

Paola Bertucci, *Artisanal Enlightenment: Science and the Mechanical Arts in Old Regime France*

New Haven, CT and London: Yale University Press, 2017. Pp. 312. ISBN 978-0-3002-2741-3. \$40.00 (hardcover)

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Over the past decades, historians of science and technology have challenged the historical separation between mind and hand, between scholar and artisan. Paola Bertucci's excellent *Artisanal Enlightenment* takes such approaches one step further by bringing a previously overlooked intermediary actor to the fore: the *artiste*. In eighteenth-century Paris, the *artistes* saw themselves as superior to mere artisans because of their intellectual capacities and *esprit*, but they also distinguished themselves from savants through their preference for practice over theory. Bertucci's main argument is that 'key Enlightenment concepts – such as improvement, progress, and useful knowledge – emerged from the contested territory of the mechanical arts, where *artistes* strove to differentiate themselves from artisans as well as from savants' (pp. 3–4).

The most important platform for the *artistes* was the Société des arts, founded in Paris in 1728 and dissolved in the early 1740s due to unreliable patronage, internal conflicts and decreasing activity. The recent discovery of the institution's archives has now made a more thorough assessment of its activities possible. The society mainly gathered clock-makers, surgeons, cartographers and other artisans who, despite the intellectual aspects of their work, were excluded from the royal academies and medical faculties. By also attracting savants affiliated with the Académie des sciences and nobles with a passion for improvement, the society functioned as a meeting point for different cultures of knowledge. Before their activity started to decline, many of them met bi-weekly to present their work, demonstrate new innovations and cultivate their identity as *artistes* who would lead their country's improvement.

The book covers the period from the foundation of the Académie des sciences in 1666 to the publication of the first volume of Diderot and d'Alembert's *Encyclopédie* in 1751. Bertucci elegantly situates the emergence of the *artistes* between these two landmark events in the French history of science. The rivalry and collaboration between the *artistes* and the Académie des sciences are central themes throughout the book, and Bertucci demonstrates how the *Encyclopédie* both followed several earlier encyclopedic projects on the arts and reinforced the distinction between artisan and *artiste*. The book is divided into three parts, each divided into two chapters. The only chapter that is fully dedicated to the Société des arts, the fourth, constitutes the pivot of the book. All other chapters gravitate towards the analysis of this institution, but they also shed new light on other better-known aspects of the French Enlightenment when seen from the perspective of the *artistes*.

The first part examines how the savants of the Académie des sciences perceived the mechanical arts in the late seventeenth and early eighteenth centuries. It focuses on the academy's project, initiated by Colbert, for writing an encyclopedic history of the arts. Borrowing methods and perspectives from natural history, the project was at first centred on the search for an organizing principle of *enchaînement* (interconnectedness)

that would allow a categorization of the arts according to a natural hierarchy. The project changed when it fell into the hands of Réaumur, who wished to turn the arts into a useful science. In Réaumur's view, the artisans – characterized as automata, just as replaceable as their tools – had to be directed by ingenious savants.

In the second part, the *artistes* themselves take centre stage. Challenging previous prejudices about artisans, they emphasized that intelligence, talent and *esprit* were required to perform their professions. They furthermore argued that they, due to their practical knowledge and experience, were the only ones able to describe and disseminate their useful knowledge. After the failure of a similar attempt in 1718, the Société des arts was created in 1728. Bertucci examines its dependence on its patron, the Comte de Clermont, that led to both its initial success and its subsequent fall. She also shows how the society, even though it challenged the privileged social position of savants, reproduced the hierarchical system of the old regime in its own internal structure.

Writing about the arts takes a central position in the book and is thematized in the fifth chapter. Bertucci convincingly argues that publication format was a political choice reflecting perceptions of the mechanical arts and artisans' place in society. The Académie des sciences's grand encyclopedic project was based on the assumption that best practices in the mechanical arts only change very slowly. According to the *artistes* of the society, on the other hand, improvement in the arts occurred both frequently and unexpectedly, and they therefore preferred shorter and more punctual publications through which new innovative knowledge could be rapidly communicated. Also focused on the diffusion of artisanal knowledge, the sixth chapter examines how the mechanical arts and machines gained popularity in the high society of the salons and became increasingly important in the education of younger generations.

Rather than seeking the roots of modern science in artisanal knowledge, this book places the *artistes* in a sociopolitical context of the French Enlightenment. Bertucci stresses that the identity formation and boundary work of the *artistes* were essentially political in that they aimed to present themselves as the ones most fit for serving the French state in leading its improvement. One question that is not discussed is the place of agriculture in the improvement project of the *artistes*. Pursuing this topic further might have been fruitful considering that (1) agriculture was arguably the foremost area for the theory and practice of improvement in the period, (2) tools such as the seed drill were developed as and created new links between agriculture and the mechanical arts and (3) agriculture seems to have been a central concern for the *artistes* who included 'agriculture and economy' and 'animal economy' among the nine focus areas of the Société des arts. Nevertheless, this extensively researched, lucidly written and clearly argued book is a most important contribution to the history of science and technology: it opens up the world of a new historical persona, the *artiste*, and provides a forceful corrective to the Enlightenment narrative that only grants intellectual primacy to the *philosophes*.

doi:10.1017/S0007087421000170