

In This Issue

We open this issue with an article on a subject of considerable interest in recent years among historians of both technology and science: the relationship between the Enlightenment and the Industrial Revolution. In "An Enlightenment in Steel? Innovation in the Steel Trades of Eighteenth-Century Britain" Chris Evans and Alun Withey offer us a history that challenges Joel Mokyr's interpretations of "Industrial Enlightenment" through a sharply observed exploration of the eighteenth-century British steel trades. They find that it wasn't the circulation and codification of artisanal knowledge that drove most innovation in the steel trades, but rather specific consumer demands—a finding for this industry that contrasts starkly with Mokyr's conclusions. Far from removing the Enlightenment from the equation, however, Evans and Withey demonstrate notable connections between the consumers of steel and the milieu of the Enlightenment, shifting the focus from steelmakers to steel users and adding a new twist to this engaging and important historical discussion.

Unpacking technological revolutions is also at the heart of David Brock and Christophe Lécuyer's contribution, "Digital Foundations: The Making of Silicon-Gate Manufacturing Technology." Focusing on the now ubiquitous building block of the digital revolution—the silicon gate—Brock and Lécuyer engage in a materials-centered history, exploring the material, market, and competitive logics that underpinned the emergence of a digitalized society. After almost fifty years of "Moore's Law," it is easy to take for granted the constant reduction in costs and increases in capability of digital technologies, which seem to be part and parcel of the contemporary world. Brock and Lécuyer recover the foundational histories hidden behind this naturalized reading of "progress in computing," and show in the process the wider contexts and technological work that operated to maintain, rather than reflect, Moore's Law.

There is an old controversy in the history of technology about the "true" origins of the Congreve (or Parly) rocket. Some claim it for India, seeing Sir William Congreve's claims as mere hype intended to cover up the older Indian origins of the technology, while others see it as an innovative weapon emerging from the research efforts of Congreve in Great Britain. In "Technology on the Spot: The Trials of the Congreve Rocket in India in the Early Nineteenth Century" Simon Werrett turns this old debate on its head by using the history of the Congreve rocket to ask a different question: What work do discourses about geographies do in the struggle to establish new technologies in imperial settings? In the process he shows how pliable the notion of "technology transfer" could be and historicizes the stakes of origin stories. Asserting "transfer" in this imperial setting was not just a bald statement about moving technologies, but a rhetorical move in a contest over authority. As Werrett points out: "It would be wrong to view the histories of the Congreve and Parly rockets in India as a story of imperial technology transfer, because a key element of the disputes . . . was whether, in fact, the rocket was traveling at all."

We are pleased to offer our second installment of a new feature in *T&C* called "Inside the Black Box": articles that tightly focus on particular artifacts, historical moments, or debates within the field. We are privileged to bring you a fascinating exploration of hydraulic management in a medieval French monastery. Sheila Bonde and Clark Maines have been excavating a former Carthusian monastery at Bourgfontaine in France, sited on a working farm. Because of its location, this former charterhouse has remained largely unstudied until Bonde and Maines's recent work. Their article, "The Technology of Medieval Water Management at the Charterhouse of Bourgfontaine," explores the exceptionally sophisticated technology of this monastery, to respond to the complex water requirements of the quasi-eremitic Carthusian order and underwritten by the considerable patronage