
From the reception of Aristotle's philosophy at thirteenth-century universities up to the eighteenth century, philosophy underwent a series of difficult challenges, of which the last was the most severe: the separation of modern philosophy from the natural sciences. Numerous scholars have studied aspects of this ultimate transformation and have attempted to provide an explanation of it. At the core of many of these investigations stands the radical transformation of natural philosophy. Explored by historians of both science and philosophy, natural philosophy represents a very fruitful field of study, as it bridges all other philosophical disciplines.

Antonia LoLordo's book on Pierre Gassendi and the Birth of Early Modern Philosophy belongs to this type of enquiry, as it investigates an important system of natural philosophy within its historical context (p. 2). Addressing mainly the issues developed in the Syntagma Philosophicum, but with references to Gassendi's other writings, the author of this book aims to provide a sympathetic philosophical reconstruction of the views developed by the philosopher from Digne. Thus, from very early on, the reader is warned that the focus is on Gassendi's philosophical agenda as reconstructed from his magnum opus, which was however published posthumously. Moreover, LoLordo also makes it clear from the beginning that Gassendi's dispute with Descartes—to mention only the most famous example of Gassendi's controversies with contemporaries—is only of secondary interest, namely to the extent that it can help the reconstruction of Gassendi's philosophical system.

The book is structured in ten chapters, each of which discusses important aspects of Gassendi's philosophy. LoLordo begins with a historical chapter, which presents Gassendi's life within the intellectual context of the period. Setting the stage for her analysis of natural philosophy, LoLordo provides a good survey of the historical context, in which she relies heavily on Olivier Bloch's chronology of Gassendi's writings (p. 20). There is, however, a secondary, rhetorical, reason for LoLordo's reference to Bloch's celebrated book: namely to announce differences in interpretation, which she carries forward throughout her book. What is at stake is notably the “double truth doctrine” (p. 33), of which LoLordo argues that Gassendi was no representative (p. 247).

In chapter two, “Gassendi's Philosophical Opponents,” LoLordo compares Gassendi’s system to three philosophical alternatives. First, she investigates how Gassendi planned his philosophical project of the Syntagma against the Aristotelians (p. 36)—an opposition that became particularly clear in Gassendi's early Exercitationes paradoxicae adversus Aristotelos (1624), which LoLordo shows to have set the themes of the Syntagma. The second adversary is the neo-Platonist concept of an anima mundi, which had become increasingly popular in the Renaissance (p. 45). LoLordo correctly addresses the theological and ontological aspects that motivated Gassendi’s rejection, pointing to the explicit discussion of this doctrine in the Examen philosophiae Roberti
Fluddi Medici and concluding the section with a well-argued comparison of Gassendi with Marsilio Ficino. What is conspicuous in this context is Gassendi’s rejection of chemistry (pp. 47, 53), which relies on similar arguments as those used by Gassendi’s Cartesian contemporaries who, like Jacques Rohault, commented positively on the use of chemistry in medicine and pharmacy, but denied its status as a science, as its resolutive method appeared to defy mechanical explanations. According to LoLordo, Gassendi, who argued likewise, believed, for example, that the chemists’ five elements “could themselves be further resolved, ultimately into atoms” (LoLordo’s words, p. 53). She reaches this conclusion on the basis of Gassendi’s statement: “I remain silent here about what could be added concerning the resolution of those five principles into their seeds and finally into atoms, for the matter should be understood from the things that will be said later” (1.245b).

The third and final philosophical opponent discussed in this chapter is Descartes. LoLordo does not spend much time on Gassendi’s *Objections* and Descartes’s *Replies*, given how often this debate has already been analyzed. Instead, she concentrates on a few issues, such as the problem of clarity and distinctness and the formation of ideas—problems that she shows to resurface later in Gassendi’s *Syntagma* (p. 55).

In chapter three, “Skepticism, Perception, and the Truth of the Appearances,” LoLordo takes issues with Richard Popkin’s characterization of Gassendi as a skeptic, claiming that this label can be applied only to the early period of the *Exercitationes*. By contrast, “the system of canonic provided in the *Syntagma* outlines a positive program for achieving knowledge, one that responds to Gassendi’s earlier skepticism” (p. 60). Even if the earlier temptation of Pyrrhonism can sometimes be felt in the mature work of Gassendi, LoLordo emphasizes Gassendi’s positive theory of knowledge with its heavy reliance on perception and its quest for the hidden inner—but corpuscular and atomic—structure of things. In her admirable analysis, LoLordo focuses less on the ontological aspects of Gassendi’s philosophy than on his epistemology. She leads the reader from Gassendi’s early skepticism to the antidote offered to it in the *Syntagma*, and she concludes that “his theory of perception as a whole draws a tight connection between the mechanics of sensation and the epistemic status of ideas and judgments” (p. 68). This tight connection has to do with Gassendi’s theory of vision (pp. 69–75), which is based on the Epicurean notion of simulacra, although—as LoLordo points out—Gassendi’s account fails to explain “how those changes [in the sensory apparatus] relate to acts of apprehension” (p. 75). Since the object of perception must produce appearances that are always true, LoLordo seeks to find out how Gassendi combined such an epistemology with the possibility of error. Her answer is that for Gassendi, appearances guarantee only the certainty of existence, but do not reveal the nature and qualities of a thing (p. 81).

In her subsequent chapter, “Cognition, Knowledge, and the Theory of Signs,” LoLordo focuses mainly on the formation of new ideas, and notably of such ideas as were not the product of the impressions brought about by perceptual cognition. Gassendi, combining Epicurean and Aristotelian elements, does not seem to have been able to furnish a clear answer to this problem (p. 90). Further, idea formation and