as complementary to other, more canonical outlooks, especially as contextualists have in some respects been interested in the "practical past" as much as the "historical past."

Skinner's afterword reviews all of the chapters in the volume, and welcomes the alternative perspectives offered by the authors in parts one and two as well as Flathman's gentle critique of the contextualist approach. Skinner concedes that no "single set of hermeneutic principles can ever hope to capture more than a fraction of what we want to know about the texts we study," and that we "need to remain in constant dialogue with each other about the rival merits of different approaches" (284-5). But apart from the interdisciplinary voices in the volume, and Flathman's cautionary comments, nothing is heard from such non-contextualist political theorists as Hegelians, Marxists, Arendtians, Foucauldians, and Straussians. The contextualist dialogue is open only to invited guests.

Harold J. Cook. *Matters of Exchange: Commerce, Medicine, and Science in the Dutch Golden Age.* New Haven & London: Yale University Press, 2007. xiv + 562pp. \$35.00. Review by ALIX COOPER, SUNY-STONY BROOK.

In this deeply-researched and provocative book, Harold J. Cook combines intellectual, cultural, social, religious and political history with the history of science and medicine to investigate the development, in the seventeenth-century Dutch Republic, of strikingly new ways of thinking about the material world. Drawing on numerous carefully contextualized case studies from the United Provinces, Cook argues that expanding interests in global commerce and trade during the seventeenth century supplied the Dutch not only with a plethora of fascinating new objects, such as exotic specimens from far-flung continents, but also with concepts and metaphors (like that of commerce itself) which likewise helped to spur increasingly materialistic modes of thinking. As a result, a newly object-centered, and thus "objective" knowledge arose, increasingly seen as derived not so much from reason as from the "passions" that physicians and folk-healers strove to control, as well as from the body itself.

## REVIEWS

This phenomenon was, Cook maintains, far from unique to the northern Netherlands. Instead, he argues, commerce can be seen to have played a crucial role more generally in the unfolding of the "new sciences" and related patterns of thought throughout Europe and beyond. *Matters of Exchange* is thus far more than a book about seventeenth-century Dutch science and medicine (though this is noteworthy enough, considering how extremely few studies actually exist on this topic). Rather, it is a highly synthetic and ambitious work that aims to reinterpret the Scientific Revolution itself more broadly–and together with it many aspects of the overall trajectory of seventeenthcentury culture from the century's beginning to its end.

The book unfolds both chronologically and thematically. The first chapter sets forth the themes of the book, placing them in the context of contemporary debates in the history of early modern science and of early modern culture more generally, while the second presents an admirably clear introduction to the history and culture of the late sixteenth-century Netherlands; both chapters should be extremely useful to readers more familiar with other national or disciplinary contexts. As Cook convincingly shows here, concerns with financial exchange and the conversion of currencies went hand in hand with other kinds of exchange, for example that of curiosities acquired on long voyages, which circulated through many a Dutch burgher's cabinet. Furthermore, in the second chapter, Cook introduces an important case study, namely that of Caspar Barlaeus, a Dutch scholar who in 1632 gave an inaugural address on the founding that year of Amsterdam's first full-scale Athenaeum. Barlaeus devoted his address to the theme of the union of wisdom and commerce. Rejecting the classical assumption that the pursuit of wealth was incompatible with that both of virtue and of knowledge, the Dutch scholar argued that commerce was in fact highly conducive to knowledge and wisdom-as could be seen in the example of Amsterdam itself, whose affluent citizens had enabled the Athenaeum's opening. This case study is just the first of many that Cook subsequently deploys to focus readers' attention on the intellectual implications of commerce, and as such it helps to provide a valuable touchstone for Cook's own argument, one he frequently refers back to.

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Gradually, as the book proceeds, Cook presents many such examples of the intersection of commerce and natural knowledge, in each case delving deeply into the historical context in question in order to explain what was at stake. Thus, he devotes considerable space in Chapter 3 to carefully scrutinizing the religious and political debates that framed the career of the prominent early seventeenth-century botanist Carolus Clusius, who founded the botanical garden at Leiden, and the ways in which Clusius sought to distance himself from these debates by developing an observational style that privileged descriptive detail, that is, that favored knowledge based on particulars, rather than on all-too-controversial general principles. Likewise, Chapter 4 advances Cook's claims through another case study, this time of the medical doctor Nicolaes Tulp (depicted by Rembrandt in 1632 in his famous painting The Anatomy Lesson). Painstakingly uncovering Tulp's involvement in assorted religious, political, and professional intrigues, Cook shows how Tulp himself, despite disagreeing with Clusius on many matters, similarly ended up "preaching" from the pulpit of the anatomy theater the same kind of emphasis on material detail in the study of the human body that Clusius had advocated in the botanical realm. A case study in Chapter 5 of another physician, Dr. Jacobus Bontius, who travelled with the Dutch East India company to faraway Java and while there conducted critical work on the flora and fauna of the Indies, comes to the same conclusion: Dutch values and the demands of commerce alike furthered the development of new styles of knowledge based on individual "facts," which could easily be circulated and exchanged in an increasingly globalizing world. Subsequent chapters on the Dutch invention of microscopy and the Dutch transmission to Europe of knowledge about Japanese acupuncture, as well as other examples too numerous to mention here, provide additional evidence to substantiate this crucial claim.

One of Cook's most striking analyses, though, comes when he turns his attention to philosopher René Descartes, one of the Netherlands' most famous seventeenth-century immigrants. In a chapter entitled "Medicine and Materialism" (Chapter 6), Cook shows how Descartes' experiences in Dutch anatomy theaters helped lead him to develop his theories about the relation between body and mind into a full-fledged interest in the "passions." His resulting treatise on *Les*  passions de l'âme, fleshed out in correspondence with the young Princess Palatinate Elizabeth (also taking refuge in the Netherlands at the time), justified the passions as physiologically-and thus materially-caused modes of knowledge that were capable of serving as positive forces in the world. Seen in this light, self-interest caused by the passions, such as an individual's quest for personal wealth, might very well prove beneficial to the common good. Cook demonstrates how these ideas of Descartes, very much influenced by his stay in the Netherlands, then influenced events in the Netherlands in turn, as they were taken up not only by Dutch proponents of a materialism even more radical than Descartes' own dualism, but also by some extremely highly-placed republican theorists. In a later chapter, Cook traces the subsequent career of such ideas about the passions, revealing that the Londonbased author of the highly influential Fable of the Bees: Or, Private Vices, Publick Benefits (frequently used in the eighteenth century to justify commerce), Bernard Mandeville, was himself Dutch in origin and had drawn considerably in this work on the materialist ideas he himself had encountered while studying in Leiden. In short, the intellectual milieu of the Dutch Republic thus proved highly favorable not only to the study of "objective" facts, but also to an accompanying philosophical materialism in which the act of thinking itself came to be viewed in bodily or material terms, with significant cultural and political consequences.

*Matters of Exchange* thus provides a distinctly new view of early modern science. Paying careful attention to aspects of science and thought often left out of traditional accounts of the Scientific Revolution—from the importance of natural history in the construction of "objective" knowledge, to the key role of medicine in the emergence of materialism—Cook suggests new ways of looking at old narratives. The way in which the book immerses the reader deeply within relatively understudied Dutch contexts has the same effect. The numerous case studies Cook presents of the interconnections between commerce and culture support his argument quite well; the 60 black-and-white illustrations that grace the book also add substantially to its appeal. The book should thus be of considerable interest to a wide range of readers, including literary and cultural historians, as well as anyone interested in seventeenth-century matters.