his impact in early modern Europe. So they are well poised to produce a relatively comprehensive set of entries detailing Descartes's philosophy and "those who supported him, who corrected him, and who together formed one of the major movements in philosophy: Cartesianism" (xi; Jon Woronoff, series editor). I take it that this text has at least two audiences and serves a different primary purpose for each audience: the relative novices can use it for introductions to specific topics that might be of interest for further research and exploration, and the philosopher more knowledgeable about Descartes can use it to expand and deepen her knowledge with a wide range of fascinating details about Descartes and his philosophy. For the most part, the authors do an admirable job of the tasks at hand. There are hundreds of entries covering figures (some well known and others not), topics Descartes wrote about, social and religious movements, and scientific and mathematical movements. It's inevitable that with a project of this scope, authors will have to make choices about what to include, and as a result, there are some omissions. These omissions aside, this volume succeeds.

The book opens with a rich and thorough introduction before turning to the alphabetical entries themselves, and then it closes with close to 50 pages of bibliographical information. The introduction provides a solid and interesting account of Descartes's "life and times" and then gives an overview of Descartes's philosophy and the Cartesianism that grew out of an engagement with and reaction to that philosophy. The entries, each one usually written by one of the five authors, fall into a broad swath of categories: philosophical terms from metaphysics, epistemology, musical theory, passions and morals, natural philosophy, mathematics, and more; people names; place names; theological and cultural movements and peoples (e.g., Jansenism, Jesuits, Pelagianism); and titles of texts. Within each entry, terms that are cross-referenced to other entries are found in boldface. Finally, the 50 pages of bibliographical material include over 700

sources, helpfully divided into sections: an introductory discussion of the extensive literature on Descartes, including helpful information about existing bibliographical sources; primary texts by Descartes; primary texts by other authors associated with Cartesianism; secondary texts on Descartes; secondary texts on other authors associated with Cartesianism; and Internet resources.

One unexpected, and somewhat delightful, result of reading the text systematically from beginning to end is the expanded and deep sense that the reader gets of Descartes's life and the kind of thinker he was. This proves to be a valuable supplement to the deliberate summary of his life, times, and philosophy provided in the introduction. Of course, the typical reader of this text, who is not apt to start reading at the beginning and continue through to the end, is unlikely to get this expanded understanding of this great philosopher. But this does not change the fact that the entries as a whole do seem to add up to more than their sum.

Perhaps the volume's greatest strength is in its impeccable coverage of mathematics and various fields in what we now call science. This strength is unsurprising given comments in the preface and reader's note at the outset of the volume, comments that explicitly aim to expand our understanding of Descartes's philosophy and philosophy of the seventeenth century to include topics in mathematics and a range of various disciplines we now collect under the wide umbrella of science:

We usually divide the history of the philosophical world into periods . . . and teach modern philosophy beginning with René Descartes and ending with Immanuel Kant. The reason for this involves a view of modern philosophy as consisting of two distinct camps: continental rationalists . . . and British empiricists. . . .

While there is some truth in the simple schema we teach, its greatest deficiency is that it misses too much of the real Descartes. In the 17th century, Descartes was known as well, if not more, for his achievements in mathematics, physics, cosmology, physiology, philosophical psychology, and so forth. It would be difficult to overstate the influence of Descartes on practically every aspect of seventeenth-century thought, even such far-flung subjects as geology and medicine. (xiii)

Furthermore, "The entries cover not only figures whom we now recognize as philosophers and topics we now categorize as philosophical, but also figures whom we might recognize as scientists and topics that we categorize as scientific" (xv). This strength is also unsurprising given the research expertise of the authors, the majority of whom write on these features of early modern philosophy in gen-

eral and of Descartes in particular. The result is a volume with about as extensive and informed a coverage of mathematics and natural philosophy as they relate to Descartes as one might hope for.

I have a small worry associated with this strength, and this is that some entries are oddly short, while others are oddly long. “Mind” is afforded half a page (236–37), while “animal spirits” has over two pages devoted to it (23–26). This imbalance is somewhat mitigated in some cases by the rich array of entries associated with the primary entry. Again, “mind” is cross-referenced with 11 further entries (e.g., “intellect,” “sensation,” “cogito”), and after the entry on mind one is invited to “see also” an additional five entries (e.g., imagination, immortality, will [237]). Moreover, it is true that early to mid-twentieth-century investigations of Descartes were skewed toward topics of interest to philosophers of those decades of the twentieth century, and that the expansion to include mathematics and natural sciences is, indeed, truer to Descartes himself and the seventeenth century itself. And finally, some of the five authors tend to produce tighter, shorter entries (e.g., Schmaltz, who produced the entry on mind), while others tend to write longer, more detailed entries (e.g., Verbeek, the author of “animal spirits”). These qualifications notwithstanding, there are the occasional imbalances in entry length, where topics more central to Descartes’s own thought are somewhat terse while other more marginal topics enjoy more coverage.

Of greater concern is the almost complete lack of coverage of some topics and figures. The strength of the volume—its attention to mathematics and natural philosophy—is intricately related to this weakness, for they both emerge owing to the research profiles of the authors. One especially jarring omission is the volume’s almost complete silence on the women who write on Descartes or who are squarely in the Cartesian tradition or who are in various anti-Cartesian traditions. Elisabeth and Queen Christina are the two women with their own entries, and this is to be expected given that Descartes’s correspondents have entries of their own. But that’s it. A few women are mentioned in passing in other entries; Mme de Sévigné is quoted under the entry for René le Bossu, calling him a Cartesian (206). But where is Mary Astell, who published over half a dozen major texts in philosophy, clearly engaged with Cartesian philosophy? Where is the primary entry on Margaret Cavendish, who sat at dinner with Descartes in Paris and published widely, including half a dozen or so texts in philosophy, several of which explicitly, and in a sustained way, grapple with Descartes’s metaphysics and natural philosophy? Cavendish does, somewhat depressingly, get a sentence of mention in the primary entry afforded her husband, an entry that makes clear that the husband has very little engagement with Cartesian philosophy itself. Where is Emilie Du Châtelet, the eighteenth-century intellectual powerhouse who treated the demise of Cartesianism in France with admirable evenhandedness and a

command of the technical underpinnings of both Cartesianism and its victorious rival, Newtonism? Another eighteenth-century French intellectual (Voltaire) with a far blunter grasp of the mathematics, physics, and metaphysics of these two grand traditions is granted a mention in the introduction (14), but not his philosophical and mathematical superior, Du Châtelet. The list could go on. Research and teaching attention to the natural philosophy of Descartes and others in the seventeenth century has been going on for about 40 years now, so it has become a fairly standard part of our thinking about this period and its philosophers. Research interest in the contributions of the many sharp women writing in this period is comparatively new, but it has cascaded over the course of the past 5 years or so. This is now an exceedingly active area of research; it is no longer a marginal area of scholarly concern. And it is an ethically important area of research if we are to have a full and balanced understanding of our philosophical past. Yet almost nowhere is this field of research reflected in this book.

Just as mid-twentieth-century philosophers viewed the philosophical past through the lens of topics of interest to them, so too do the authors view this period and Descartes through the lens of their own research interests. And so, too, does this reviewer read this book through the lens of her own research interests. In doing so, I have underscored what I see as a major lacuna in the volume. There is nothing wrong, in my view, with taking a focused view of the past through one's own research interests; to underscore a point made above, the strength of this volume in its powerful treatment of mathematics and natural philosophy is undergirded by precisely this focused view. But a wider diversity of research expertise among the authors would have lent the book a greater balance of strengths. It could have, for example, paid due heed to the great diversity of thinkers who, in the seventeenth century—and today—sit at philosophy's table.

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Ohad Nachtomy and Justin E. H. Smith, eds. *The Life Sciences in Early Modern Philosophy*. Oxford: Oxford University Press, 2014. Pp. xiii+256. \$78.00 (cloth).

Can we still assume that there is a difference in essence between life and mechanical motion, between natural beings and machines? Should we posit a difference between life and intelligence, between bodily functions and minds? These are some of the questions addressed in this remarkable collection of es-