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Bartow J. Elmore, *Citizen Coke: The Making of Coca-Cola Capitalism* (New York: W. W. Norton, 2015). ISBN: 978-0-393-24112-9

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Introduction by Christopher F. Jones, Arizona State University

Environmental historians and historians of capitalism can congratulate themselves for participating in two of the most dynamic subfields in the historical profession. At a moment when the liberal arts and human sciences are increasingly under attack for declining enrollment numbers, stagnating professional societies, and critiques of being disconnected from real world concerns, both environmental history and the history of capitalism appear to be notable exceptions. Moreover, the two fields seem to have a great deal to say to one another. Environmental historians have long engaged with the relationships between capitalism and ecological change. Donald Worster, for example, argued capitalism was the central factor behind the Dust Bowl in his seminal work of 1979, and numerous others have followed suit.[1] Similarly, the historical development of capitalism, quite clearly, has been integrally related to the ever-increasing consumption of natural resources.

Yet surprisingly, the two fields have engaged in relatively collaborative dialogue. Despite the long interest in the consequences of using natural ecosystems for gaining profit, environmental historians have often painted capitalism with a broad brush that is inattentive to its historical, spatial, and cultural variations. If environmental historians can be accused of employing a simplistic notion of capitalism, it could be argued that the newer subfield of history of capitalism has largely ignored the natural world as an analytical category. The potential synergies between the fields, it appears, remain to be tapped.[2]

One of the many virtues of **Bartow J. Elmore**'s new book ***Citizen Coke***, is that it attempts to link the two fields. Beginning with a can of Coke—one of the world's most recognizable material artifacts—he traces how Coca-Cola acquired the natural resources it needed to offer its product to consumers around the world. At one level, the book follows a familiar model of commodity studies: begin with a product and trace the global environmental consequences of its production. Yet Elmore pushes this approach forward by arguing all corporate strategies for making money are not the same, and that different variations of capitalist enterprise can generate different human-environment relations. In particular, he uses the history of Coca-Cola to explore a variety of capitalism in which avoiding ownership of natural resources—outsourcing the work to others—proved to be highly profitable. Coke was able to profit more, he argues, by doing less.

By following the ingredients in a can of Coke, Elmore takes readers on a global journey guided by lively prose. The book traverses the mountains of Peru where Coca-Cola obtained exclusive access to coca leaves, follows Progressive Era policies

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[1] Donald Worster, *Dust Bowl: The Southern Plains in the 1930s* (Oxford: Oxford University Press, 1979).

[2] Elmore's author response makes a similar argument and provides a number of useful citations identifying some exceptions to these patterns on page 32 of this document.

to create urban water systems in America, examines the demand for water at bottling plants in arid regions, explores Coca-Cola's partnerships with companies such as Hershey and Monsanto, and much more. Throughout, Elmore encourages us to consider Coca-Cola capitalism as a distinct approach to transforming the bounty of the natural world into wealth.

I asked **Shane Hamilton** to join the roundtable because he has been one of the most active scholars seeking to integrate the histories of business, technology, and the environment. His award-winning 2008 book *Trucking Country* explored the complex social and cultural politics of conservatism through the lens of truck drivers in post-WWII America. Continuing his analysis of the intersections between food and capitalism, his current project examines supermarkets in the Cold War era.

When I heard **Edward Melillo** was teaching *Citizen Coke* to a group of undergraduates in a class on global commodity flows and the environment, I was delighted that he agreed to join this forum and share his reflections and those of his students. His own research focuses on the environmental history of the Pacific World, including a 2012 article on the global fertilizer trade that won ASEH's Alice Hamilton prize. His forthcoming book, *Strangers on Familiar Soil*, builds on that research to offer an account of the extensive yet often-forgotten interconnections between California and Chile during the last two hundred years.

A historian of food, technology, and the environment, **Gabriella Petrick** brings extensive knowledge about industrialized food production and consumer taste to the roundtable. Drawing on this expertise, her comments help situate Coca-Cola within the broader economic and social context of the food and beverage industry and seek to clarify the company's impacts. Her current research projects range from the history of food processing to the evolution of taste to recent developments in the global wine industry.

Last but certainly not least, **Richard Tucker's** comments make a fitting transition into the author response. As Elmore notes—and many other environmental historians will likely agree—Tucker's work was very influential in shaping his thinking. *Insatiable Appetite* has become a canonical work within environmental history, helping inspire others to examine the ecological consequences of global commodity flows. In addition to his work on tropical natural resources, he is researching how war and military preparation have reshaped ecosystems over the past century.

Before turning to the first set of comments, I would like to pause here and thank all the roundtable participants for taking part. In addition, I would like to remind readers that as an open-access forum, *H-Environment Roundtable Reviews* is available to scholars and non-scholars alike, around the world, free of charge. Please circulate.

Comments by Shane Hamilton, University of Georgia

With its gray bubbles and curvy red swoops, the dust jacket on my copy of *Citizen Coke* evokes a can of Diet Coke. Fittingly, the book's table of contents reads like an ingredients list: Tap Water, Waste Tea Leaves, Sugar, Coca Leaf Extract, and so forth, offering a neatly packaged narrative for Bartow J. Elmore's historical analysis of the commodity chains that flow into a can of Coke. Taking a supply chains approach, Elmore takes us on a jaunty, bird's-eye-view tour through time and space: we visit tropical plantations, corporate offices in the urban "New South," New Jersey factories, Iowa corn fields, and contemporary northern India, to name just a few. Exceptionally engaging and informative, the book successfully makes visible many of the hidden components of Coca-Cola's commodity system, from the rise and fall of waste tea leaves as caffeine sources to the development of non-returnable plastic bottles that now encase most retail doses of Coke.

As Elmore notes early in the book (footnote 9, p. 12), his work is in conversation with an illustrious group of environmental historians who have explored the nature of commodity flows.[3] Landscapes and livelihoods, environmental historians know, can be dramatically changed when big buyers construct massive supply chains to meet consumers' insatiable appetites for meat, grain, lumber, coffee, bananas, sugar, and so on. Indeed, it seems possible that environmental historians have done a better job of exploring the consequences of consolidated buying power than have business or economic historians. Monopoly power—in which one big seller dominates a market—is familiar ground in business, economic, and political history. But as Bartow Elmore rightly notes, monopsony power—in which one big *buyer* dominates a market—is less well understood by most historians, yet is a crucial determinant of much of our contemporary world's ecologies. "Coca-Cola and other similar mass-marketing companies," Elmore points out, "were consumers as much as they were producers, and they required natural resources in order to survive" (pp. 4-5). The structure of a monopsonistic business model, in other words, often places extraordinary demands on the natural world, and environmental historians have been especially successful in thinking through the material and social consequences of this fact.[4]

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[3] Elmore cites Richard Tucker (*Insatiable Appetite*), John Soluri (*Banana Cultures*), and William Cronon (*Nature's Metropolis*) as direct influences. Recent examples of environmental histories of global supply chains include: Gregory T. Cushman, *Guano and the Opening of the Pacific World: A Global Ecological History* (New York: Cambridge University Press, 2013); Edward D. Melillo, "The First Green Revolution: Debt Peonage and the Making of the Nitrogen Fertilizer Trade, 1840-1930," *American Historical Review* 117 (Oct. 2012): 1028-60.

[4] I have for years been attempting to bring Joan Cahalan Robinson's term *monopsony* into historical discourse; see for example Shane Hamilton, "Supermarkets, Free Markets, and the Problem of Buyer Power in the Postwar United States," in *What's Good for Business: Business and American Politics since World War II*, ed. Kim Phillips-Fein and Julian Zelizer (New York: Oxford University Press, 2012), 177-94.

Perhaps one reason environmental historians are drawn to supply chains and monopsony power is the field's general appreciation of scale. Both in terms of geography and chronology, few fields are as committed to large-scale history as is environmental history.[5] From an environmental history perspective, one appeal of studying monopsonistic supply chains is the possibility of exploring a system as a whole. Doing so can enable, as it does for instance in John Soluri's work on bananas, attention to multiple actors at multiple scales; microorganisms and bipedal mammals co-constructed the modern banana chain, determining how and when and where bananas (and which cultivar of bananas) would be produced and consumed.[6] Furthermore, a supply chain approach almost inherently demands attention to multiplicity of causation, a hallmark of environmental history that, as Paul Sutter has recently explained, is a vexing theoretical problem that has nonetheless been generative of some of the field's best scholarship.[7]

Of course environmental historians are not the only scholars concerned with supply chains. Historians of capitalism and labor have been particularly active in recent years in exploring how big buyers—from British textile mills to Walmart to Starbucks—have transformed workers' and consumers' lives.[8] The *nature* of supply chains tends to be of less concern in these histories, however. Ultimately most historians of capitalism are investigating purely human power relationships; the investigation of other organisms merits less attention than capitalists' methods for extracting profit from social and technological structures.

So: is Elmore's *Citizen Coke* an environmental history or a history of capitalism? Or is it perhaps neither?

The overall structure of the book and its moral center suggest that Elmore's allegiance is to the field of environmental history. The Epilogue, in particular, brings Elmore's desire for a "truly green and socially just enterprise" (p. 302) into focus, while chapters on sugar and water and curbside recycling address questions that are of clear significance to any environmental historian.

Most of the book, however, is an investigation of "Coca-Cola capitalism." Elmore defines this as a "shorthand term" for "an outsourcing strategy" developed by mass-marketing firms whose profits have been produced more by the movement of goods

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[5] I have in mind such ambitious works as: Alfred W. Crosby, *Ecological Imperialism: The Biological Expansion of Europe, 900-1900* (Cambridge: Cambridge University Press, 1986); J. R. McNeill and William H. McNeill, *The Human Web: A Bird's-Eye View of Human History* (New York: W. W. Norton, 2003); William Turkel, *The Archive of Place: Unearthing the Pasts of the Chilcotin Plateau* (Seattle: University of Washington Press, 2008).
[6] Soluri, *Banana Cultures*, op cit.
[7] Paul S. Sutter, "The World With Us: The State of Environmental History," *Journal of American History* 100 (Jun. 2013): 94-119.
[8] Sven Beckert, Empire of Cotton: A Global History (New York: Knopf, 2014); Nelson Lichtenstein, The Retail Revolution: How Wal-Mart Created a Brave New World of Business (New York: Metropolitan Books, 2009); Bryant Simon, Everything but the Coffee: Learning about America from Starbucks (Berkeley: University of California Press, 2009).

than by the production of them (10). Corporate strategy, in other words, figures more prominently than other themes on most of the book's pages. While the ecological impacts of Coca-Cola's business decisions are always at play in the book, sometimes they appear more implicitly than explicitly. Take sugar, for instance. Rather than appearing as an actual material, produced on physical soil through human toil, in *Citizen Coke* sugar appears primarily as a function of its price—which, of course, was the issue of most importance to Coca-Cola's executives and thus the issue that produced the lengthiest paper trail. We thus learn a great deal about how Coca-Cola helped structure and restructure the global sugar market over the twentieth century, but we learn much less about the workers or consumers for whom price may not have been the only measure of sugar's worth.

The narrative advantages of focusing on Coca-Cola's corporate strategies are numerous, as the editors and marketing team at W. W. Norton undoubtedly recognized. Coca-Cola is one of the most familiar corporate names in the world, and as Elmore correctly and forcefully demonstrates, the decisions of its executives have had tremendous impacts in American and world history. Yet many readers may find that a surprisingly disproportionate amount of text is devoted to Coca-Cola and its executives' strategies in the marketplace, rather than to the structures of capitalism the book promises to reveal. Ultimately this is a work of business history first and foremost; the key questions guiding the book's narrative all center on how the Coca-Cola Corporation has remained profitable for so long despite producing almost nothing tangible. This, of course, is an exceedingly important and intriguing question, but it also produces a somewhat tautological definition of "Coca-Cola capitalism"—nearly everything the Coca-Cola corporation has done qualifies as Coca-Cola capitalism. Although the central thrust of the book is that Coca-Cola's most successful business strategy has been one of outsourcing production and shirking responsibility to governments and the environment, we repeatedly learn that the "genius" (p. 290) or "brilliance" (p. 189) of Coca-Cola capitalism has been the company's ability to cultivate such dogged loyalty to its brand that no government dares dethrone the soda sovereign. Thus, many readers will likely find themselves questioning whether Coca-Cola capitalism is in fact "shorthand" for something more broadly applicable, or whether in fact it represents primarily Coca-Cola's specific strategies and successes. Would "merchant capitalism" work better as a broadly applicable term?

The firm-focused nature of the book has political implications. Elmore suggests, particularly in his Epilogue, that an engaged citizenry of informed consumers can push for policies to address the problems created by Coca-Cola capitalism—lack of clean drinking water, rampant obesity, wasteful packaging, subsidies to agribusiness, etc. This is an appealing political stance if in fact just one firm is responsible for so many of the social and environmental costs of contemporary capitalism. But if—as much work in environmental history would suggest—the problems of "Coca-Cola" capitalism are more structural than firm-specific, one might feel less sanguine about the world learning to sing in perfect harmony. Would a proliferation of firm-specific studies that take corporations to task for their behaviors produce more or less real-world impact than studies that cast a wider topical or theoretical net? Is there a substantive political difference between a firm-based history and a broader history of capitalism?

Comments by Edward Melillo, Amherst College

The genre of commodity history is awash in hyperbole. Larry Zuckerman's *The Potato: How the Humble Spud Rescued the Western World* (1998), Simon Garfield's, *Mauve: How One Man Invented a Color That Changed the World* (2000), Christine McFadden's *Pepper: The Spice That Changed the World* (2008), and John Gaudet's *Papyrus: The Plant that Changed the World* (2014) are just a few examples of books that hew to a well-worn blueprint: pick an object that inspires colorful stories, attach its name to an excessively ambitious historical assertion, and present this commodity as an autonomous agent of change.[9]

Wary of such immodest proposals, students in my Spring 2015 "Commodities, Nature, and Society" seminar at Amherst College were suspicious of the grandiose title emblazoned across Bartow J. Elmore's *Citizen Coke: The Making of Coca-Cola Capitalism*. Prior to reading Elmore's monograph, one of them asked, "Is there really such as thing as 'Coca-Cola Capitalism,' or is this another one of those books that tries to explain too much through the lens of one commodity?" For the most part, *Citizen Coke* left my students pleasantly surprised and thoroughly reassured that historians have neither forgotten their capacity for humility nor have they lost their ability to illuminate opaque networks of social and environmental relations.

A key objective of my "Commodities, Nature, and Society" seminar is to is to explore the changing roles of natural systems and the divisions of labor that underlie the long-term processes of globalization. Participants investigate the environmental and social histories of twelve commodities: sugar, emeralds, cotton, tobacco, chocolate, coffee, nitrogen fertilizer, hybrid/electric cars, human body parts, meat, sneakers, and Coca-Cola. Each of these commodities represents a complex array of linkages among producers, consumers, and intermediaries over time and space. Readings draw upon the disciplines of history, ecology, anthropology, and geography to place these commodities in their social, environmental, and spatial contexts. Elmore added a vital dimension to our semester by spending an hour videoconferencing with the class.

Building on the reactions of my seminar students, I explore the virtues of assigning *Citizen Coke* to undergraduates. I also pose several questions for Elmore that emerged from in-class discussions, the videoconference, and students' written responses to the book. Their challenges to the Elmore's theses clustered around three themes: 1) the relationship between business strategies and ideologies, 2) the place of labor and social movements in the book's environmental history narrative, and 3) the degree to which Coke's approach to natural resources make it a corporate

[9] Larry Zuckerman, *The Potato: How the Humble Spud Rescued the Western World* (Boston: Faber and Faber, 1998); Simon Garfield, *Mauve: How One Man Invented a Color That Changed the World* (Boston: Faber and Faber, 2000); Christine McFadden, *Pepper: The Spice That Changed the World* (Bath, UK: Absolute Press, 2008); and John Gaudet, *Papyrus: The Plant that Changed the World* (New York: Pegasus Books, 2014).

anomaly or an exemplar of more widespread trends. Even though they wanted to push Elmore on these points, most of my seminar participants strongly disagreed with Beth Macy's perfunctory conclusion in her *New York Times* review of the book: "Despite its historical sweep and important message, 'Citizen Coke' suffers from saccharin flatness, like a twist-top soda bottle opened one too many times."[10] In contrast, the vast majority of my students found Elmore's prose refreshing and his arguments multidimensional. *Citizen Coke* is punctuated with catchy, yet substantive, turns of phrase. Likewise, its central assertions are memorable and clearly framed.

Beyond its readability, Elmore's book is a model of interdisciplinary research and writing worthy of emulation at any level of scholarship. The author's probing, journalistic style is reminiscent of Progressive Era muckraking, yet elements of the book bear the influences of food studies writers like Michael Pollan and Marion Nestle. *Citizen Coke* draws upon an impressive array of archival discoveries, Freedom of Information Act requests, carefully executed interviews, and fieldwork in India, Peru, and the United States. These stylistic, disciplinary, and geographical border crossings allow Elmore to make nuanced connections among social and environmental phenomena at many scales.

Coca-Cola's ubiquity on the world stage demands such a multi-faceted approach. In 2012, the company was operating in more than two hundred countries and sold over 1.8 billion beverage servings per day. As Elmore notes, Coke had become "the most recognized brand in human history" (p. 15). A cleverly packaged concoction of water, sugar, caffeine, and coca-leaf extract allowed the company to generate insatiable cravings for its caramel-colored, fizzy liquid. By combining nimble marketing plans and shrewd business schemes with aggressive expropriations of natural resources and state-subsidized growth strategies, Coke conquered the world's beverage markets.

Founded in 1886 by John Stith Pemberton, "a cash-strapped morphine addict operating out of a small pharmaceutical shop" in Atlanta, Georgia, the soda firm arose from humble beginnings. As rival corporations sank their capital into factories and plantations, Coca-Cola purchased ingredients from external suppliers. By contracting out its supply chain, the company offloaded risk and kept raw materials costs low. Other strategies included heavy reliance on state subsidies and political favors that "sweetened Coke's supply situation" (p. 120), helping its corporate leadership skirt regulatory obstacles and gain access to key natural resources. Likewise, switching from glass bottles to "one-way containers," shifted the costs of disposal or recycling to consumers and taxpayer-funded public infrastructure.

Elmore defines "Coca-Cola capitalism" as "an outsourcing strategy first developed by America's mass-marketing giants at the turn of the twentieth century" (p. 10). At this point, my students began to wonder how the author differentiates between

[10] Beth Macy, "'Citizen Coke,' by Bartow J. Elmore," *New York Times* (Sunday Book Review), January 2, 2015.

business strategies and ideological frameworks. Ideologies, such as capitalism, are totalizing conceptions of the world that inhabit far deeper social and psychological strata than the superficial trends of business practices. Given that Elmore presents outsourcing as an ideological development—"Coca-Cola capitalism"—my students wanted to know more about the long-term history of this concept. Where did it come from? Was its genesis really a "Made in the USA" story?

Elmore never tells us that "outsourcing" has deep roots, which stretch across the Atlantic and back in time to at least the eighteenth-century. As Adam Smith contended in *The Wealth of Nations* (1776), "If a foreign country can supply us with a commodity cheaper than we ourselves can make it, better buy it of them with some part of the produce of our own industry employed in a way in which we have some advantage."[11] Although Coke's founders and pioneer strategists might not have been experts in Scottish political economy, they were surely operating in an economic climate where the practice of outsourcing and the pursuit of comparative advantage were considered tenable and rational.

Elmore might want to reflect on how environmental historians can offer new perspectives on our understanding of the interplay between business strategies and ideologies. Historian Bethany Moreton has elegantly demonstrated how a cultural history approach helps us comprehend the seemingly paradoxical "corporate populism" that emerged among Wal-Mart workers in the Ozarks.[12] Hers is a book with much to say about the relations between particular corporate practices and more general ideological agendas. Might some analogous approach, albeit one derived from Elmore's affinity for the ecological, offer a meaningful analysis of such interactions?

Secondly, Elmore could have said more about the contradictions that outsourcing generates. In the words of labor historian Irving Bernstein, "Outsourcing is two sided. On the one hand, it loosens the dependence of employers on domestic workers. On the other hand, it binds them to many other workers in far-flung and extended chains of production…that are themselves acutely vulnerable to disruption."[13] Although they receive no mention in *Citizen Coke*, Coca-Cola's labor troubles across a diffuse supply chain have been a veritable Banquo's Ghost, returning unbidden to haunt the company's fortunes at every juncture.[14]

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[11] Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations* (London: W. Strahan and T. Cadell, 1776), book IV, section ii, 12.

[12] Bethany Moreton, *To Serve God and Wal-Mart: The Making of Christian Free Enterprise* (Cambridge, Mass.: Harvard University Press, 2009).

[13] Iriving Bernstein, *The Turbulent Years: A History of the American Worker, 1933-1941*, 2nd ed. (Chicago: Haymarket Books, 2010), xviii.

[14] For a few examples, see Alan Jones, "Coca-Cola Workers in 24-Hour Strike," *The Independent*, July 28, 2011; Robert J. Alexander, *A History of Organized Labor in Panama and Central America* (Westport, Conn.: Praeger Publishers, 2008), 258-59; and Kristen Wyatt, "Workers at Coke Bottling Sites Go On Strike," *Seattle Times*, May 24, 2005.

Challenges to Coke's market dominance have also come from diverse groups on the consumer end of the commodity chain. Elmore never points out that companies cannot outsource the maintenance of their brand identities. The successful racial discrimination case that Jesse Jackson led against the company in 1999—which resulted in a $156 million resolution in favor of the company's black employees—is one of many instances where grassroots campaigns forced profound structural adjustments to business operations.[15] Would Elmore agree that these missing constituencies—workers employed by the corporation and social movements outside its factories and bottling plants—significantly shaped the development of Coke's outsourcing model?

Thirdly, students finished Elmore's book wondering if Coke's publicly subsidized and largely unregulated expropriations of natural resources make it a corporate outlier or if such behavior is normative among today's firms. In *Citizen Coke*, Elmore wisely moves beyond prior analyses of Coca-Cola, shunning the notion that advertising was the company's principal genius. Instead, he convincingly "restores the connection between the Real Thing and the real ecologies that supported it" (p. 12). As he shows us at every turn, the making of "the Real Thing" depended on violent transformations of public resources into private property. Although Elmore never uses this terminology, new techniques of "enclosing" such commons have been hallmarks of neoliberalism, an ideological project that went global in the 1970s and 1980s when right-wing governments led by Augusto Pinochet, Ronald Reagan, Margaret Thatcher, Helmut Kohl, Brian Mulroney, and Yasuhiro Nakasone came to power in Chile, the United States, Great Britain, West Germany, Canada, and Japan. Their brand of "austerity" capitalism, guided by the twin pillars of marketizing all social interactions and privatizing all public goods, animates Coke's own strategic plan. Yet, as my seminar participants kept discovering, neoliberal attempts to commodify society and nature are deeply anchored, system-wide processes, not just business strategies.[16] As one of my students phrased it in her written reflection on *Citizen Coke*, "I found myself wishing that Elmore had simply called 'a spade a spade' and said that Coke is drinkable neoliberalism in a can."

Although matters may not be as simple as such an effervescent formulation suggests, Elmore *has* framed his work as a critique of neoliberalism on previous occasions. At the American Society for Environmental History's 2011 conference in Phoenix, Arizona, I chaired a panel on "Multinational Corporations, State Institutions, and Water Privatization in the Era of Neoliberal Expansion" where he presented portions of what was then an ongoing dissertation project. Those in attendance that afternoon were enthralled with Elmore's work, and we are all very fortunate that the publication of *Citizen Coke* has made his research accessible to a wider audience. Does Elmore find notions such as enclosure of the commons and neoliberalism useful, even though they do not appear in *Citizen Coke*?

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[15] Greg Winter, "Coca-Cola Settles Racial Bias Case," *The New York Times*, November 17, 2000.
[16] Edward D. Melillo "Spectral Frequencies: Neoliberal Enclosures of the Electromagnetic Commons," *Radical History Review* issue 112 (Winter 2012): 147-61.

As the very best commodity histories demonstrate, capitalism has long struggled with social and environmental constraints to its limitless expansion.[17] Elmore's gem of a book gives us an eloquent exploration of one company's attempts to circumvent those limits. Participants in future semesters of "Commodities, Nature, and Society" will benefit from the animated discussions that *Citizen Coke* invariably inspires. During our conversations, I will serve my students one of the fine, locally made colas from Western Massachusetts!

[17] For more on the limits to the commodification of nature, see W. Scott Prudham, *Knock on Wood: Nature as Commodity in Douglas-Fir Country* (New York: Routledge Press, 2005), which offers an in-depth exploration of the timber industry's endless struggle to make homogeneous lumber from heterogeneous trees.

Comments by Gabriella Petrick, University of New Haven

It's Not ***All*** Coke's Fault

Bartow Elmore's *Citizen Coke* makes an important contribution to business and environmental history by telling a set of interlocking commodity histories anchored through a specific company, in this case Coca-Cola. By focusing on water, caffeine (from tea, coffee, chemical synthesis), coca leaves (and synthetic Merchandize #5), all manner of packaging (glass, aluminum, plastic), sugar and high-fructose corn syrup, he explains how Coke attempted to be not just profitable, but hugely profitable. Another major contribution of this work is that Elmore moves beyond what I will call hegemonic histories of business. These are largely histories using advertising as their main evidence to suggest how corporations, and by extension corporate capitalism, manipulated/duped consumers into buying mass-market goods they really did not want or need.[18] That Elmore rejects this approach as insufficient in explaining why Coke became ***the*** most important soft drink in the world is a breath of fresh air. This approach helps us better understand producers (which is Elmore's goal) but also has the potential for understanding the choices consumers made every day. I hope Elmore's work will inspire other historians to explore similarly complex approaches to the history of business. Elmore also illustrates how Coke at times worked with regulators and at times against regulators to thwart competition and maintain profitability as best it could, much like other contemporary food firms.

And yet, after reading, rereading, and mulling over the book, as well as crunching the numbers, I ultimately feel that Elmore missed an important opportunity to use the historian's critical eye and balanced analysis of evidence to move us beyond the babble of evil Coke and evil soda. Soda is not evil: it is just a sweet beverage Americans have loved since the early twentieth century. Much like a lot of commodities, it can be used in multifaceted ways that have positive, neutral, and negative outcomes. I had hoped Elmore might channel Kransberg's Law to analyze Coca-Cola. Mel Kransberg, one of the founding scholars of the history of technology, said technology is neither good, nor bad, nor indifferent, meaning it is humans who build and use technologies and that there are consequences to human actions and

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[18] A few examples of the hegemonic view include by are not limited to: Max Horkheimer and Theodor W. Adorno, "The Culture Industry: Enlightenment of Mass Deception" in *Dialectic of Enlightenment: Philosophical Fragments,* ed. Gunzelin Schmid Noerr, trans., Edmund Jephcott (Stanford, CA: Stanford University Press, 2002); Theodor W. Adorno, *The Culture Industries: Selected Essays on Mass Culture* (London: Rutledge, 1991); Sydney Mintz, *Sweetness and Power* (New York: Viking Press, 1985); T. J. Jackson Lears, *No Place of Grace: Antimodernism and the Transformation of American Culture, 1880-1920* (Chicago: University of Chicago Press, 1981) and *Fables of Abundance: A Cultural History of Advertising in America* (New York: Basic Books, 1994); Susan Strasser, *Satisfaction Guaranteed: The Making of the American Mass Market* (New York: Pantheon, 1989); Harvey Levenstein, *Revolution at the Table: The Transformation of the American* Diet (New York: Oxford University Press, 1988) and *Paradox of Plenty: A Social History of Eating in Modern America* (New York: Oxford University Press, 1993).

decisions. To bastardize Kranzberg's Law: Coke—the product—is neither good, nor bad, nor indifferent.

Let me be clear, I am no apologist for Coke or soda and soft drinks more generally. As a historian who has long worked in departments that link food to nutrition and public heath, I think soda is not a healthy food choice and should be consumed more like candy than like water, in small, infrequent but pleasurable quantities. Soda is not something I drink all that often. I favor tap water over other beverages, largely for the reasons Elmore elucidates: these are my politics. I have no doubt that Coke wheeled its power to maximize its profits at the expense of Americans who consumed ever-larger quantities of Coke and soft drinks even as they risked their own health. That does not mean it is Coke's fault that America has an obesity crisis, as Elmore argues largely by channeling shrill food industry critics like Michael Pollan, Frank Bruni and Mark Bittman. This framing does history no service. Contrary to Elmore's analysis, Coke, by itself or in conjunction with other soft drink producers (here I include both carbonated and non-carbonated sugary drinks, e.g. sports drinks), did not make Americans overweight and obese for reasons that will become clear presently.

As I read the book, I kept coming back to questions of historiography. Who is this book written for? To me, it speaks to a number of different audiences. It is, clearly, and I think mostly an environmental history and perhaps policy history. It is also both a history of business and a history of capitalism: these being two distinct and different fields. Yet, it is also a history of nutrition, a commodity history, an agricultural history and a work of environmental activism. This is both a blessing and a curse. While I have no doubt the book will have mass appeal, it makes it challenging for scholars more clearly steeped in these historical sub-disciplines to follow where Elmore wants to take us.

I am intrigued by Elmore's terminology of Citizen Coke and Coca-Cola capitalism. As Elmore argues, Citizen Coke was a "do-gooder" or a progressive (as in the 19th century version) organization that made the world a better place through its products. He describes Citizen Coke as "a public citizen whose success ultimately improved the lives of those around them" (2). In other words what was good for Coke was good for America and, by the 1970s, the world. I certainly agree that this might have been what Coke wanted everyone to think and perhaps what managers even believed, but I am unconvinced that Americans perceived Coke that way and there is little evidence in the text to support this assertion. In fact, throughout the 1960s, many women were deeply skeptical of serving their families soda because they did not buy into Coke and other beverage makers' rhetoric.

There were, however, other companies who really did try to improve their communities with more or less success. Many historians have written about corporate paternalism and even the rapacious capitalists of the Gilded Age like Carnegie, Rockefeller, and Frick sought to "do good works." So how is Coke different than paternalists like H. J. Heinz, Wannamaker, or even Pullman? Were Coke executives more like Andrew Carnegie or Bill Gates or other industrialists who used their money on public works and not on their own employees? The history and trajectory of Citizen Coke ebbs and flows throughout the text leaving this reader wondering who first articulated it as a business philosophy and how did it change over the course of the century? The voices inside Coke are missing and without access to company records, I am not sure it is possible to do little more than speculate on Coke's vision of itself as a force for good through capitalism. Elmore does show us this aspect of Coke late in twentieth century, but it is largely missing for the earlier period.

Coke fit into a larger business community and, to me, was not unique in its approach to business, image or community involvement. Here, I believe more engagement with the business history literature would have served Elmore well and enabled him to put Coke in context. I should point out that Coke, all things considered, was not that big a company until the late twentieth century as Elmore explains. As McDonald's boomed in the 1970s and 1980s, so did Coke. The 1990s brought the mini mart, another clear boon to Coke's expansion and bottom line, as were overseas markets. But compared to contemporary food companies such as Heinz, Campbell's, General Foods, and Kraft, let alone Ford, GM, or US Steel, Coke was not an economic powerhouse at the turn of the twentieth century. It was a big fish in the small pond of carbonated beverages until the last decades of the twentieth century. This is certainly not to say that Coke was unimportant—it did after all dominate the carbonated beverage industry, but without contextualizing the size of the company relative to other firms and how its place in the American economy changed over the century, it is difficult to judge Citizen Coke's influence and how much of it is just the company telling itself and the public stories. Atlanta may have been well served by Coke's largess, but was New York, Boston or Chicago? The US more generally? (Carnegie built libraries across the nation not just in Pittsburgh and Bill Gates has global impact). In other words what good did Coke do? For whom, when, and where?

I am equally dubious about Coca-Cola capitalism. According to Elmore, Coca-Cola capitalism was "an outsourcing strategy first developed by America's mass-marketing giants at the turn of the twentieth century" (10). This system relied on public infrastructure that Coke and others utilized to channel natural resources and transport them to market. But didn't most companies and corporations leverage public infrastructure to support their businesses? President Obama has said as much in a rebuke to neoliberal and free market advocates. Didn't the government sell land to railroads and farmers to unlock western resources to grow the American economy in the nineteenth century? Certainly, Salinas growers were extracting water from the Salinas River to grow lettuce and other produce for eastern markets beginning in the mid-1920s. What about grazing on public lands? How was Coke different from others? Why should Coke serve as a model for others when it was such a small player not just in the US economy but even in the food industry before World War II when carbonated beverage consumption skyrocketed (and arguably not until the 1970s)? Here it seems that Elmore is looking backwards and imposing structure from a presentist perspective rather than looking forward from the past.

I am also curious as to whether Coke's strategy was really distinct. As Philip Scranton, David Hounshell, and many others have shown, there were and still are a wide variety of business structures and vertical integration is more the exception than the rule. For example, once Howard Heinz took over the H. J. Heinz Company, he divested the company of land in the Midwest and its can and crate making facilities around World War I, because they no longer made business sense. By that time, Heinz was too big to manage everything well. More specifically, once the Ames brothers' new canning system was perfected in the 1910s, hand-making cans in-house no longer made economic sense. In other words, Heinz leveraged new technology and another company's expertise to its advantage. This allowed both Heinz and can producers to rapidly expand production. Shouldn't it be Heinz Capitalism, rather than Coca-Cola Capitalism, as Heinz was a far larger and a more influential company than Coca-Cola at the time? Or was leveraging others' knowledge and expertise just a common business strategy that suited a particular historical and economic moment? My point is that Coke is not unique and many others were employing the same strategies and perhaps Coke was modeling others and not inventing something new. If so, why call it Coca-Cola capitalism and not something more reflective of the broader business environment?

A last point on *Citizen Coke* as a business history. Elmore repeatedly states that Coke did not make anything or as he writes: "Coke's genius … was staying out of the business of making stuff." (9) This of course, as Elmore illustrated time and time again, is false. As Elmore shows us, Coke invested downstream in coffee and upstream in bottling when it suited its needs. The strategy changed over time. It also made a physical product, Coke syrup, from a set of commodities and shipped it far and wide. Elmore might not like what Coke produced and continues to produce, but Coke really did make and transport a physical object, unlike Google, Uber, Airbnb or hotels, laundries, fish mongers, butchers and myriad other shops, firms and companies that provided services or transformed raw commodities.

One of the sharp critiques Elmore makes, echoing journalist Michael Pollan and other food industry critics, is that Coke is malevolent and perhaps even evil because it continually expanded capacity in pursuit of profits and its product was "junk." He claims Americans became addicted to Coke's sugary beverage, and, as a result, the US has an obesity crisis.[19] Elmore frames Americans as human silos for excess corn and Coke leveraging this agricultural excess, in the form of high fructose corn syrup (HFCS), to line its pockets, indifferent to the human suffering its products caused. This is an overly simplistic analysis of corn production and its relationship to the

[19] While Michael Pollan is arguable the most famous, others include Eric Schlosser, Morgan Spurlock, Frank Bruni, Michael Moss, Mark Bittman, Marion Nestle, Kelly Brownell, the organization Center for Science in the Public Interest, among others.

obesity crisis. Obesity has less to do with soft drinks than it has to do with a complex set of environmental, lifestyle and genetic factors.[20]

I am very perplexed by Elmore's analysis of corn production and prices as well as HFCS prices. Elmore states: "All this cheap corn meant big business for America's corn refineries" and "the glut of agribusiness now came pouring into consumer markets all over the country" (267). Yet, the vast majority of the corn was not consumed by humans and did not in fact make it into consumer markets. Cows, pigs and chickens in the US and abroad stored the corn planted on the large farms Elmore describes. Julie Guthman has noted that the excess corn American farmers grew was most likely exported to feed livestock across the globe. She goes even farther to say: "Although the role of subsidies in overproduction is debatable, it is patently false that subsidies make junk food more affordable than fresh fruits and vegetables."[21] She argues that it is the devaluation of labor on the farm, in McDonald's, and at 7-Eleven and other commercial entities that reduced the price of soda and other junk foods rather than cheap corn.

Also, when I looked at the price of corn and high fructose corn syrup (both HFCS-42 and HFCS-55), Elmore's claims become more problematic. Yes, HFCS was significantly cheaper than sugar between 1975 and 2012, with a few years close to parity (2007, 2008). And, yes, soft drink producers switched to HFCS-55 because it was cheaper, averaging 6.39 cents less a pound than sugar but with great volatility. Yet, corn prices did not drop as far nor stay low as Elmore contends. Before July 1973, corn never rose above $2.00. Three-dollar-a-bushel corn was an anomaly at the end of 1974, as were the low prices at the end 1986 and throughout 1987. The nadir for corn prices in the US was 1987 when the average annual price was $1.56, but in 1988 prices jumped to $2.27. In the almost 40 years between 1975 and 2014 only 6 years saw average annual corn prices drop below $2.00 (with only 9 months at or below $1.50) and more frequently average annual prices were closer to $2.50.[22]

Additionally, Elmore leads us to believe that there is a direct relationship between the price of corn and the price of HFCS, but this is not the case. Sometimes corn prices jump and the price of HFCS will drop and the reverse also happens. For example in 1986 when corn was $1.96/bushel, HFCS-55 was 19.96 cents/pound; in 1988 when corn prices were $2.27/bushel, HFCS-55 was 18.68 cents/pound. In 1998 when corn was $2.20/bushel HFCS-55 was only 13.42 cents/pound but the

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[20] "Profiling Food Consumption in America," *Agricultural Fact Book 2001-2002* (Government Printing Office, Washington D.C.), 14 and 17. http://www.usda.gov/factbook/chapter2.htm
[21] Julie Guthman, *Weighing In: Obesity, Food Justice and the Limits of Capitalism* (Berkley: University of California Press, 2011), 123.
[22] "US Average Monthly Corn Price Received 1960-2014," http://www.farmdoc.illinois.edu/manage/uspricehistory/USPrice.asp. Last accessed 19 June 2015. ERS data have slightly different prices because they average over two six month periods, but the trend is the same. http://www.ers.usda.gov/media/521667/corndatatable.htm. Last accessed 19 June 2015

next year when corn dropped to $1.89/bushel, HFCS-55 rose to 14.91 cents/pound. The data does not support Elmore's contention that the "raw inputs for the corn refining business were in free fall" (268). In fact, over almost four decades, they were quite stable, save for a few volatile years.[23]

Moreover, both the production and consumption of HFCS has declined in recent years. Production in 2014 was roughly the same as in 1993 with peak production in 2002. Since then, it has been falling. The highpoint of caloric sweetener consumption in the United States was 1999, since then Americans have reduced total consumption from about 153 pounds per capita to 131 pounds per capita, but obesity rates have not followed suit. Yes, Americans drink too much soda and there is some evidence that drinking calories induces eating more as well, but most sugar is chewed rather than slurped and is from cane and beets rather than corn.[24] It is the muffins, cookies, Frosted Flakes, cereal bars, energy bars, candy and sugar bowl that deliver most of the sugar Americans eat.[25] Coke has nothing to do with these foods or Americans' preference for fat and sugar (with a little salt) or fat and salt (with a little sugar). In the last three decades of the twentieth century, snack food in the form of chips and cookies contributed to American's waistlines more than soda.[26] Elmore would also have us believe that Americans were healthier in the nineteenth and early twentieth centuries because they ate less sugar. They were not. Then, just as now, many Americans suffered from malnutrition, it was just a different kind.

Now, let's look at obesity. Elmore asserts that "consumer's waistlines exposed the expensive storage costs that allowed the oversupplied corn market to function. Far from receiving nutritional benefits from the supersize revolution, consumers functioned as the new repositories of agricultural surplus. Consumers' bodies became jam-packed silos, replacements for the federal repositories that once helped stimulate scarcity by keeping excess corn off retail shelves" (272). This ignores not

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[23] These data are based on the following: Time Series of Monthly Average Price of Corn University of Illinois at Urbana-Champaign farmdoc database http://www.farmdoc.illinois.edu/manage/uspricehistory/USPrice.asp; ERS Table 5--U.S. wholesale refined beet sugar price, Midwest markets, monthly, quarterly, and by calendar and fiscal year. http://www.ers.usda.gov/data-products/sugar-and-sweeteners-yearbook-tables.aspx; ERS Table 9a--Wholesale list price HFCS-42, Midwest markets, monthly, quarterly, and by calendar and fiscal year (1975-1999); Table 9--U.S. prices for high fructose corn syrup (HFCS), Midwest markets, monthly, quarterly, and by calendar and fiscal year http://www.ers.usda.gov/data-products/sugar-and-sweeteners-yearbook-tables.aspx; ERS Table 9b--Wholesale list price HFCS-42, Midwest markets, monthly, quarterly, and by calendar and fiscal year (1981-1999) Last Accessed 18 June 2015; and email correspondence with ERS on HFCS prices.

[24] Table 50--U.S. per capita caloric sweeteners estimated deliveries for domestic food and beverage use, by calendar year

[25] Table 30--U.S. high fructose corn syrup (HFCS) supply and use and Table 20a--U.S. sugar deliveries for human consumption by type of user, calendar year "Corn Sweeteners Supply, Use, and Trade," Economic Research Service, United States Department of Agriculture. http://www.ers.usda.gov/data-products/sugar-and-sweeteners-yearbook-tables.aspx#25456. Accessed 8 June 2015

[26] Gladys Block, "Foods Contributing to Energy Intake in the US: Data from NHANES III and NHANES 1999-2000," *Journal of Food Composition and* Analysis 17 (2004): 442.

only the volume of corn being used in human food production, but also the shifting quantities of HFCS being consumed. Writing more as an activist than a historian and relying on journalists like Michael Pollan and Betty Fussell detracts from the very real twin problems associated with the over consumption of sugar and fat and obesity in the United Sates and, increasingly, the world. A 2011 study found French fries contributed more to weight gain than soda.[27] This is not to say that sugar does not play a role and contribute to obesity and type 2-diabetes, just that it is a factor not cause. Correlation is not causation, a point that is frequently muddied throughout the text.

I agree with Elmore that there is both an obesity crisis and that drinking sugar-sweetened beverages in large quantities contributes to weight gain, which, in turn, can lead to obesity and all of its complications. There is clearly a correlation between sugar, HFCS, dextrose, glucose, maltose, etc. and obesity. Reducing sugar consumption is clearly in the best interest of many Americans, but is it not all Coke's, corn's or even sugar's fault. Obesity is a complex condition caused by a constellation of factors only a few of which Elmore examines. Since the 1980s, some of the other causes include: smoking cessation, eating away from home, larger dinner plates, poverty/wage erosion, stress, insomnia, asthma, endocrine disruptors, eating more fats and refined carbohydrates (not sugar), composition of an individual's microbiome, eating less vegetables, having obese or overweight family and friends, lack of access to inexpensive healthy food and healthcare, and, ironically, the expansion of nutrition programs. And, perhaps most importantly, about 70% of obesity can be explained by genetic factors.[28] While his book did not need to examine on all of these factors in detail, Elmore's hyperbolic portrayal of Coke as a major contributor to obesity reduces a set of complex interlocking biological and social issues into an overly simplified narrative of corporate malevolence.

Similarly, Elmore's definition of obesity confuses overweight (Body Mass Index or BMI 25 to 29.9) with obesity (BMI 30 or over) (see 273). Overweight is not obese nor does it share the same health risks or costs as obesity or morbid/extreme obesity (BMI greater than 40). In fact, there are studies that suggest, especially in older adults, that being overweight or mildly obesity (BMI 30-34.9) is somewhat protective, but again these are correlated and not causal findings.[29] The 2008 obesity rate was 31% not 34%, as Elmore states; 34% was the figure for overweight. Both numbers are shockingly high and should raise serous question about American eating habits, but they are not the same thing. But even these numbers are a bit problematic when looking at the longitudinal data as Elmore does on page 273. In Figure 4, there is a huge spike in obesity rates between 1980 and 2000, when 20%

[27] "Certain Foods Linked to Long Term Weight Gain," National Institutes of Health. 11 July 2011. http://www.nih.gov/researchmatters/july2011/07112011weight.htm Last accessed 19 June 2015.
[28] "Genes, Junk Food, and Weight," National Institutes of Health Research Matters 28 January 2013. http://www.nih.gov/researchmatters/january2013/01282013weight.htm . Last accessed 19 June 2015.
[29] Hui Zheng, Dmitry Tumin, and Zhenchao Qian, "Obesity and Mortality Risk: New Finding from Body Mass Index Trajectories," *American Journal of Epidemiology* 178 (September 7, 2013): 1591-1599.

of the population became obese. While there is no doubt that obesity rates were rising, some of that rate of increase was based on the Centers for Disease Control and Prevention (CDC) reformulating the clinical definition of overweight and, for the first time, using BMI to measure obesity. In 1998, the category of overweight changed from individuals in the 85th percentile of BMI to a BMI of 25 or greater and obesity to a BMI of 30 or greater. This statistical reformulation caused between 9-10% of the population (25-29 million people) to become overweight or obese. Changing the calculation of overweight and obesity made Americans fatter without gaining an ounce and distorted the data.[30] My point here is not that Elmore is wrong about the obesity crisis. Of course he is right, but the devil is in the details and it is our job, as historians, to tease out and account for the complexities of our narratives.

Throughout the book, Elmore repeatedly states that sugar is addictive. It is not. Sugar is not heroin or cocaine, although many popular websites and hyperbolic food critics repeat this cultural meme that is not borne out by science. Eating some sugar does not necessarily lead to a cycle of eating ever-larger quantities of sugar. Yes, sugar in its many, many forms induces dopamine to be released in the brain and creates a feeling of pleasure not "buzz" as Elmore tells us (274). But saying sugar is addictive is like saying smiles, sex and fat are also addictive because they release dopamine.[31] There is vigorous debate over whether there is such a thing as food addiction and although some studies have shown that rats given a calorie dense diet (high in sugar and fat or sweet in the form of saccharine or sugar) show some signs of addiction similar to drugs, these are compulsive binge eaters and not simply overeaters.[32] The overeaters did not display addictive behaviors.[33] Additionally, the number of binge eaters in a population is far below the rate of obesity, even if there is such a thing as food addiction it cannot explain America's high obesity rates nor can sugar consumption. Again, I am not suggesting eating or drinking large quantities of sugar and/or fat is healthy, but only that the science to date does not support sugar addiction and repeatedly using such loaded language undermines Elmore's analysis and the veracity of the text.

The one area Elmore does not even begin to address is why Americans prefer Coke. For well over a hundred years, Americans have preferred Coke over all other carbonated beverages. Why was that? It cannot be the sugar or a biological disposition for sweetness because Pepsi is sweeter and there are plenty of other

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[30] Email communication with CDC. 5 June 2015. See also CNN "Who's Fat? New Definition Adopted," http://www.cnn.com/HEALTH/9806/17/weight.guidelines/. Accessed 8 June 2015.

[31] Monica Reinagel, "Sugar and the Science of Addiction," *Food & Nutrition Magazine* 28 October 2013. Accessed 9 June 2015. I should note that this journal is published by the Academy of Nutrition and Dietetics, which is the national organization for dietitians and registered dietitians.

[32] David H. Epsitein and Yavin Shaham, "Cheesecake-Eating Rats and the Question of Food Addiction," *Nature Neuroscience* 13 (2010): 529-531. http://www.nature.com.mutex.gmu.edu/neuro/journal/v13/n5/full/nn0510-529.html. Last accessed 19 June 2015.

[33] Paul M. Johnson and Paul Kenny, "Dopamine D2 Receptors in Addiction-Like Reward Dysfunction and Compulsive eating in Obese Rats," *Nature Neuroscience* 13 (2010): 635-641.

sweet choices. As Elmore argues, it is not all marketing or brand, although these certainly have a role. I would suggest, like Heinz ketchup, when Pemberton formulated his original soft drink he struck a balance of sweetness and acidity with sparkle that just tasted really good and still does. Even as the formula changed over the century, there is something about the taste of Coke that sets it apart. Taste matters even if it is ephemeral. People choose to drink soda, even if it might not be the best decision for their health. So, what I am really asking is how do consumers and their choices fit into the Coke story specifically and soda consumption more generally? Learning more about why consumers increasingly chose Coke and soda over other beverages like milk or coffee would strengthen Elmore's analysis.

Throughout *Citizen Coke*, Bartow Elmore lays many sins at Coca-Cola's feet. Many are well deserved, yet others are not. At its best, the book challenges how we think about corporate power, illustrates how businesses are intertwined through the goods and services they supply to each other, and questions who is responsible for safeguarding resources (natural and human). At its worst, it is an activist screed. It is easy to blame Coke: it is hard to shift the burden of poverty, increase taxes to fund schools, battle deregulation and lobbying efforts, shift neoliberal ideology, or change what people eat. In other words, it is an uneven book. I once heard John Kasson say something to the effect that he studies what he is ambivalent about. I wish Elmore was more ambivalent about his subject. Elmore writes with passion—sometimes too much—and conviction. Yet, as historians, it is sometimes best to distance ourselves from our passion and the politics that surround us.

Comments by Richard Tucker, University of Michigan

Corporate histories are an important segment of the literature on the history of capitalism. But they have rarely been concerned with environmental issues; this in itself suggests the significance of Bart Elmore's study of the world's dominant soft drink company, a study that bridges the gap between business history and environmental history. Conventional business histories rarely touch on the natural world, but a small group of environmental historians have begun to assess the legacies of global-reaching American corporations. One category, monocrop agriculture and tree plantations, includes Greg Grandin's *Fordlandia*, and John Soluri's *Banana Cultures*. Strategic metals are a second category; Tim LeCain's *Mass Destruction* is a study of a powerful, environmentally ravaging (though domestic) U.S. corporation. And as I reach for my coffee mug, I realize that a third category includes caffeine: the mild narcotics that have virtually no nutritional value but environmental and public health costs that range from probably benign to unquestionably severe.

Elmore's work is solidly grounded in industrial history, especially studies of transnational corporations that import natural resources for the American consumer economy. *Citizen Coke* describes the complex social, economic and environmental impacts of an enormously powerful global corporation. Elmore charmed his way into corporate archives, enabling him to understand policy making and marketing from the inside. He shows how Coke forged links with other major corporations, including Hershey (cane sugar), Monsanto (chemicals) and McDonald's (marketing outlets), overwhelming both corporate competition and local communities' resistance. Each of these invites a similar study.

This accumulation of power also entailed close relations with the federal government, both Congress and regulatory agencies. And when Coke surged into global marketing after 1945 (by 1970 fully half of its profits came from international sales), its political alliances extended into international agencies as well. During the Cold War years Coke collaborated with the State Department, USAID and the Overseas Private Investment Corporation (OPIC), in a crusade to convince the world's consumers that corporate capitalism (closely supported by government, it went without saying) was the "Free World's" trump card against Moscow's empire. In the process, Coke mastered the politics of cozy relations with host governments and insider elites, as the recent instance of Mexico's President Vicente Fox, former CEO of Mexico Coca-Cola, exemplifies.

What were the consequences for societies that felt its impact? One surely was drawing them into the global net of consumerism. Coca Cola's advertising campaigns shaped international consumerist values, by exporting American cultural icons: happy nuclear families, picnics of sparkling twenty-somethings, even Santa Claus. Only Santa was overweight, and Coke can't be blamed for that. The literature on the global spread of consumerism could shed further light on the cultural significance of Coke, and for that matter, Pepsi as well.

As environmental history this study also moves into the commodity flow literature, which traces products to their source locations, production methods, and distribution networks. In the chapter on sugar, Elmore traces the Coke-Hershey alliance back to the cane fields of Cuba, showing American consumers' impact on Cuba's land and people more effectively than previous studies of Hershey. In the chapter on coca, he indicates something of the consequences for the politics and ecosystems of Peru. "The real losers … were the Peruvian coca farmers, who slipped into poverty or, in many cases, into dangerous partnerships with South American narcoterrorists." (p. 132) I'm led to wonder whether Coca Cola has been similarly involved with Colombia, where the drug wars have been especially bloody and controversial. And more description of the resistance to and critiques of Coke Imperialism in those countries would be welcome.

Perhaps the most surprising chapter discusses Coke's insatiable demand for clean water -- as much as 8 trillion gallons in 2012, "enough to meet the annual cooking, cleaning, and drinking needs of over 2 billion people, or close to a quarter of the world's population." (p. 18) In the 1960s Coke found a new opportunity to broaden its product line, bottled water: in 1970 it began marketing Aqua-Chem, its first market-quencher, and in 1999 it added Dasani. To be sure, in countries as diverse as Saudi Arabia and Chile, it offered new technologies of quality control and desalination plants. But it also competed directly with local users of limited water supplies in countries like India. In arid Jaipur the critical aquifer began dropping, and in Kerala Coke overrode hostility from water-starved villagers.

All this leads Elmore to probe the broad question of a large corporation's potential for environmentally innovative leadership, as he surveys major dimensions of resources extracted, and some aspects of product and pollution outflow. In what could be called enlightened self-interest, Coke designed its first Life Cycle Analysis (LCA) in 1969, which enabled it to trace the flow-through of materials more closely than before. This LCA system, with refinements, became one of the Environmental Protection Agency's powerful tools for assessing corporate pollution.
Coke's environmental concern emerged in response to growing public awareness in the '60s, when it began cultivating good public relations by joining the campaign against roadside litter. Toward the end of the chapter on recycling glass, aluminum and plastic, he offers a shrewd assessment of corporate greening. "Despite the fanfare about corporate greening campaigns, today's curbside reclamation programs would not have been possible without public funding. Corporate recycling programs have been built on infrastructure that it took municipalities decades to construct. .. In the end, consumers did most of the work, subsidizing (both through their labor and through taxes) the beverage industry's packaging-reclamation system, allowing companies to expand their operations without incurring increased costs. … How long will the country continue its experiment before it asks big businesses to pay for the waste they generate?" (260-61)

Then there are the public health issues, an inseparable aspect of a corporation's environmental impact. These are particularly prominent for a corporation whose project has contributed so generously to widespread health problems. In the chapter on high-fructose corn syrup Elmore reveals Coke's internal struggles over how to cope with rising public alarm over carcinogens, the overweight epidemic, and diabetes. Could he probe that public debate more broadly? Perhaps he has done that since he completed this manuscript.

Where else could we take the discussion from here? *Citizen Coke* points us toward insisting on greater understanding of key corporations' environmental dimensions. But how are we to know with any precision what those costs are? This requires a rigorous method of tracking the environmental costs of any industrial process, including consumer goods, military production, and so on. Environmental historians could use the technical details of Life Cycle Analysis to telling effect, though they can't always gain access to corporate records as successfully as Elmore did with Coke.

We also need more detailed studies of environmental changes in locations where natural resources are extracted for export, such as cacao (its international production zones in West Africa and its processors in Europe and the U. S.) -- or global tobacco production. To my knowledge there is no similar environmental study of the tobacco industry or any of its leading corporations, to extend Allan Brandt's formidable *The Cigarette Century* to its disastrous global scope. There are any number of multi-dimensional doctoral dissertations waiting to be pursued. Both academe and the public will be well served when Elmore has more company in this work.

Bart Elmore's witty, bemused, and ultimately indignant writing will appeal to a wide audience. Personal anecdotes further lubricate his narrative. A disconcerting pleasure to read, *Citizen Coke* should attract wide attention in both Business Schools and Environmental Studies programs, as well as the wider public. It was wise to choose Norton as his publisher.

Response by Bartow J. Elmore, University of Alabama

I will risk charges of being too saccharine and begin by offering my hearty thanks to Chris Jones and the roundtable participants. I am deeply honored to have scholars I have long admired volunteer their time to offer reflections on my work, and I'm appreciative of their many kind remarks. Richard Tucker deserves special praise because it was his book, *Insatiable Appetite: The United States and the Ecological Degradation of the Tropical World*, which really sparked my interest in writing environmental histories of commodities. Beyond Tucker, each of the participants in this roundtable produced scholarship that shaped my own. So thank you all for your time and commitment and for, in small ways and big, inspiring me to write this book.

It is fitting that Hamilton and Petrick should raise the question of where my historiographical home is because I'm not sure I really have a home. That's because, from academic birth, you might say, I was an orphan. I had come to the University of Virginia to work with Ed Ayers as a historian of the American South only to find that after my first year, Ayers was off to become president of the University of Richmond. He remained my advisor (a testament to his unshaking commitment to his students), but I needed to find a new Departmental mentor. Grace Hale graciously took over primary advising responsibilities, and in my second year I met environmental historian Ed Russell who introduced me to the field that I now call my main sub-discipline. Influenced by the work Paul Sutter was doing at the University of Georgia, I collaborated with the two Eds and Grace to come up with a dissertation topic in the area of southern environmental history.[34] Surveying the scholarship produced at the time, I felt that there was a real need to take southern environmental history global. Most histories connected to the sub-discipline focused almost exclusively on environmental changes happening within the American South. I wanted to adjust the aperture of the investigative lens to consider southern institutions' effects on worldwide ecological changes.

At first we considered the usual suspects of southern history for subjects of study: cotton, tobacco, and rice. Here were agricultural commodities connected to vast economic and ecological networks that extended far beyond the South. But then, one day, I saw a Coke can on Grace Hale's desk, and I knew I had stumbled upon a special topic of study. At that time, Coca-Cola operated in approximately 200 countries worldwide, served roughly 1.8 *billion* beverage servings a day, and was the most well-recognized brand in human history. This was a firm born in the Jim Crow South that became the single largest buyer of sugar on the planet by the 1910s, the largest industrial consumer of processed caffeine by the 1950s, and the biggest consumer of aluminum and plastic packaging in the beverage industry. Considering its demand

[34] For a survey text on southern environmental history that shaped my understanding of the field, see Paul Sutter and Christopher J. Manganiello, eds., *Environmental History and the American South: A Reader* (Athens: University of Georgia Press, 2009).

for ecological capital, Coca-Cola seemed the ideal southern product to examine through the lens of global environmental history. Better yet, from a graduate student's perspective, no historian had attempted a comprehensive history of the firm.

So back to that historiographical home question raised by Hamilton and Petrick: was *Citizen Coke* meant to be southern history, business history, environmental history, or a new addition to the growing literature on the history of capitalism? Though I was (and am) most passionate about the field of environmental history, I'll confess I was not exclusively wedded to any particular sub-discipline and I had no particular agenda to intervene in a specific historiographical debate. It was only after following each ingredient and looking at patterns my commodity-chain studies revealed that I began to see broader implications of historiographical significance.

And this gets to the heart of an essential question raised by almost all of the roundtable participants: is *Citizen Coke* a book about one firm and its unique business strategy or does it offer insights into deeper structural forces that shaped the rise of corporate America? I never intended this to be a work about just one firm and its business strategies. I stated as much in the introduction, saying, "Coca-Cola is the main character in this book precisely because its dependence on others offers windows into much bigger worlds" (9). What made Coca-Cola such a good case study for understanding larger patterns in American corporate development was the dizzying array of suppliers in diverse industries that the firm partnered with to make its beverages. Following Coke's ingredients allowed me to talk about the Monsanto Company and corporate practices within the chemical industry; American Can Company and the transformation of America's packaging businesses; the Sugar Trust and the larger transnational agricultural policies that shaped its ability to refine Caribbean sugar for Coke; and General Foods and the dynamic relationship between South American coffee growers and US consumers. All of these firms and industries, as well as many others, are part of my story. In short, while there is necessarily a limit to the number of different industries a scholar can survey in one book, *Citizen Coke* looks beyond Coke to consider the ways in which shifting political policies, social movements, and ecological transformations shaped the contours of the American economy in the twentieth century.

On that note, I completely agree with Hamilton, Melillo, and Petrick when they argue that Coke was in many ways a product of economic and ecological realities that were manifestations of ideologies neither invented nor specifically nurtured by the firm— whether Progressivism or neoliberalism. Time and time again, Coke took advantage of public programs that it had very little role in initiating. Progressive Era expansion of public water systems, driven by a period-specific political philosophy, is perhaps the best example of this. Coke was not an aggressive lobbying agent for such reform, but nevertheless capitalized on the massive public investments in public pipes spurred by the Progressive movement. So too did the company benefit from neoliberal foreign assistance programs in the 1990s that channeled public funds to private corporations via federal agencies, such as USAID and OPIC. Coke was sometimes at the negotiating table when government officials designed these public initiatives, but it would be disingenuous to consider Coca-Cola the prime architect of these policies that ultimately benefited the company's expansion at home and abroad.

So to answer Melillo directly, yes, to understand Coke's rise you must understand neoliberal politics, but I don't believe Coke's success can be neatly explained as "drinkable neoliberalism." Doing so offers too much explanatory power to an abstract concept and fails to capture the messy stuff of history—specifically, the ways in which firms like Coke adapted their businesses strategies to take advantage of diverse ideological trends (whether Progressive politics of the 1920s or the "green capitalism" movement of the 1990s).

And this is where Melillo's question about strategy and ideology becomes so important. What made Coke great was its strategy of remaining unwedded to any particular ideology. Just as the company shunned ownership of factories and plants, so too did it avoid long-term commitments to particular political platforms, religious groups, or social movements (very unlike Koch Industries, I might add). Coke felt just as at home in Roosevelt's New Deal as it did in the heyday of the Reagan Revolution, enjoying close partnerships with Republican Dwight D. Eisenhower and Democrat Jimmy Carter. In other words, my research revealed that Coke deployed diverse strategies to tap into different ideological bases, rather than adopting one ideological framework to drive company strategy.

This leads me to the roundtable participants' important queries about the suitability of my term Coca-Cola capitalism. First, let's deal with the Coca-Cola part of the label. Is Coke really the only company that followed this strategy of outsourcing costs onto others? If not, should it be called Coca-Cola capitalism? Let me be clear: I do not think that Coca-Cola was the only company to practice this strategy of outsourcing nor do I think the company invented this way of doing business. As I say in the introduction, "I call it 'Coca-Cola' capitalism because Coke deployed it so effectively, but there were other firms—Pepsi, McDonald's, software firms, and many others—that followed similar strategies to huge profits" (10). My main point was to suggest that Coke was one of the earliest exemplars of this business strategy. Here was a firm that relied on independent bottlers to distribute a drink made up of sweeteners subsidized by the federal government mixed with public tap water provided by municipalities that also paid for the recycling systems that cleaned up the company's packaging waste. In sum, many firms relied on outside help to make millions, but Coke proved particularly adept at getting others to do work for it.

I used the term Coca-Cola capitalism for another important reason: to highlight just how important mass-marketing firms like Coca-Cola were to shaping the extractive industrial economy of the twentieth century. As I say in the introduction, "The historical canon of corporate capitalism treat Coca-Cola and other similar consumer goods firms as masters of marketing but gives short shrift to their deftness in coordinating the transfer of natural capital through commercial channels" (11). I wanted to right that historical inaccuracy to show Coke's integral role in compressing the ecological bounty of global commodity markets. The company turned the prodigious industrial output of big factories and agribusinesses into digestible products suitable for worldwide consumption. In other words, Coke was more than just a brilliant advertiser, bringing together "technologies and infrastructure it did not own to create broadband channels of ecological exchange essential to the making of modern America" (10).

Coke was not the only business to deploy Coca-Cola capitalism, and in fact I argue that Coke's strategy for making money became mainstream in many different industries by the end of the twentieth century. I elaborate on this more fully in the Epilogue when I draw comparisons to Microsoft and Google and discuss the recent leaning of the corporate economy since the 1970s. This is not to say that these other firms were self-consciously copying Coca-Cola, but just to say that an incredible variety of enterprises, including some in the industrial sector of the economy, discovered through trial and error that vertical disintegration and outsourcing techniques similar to those deployed by Coke produced financial dividends for their firms and made them more resilient in the long run.

Let me make one more small note addressing the question of Coke's uniqueness. To Melillo's point about Adam Smith and the origins of outsourcing, I am well aware that outsourcing as a strategy for making money had been around a lot longer than Coca-Cola (and even Smith), but I would argue that the rise of new government infrastructure and transportation and communication technologies at the end of the nineteenth century enabled outsourcing to be carried out on a much grander *scale* than had been possible previously in American business. So, yes, Coke did not invent outsourcing, but it matured at a time when a new political and economic environment enabled firms to offload substantial costs on public agencies and independent global producers like never before.

All this leads me to defend my choice of using Coca-Cola in labeling this business strategy. While Petrick is undoubtedly correct in suggesting that we can imagine broader labels (might scavenger capitalism work?), I do believe Coke, while not the progenitor or sole master of this business strategy, is a deserving honoree.

Now let me turn to the pesky capitalism part of the moniker. While I agree with Melillo that the term capitalism is loaded with deep "social and psychological" meaning, I chose to use the term because I think, at base, Coke's business strategy was informed by capitalist conceptions of resource extraction, processing, and distribution. I felt, in short, that I should not shy away from saying that capitalist economic thinking influenced Coke executives' way of doing business. However, in using the term capitalism, I did not intend to imply that Coke had somehow developed a new economic ideology that displaced an older world-system. With more modest ambitions in mind, my intent was simply to note that this business strategy drew on deeper capitalist understandings of the relationship between businesses, laborers, and the environment.

On the topic of labor and business, I believe Hamilton and Melillo are right to point out that at times I missed opportunities to do more labor history in this book. As Hamilton and Petrick kindly note, this was in part a product of the sources I had on hand to tell this story. Much of this book would never have been possible had I not come across the papers of Robert W. Woodruff, the undisputed "boss" of Coca-Cola who ran the company from the 1920s up to his death in the 1980s. The Woodruff collection, housed at Emory University, contained hundreds of boxes detailing conversations between Woodruff and various executives at the firm. These materials helped me tell vivid stories about some of the company's key battles to acquire natural resources from around the world. But rich as they were, largely absent from these files were the voices of men and women on the ground—the salesmen, sugarcane farmers, and truck drivers—who made the whole Coke system work. When Beth Macy in her *New York Times* review said that she wanted to know more about the black employee who mixed Coke syrup at the company's 1890s headquarters, I couldn't have agreed with her more. I wanted to know about that man's life, but the simple truth was that I could not find sources to adequately tell that story. I bow to environmental historians, such as Jon Soluri, who have done a much better job meticulously finding the voices of company farmers and industrial laborers operating outside firm's executive suites.[35] I will continue to strive to learn from Soluri and others as I seek to fuse labor and environmental history in my future works.

That said, one of the things I tried to point out in this work was how private citizens not on the payroll of the Coca-Cola Company often functioned as de facto laborers for the firm. For example, in my chapter on recycling I showed how municipalities helped bail out the beverage industry by investing taxpayer dollars in the construction of comprehensive curbside recycling systems. "In the end," I argued, "consumers did most of the work, subsidizing (both through their labor and through taxes) the beverage industry's packaging-reclamation system, allowing companies to expand their operations without incurring increased costs" (260). Showing how labor history can be found in suburbanites' strolls to the curbside, *Citizen Coke* hopefully forces readers to take stock of some of the ways in which firms tap into hidden or nontraditional sources of labor.

Before offering concluding thoughts, I thought I would address some of the more fine-grained critiques of the work. First, let me make a clarifying note about diction. I do not use the words "evil" or "malevolent" to describe Coca-Cola in this monograph as Petrick's review might imply. In fact, I went to great lengths not to use loaded modifiers in this book or to take cheap shots at company employees. I write about Coke president Paul Austin's sincere concerns about the environment in Chapter 8 and likewise discuss CEO Neville Isdell's distinguished past as a social worker in Chapter 6. I also talk about some of the impressive charitable works the

[35] I am referring here to John Soluri's *Banana Cultures: Agriculture, Consumption, and Environmental Change in Honduras and the United States* (Austin: University of Texas, 2005).

company has funded and even begin the book talking about how I went to a school financed with Coke money. This is not a story about bad corporate villains and their plans to intentionally ruin the world. The terms "evil Coke" and "evil soda" are Petrick's not mine.[36]

In the end, this is a book that indicts the political system that encourages Coke's environmentally unsustainable growth and not a book that holds out the delusional hope that the demise of one brand is the panacea the world needs. Throughout *Citizen Coke*, I point to clear public policy changes that might right deep ecological and social injustices in the world. In the chapter on recycling, for example, I argue that reducing waste in our society will involve passing legislation that puts a price tag on litter, whether that litter comes from Coke or other firms. In my chapter on water abroad, I argue that we must stop using foreign assistance funds to support corporate capture of precious water supplies and begin using those funds to build comprehensive public water systems that are much needed in arid regions of the world. In other words, I don't think fixing Coke will fix the problems addressed in this book. Rather, I look to Coke's practices to identify places where we as citizens can make real interventions in the political system that might have far reaching implications for creating a sustainable economy for the future.

I can't agree more with Petrick that Coke is not solely to blame for the nation's obesity crisis, which is why I was surprised when she said that I claimed obesity was "all Coke's . . . fault." I do not make this claim. I simply argue, time and again, that soft drinks were a "significant contributor" (263) to the obesity crisis, which I stand behind. One point of reference I would make here in support of my argument comes from a 2004 *Journal of the American Medical Association* article in which scientist Caroline M. Apovian reported that "sugar-sweetened soft drinks . . . represent the largest single food source of calories in the US diet."[37] I won't elaborate much here, but I would point readers to pages 270-273 where I discuss other factors beyond Coke contributing to the obesity crisis, including "obesogenic environments." I also

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[36] I should also note here Petrick's charge that I resorted to "loaded language" when using the word "addictive" in reference to sugar consumption. She suggests that such evidence for sugar addiction comes from "popular websites and hyperbolic food critics." This statement short sells the extensive PubMed research I conducted while writing this book. For clarity, here is my main reference to the science on sugar and addiction: "Recently, scientists have even found evidence to suggest that sugar may be as addictive as cocaine" (76). In the footnote to this passage, I reference not only a study entitled "Intense Sweetness Surpasses Cocaine Reward," but also another article published by Princeton University researchers in 2008 which clearly states "sugar . . . might be expected to have addictive potential." For those references, see M. Lenoir, F. Serre, L. Cantin, S. H. Ahmed, "Intense Sweetness Surpasses Cocaine Reward," *PLoS ONE* 2, no. 8 (August 2007), 1; N. M. Avena, P. Rada, B. D. Hoebel, "Evidence for sugar addiction: Behavioral and neurochemical effects of intermittent, excessive sugar intake," *Neuroscience and Behavioral Reviews* 32, no. 1 (2008): 20. This is not to say that the scientific debate is settled on the subject of sugar consumption and addiction, but just to clarify that my arguments were not based on "popular websites." I would encourage readers to peruse my footnotes for a robust list of scientific studies on how soft drinks affect the body.

[37] Caroline M. Apovian, "Sugar-Sweetened Soft Drinks, Obesity, and Type 2 Diabetes," *Journal of the American Medical Association* 292, no. 8 (August 25, 2004): 978.

cite Julie Guthman's work on other biological factors that affect weight gain on page 363.[38]

Petrick's concerns about my treatment of corn prices also seem a bit overblown. I never intended to imply that corn subsidies were the only thing that drove down corn prices and even talk about the "new machines, hydrological systems, and nitrogen fertilizers" (266) that helped increase America's agricultural bounty in the postwar era. I mention that prices were low in the mid-1980s, but I also state that there were "price fluctuations in the coming years" (267). In short, I concede that I might have done a better job showing that corn prices were not directly linked to high-fructose corn syrup prices, but I'm not sure the "devil is in the details" in this case. The point here, as Petrick admits, is that high-fructose corn syrup was cheaper than sugar (in part—but not wholly because of—subsidies), which kept costs down for soda producers as they expanded in the 1980s and 1990s. I see no devil lurking here.

Though I may disagree with some of Petrick's critiques, on the issue of obesity, I must thank her for finding an error in my definition of Body Mass Index (BMI). There is indeed a typo on page 273, and the text should read that the CDC considers someone with a BMI over 30 to be obese. The correction is being made in the paperback.[39]

I felt it was fitting that seasoned veteran Richard Tucker, in the final review, should question where we should go from here, so I will end by reflecting on his excellent query. I believe there are real opportunities to strengthen connections between environmental historians and scholars interested in the history of business and capitalism. As my response to the reviewers here suggests, I certainly have not perfected the secret formula for doing global environmental histories of big businesses, but I survey the opportunities for such work and the possibilities seem endless. No doubt, the task is daunting. To tell the story of *Citizen Coke*, I snuck into lobbying firm basements, trekked across flooded rivers to find bottling plants in India, and journeyed to Peru to learn more about Coke's coca farmers—not the conventional habits of the academic historian. At times the barriers to information made me want to give up. But considering multinational firms' incredible power to shape global ecological change, I think this kind of work needs to be done.

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[38] I was fortunate to hear Julie Guthman talk in depth about her book, *Weighing In: Obesity, Food Justice, and the Limits of Capitalism* (Berkeley: University of California Press, 2011), while a postdoctoral researcher at the University of California-Berkeley, and her findings influenced passages in which I note the complex causes of the obesity crisis. Nevertheless, the science is quite clear that soft drinks remain a significant contributor to the obesity problem.

[39] For those interested in CDC data on obesity trends since 1960, see K. M. Flegal, M. D. Carroll, C. L. Ogden, and L. R. Curtin, "Prevalence and Trends in Obesity Among US Adults, 1999–2008," *Journal of the American Medical Association* 303, no. 3 (January 20, 2010): 235–241. http://www.cdc.gov/nchs/data/hestat/obesity_adult_09_10/obesity_adult_09_10.htm#table1.

And the emergence of new academic communities holds great promise for future fusions of business and environmental history. Over the past two decades, historians have taken a keen interest in what has become known as the history of capitalism. Several historians commented on the state of this new "insurgent field" in the recent interchange published in the September 2014 edition of the *Journal of American History*. Historian Stephen Mihm argued persuasively that the history of capitalism sought to "erode disciplinary barriers" between labor, business, cultural, and economic historians—barriers that in many ways inhibited scholars from telling broad, synthetic stories about global economic transformations in the twentieth and twenty-first centuries. For many, the history of capitalism was a big tent that could house an array of scholars, both within and outside the historical craft, who wanted to ask probing questions about economic inequality, uneven global capital flows, and the growth of unstable debt markets in recent decades.[40]

But while the 2014 *Journal of American History* interchange suggested the arrival of a new field that warmly embraced diverse scholarly disciplines, noticeably absent in the discussion was any mention of how this academic community might engage the environmental history community. To be sure, one could argue that environmental historians need no invitation, having long written about the history of capitalism. Canonical environmental histories, such as William Cronon's *Nature's Metropolis*, Richard White's *Railroaded*, and Donald Worster's *Dust Bowl*, all offered detailed analysis of how capitalist firms strategized to maximize extraction of natural resources. In *Dust Bowl*, Worster even singled out "capitalism" as the root cause of one of the nation's worst environmental disasters. "Capitalism," he wrote, "has been the decisive factor in this nation's use of nature."[41]

Yet, despite such excellent works detailing the relationship between capitalism and the environment, the connections between the business history community—the home base for many of the new scholars of capitalism—and the environmental history community have remained weak. In the late 1990s, historians Chris Rosen and Christopher Sellers spoke directly to this disconnect in Harvard's *Business History Review,* arguing that there was a real need to draw the two subfields together. I think their challenge to historians has remained largely unanswered, a problematic reality because it has meant that historians have remained on the sidelines in contemporary debates about the future ecological sustainability of multinational corporate growth.[42]

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[40] Sven Beckert, Angus Burgin, Peter James Hudson, Louis Hyman, Naomi Lamoreaux, Scott Marler, Stephen Mihm, Julia Ott, Philip Scranton, and Elizabeth Tandy Shermer, "Interchange: The History of Capitalism," *Journal of American History* 101, no. 2 (September 2014): 504-505.
[41] Donald Worster, *Dust Bowl: The Southern Plains in the 1930s* (Oxford: Oxford University Press, 1979, 2004), 5.
[42] For their discussion of the merger of the fields, see Christine Meisner Rosen and Christopher Sellers, "The Nature of the Firm: Towards an Ecocultural History of Business," *The Business History Review* 73, no. 4 (Winter, 1999): 577-600; Christine Meisner Rosen, "Industrial Ecology and the Greening of Business History," *Business and Economic History* 26, no. 1 (Fall, 1997): 123-137

But need this be so? Beyond my account of the Real Thing, we need more histories that dive into the ways real businesses affect real ecologies in the real world. Where is the environmental history of Wal-Mart? McDonald's? Apple? Here are capitalist enterprises with financial and political resources that dwarf some nation-states and with profound capacities to extract natural resources from ecosystems around the world. What's more, many of these businesses are still in operation and therefore might be influenced by groundbreaking studies that expose the steep ecological costs of past corporate practices.

Considering the gravity of the ecological problems we face—from global climate change to water resource scarcity—it strikes me that environmental historians are uniquely positioned to offer critical insights into redesigning our economy for a sustainable future, and it would appear that bringing business historians and environmental historians into richer dialogue would be a great step in this direction. We need more studies that use the lens of environmental history to help businessmen, politicians, and citizens reimagine a new economy that is ecologically sound. Some may call me an "activist" historian for pushing for such works that engage with the world that surrounds us. I make no rebuttal.

About the Contributors

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