through the murk and the figure of Jack the Ripper silhouetted against the darkness. William M. Cavert's *The Smoke of London: Energy and Environment in the Early Modern City*, however, explores the story of smoke pollution in the capital city in the seventeenth and eighteenth centuries. London became reliant on coal for a variety of purposes from the sixteenth century onward. While Londoners found coal "ugly, unhealthy, or undesirable" (xviii), it became embedded in conceptions of social stability, economic prosperity, and state power. According to Cavert, it "brought benefits that rendered its dirtiness acceptable" (xviii). Disruption to coal supplies was thought to be as devastating to the social order as were problems with food supplies.

Cavert looks at the early legal debates, many initiated by personal complaints from Elizabeth I and Charles I, aimed at limiting smoky industries located near the Royal Palaces. Charles II shared his father's dislike of coal smoke, but "measures against it were limited, local, sporadic, and rearguard" (190), not least because Charles was more interested in projects outside the capital city in Windsor or Greenwich. Such preferences marked the failure of earlier attempts to limit smoky industries within London.

The situation changed gradually as local magistrates became more interested in cleaning London's air to benefit health and to protect buildings. But these early attempts to legislate started a pattern that was to be followed during later centuries as attempts to reduce smoke failed to be passed into law. For many people, a major part of the problem was that the smoke pouring from workshops signified industrial success and full employment, just as smoke issuing from domestic chimneys registered prosperity and cozy domesticity, a relationship only hinted at in Cavert's book.

Other, wealthier individuals also tried to limit the number of smoke-emitting industries located near their own dwellings. New developments in the west of London, such as Covent Garden, prohibited smoky trades from the outset in order to attract a higher class of resident. Urban settlements created for and by social and political elites partly explain why London's East End suffered more from the West End's smoke, as the vapors from the increasing number of domestic dwellings were blown eastward by the prevailing winds.

The most significant stand against smoke during the period covered by this book was John Evelyn's pioneering pamphlet *Fumifugium* (1661). Powerful though it was, Evelyn's polemic had little practical effect. Cavert also surveys the metaphorical and literary resonances of smoke. For many, London could be summed up as a place of "sin and sea coal" (200). The smoky atmosphere evoked images of mercantile greed and corruption. While the smoke of London might ruin innocent women, London could be an intellectual center for women, leading one bluestocking to write that she looked "forward with joy to the dark days of January and the smoke of London," which reduced the possibilities for outdoor recreations (214).

This book is not about the mixture of smoke with the

natural damp atmosphere of London that produced London fogs, the "pea-soupers," which became frequent and dense from the 1830s onward; it is about specific smoke nuisances from industries such as breweries, soap producers, tanners, and glass and brick manufacturers whose smoke poured into neighboring houses, ruining their furnishings and clogging up their inhabitants' lungs. People who were part of these earlier centuries were not environmentally apathetic, and they attempted to control or even curb the filthy smoke because many were personally affected. Cavert shows the development from initial attempts to protect the city's air and beauty to wider projects. All of this sets the scene for later battles as industry in London expanded and domestic hearths increased, which culminated in the Clean Air Act of 1956.

Cavert has written an engrossing, readable, and authoritative study of a significant episode in the history of the urban environment, one with important lessons for today. It is a pity, however, that the publishers chose not to include any illustrations, despite the rich visual sources available on this topic.

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MARK G. HANNA. *Pirate Nests and the Rise of the British Empire, 1570–1740.* Chapel Hill: University of North Carolina Press, published for the Omohundro Institute of Early American History and Culture, Williamsburg, Va., 2015. Pp. xvi, 448. \$45.00.

In *Pirate Nests and the Rise of the British Empire, 1570–1740*, Mark G. Hanna provides a fascinating and informative history of the rise and fall of international piracy from the late sixteenth through mid-eighteenth centuries. Whereas most historical treatments of piracy focus attention on sea bandits at sea, Hanna focuses attention on them at shore. And whereas most previous work's central concern is with pirates themselves, Hanna's interest is with the relationships that sea bandits had to and with landlubbers—the colonials who facilitated piracy and, ultimately, its demise.

The first five chapters of Hanna's book consider "pirate nests," colonial communities in Jamaica and North America that supported maritime marauders by fitting out their vessels, providing markets for their stolen goods, and offering them legal refuge, including lives to which they could retire after a big score. Chapters 6 through 10 study eroding support for pirates, a turning point reached in the transformative 1690s, when enthusiasm for sea bandits began to wane and once hospitable colonial communities started to turn on them, culminating just a few decades later in the "war on pirates" that led to their virtual extinction.

Hanna sees political, religious, and economic factors as contributing to early support for sea bandits in colonial pirate nests. But it is the economic factors that seem most persuasive: specifically, Crown-created trade restrictions. Those restrictions, manifested in the monopoly privileges granted to the East India Company (EIC) and Royal African Company (RAC), had deleterious effects on the econ-

omies of the northern colonies of North America in particular, causing shortages of bullion, slave labor, and much-desired East Indian luxury goods. Pirates plundered these commodities from foreign ships operating in restricted markets and fenced them in wanting colonies, where, unsurprisingly, pirates were warmly welcomed.

In the subsequent decay of support for sea banditry in such colonies, leading to the disappearance of pirate nests in the eighteenth century, Hanna also identifies multiple causes. Changes in English law, for example, made it easier to prosecute piracy and more effectively extended metropole authority over colonial peripheries. But perhaps the most compelling driver in his account is again economic: the relaxation of trade restrictions damaging to the economic welfare of affected North American colonies, achieved in part by subjecting the EIC and RAC to greater competition. No longer reliant on sea bandits for access to bullion, slaves, and calico, colonials in pirate nests lost a central reason for supporting them. Indeed, as their economies became more globally integrated and dependent upon international commerce, the citizens no longer saw the activities of sea bandits as a net benefit, but as a net cost—a threat to peaceable relations with foreign governments conducive to trade. Now "homeless" and universally hunted, pirates were doomed, effectively wiped from the water by 1726.

It is easy—too easy for an economist—to interpret the rise and fall of pirate nests in Hanna's account as driven by simple colonial self-interest. Colonials who benefited from piracy supported it; those who did not were against it. When changing political-economic conditions led the former's benefits to dwindle, so did their support, encouraging a common stance against sea banditry and its subsequent decline.

Yet, a more careful reading of Hanna's story cautions against such an interpretation, or at least its basest variants. For in his account, colonials in pirate nests were not, for the most part, plainly corrupt or opportunistic. Rather, they appear to have supported sea bandits from a sincere belief that their support was morally justified—not only economically, but politically and even religiously. This is a possibility worth considering. Still, for the cynic, at least, doubt lingers: Have the aiders and abettors of thieves ever defended their action on the grounds that it simply profited them? If so, rarely, and this makes it difficult to know how seriously one should take such persons' nobler-sounding justifications.

It is unreasonable to quibble with a book of nearly 450 pages for failing to address the reader's pet questions. Still, this reader would have been delighted to see what Hanna had to say about how, if at all, pirates' interactions and close relationships with colonial landlubbers in North America might have influenced the latter's broader thinking about political governance. Famously, eighteenth-century pirates organized their ships on a system akin to constitutional democracy—one not unlike that which, in the later eighteenth century, would become the basis of American government. By the eighteenth century, as Hanna tells us, pirates were no longer receiving support from and closely interacting with colonial communities in

North America. However, Captain Charles Johnson's best-selling *A General History of the Robberies and Murders of the Most Notorious Pyrates* (1724), which recounted piratical governance, was widely available and could have been read by some of America's Founding Fathers years later. A fanciful possibility? Surely. But it is Hanna's thought-provoking consideration of pirates' relationships to the landed communities that embraced and then rejected them that moves me to wonder.

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SARA PENNELL. *The Birth of the English Kitchen, 1600–1850.* (Cultures of Early Modern Europe.) New York: Bloomsbury Academic, 2016. Pp. xiv, 256. \$112.00.

Sara Pennell's The Birth of the English Kitchen, 1600–1850 is, to my knowledge, the first book-length history of a particular room within the domestic house. If you are wondering why we might need a history of the kitchen, here is a study that will amply answer your question. It draws on the history of cooking, domestic architecture, technology, design, material culture, work, the household, everyday beliefs, and heritage to show that rather than being a functional domestic space that changed little over time, as had previously been assumed by a number of authors, the kitchen was the heart, or perhaps engine room, of the home. It was a site of informal sociability and technological innovation as well as a place for cooking and cleaning. Understanding the kitchen takes us to the core of understanding how people lived and worked at home in the era before 1850.

The book approaches the kitchen thematically, with each chapter considering how aspects varied between households of different levels of wealth and the extent of change over time. Pennell fully engages with existing research, sometimes critically, and she considers a wide range of primary sources with a strong emphasis on material culture as well as textual evidence. The book begins with the design of kitchens, considering the rarity of visual depictions before 1750, and then moves on to model kitchens, which were not an innovation of the early twentieth century, as many assume, but of the late eighteenth century, when Benjamin Thompson, Count Rumford, installed model kitchens of his own design into a number of institutions and domestic settings. The following chapter on the location of kitchens enters the lively debates about the changing location of the kitchen by experts on domestic architecture. The kitchen moved from outside (as a detached structure) to inside the house, then from above ground to the basement, and then back up to ground level again. This was not simply a matter of practical considerations such as the risk of fire, the introduction of chimneys, and the advent of piped water, but it was a radical reorienting of household activity each time the location shifted.

Further, kitchens have been overlooked in narratives of industrialization and technological change, and Pennell presents a strong argument for considering the importance of domestic technology. A shortage of wood for fuel