

Technology and the Early Modern Self

Adam Max Cohen



Scholars have recently interrogated the inventions of the early modern period for their impact on the cultures into which they were introduced. *Technology and the Early Modern Self* engages in this compelling new area of study, while eschewing generalities. Instead, it examines the interactions between particular technologies and specific personality traits. From clocks and discipline, to print technology and ambition, to gunpowder and versatility, to optics and perspective, each of this book's four sections takes full advantage of the interdisciplinary nature of contemporary literary and cultural studies to shed new light on the relationships between technologies and the people who first used them.

"*Technology and the Early Modern Self* offers an expansive view of the relationship between literature and technology, encompassing many different writers, from reforming humanists such as Erasmus to canonical sixteenth-century literary writers such as Shakespeare, Spenser, and Jonson to seventeenth-century scientific authorities such as Galileo, Kepler, and Hooke. The scope is ambitious; Cohen has thoroughly canvassed the field and synthesizes much important information, producing a valuable study that should accompany both survey courses and more advanced seminars. Literary critics and historians of science alike will benefit from his arguments and comprehensive bibliography."

—HENRY TURNER, Rutgers University

"A beautifully crafted piece of work, *Technology and the Early Modern Self* explores the complex and complementary ways in which a world of *things*—clocks, printing presses, guns, optical devices—helped to mold and fashion that most nebulous but vital attributes of the human creature: a sense of selfhood. Cohen's thoughtful and engaging book will make a major contribution to our understanding of the imaginative world of early modern people."

—JONATHAN SAWDAY, author of *Engines of the Imagination*
and *The Body Emblazoned*

"Cohen's *Technology and the Early Modern Self* is clearly written and well organized. In this work Cohen has taken to heart the skepticism directed by postmodern theory toward the notion of technological progress. This book carefully examines the historical perspective of early modern selfhood as it was changed and shaped by technological innovation. While his first book *Shakespeare and Technology* gives us a new way of reading Shakespeare, this second book is broader and more ambitious and its impact potentially greater."

—DANIEL VITKUS, Florida State University

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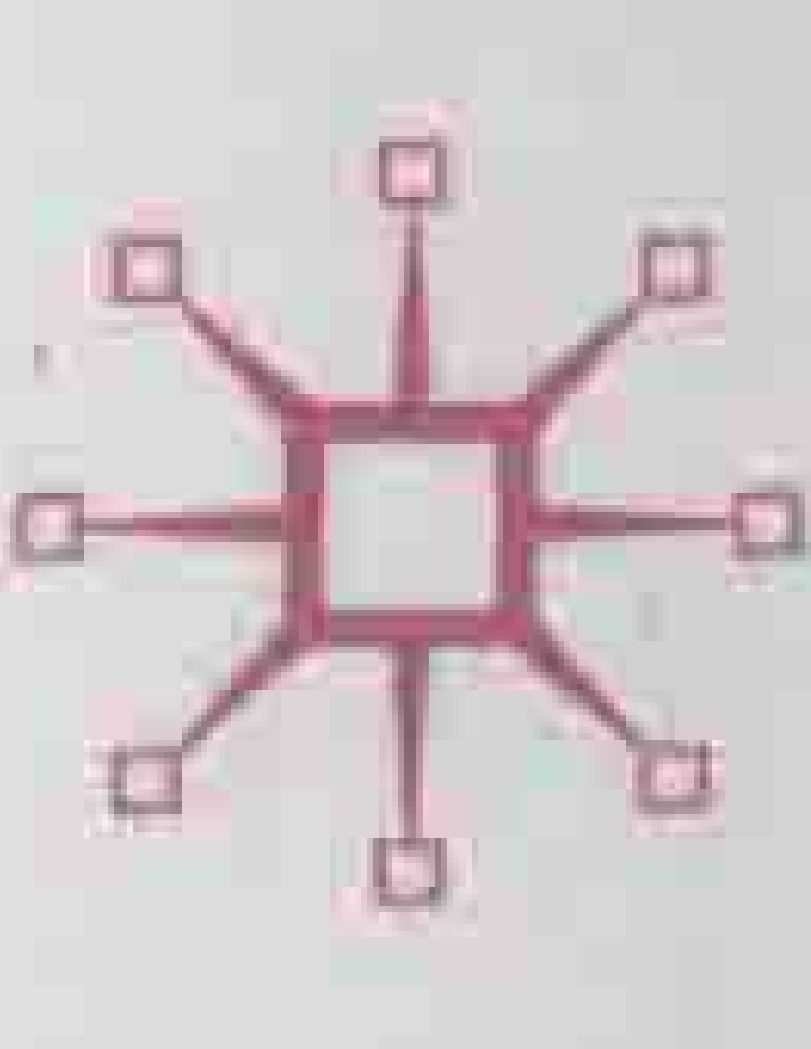
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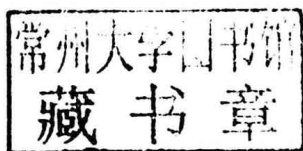
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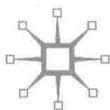


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Technology and the Early Modern Self

Also by Adam Max Cohen

*Shakespeare and Technology: Dramatizing Early Modern Technological
Revolutions* (Palgrave Macmillan, 2006)

For Debbie

Acknowledgments

A recurring humanist fantasy in the early years of the print revolution was that a scholar might someday write a book that contained *omne scibile*, all that is knowable. The acknowledgment sections of books such as this one hold out a similar dream—the idea that an author can adequately thank all those who have helped him or her to write a book. While we may smile inwardly at the naïveté of the Renaissance humanist, the dream of total acknowledgment is just as unattainable, as every author who has sat down to write an acknowledgment section like this one can attest. Having acknowledged the inadequacy of the acknowledgment enterprise on which I am about to embark, I would like to take this opportunity to thank the individuals and institutions who have been particularly generous in nurturing this book over the course of its life.

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Introduction: A New Instrument

What impact do technologies have on us? Do the often powerful and sometimes mysterious tools, instruments, and machines that we use on a regular basis reinforce existing personality traits, or do they create us anew? These questions are important in any historical period, but they seem particularly apt in relation to the era that has been known since the mid-nineteenth century as the Renaissance because the two major paradigms related to the period highlight the development of individualism on one hand and technological shifts on the other.

In his book *The Civilization of the Renaissance in Italy* (1860) Jacob Burckhardt argued that a decrease in medieval religious devotion and a temporary lack of central political authority encouraged the heads of Italian city-states to create cults of fame. Courtiers who served these ambitious princes crafted literary and artistic masterpieces that testified to their power and good taste, and in doing so these courtiers also made names for themselves. In the late twentieth century Burckhardt's theory regarding the rise of the individual enjoyed a sort of renaissance thanks in part to Stephen Greenblatt's book *Renaissance Self-Fashioning* (1980) and the New Historicism movement Greenblatt helped to found. While New Historicism has been challenged and revised since the early 1980s, its focus on self-fashioning continues to influence the critical discourse related to the early modern period.

The second major paradigm that has proved influential in recent studies of the European Renaissance is the idea that the period experienced revolutionary cultural shifts that ultimately laid the groundwork for modernity. Many of these shifts were either driven or enabled by technological innovations such as printing with movable type, improvements in navigational instruments, and the use of gunpowder weapons. Scholars interested in these cultural transformations now routinely use the term *early modern* to describe the period, as opposed to *Renaissance*, and in so doing they assert that the historical shifts that took place put Europe on the path to modernity.¹

When literary and cultural historians attempt to bring these two paradigms into conversation with one another they usually follow Burckhardt's

lead by focusing on the significance of broadly based and sometimes nebulous social, religious, cultural, and political shifts. Among the factors that are most often mentioned are the rise of absolutism, the Protestant Reformation, the development of print culture, the rise of proto-capitalist economies, and the impact of the so-called Age of Discovery.²

While most humanities scholars have long acknowledged that the rise of early modern individualism was a complex phenomenon brought on by a variety of cultural factors, until recently few have considered the phenomenon in relation to the invention, evolution, and dissemination of particular tools, instruments, and machines.³ There are several possible reasons for this. Humanities scholars are not trained to study technology. They are trained to study texts, and in some cases the textual traces of early modern technologies are relatively scarce. In addition, some shy away from the study of technology because Western culture has long been marked by what one historian has called “two parallel systems of education—that of the mechanical arts for engineers and that of the liberal arts for men of letters.”⁴

In the first half of the twelfth century Hugh of St. Victor opined that the mechanical arts were “adulterate,” and he supported this view by noting that the word *mechanical* derived from the Greek *moikos* and the Latin *moechus*, which mean *adulterer*. In medieval and early modern Europe the mechanical arts, like most forms of manual labor, were not only associated with low social status, they were often viewed as immoral. Work done with one’s hands was associated with the corrupt flesh, thus it was thought to contaminate or even deform the soul.⁵ Pamela H. Smith provides some historical perspective on this anti-mechanical bias when she notes that “The Greek disdain for manual work as deforming to mind and body was carried on in Western culture up into the seventeenth century and beyond.” Smith cites Aristotle’s claim in his *Politics* that craftsmen could not be full citizens because “no one can practice virtue who is living the life of a mechanic or laborer.” Aristotle concluded that “there is no room for moral excellence in any of their employment.”⁶ Today, in part because of a residual sense of social, intellectual, and moral superiority, scholars working in the liberal arts “have rarely thought it worthwhile to cross the gap in order to study or to write the history of the mechanical arts, the history of technology.”⁷ I will suggest in this study that the gap must be bridged in order to gain a nuanced understanding of the people who lived during the early modern period.

Francis Bacon is often cited as a leading early modern proponent of the mechanical arts. In *The Advancement of Learning* (1605) he claimed that new technologies had already helped natural philosophers surpass the ancients, and he campaigned for more and better research into the mechanical arts: “I find some collections made of agriculture, and likewise of manual arts; but commonly with a rejection of experiments familiar and vulgar. For it is esteemed a kind of dishonour unto learning to descend to inquiry or meditation upon matters mechanical, except they be such as may be