American bale, so scholars must not cavalierly make quantitative claims based on numbers of bales. He understands that not all cotton was created equal and that grades were important. He realizes that not all of the cotton in the bale wound up in finished goods due to wastage in the manufacturing process, and he can specify the rate of wastage. Previous historians have not been so careful in their analyses, and they fell into error as a result—and Powell calls them out forthrightly. He explains the complicated positions and conflicted motivations of Thomas Ellison and others, and chides sharply the generations of historians who quoted past authorities without checking their sums. There is little to quibble about with such a thorough book as this. Hopefully historians reading this book in the future will rely on it for the Civil War period—it is as near a final words as can be imagined—and pass lightly over the uncritical praise in the last few pages of Henry Neill's role in the cotton market at the end of the nineteenth century, which is, uncharacteristically, not supported by the facts.

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Margaret Pugh O'Mara. *The Code: Silicon Valley and the Remaking of America*. New York: Penguin Press, 2019. 512 pp. ISBN 978-0-399-56218-1, $30.00 (cloth), 978-0-399-56220-4, $20.00 (paper).

Newly released in paperback, Margaret Pugh O'Mara's *The Code: Silicon Valley and the Remaking of America* is a comprehensive, compendious, and synthetic study of what its introduction calls an "American Revolution." *The Code* argues that the history of Silicon Valley is "an only-in-America" story, the "glorious accomplishments" of the Valley's technology industry only possible in the United States, and was indeed "made possible by the broader political and economic currents that shaped more than a half century of [U.S.] history" (411). For O'Mara, the history of Silicon Valley "also is a history of modern America," and modern American history was "remade by Silicon Valley in return" (2). "From the marble halls of Washington and the concrete canyons of Wall Street" (6–7), *The Code* argues that Silicon Valley's origin was "neither a big-government story nor a free-market one: it's both" (411). O'Mara defines Silicon Valley as "no longer merely

a place. . . . It is a global network, a business sensibility, a cultural shorthand, a political hack" (2). It is also a paradox as a web of people who not only "cracked the code for business success" but also managed to birth "one generation of tech after another" (2). Silicon Valley produced a world "eaten by software" (2) and also became a place that served as an urban model for economic success that cities around the globe strove to replicate.

Building on her first book, *Cities of Knowledge*: *Cold War Science and the Search for the Next Silicon Valley*,[1] the author sets out here to write a "straightforward, readable narrative that would be accessible to non-technologists" (417). O'Mara begins the book's four "acts" and twenty-seven chapters in the immediate post–World War II moment and chronicles the seven decades thereafter, concluding with meditations on the contemporary tech landscape. For O'Mara, Silicon Valley was not just a place but also "a set of tools, a network of people, a bootstrapping sensibility" (411). *The Code* features a rare roster of oral histories, effortlessly unspooling the clubby relationships that knit together a diverse set of firms, inventions, and services known as "the technology industry." *The Code*'s analysis is close and faithful to its source base, with particularly rich oral history contributions from Ann Hardy, Burt McMurtry, Chamath Palihapitiya, and Ed Zschau. O'Mara has a nearly cinematic ability to make the reader feel present in the past by showing the "network of people" that crisscrossed this technological and economic landscape.

This book makes a standard-bearing contribution to the historiography of Silicon Valley. It joins and builds on such business histories as Leslie Berlin's *The Man Behind the Microchip*, the definitive biography of Intel founder Robert Noyce;[2] Berlin's *Troublemakers*, which chronicles the careers of the Valley's major tech entrepreneurs at the turn of the twenty-first century;[3] Christophe Lécuyer's *Making Silicon Valley*, a history of the early Santa Clara Valley hardware industry and its foundational firms;[4] Miriam Pawel's *The Browns of California,* a beautifully written story of another dynasty that shaped the state of California over the course of the twentieth century;[5] Annalee Saxenian's

1. Margaret Pugh O'Mara. *Cities of Knowledge: Cold War Science and the Search for the Next Silicon Valley* (Princeton, NJ: Princeton University Press, 2004).

2. Leslie Berlin, *The Man Behind the Microchip: Robert Noyce and the Invention of Silicon Valley* (New York: Oxford University Press, 2005).

3. Leslie Berlin, *Troublemakers: Silicon Valley's Coming of Age* (New York: Simon and Schuster, 2017).

4. Christophe Lécuyer, *Making Silicon Valley: Innovation and the Growth of High Tech*, 1930–1970 (Cambridge, MA: MIT Press, 2005).

5. Miriam Pawel, *The Browns of California: The Family Dynasty that Transformed a State and Shaped a Nation* (New York: Bloomsbury, 2018).

Regional Advantage, a foundational urban and economic comparative analysis of the Valley;[6] Fred Turner's *From Counterculture to Cyberculture*;[7] John Markoff's *What the Dormouse Said*, which offers important cultural analyses of the Silicon Valley's business history;[8] and Louis Hyman's *Temp*, an extensive history of the long-standing gig economy in the United States.[9]

Written for the trade, *The Code* possesses a broad appeal for the reading public and undergraduates and graduate students alike, while also serving as a textbook of sorts to fellow scholars of the region. Readers will enjoy the lively writing; the fast-moving prose; the rich, funny descriptions; and the insider quotes. The short chapters make for natural excerpting for assignment in history, business, and STS courses. This book is recommended for academic readers as well as those wishing to enhance their knowledge of the corporate actors whose technological innovations and investments characterized Silicon Valley.

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6. Annalee Saxenian, *Regional Advantage: Culture and Competition in Silicon Valley and Route 128* (Cambridge, MA: Harvard University Press, 1996).

7. Fred Turner, *From Counterculture to Cyberculture: Stewart Brand, the Whole Earth Network, and the Rise of Digital Utopianism* (Chicago: University of Chicago Press, 2006).

8. John Markoff, *What the Dormouse Said: How the Sixties Counterculture Shaped the Personal Computer Industry* (New York: Penguin, 2005).

9. Louis Hyman, *Temp: The Real Story of What Happened to Your Salary, Benefits, and Job Security* (New York: Penguin, 2018).