

hard intellectual or professional boundaries on surveying, engineering, architecture, and antiquarian studies. That said, the book's tight focus might also be seen as a limitation. Long's exclusive concentration on later sixteenth-century Rome prevents her from connecting her research to broader historical and historiographical trends. I found myself wondering, for example, how some of the ideas presented might play out in Elizabethan London (more familiar territory for me), and I would have welcomed a more general consideration of these early modern urban developments. I was also surprised that Long does not offer a more extensive discussion of early modern intellectual "trading zones," an intriguing topic that she introduced in a previous book and articles.¹ The current book has obviously grown out of that earlier work, but it does not really engage with or advance it. In some ways, *Engineering the Eternal City* seems more like an exhibition catalogue than a monograph, presenting a series of related projects, treatises, authors, and patrons rather than a sustained narrative or thesis. Other than a brief treatment in the introduction and too-short conclusion, the big picture seems oddly understated here. Nevertheless, the book will be of interest to those who study the history of architecture, science, technology, cartography, antiquarianism, and the Italian Renaissance in general.

ERIC H. ASH
Wayne State University

Note

1. See Pamela O. Long, *Artisan/Practitioners and the Rise of New Sciences, 1400–1600* (Corvallis: Oregon State University Press, 2011); Pamela O. Long, "Trading Zones: Arenas of Exchange during the Late-Medieval/Early Modern Transition to the New Empirical Sciences," *History of Technology* 31 (2012), 5–25; Pamela O. Long, "Trading Zones in Early Modern Europe," *Isis* 106, no. 4 (2015), 840–47.

Iris Moon

The Architecture of Percier and Fontaine and the Struggle for Sovereignty in Revolutionary France

London: Routledge, 2017, 186 pp., 10 color and 40 b/w illus. \$160 (cloth), ISBN 9781472480163

"Relationships," Iris Moon tells us, "are a form of paperwork" (13). In this fascinating book, she asserts that bureaucracy of

various kinds underpins our understanding of how the architectural team of Charles Percier and Pierre-François-Léonard Fontaine established their mutual practice, continuing it against the odds through dramatic regime changes in late eighteenth- and early nineteenth-century France. More important, however, paper itself—as mad-deningly contingent material substrate, as substitute for solid buildings, and as money—emerges here as a determining force. With so many projects unrealized or unrealizable during the French Revolution and Empire, architecture took to the page.

Moon's focus here is how interior decoration provided new ways of giving shape to hitherto unimaginable forms of modern sovereignty while simultaneously realizing architectural ambitions that were otherwise thwarted. This concentration on the interior marks a notable departure from much scholarship on the Revolution's visual culture. Internalizing revolutionary rhetoric about the virtues of transparent political spaces, scholars have tended to accentuate that culture's more monumental public-facing forms, masking an unease about revolutionary architecture's perceived lack of substance and betraying a suspicion that its façades concealed little of note. However, Moon is eager to stress that Percier and Fontaine's remarkable designs for interiors should not be read as mere compensation for a paucity of resources. Rather, their attention to mobile objects such as furniture was bound to more profound historical dynamics: the Revolution's destruction of buildings and the way architectural spaces and the objects they contained were rendered fungible by the new commercial opportunities that followed the Terror. Moon argues compellingly that Percier and Fontaine's development of an aesthetic of classical order made sense as a bulwark against the motility of visual signs, the instability of materials, and the processes of repurposing and making do that characterized the politically and commercially insecure climate of post-revolutionary Paris. At the same time, this book reveals that the architects' practice was not immune to its political and aesthetic situation; indeed, their work acquires a more complex historical aspect because it was structured by the same volatile yet experimental qualities it so often sought to deny.

Scholarship on Percier and Fontaine had a banner year in 2017. Jean-Philippe Garric's excellent exhibition on Percier and its accompanying catalogue (to which Moon contributed an essay), alongside the book under review, greatly extended the range of critical interpretation of these figures' work.¹ This book does not pretend to be a complete account of Percier and Fontaine's prodigious collective output; rather, it has more precise critical ambitions. With erudition and flair, Moon argues that the Revolution, and revolutionary political praxis more generally, energized Percier and Fontaine's work in unexpected ways. This cuts against hackneyed accounts of this period that view the Revolution's effects on architecture in predominantly negative terms. Indeed, central to Moon's thesis is the framing of Percier and Fontaine's practice as "revolutionary" in character and periodization. Eschewing the anachronistic category of "Empire style," Moon makes the significant decision not to describe their work as of the Empire, or even, for the most part, as "postrevolutionary." Drawing attention not only to the French Revolution's duration but also to the multiple, overlapping personal and official timelines that structured its course, she points to the manner in which the Revolution continued to haunt artists and architects for many years afterward. In this, and in the author's willingness to traverse a variety of contemporary visual materials, *The Architecture of Percier and Fontaine* brings the architects' work into fruitful dialogue with recent critical literature within the history of art and architecture, breaching the tight frame offered by a sole focus on either biography or style.

The book opens with an account of what Moon terms Percier and Fontaine's "work of friendship" as it evolved in the years prior to the Revolution, first at Antoine-François Peyre's private school, where they met in 1779, and subsequently at the French Academy in Rome. Percier was awarded the Grand Prix de Rome in 1786, and while Fontaine was unsuccessful in this regard, failing in his attempt to channel the gloomy gigantism of Étienne-Louis Boullée, he was able to make his own way to Rome. Moon locates the genesis of Percier and Fontaine's subsequent practice in the heated atmosphere of collaboration and competition that prevailed there. The friendships developed in

Rome, between Percier and Fontaine, but also between the pair and figures such as the architect Claude-Louis Bernier and the painter Jean-Germain Drouais, were fundamental to Percier and Fontaine's ability to navigate the political turbulence of ensuing decades. As has been well documented, friendship—and the economies of desire and emulation that attended it—became politicized in new ways during the 1780s and 1790s. Placing the architects carefully in their milieu on the eve of revolution, this first chapter proceeds with an eye to both architects' pasts and with an eye to the future, as Moon suggests that the designs and ideas Percier and Fontaine committed to paper during this period were instrumental in their subsequent survival of the Terror.

While Percier and Fontaine missed the outbreak of the Revolution—Fontaine returned to Paris in August 1790, and Percier the following year—it played a decisive role for both men. “The remaking of the interior,” Moon proposes, “became a strangely precarious and invisible kind of work during the Revolution” (37). At issue was not a vision of interiority as a site for the production of bourgeois subjectivity but rather an understanding of the interior that took seriously the reuse and renewal of residual spaces. Indeed, during the Revolution, Percier and Fontaine were members of the Commune des Arts, participating in debate on which royal monuments should be destroyed and which preserved, and from 1793 Percier collaborated with Alexandre Lenoir on his historicist assemblage of architectural fragments at the Musée des Monuments Français. Tracing the architects' collaboration on designs for the patriotic stage in the early 1790s, Moon observes how the rhetoric of anti-illusionism that governed such designs was translated into their ideas for interiors, including their work on the meeting hall for the National Convention in the former Salle des Machines of the Tuileries Palace. The personal politics of these architects has little bearing here: although we do not know much of the taciturn Percier's beliefs on such matters, the more ebullient Fontaine was clear in his distaste for the Revolution. Subject to suspicion since a trip to London in 1792, however, he was sensible enough not to declare his opinions until many years later.

The vexed question of what exactly a postrevolutionary architecture might comprise, and Percier and Fontaine's investment in a “fundamentally politicized *process* of changing spaces *from the inside*” (39), found a complex kind of resolution in the final years of the Consulate and Empire. The book's central chapter, which operates as something of a hinge, concerns Percier and Fontaine's *Recueil de décorations intérieures*, issued in installments from 1801 to 1812, and its problematic relationship to fashion and commercial culture. Moon's argument here is a powerful one: the *Recueil* should be viewed not as a durable monument to neoclassical taste but rather as an attempt to stabilize a fundamentally precarious situation, as a redoubt against the ways in which fashion and industry might “threaten to liquidate the authority of architecture and the classical past” (69). The *Recueil*, Moon contends, is fundamentally marked by this encounter with recent history, and she attends perceptively to its syncopation with contemporary fashion publications such as the *Journal des dames et des modes*. Moon reads the *Recueil* alongside prints, fashion plates, and paintings by artists such as Louis-Léopold Boilly, who incorporated the design for Jean-Baptiste Isabey's atelier that appeared as the first plate in the *Recueil* into the setting for his 1798 *Assembly of Artists in the Studio of Isabey*. However, a skewed chronology here suggests that at the time of the painting's production this space existed only on the architects' page. The *Recueil* that emerges from Moon's fine-grained analysis is one rich with historical meaning, and indeed Percier and Fontaine's preliminary discourse to the *Recueil*, added retrospectively in 1812, made clear that this was a project with ideological and theoretical intentions. Decisive here were processes of mediation—via reproductive prints in particular—whose proliferation, alongside fashion's essential lack of authority, threatened architecture's future. In a postrevolutionary climate in which time was always at stake, the abstractions of pure design offered a defense against the ephemerality that imperiled architectural authority, even as the *Recueil's* architecture of interiors was bound, irrevocably, to the fashion system.

Chapter 4 takes us to Spain, to one of the few surviving interior spaces featured in

the *Recueil*, the platinum cabinet, a room designed for the Casa del Labrador, the royal family's summer residence at Aranjuez, designed and built for Charles IV between 1800 and 1806. This small space was developed initially under the auspices of the *bronzier* Michel-Léonard Sitel, before Percier and Fontaine assumed control. Described by them as yet another “object of commerce” (100), the cabinet, Moon argues, speaks to the political and temporal dissonance of postrevolutionary luxury. Something of a *Gesamtkunstwerk*, the platinum room demonstrated a political ideology of nature that was distinctively French in tone, departing from the pastoral emphasis on local landscape more commonly seen at the Spanish court. Indeed, the room was constructed entirely in Paris, and Percier and Fontaine did not see it in situ. The design was especially notable for its innovative use of platinum, a material newly replete with revolutionary significance. Platinum was increasingly valued for its precision and permanence, and its constancy as a material had led to its use in France as the standard of measurement in the recently imposed metric system: the official standard meter and kilogram were made from this metal. The platinum cabinet, in Moon's telling, was both an attempt by Percier and Fontaine to render in permanent materials, and in miniature, that which existed in France only on paper and a movable space linked to the speculative prerogatives of Consulate Paris. As such, the cabinet occupies a strange, experimental, and mobile position between the postrevolutionary political culture within which Percier and Fontaine worked and that of ancien régime Spain: this was not an additive iteration of a cohesive “Empire style” but rather a transitional, temporally fraught space structured by the complex ways in which political processes rendered materials uncertain. Moon examines the cabinet in the light of both the implementation of the Republican calendar a few years earlier and the recent collapse of the assignat (in 1803 Percier himself designed high-denomination bills for the Banque de France). “Shaped,” as Moon observes, “by the Revolution's continuing reconceptualization of temporality and the search for forms of permanence” (101), the platinum cabinet staged an uncomfortable confrontation of new and old.

It is not until the final chapter that Napoleon fully enters the scene, following his coup of 18 Brumaire, in a vivid discussion of Percier and Fontaine's adaptations and tactical incursions at Malmaison. Moon's focus is the tentlike structure for the *salle de conseil*, or council room, also featured in the *Recueil*. Drawing out the ambiguity of this form, its borrowings from the stage sets of the Menus-Plaisirs and its resonance with the transformable objects of Napoleon's traveling bivouac, Moon offers a nuanced reading of the mobility of this outdoor structure brought indoors in the light of Napoleon's disregard of architectural propriety; as she observes, the willingness to suspend laws as well as to make them was one of Napoleon's signal revolutionary inheritances. At Malmaison, Percier and Fontaine were faced with the challenge of how to develop architecture that articulated an unprecedented model of sovereign power. Although Napoleon and Josephine asked Percier and Fontaine to renovate Malmaison in 1799, constant revisions and bureaucratic difficulties ensured that it remained a "permanent work in progress," and as its completion became ever further deferred, the project evolved primarily on paper. By this point, Percier and Fontaine were adept at negotiating such provisional conditions; as Moon writes, "Even before arriving at the tented council room, we can already see Percier and Fontaine undoing the solidity of walls and rendering them into partitions that can be moved, doubled, or dissolved" (136).

In a poignant coda, Moon evokes the scene of Fontaine burning his papers in May 1816, likely to eliminate any evidence of problematic political associations, and the clearing of a financial debt to Percier that freed him to complete his only sole-authored freestanding structure, the Chapelle Expiatoire in Paris, built from 1815 to 1826 to commemorate the victims of the Revolution and to house the remains of the French royal family. Moon argues that this project did not simply represent the conservatism and political opportunism that allowed Fontaine to outlive successive political regimes. Rather than reinscribing a teleology of political outcomes anticipated far in advance, she asserts, it was a further instance of how these architects made "architecture meaningful when so much else did not

make sense" (156). The true meaning of the Chappelle, Moon concludes, was not realized until 1871, when the Paris Commune ordered its destruction. Although this command was never carried out, a trace inscription of "Liberté, Égalité, Fraternité" can still be read above the door, a haunting palimpsest that reveals the rich contingency of architecture as a site of revolutionary possibility that, as this insightful and provocative book reveals, often exceeded its authors' original intentions.

RICHARD TAWS
University College London

Note

1. *Charles Percier: Architecture and Design in an Age of Revolutions*, Bard Graduate Center, New York, 18 Nov. 2016–12 Feb. 2017, and Château de Fontainebleau, France, 18 Mar.–19 June 2017; Jean-Philippe Garric, ed., *Charles Percier: Architecture and Design in an Age of Revolutions* (New Haven, Conn.: Yale University Press, 2016).

Peter H. Christensen

Germany and the Ottoman Railways: Art, Empire, and Infrastructure

New Haven, Conn.: Yale University Press, 2017, 204 pp., 77 color and 66 b/w illus. \$65 (cloth), ISBN 9780300225648

Indispensable—if ubiquitous and seemingly ordinary—components of everyday life, infrastructures shape how space and time are organized across multiple scales. As sizable interventions on the land, they require a sustained investment of substantial human, economic, and material resources. Consequently, infrastructures engender productive avenues of inquiry, and in recent decades, following the imaginative work of historians of technology and geographers, architectural and urban historians have begun demonstrating a keen interest in this subject. With his astute site and period selection, Peter H. Christensen introduces a valuable international geopolitical dimension to this literature. *Germany and the Ottoman Railways* presents the world of complex interactions and unexpected synergies that occurred between a waning, yet still sovereign, Ottoman Empire and the robustly industrial neophyte German state as it entered the colonial race long dominated by Britain and France. This was neither internal colonization to achieve territorial cohesion nor imperial colonialism

for resource extraction and labor exploitation, but, in its ambiguity, Christensen suggests, the railway project opened up a vast gray zone for tactical interventions by actors from both countries, despite the obvious asymmetries between them.

Examining railway construction from inception to completion, Christensen traces changing loyalties, opportunistic moves, and the ebbs and flows of enthusiasm, funds, and resources. The volume consists of two parts. In the first, chapters titled "Politics," "Geography," "Topography," and "Archaeology" examine constructions of knowledge and imagination, moving from the abstract macroscale of geopolitics to the microscale of archaeological remains in specific sites. Next, chapters titled "Construction," "*Hochbau*" (meaning above-ground structures), "Monuments," and "Urbanism" explore the generation of physical form at successively larger scales. By the late nineteenth century, reform-minded Ottoman officials had recognized how railroads could complement their plans for modernizing and maintaining the empire's integrity, but they lacked capital and expertise. Meanwhile, German politicians, industrialists, investors, and boosters with an appetite for raw materials, wealth, and international clout were willing to help, but at a price. This uneven convergence of Ottoman and German interests forms the substance of chapter 1. Chapter 2 explores the two parties' geopolitical calculations as expressed through geographic theory, travel literature, landscape paintings, and albums of both photographs and paintings. Initially intended to elicit geographic desire, the depictions evolved with the project, eventually helping to normalize German penetration into Ottoman territory upon the railways' completion. Chapter 3 zooms in closer to examine representations and constructions of the land through a series of maps produced in anticipation of the project. Despite also showcasing Ottoman ambitions about modernizing the empire's domain, these representations were driven mainly by Germany's economic interests and hunger for resource extraction. In chapter 4, archaeology emerges as the battleground where the Ottomans fought to preserve their territorial sovereignty against German encroachment. On the one hand, Christensen focuses on the entanglements among politics, scholarship, industry, and