The Sugar Revolution in New England: Barbados, Massachusetts Bay, and the Atlantic Sugar Economy, 1600–1700

This article traces the patterns of sugar consumption in seventeenth-century New England, from port to countryside, and the way in which economic exchange between New England and Barbados shaped the development of both regions. It deepens understanding of the rise of slavery-based tropical commodity production and consumption in the Atlantic world and examines the ways in which the emergence of capitalism and global imperialism was connected to the primacy of sugar as one of the most widely distributed early modern commodities.

Keywords: sugar, British Atlantic, slavery, consumption

In this article, I trace the patterns of sugar product consumption in seventeenth-century New England, from port to countryside, and I explore the way in which economic exchange between New England and Barbados lay at the core of the development of both regions. My research deepens our understanding of the rise of slavery-based tropical commodity production and consumption in the Atlantic world; I examine the ways in which the emergence of both capitalism and global imperialism in the early modern world were connected to the primacy of sugar as one of the most widely distributed early modern commodities. How did sugar products move differently through societies than did the durable goods that have received greater scholarly attention? How might a reconceptualization of colonial sugar, molasses, and rum consumption inform interpretations of the intertwined rise of capitalism and slavery? And how can expanded research into the history of the Atlantic sugar trade enrich our knowledge of New England's economy and material culture?

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My research also contributes to the scholarly conversation about the nature of early modern capitalism. Historians have focused heavily on the significance of the development of a profit-oriented culture in the seventeenth and eighteenth centuries; I argue that the emergence of capitalism during this period should also be understood as an expression of preexisting consumer behaviors unleashed with torrential force with the vanquishing of environmental and other structural limitations on production. Further, the explosion of demand was not simply an accommodation to a changing socioeconomic system but also a driver of it. The premodern demand of English people for sugar must be considered as a factor in efforts to secure and develop the English colonies and Atlantic markets. The English migrants who settled Massachusetts Bay and Barbados in the first half of the seventeenth century-many of them families with kin in both colonies-brought with them a habituation to sugar, a powerful predilection that was particularly striking within the context of their explicit rejection of early modern consumer culture. This demand had long been pushing up against structural supply constraints, as imperial rivalries inhibited the flow of sugar imports into England. English imperialism, in which New England played a key part, resulted in the greater ease of movement of commodities (as well as people) and, above all, sugar products. Demand was not simply satisfied by these developments; rather, it played a causal role.

This article examines the role of mass consumption in fostering the intertwined growth of markets, slavery, and capitalism. Historians have long recognized the importance of sugar as a vehicle of capital accumulation, of its production zones as markets for British industrial goods, and of sugar plantations themselves as early models of industrial organization. Yet sugar's influence as a consumer good that spurred growth and permanently altered structures and behavior has not been as well explored.¹ Instead, the scholarship that does attend to the relationship between consumption and the early growth of merchant capitalism focuses mostly on the European fascination with other rare and exotic goods, particularly spices.² I argue that sugar was no less a singular and potent force in the history of capitalism.

¹As pointed out by Ralph A. Austen and Woodruff D. Smith, "Private Tooth Decay as Public Economic Virtue: The Sugar-Slave Triangle, Consumerism, and European Industrialization," *Social Science History* 14 (1990): 109.

²See Wolfgang Schivelbusch, *Tastes of Paradise: A Social History of Spices, Stimulants, and Intoxicants* (New York, 1992), 9–10;Paul Freedman, *Out of the East: Spices and the Medieval Imagination* (New Haven, 2008), 2–3. Schivelbusch and Freedman argue that spices lay at the core of an upper-class consumer culture that stimulated markets, trade, and eventually overseas exploration and colonization.

In this way, I endeavor to connect scholarship on the "sugar revolution" of the West Indies, which traces the rise of sugar monoculture and slave labor, with our understanding that the "consumer revolution," the change in the way people perceived and pursued material goods, was as important as the expansion of production in laving the groundwork for the industrial revolution. Scholars of the early modern world have emphasized the significance of the spread of durable goods, the reorganization of work, and the technological changes that marked the first stages of the Industrial Revolution. Yet sugar, molasses, and rum were so valuable, and consumers' appetites for them so voracious, that it is difficult to overstate the historical importance of their trade and consumption. Economic historian David Eltis notes that in the seventeenth century, Barbados alone "was probably exporting more [by value], proportionate to its size and population, than any other colony or state of its time or, indeed, in the history of the world up to that point."³ This shift, to a world economy based on colonial production of tropical goods to meet a seemingly insatiable consumer demand, was as integral to the emergence of industrial capitalism as the agricultural, technological, and organizational changes that have received so much attention.

Consumer historians Carole Shammas and Anne McCants have argued that the explosion of demand for tropical groceries (of which sugar was the most prominent) after 1600 was far more central to the economic development of Britain and Europe than most historians have acknowledged. In 1559, these groceries were less than 9 percent of imports by value into England and Wales; in 1772, they were almost 36 percent. McCants's work on early modern Amsterdam finds near universal coffee and sugar consumption across all classes, even the poorest, by 1750. Aside from generating massive profits for producers. shippers, and retailers, use of these "luxury" tropical commodities transformed populations into globally linked consumers who shifted their economic calculations to gain access to these goods. Though far from a sufficient condition for the spread of capitalism, this reorientation toward consumption was a necessary one. And tropical groceries possessed unique characteristics that quickly overwhelmed traditional constraints on consumer behavior, forging a new economic system.⁴

³David Eltis, "New Estimates of Exports from Barbados and Jamaica, 1665–1701," *The William and Mary Quarterly* 52 (1995): 642, 646.

⁴Carole Shammas, "The Revolutionary Impact of European Demand for Tropical Goods," in *The Early Modern Atlantic Economy*, ed. John J. McCusker and Kenneth Morgan (Cambridge, UK, 2000). Anne McCants, "Exotic Goods, Popular Consumption, and the Standard of Living: Thinking about Globalization in the Early Modern World," *Journal of World History* 18 (2007): 433–462, and "Poor Consumers as Global Consumers: The Diffusion of Tea and Coffee Drinking in the Eighteenth Century," *Economic History Review*

Sugar was also one of the few colonial crops that was utterly dependent on the coercive nature of slave labor to synchronize production levels with demand. So dominant was the sugar industry in the slave trade, and so prominently does the commodity figure in the history of empire, that documenting and analyzing sugar consumption is essential to understanding the trajectory of the early modern political economy. As Barbara Solow asserts, "The demand for slaves is in part derived from the demand for particular commodities, and shifts in world demand for them and the elasticity of that demand will be an explanatory factor for the adoption of slavery. ... It is not possible to say what the history of modern slavery would have been without sugar, but it is perfectly possible to wonder."⁵

Yet the sixteenth-century and seventeenth-century Atlantic sugar market remains poorly understood, as do many aspects of early modern eating habits.⁶ Economists and historians have not fully explored the nature of demand for food, assuming it was a static commodity whose demand elasticity could be explained mostly by changes in prices.⁷

⁵Barbara L. Solow, *The Economic Consequences of the Atlantic Slave Trade* (Lanham, 2014), 118–119. See also Barbara L. Solow, "Slavery and Colonization," in *Slavery and the Rise of the Atlantic System*, ed. Barbara L. Solow (Cambridge, UK, 1991), 28–29. She notes that other tropical drugs such as tobacco and coffee did not lend themselves as readily to slave production. Though other commodities such as rice and indigo did rely heavily on slavery, they were not as compelling to consumers as sugar.

⁶Craig Muldrew terms diet the "Cinderella" of early modern English historiography, despite the fact that food was the "petrol of the early modern economy." Craig Muldrew, Food, Energy, and the Creation of Industriousness: Work and Material Culture in Agrarian England, 1550–1780 (Cambridge, UK, 2011), 2, 29–30. Recent scholarship on much later periods link sugar consumption to the growth of empire, business, and labor. For example, see April Merleaux, Sugar and Civilization: American Empire and the Cultural Politics of Sweetness (Chapel Hill, 2015).

⁷For commentary on the lack of research on early modern sugar consumption in England and Europe, and arguments for moving the onset of such consumption earlier, see Anne E. C. McCants, "Poor Consumers," and Eddy Stols, "The Expansion of the Sugar Market in Western Europe," in *Tropical Babylons: Sugar and the Making of the Atlantic World*, ed. Stuart B. Schwartz (Chapel Hill, 2004). The limited studies of New England consumption in the seventeenth century include Gloria L. Main and Jackson T. Main, "The Red Queen in New England?" *The William and Mary Quarterly* 56 (1999): 121–150; Gloria L. Main and Jackson T. Main, "Economic Growth and the Standard of Living in Southern New England, 1640– 1774," *The Journal of Economic History* 48 (1988): 27–46. The only systematic study of the colonial New England diet—Sarah F. McMahon, "A Comfortable Subsistence: The Changing Composition of Diet in Rural New England, 1620–1840," *The William and Mary Quarterly* 42 (1985): 26–65—establishes the trajectory and parameters of the colonial New England diet

^{61 (2008): 172-200,} asserts that scholars of global economic history have not given enough weight to changes in culture and consumption patterns. Robin Blackburn hints at the importance of sugar in turning peasants into consumers in *The Making of New World Slavery: From the Baroque to the Modern*, 1492–1800 (New York, 1997), 403, 559. Joyce Appleby summarizes the link between consumption and economic growth in her effort to define capitalism: "When ordinary people joined their social superiors in the pursuit of the pleasures of consumption, their numbers changed the character of enterprise." Joyce Oldham Appleby, *The Relentless Revolution: A History of Capitalism* (New York, 2010), 49.

But for most commodities, including foods and especially sugar, the nature of demand is much more complex, requiring a synthesis of quantitative study and cultural analysis.

New England and the Atlantic Sugar Market

The Massachusetts Bay colony (1628) and the colony of Barbados (1627) were established within a year of each other. New England served as an anchor for the development of Barbados during the pivotal period of 1630-1660; Massachusetts, Rhode Island, and Connecticut supplied much of the food, timber, and other basic needs of the island, and great numbers of people as well as goods flowed back and forth between New England and the Caribbean.⁸ By 1688, about two-thirds of export commodities leaving Boston went to the West Indies. New England's natural resources, principally timber products and fish, and agricultural products such as salt beef and pork, dairy, and live animals, found by far their biggest market in the sugar islands, which, by outsourcing these agricultural products, were able to build an industrial economy based on slavery and sugar. As Barbados planters explained to Parliament in 1673, "[T]hey could not maintain their buildings, nor send home their sugars, nor make above half that quantity with out a supply of those things from New England."9 Equally important was New England's dominance of the island's export trade, shipping the island's sugar products to England or reexporting them up and down the North American coast.¹⁰ Much of the sugar, molasses, and rum that New

but does not focus on tropical goods. For an overview of diet in the early republic, see Lorena S. Walsh, "Consumer Behavior, Diet, and the Standard of Living in Late Colonial and Early Antebellum America, 1770–1840," in *American Economic Growth and Standards of Living Before the Civil War*, ed. Robert E. Gallman and John Joseph Wallis (Chicago, 1992), in which she calls for more research. Woodruff D. Smith reviews this gap in the field, both generally and in relation to sugar in particular, in chapter 1 of *Consumption and the Making of Respectability, 1600–1800* (New York, 2002).

⁸ For connections between the two regions, see Alison Games, *Migration and the Origins of the English Atlantic World* (Cambridge, MA, 1999); Karen Ordahl Kupperman, *Providence Island*, *1630–1641: The Other Puritan Colony* (Cambridge, UK, 1993); Russell Menard, *Sweet Negotiations: Sugar, Slavery, and Plantation Agriculture in Early Barbados* (Charlottesville, 2006), chapter 6; and Richard S. Dunn, *Sugar and Slaves: The Rise of the Planter Class in the English West Indies*, *1624–1713* (Chapel Hill, 1972), 110–116.

⁹Charles F. Carroll, *The Timber Economy of Puritan New England* (Providence, 1973), 89, 138; W. Noel Sainsbury, ed., *Calendar of State Papers, Colonial Series, America and West Indies: Volume 7, 1669–1674* (London, 1889), 475.

¹⁰Margaret Ellen Newell, From Dependency to Independence: Economic Revolution in Colonial New England (Ithaca, 1998), 76–78. Historians have characterized New England's role in the sugar–slave complex accordingly. This view focuses exclusively on New England's exports of raw materials and the region's import of English manufactures. See Solow, Economic Consequences of the Atlantic Slave Trade, xiii. Though New England's role in the colonial Atlantic economy has been investigated and expanded most recently by Eric Kimball

England merchants brought back from their West Indies voyages were consumed throughout the New England countryside, becoming integrated into daily life in a way that further tied the two regions culturally and economically. The dynamic New England economy, which emerged out of the colonial period to lead the new nation into an era of extraordinary growth, can be attributed in part to this relationship with sugar products. Though the other global tropical groceries—tea, coffee, and chocolate—did not make widespread inroads into New England households until the eighteenth century, New Englanders' daily dependence on sugar products developed long before the "consumer revolution" of conventional historiography.¹¹

The few scholarly treatments of the early New England diet do not consider the role of tropical commodities and characterize seventeenthcentury foodways as monotonous, self-sufficient, and aimed at basic subsistence.¹² Nor does the rich literature on the cultural and material history of the early settlers and native peoples give sugar products appropriate attention.¹³ My research, in contrast, shows that the mass

¹³ For example, Martha L. Finch, *Dissenting Bodies: Corporealities in Early New England* (New York, 2010); Matt Cohen, *The Networked Wilderness: Communicating in Early New*

and Wendy Warren, who seek to further expose New England's connections to sugar, slavery, and capitalism, more research needs to be done in uncovering the role of New Englanders as developers of the two regions and as consumers of slave-produced products. See Eric Kimball, "An Essential Link in a Vast Chain: New England and the West Indies, 1700–1775" (PhD diss., University of Pittsburgh, 2009); Wendy Warren, *New England Bound: Slavery and Colonization in Early America* (New York, 2016).

¹¹The literature on North America's "consumer revolution" focuses almost entirely on the period from 1690 on, and the majority characterizes seventeenth-century consumer culture as limited. A good summary is Lorena S. Walsh, "Peopling, Producing, and Consuming in Early British America," in *The Economy of Early America: Historical Perspectives and New Directions*, ed. Cathy Matson (University Park, PA, 2006), 142–144. See also Main and Main, "Economic Growth and the Standard of Living"; Gloria L. Main, *Peoples of a Spacious Land: Families and Cultures in Colonial New England* (Cambridge, MA, 2001), chap. 9; James McWilliams, "Butter, Milk, and a 'Spare Ribb': Women's Work and the Transatlantic Economic Transition in Seventeenth-Century Massachusetts," *The New England Quarterly* 82 (2009): 8.

¹²Historians of early colonial foodways include James McWilliams, whose painstaking analyses of probate records and account books have done much to enhance our understanding of economic life in early New England. Sarah McMahon has offered the only comprehensive study of early New England diet, but her work does not address the role of tropical commodities. See James E. McWilliams, *A Revolution in Eating: How the Quest for Food Shaped America* (New York, 2005); McMahon, "Comfortable Subsistence." For a review of the literature on colonial New England diet and the argument that "cultural assumptions" and neglect of primary sources on the part of historians have led to an overemphasis on selfsufficiency and seasonal rhythms in the secondary literature, see Joanne V. Bowen, "A Study of Seasonality and Subsistence: Eighteenth Century Suffield, Connecticut" (PhD diss., Brown University, 1990). However, Bowen herself asserts that seventeenth-century and eighteenthcentury rural New Englanders were "self-sufficient," becoming global consumers only with the rise of commercial agriculture at the end of the eighteenth century (55–56). One partial exception is Main, *Peoples of a Spacious Land*, who has drawn some limited conclusions from probate records.

consumption of sugar products on the part of seventeenth-century New Englanders impacted the trajectory of the New England and Atlantic economies.

Toward a Better Understanding of Early Modern Consumerism

Though the turn to capitalism required the emergence of a profitseeking mentality on the part of producers, investors, shippers, and retailers, such efforts would have been futile without a robust and reliable consumer base. Any explanation of the emergence of capitalism must not only consider the scale and scope of demand but also must investigate both the nature of such demand and its potency to effect change. Such analysis has not always been present even in consumer histories, especially in the first wave of such scholarship.¹⁴ Even while positing that an increase in demand preceded technological change and industrialization, economic historians often engage in circular reasoning, making the assumption that changes in production inevitably resulted in higher demand simply because of lower costs and wider accessibility.

Indeed, explaining changes in consumption patterns is a challenging endeavor, involving elements of both economic and cultural history informed by theories of human psychology. The relationship between capitalism and demand is complex; it is easy to forget that consumption does not intrinsically have anything to do with capitalism. Though capitalist economies, especially industrial ones, facilitate a vast increase in the number of goods in circulation, their structures cannot explain why people want things. In fact, if anything, the act of consuming stands in tension with profit-seeking, in that it immediately decreases the consumer's wealth and thus ability to invest, as almost everything disappears or depreciates with use.¹⁵ Yet, at the same time, one of the primary motivations for private investment is to increase one's purchasing power. Shedding light on the nature of demand can help to untangle this web of economic behaviors.

England (Minneapolis, 2010). Both give a close reading of Edward Winslow's healing of Wampanoag sachem Massasoit in 1623 but do not mention the significance of sugar in that healing.

¹⁴As Carole Shammas lamented in 1989, "the literature on past consumer behavior has produced much writing about consumer cultures and consumer revolutions in which the exact nature of the change is left obscure." Carole Shammas, "Explaining Past Changes in Consumption and Consumer Behavior," *Historical Methods* 22 (1989): 65.

¹⁵James Livingston points this out in *Against Thrift: Why Consumer Culture Is Good for the Economy, the Environment, and Your Soul* (New York, 2011). Though Livingston does not qualify this assertion, this sets aside investments in commodities that are expected to appreciate, and it assumes that people do not consume for the sole purpose of increasing their "cultural capital" and therefore their ability to maximize profits in the future.

Why did sugar, followed by other tropical groceries, calicoes, and ceramics, come to enjoy an unprecedented popularity at the beginning of the seventeenth century?¹⁶ My study of consumer history engages with and builds on that of Jan De Vries, who formulated the influential concept of an early modern European "industrious revolution," suggesting that, beginning in the seventeenth century, families increasingly preferred to buy commodities on the market rather than rely solely on household production, and that they altered their ratio of labor to leisure to do so. Significantly, he found that this demand for market commodities increased independent of, and often preceding, production innovations or changes in prices. And De Vries recognized that even when shifts in production did lead to price declines, these advances were not a sufficient explanation for increasing demand. Regarding tropical commodities in particular, he observed: "[B]y itself, the cost-reducing impact of commodities made possible by large-scale plantation production hardly seems sufficient to explain the European economy's absorption of [tobacco, sugar, coffee, cocoa, and tea] in volumes that altered the daily life of broad strata of the population."17

De Vries offers two theoretical frameworks for understanding consumption patterns (though he does not apply these frameworks to particular commodities). First, De Vries posits a division between innate, individually referenced desires and those wants that are socially

¹⁷See Jan De Vries, The Economy of Europe in an Age of Crisis: 1600–1750 (New York: Cambridge University Press, 1976), esp. 187, and Jan De Vries, "The Industrial Revolution and the Industrious Revolution," The Journal of Economic History 54 (1994): 249-270. Much of De Vries's work has been concerned with establishing patterns of consumption, and uncovering the shifts in labor allocation that enabled these patterns to change, rather than explaining such changes themselves. In his early work, he suggests that people began to buy more commodities on the market because rising taxes and greater poverty generally resulted in lower levels of household self-sufficiency. He also makes some broad references to "new standards of comfort and style" (The Economy of Europe, 187) and a new "domesticity" ("The Industrial Revolution," 263). In his most recent book, The Industrious Revolution: Consumer Behavior and the Household Economy, 1650 to the Present (Cambridge: Cambridge University Press, 2008), however, De Vries gives greater attention to the question of how to understand changes in consumer culture, speculating on factors that might have led to increasing consumerism in early modern Europe. He does not extend this analysis to particular goods. For a rare quantitative examination of the early modern demand for sugar, see Anne McCants's study of institutional sugar consumption across the seventeenth and eighteenth centuries in Dutch orphanages. She finds that "the secular trend toward greater use of sweeteners completely overwhelmed the sensitivity of sugar purchases, at first, to increases in price, and then later to declines in income." Anne McCants, "Meeting Needs and Suppressing Desires: Consumer Choice Models and Historical Data," The Journal of Interdisciplinary History 26 (1995): 204.

¹⁶ For durable goods consumption in early modern England, see John E. Wills, Jr., "European Consumption and Asian Production in the Seventeenth and Eighteenth Centuries," in *Consumption and the World of Goods*, ed. John Brewer and Roy Porter (New York, 1993), 136; and in the same volume, John Styles, "Manufacturing, Consumption, and Design in Eighteenth-Century England," 527–554.

derived and reinforced. Second, he categorizes both of the above categories of consumption as either aimed at securing comfort (the reduction of physical or socioemotional "pain or discomfort") and/or pursuing pleasure (the experience of physical sensuality or psychological novelty).¹⁸

Consumer historians have tended to favor explanations based on socially driven aspects of comfort- or pleasure-seeking.¹⁹ But not all commodities lend themselves easily to such interpretation. Historians of sugar consumption often vacillate between acknowledging sugar's unique effects on human physiology and interpreting demand for it as a mostly social or cultural phenomenon. Usually this type of argument relies on a mis-periodization of sugar consumption as a trend that postdated the emergence of capitalism, so that the desire for sugar is explained solely as a cultural response to the new social mores of capitalist culture. It is this interpretation of English sugar consumption that Sidney Mintz and Woodruff D. Smith, among others, have popularized in different forms. Both Mintz and Smith, though they

¹⁸De Vries, The Industrious Revolution, 20-25. De Vries is building here on the work of Tibor Scitovsky, The Joyless Economy: An Inquiry into Human Satisfaction and Consumer Dissatisfaction (New York, 1976). For an exploration of "novelty," see Maxine Berg, Luxury and Pleasure in Eighteenth-Century Britain (Oxford, 2005). The psychological perception of novelty, of course, interplays with physical responses to goods, as the novelty of an item tends to increase any physical pleasure associated with it, and exposure habituates and decreases physical enjoyment, though not all commodities fit this pattern. One of the most influential commentaries on the social aspects of consumption is Thorstein Veblen, The Theory of the Leisure Class (1899; repr., Oxford, 2007). Veblen focused on consumption as a direct expression of monetary wealth, which subsequent commentators have found too simplistic. Pierre Bourdieu, in Distinction: A Social Critique of the Judgment of Taste (Cambridge, 1984), famously suggested a more nuanced version of Veblen's theory, arguing that consumption is a way of forming a distinct identity rather than simply a way of indicating economic status. Since the first publication of Distinction in 1979, which focused on midtwentieth-century France, numerous scholars have investigated, challenged, and refined the ways in which Veblen's theories play out for other societies and time periods, in particular for the postmodern era. See, for example, Richard A. Peterson, "Understanding Audience Segmentation: From Elite and Mass to Omnivore and Univore," Poetics 21 (1992): 243-258; Annick Prieur and Mike Savage, "Emerging Forms of Cultural Capital," European Societies 15 (2013): 246-267.

¹⁹The overwhelming emphasis in histories of markets is on Neil McKendrick's classic "mill girl who wanted to dress like a duchess," the "latent social force" of "social emulation" unleashed by industrialization to create a "potent economic expression of growth," summarized by Joyce Appleby as the "propulsive power of envy, emulation, love of luxury, vanity, and vaulting ambition." Neil McKendrick, "Home Demand and Economic Growth: A New View of the Role of Women and Children in the Industrial Revolution," in *Historical Perspectives: Studies in English Thought and Society,* ed. Neil McKendrick (London, 1974), 208–209; Joyce Appleby, "Ideology and Theory: The Tension Between Political and Economic Liberalism in Seventeenth-Century England," *The American Historical Review* 81 (1976): 505.

emphasize the agency of different groups, see sugar consumption as the result of the social and economic transitions to capitalism.²⁰

Such frameworks serve as a compelling revision of the notion that sugar consumption is simply a function of price; however, these arguments are themselves vulnerable to critique, grounded as they are in the assumption that all consumption consists of a form of statusseeking. The result is consumer history marred by speculation, the mistaken application of a previously developed theory of consumption to a certain behavior, and an unquestioning acceptance of the proclamations of contemporary commentators from the historical period in question.²¹

²⁰ For Mintz, mass sugar consumption appears in the eighteenth century as a result of the interest of "capitalists" in dominating and controlling a new industrial workforce. According to him, "the heightened consumption of goods like sucrose was the direct consequence of deep alterations in the lives of working people." The upper classes invested in "provisioning, sating-and indeed, drugging-farm and factory workers, sharply reduc[ing] the overall cost of creating and reproducing the metropolitan proletariat." In this version of the story, the success of the English sugar plantations lay in the "insertion of an essentially new product within popular European tastes and preferences." British imperial forces secured sources of cheap sugar to placate and make bearable the lives of industrial laborers. This strategy benefitted capitalists and not incidentally ensured a market for sugar merchants and planters. In this way, "the ever-rising consumption of sugar was an artifact of the intraclass struggles for profit." Smith similarly points to a new capitalist social structure as a source of changes in sugar habits, but he places more emphasis on culture. In his telling, an emerging middle class felt social pressure to emulate the consumption habits of the wealthy and participate in a culture of "respectability." When ingesting sugar in a rigidly defined ritual, the most prominent example being tea drinking, people signaled their ability to restrain their hunger for sugar in acceptable times and forms and to adapt their behavior to new economic pressures. Sidney W. Mintz, Sweetness and Power: The Place of Sugar in Modern History (New York, 1985), 37-38, and chap. 4, esp. 174, 180-181, 186. For Smith's perspective, see Woodruff D. Smith, "Complications of the Commonplace: Tea, Sugar, and Imperialism," The Journal of Interdisciplinary History 23 (1992): 261, 264, and Smith, Consumption and the Making of Respectability, 2-4, 9. See also James Walvin, Fruits of Empire: Exotic Produce and British Taste (New York, 1997), who argues that a taste for sugar was promoted by "commercial interests" and spread by "the contagion of social usage" or "emulation" (196). Mintz also acknowledges the importance of sugar's drug-like qualities, particularly in his later work, but implies that social structures and cultural preferences better explain the spread of sugar. See Sidney W. Mintz, "The Changing Roles of Food in the Study of Consumption," in Consumption and the World of Goods, 269–272. For a broader critique of the "emulation" model of consumption, see Jon Stobart's discussion of "utility," or comfort and pleasure, as an explanation for increasing consumption, particularly of groceries. Jon Stobart, Sugar and Spice: Grocers and Groceries in Provincial England, 1650-1830 (Oxford, 2013), 5-11. My summary here is limited, and I do not mean to undervalue the important contributions of Mintz, Smith, and others to our understanding of early modern consumerism, nor do I intend to conflate the nuanced work of various different scholars.

²¹Colin Campbell, "Understanding Traditional and Modern Patterns of Consumption in Eighteenth-Century England: A Character-Action Approach," in *Consumption and the World of Goods*, 40–43; see his extensive version of this argument in Colin Campbell, *The Romantic Ethic and the Spirit of Modern Consumerism* (Oxford, 1987). Campbell is part of a larger trend; countering simplistic assumptions about the process of social emulation, scholars have moved toward the psychological underpinnings of culture, exploring how ideas, needs, and identities come to be bound up in material objects. Further, an overemphasis on the social meanings attached to objects and experiences can obscure the ways in which humans respond physically to the material world across cultures. Variations in culture, in material circumstances, and in personality, for example, affect how and to what extent people prioritize sugar consumption. But it is important to recognize that the culturally dependent aspects of sugar consumption are not wholly explicative in themselves, and can result in distortions in the history of English sugar consumption, derived in part from misconceptions of how people interact with sugar as a commodity.²²

My research indicates that factors such as lower prices, greater availability, or social change do little to explain sugar's popularity in England before the development of the English sugar colonies, when prices remained high (though not prohibitively so) and work rhythms traditional. When Barbadian planters turned to sugar in the 1640s, with extraordinary success, English work patterns and social mores were not undergoing any radical transformation. This is not to say that lower prices and increased supply did not increase consumption of sugar they did—but they did not comprise the basis for that consumption. While the sugar–slave complex did buttress the rise of capitalism—in particular, sugar's narrow cultivation zone and its capital-intensive processing characteristics encouraged trade and market production of all kinds of surplus commodities, and the wealth it generated fostered

²²For an explicit analysis of the role of evolutionary psychology in explaining consumer behavior, see Gad Saad, The Consuming Instinct: What Juicy Burgers, Ferraris, Pornography, and Gift Giving Reveal About Human Nature (New York, 2011). He argues that there are only a few human instincts that are strong enough to explain consumer behavior patterns. See also Bruce G. Trigger, "Early Native North American Responses to European Contact: Romantic Versus Rationalist Interpretations," The Journal of American History 77 (1991): 1197-1198. Trigger posits a universal "rationalist" human approach to consumption that transcends culture. Of course, even those scholars that emphasize biology over culture concede that there are an infinite number of distinct cultural manifestations of these universal drives, and that culture, as well as differing material environments, affect how people prioritize wants and needs. In particular, scholars have focused on the question of whether material abundance strongly affects the power of certain drives. For example, we might ask: Is sensory pleasure a more important motivation for consumption for those who have to worry whether they have access to material goods, and therefore do not take those material aspects for granted? See the analysis of cultural capital in Douglas Holt, "Does Cultural Capital Structure American Consumption?" Journal of Consumer Research (1988): 1-25. He argues that in the era of mass consumption, the affluent focus on "metaphysical" or "idealistic" meanings of objects as a way of differentiating themselves and claiming status. Colin Campbell makes a similar argument ("Consuming Goods and the Good of Consuming," Critical Review 8 (1994): 503–520) by differentiating "traditional" societies in which the drive for sensory pleasure can be satisfied from "modern" societies in which pleasure is an emotional ideal that can never be realized. Jean Baudrillard comes down much more firmly on the side of culture, arguing that concepts of "scarcity," "abundance," and "primary" or "minimum" are misleading, as within any society all basic or individual desires are culturally determined, even-for example-what constitutes hunger. Jean Baudrillard, "La Genese Ideologique des Besoins," Cahiers Internationaux de Sociologie 47 (1969): 45-68.

capital accumulation and expanded the slave trade—people did not become habituated to sugar because of the cultural and economic changes brought by capitalism. I argue that the sequence was quite the reverse: it was sugar dependency that fostered capitalistic behaviors. In his analysis of consumer theory, De Vries concludes that the desire for physical comforts and pleasures can be satiated, while the yearning for social comforts and socioemotional pleasures (often cast as the relief of modern boredom) has no limit.²³ In the case of chemical substances that exert physiological effects, however, the distinction may not be as significant, at least for the early modern world.²⁴ Historians usually assume some degree of innate "liking" of sugar, which would predispose people to react positively to sugar but only to consume it if market forces were favorable. In fact, it is likely that the biochemical craving for sugar is powerful enough to induce a society to build an empire in order to obtain a supply.²⁵

The overcharacterization of sugar consumption as a cultural phenomenon has led to the following mis-periodization. A typical food history introduces sugar into Europe through "spectacular banquets organized by and for the upper classes" of the Renaissance, then takes a quick leap of two hundred years to late seventeenth-century English and French Caribbean sugar plantations whose product is alleged to explain the eighteenth-century culture of tea and dessert courses. Finally, the standard narrative reveals the extensive influence of Mintz's work, concluding, for instance, that "starting in the nineteenth century, sugar

 23 De Vries, *The Industrious Revolution*, 52. De Vries's implication is the industrious revolution was a cultural and emotional one, an "innovation ... linking ... fashion and taste ... to modernity."

²⁴Works that address some aspect of other early modern "drug" foods include Ross W. Jamieson, "The Essence of Commodification: Caffeine Dependencies in the Early Modern World," *Journal of Social History* 35 (2001): 269–294; William Jankowiak and Daniel Bradburd, *Drugs, Labor, and Colonial Expansion* (Tucson, 2003); Woodruff D. Smith, "From Coffeehouse to Parlour: The Consumption of Coffee, Tea, and Sugar in North-western Europe in the Seventeenth and Eighteenth Centuries"; Jordan Goodman, "Excitantia: Or, How Enlightenment Europe Took to Soft Drugs, ed. Jordan Goodman, Paul E. Lovejoy, and Andrew Sheratt (New York, 2007); and Bennett Alan Weinberg and Bonnie K. Bealer, *The World of Caffeine: The Science and Culture of the World's Most Popular Drug* (New York, 2001). See also Brian Cowan, *The Social Life of Coffee: The Emergence of the British Coffeehouse* (New Haven, 2005); Marcy Norton, *Sacred Gifts, Profane Pleasures: A History of Tobacco and Chocolate in the Atlantic World* (Ithaca, 2008).

²⁵Historians of sugar consumption often fail to distinguish whether they are assuming a "liking" manipulated by culture and then satisfied through the machinations of impersonal markets, or a "craving" that drove the emergence of those markets and shaped cultural expression. As discussed earlier, most historians emphasize social structures and culture as factors in the expansion of the sugar market. This neglects the point that "biochemistry underlies [eating], not determining the outcome, but affecting the flexibility of the responses." Helen Macbeth and Sue Lawdry, "Food Preferences and Taste: An Introduction," in *Food Preferences and Taste: Continuity and Change*, ed. Helen Macbeth (Providence, 1997), 5.

became available to the masses, assuming for example a fundamental role in the nutritional patterns of British industrial workers."²⁶ Such a summary overlooks the impact of the sizable sixteenth-century and early seventeenth-century Mediterranean sugar industry, misrepresents the extent to which sugar was woven into English foodways by 1600, and is misleading in its portrayal of cause and effect. Indeed, though historians situate the Barbadian "sugar revolution" in the seventeenth century, one could argue that the revolution began for the English as soon as they encountered the commodity some six hundred years earlier through incursions into the Middle East.²⁷

Significantly for the course of European imperialism, structural obstacles constrained this late medieval "sugar revolution," preventing sugar production and consumption from passing certain levels in Europe and its periphery, despite strong demand. These obstacles included the semi-tropical Mediterranean climate, which was not reliably warm enough to ensure a good crop; deforestation and decreased soil fertility, which reduced the amount of fuel, water, and land available for production; and disruptions in the labor supply, as plagues and migrations made plantations overdependent on the local slave market.

The cap on production, and therefore consumption, was broken with the colonization of the Americas in the sixteenth century. Beginning in the Spanish Caribbean, and then much more extensively in Portuguese Brazil, sugar production exploded as the constraints of climate, land, and labor were erased. On Hispaniola and other Spanish Caribbean islands, a mix of free and slave labor increasingly gave way to African slavery over the course of the sixteenth century as the native population diminished. Sixteenth-century sugar production in the

²⁷ It was through the Crusades, around the year AD 1000, that large numbers of Europeans were first exposed to the sugar fields of Crete, Sicily, Lebanon, and Egypt. Europeans rapidly began both trading for larger amounts of sugar and growing it themselves on their newly conquered lands in the Mediterranean as well as on the Iberian peninsula. By the fifteenth century, merchants and entrepreneurs had established the crop on the Atlantic islands of Madeira, the Canaries, and Sao Tome. Alfred W. Crosby, *Ecological Imperialism: The Biological Expansion of Europe, 900–1900* (Cambridge, UK, 1986), 77; David Mancall, *Deadly Medicine: Indians and Alcohol in Early America* (Ithaca, 1995), 31–32. Most of the technology and processing techniques that would be used in the vastly expanded production of New World sugar were developed during medieval times on these Mediterranean and Atlantic island plantations, including animal and water power and purification processes that produced distinct grades of sugar. Michael Krondl, *Sweet Invention: A History of Dessert* (Chicago, 2011), 88–89.

²⁶ Fabio Parasecoli, "Food and Popular Culture," in *Food in Time and Place: The American Historical Association Companion to Food History*, ed. Paul Freedman, Joyce E. Chaplin, and Ken Albala (Oakland, 2014), 329; this example is typical of food histories. Mintz himself is often vague on periodization but overemphasizes the causal role of the English sugar plantations, stating that their establishment resulted in "the insertion of an essentially new product within popular European tastes and preferences." Mintz, *Sweetness and Power*, 37–38.

Caribbean was marked by sophisticated technology (including animaland water-powered roller mills); large plantations worked by hundreds of slaves; and vertical integration incorporating the processing of sugarcane into sugar, molasses, and rum into the work of the plantation. Brazilians also made important technological improvements in the extraction process that significantly increased production. Sugar refineries emerged in urban areas in Europe, as fuel for processing was scarce in sugar-producing areas. Cities in Italy and the Netherlands were important refining centers as well as sources of capital and trade.

English sugar consumers were highly dependent on these Brazilian plantations, as they had been on those of the Mediterranean and Atlantic islands. Imperial rivalries, however, prevented a truly open market for sugar; imperial politics and war presented the second early modern constraint on English sugar consumption through the mid-seventeenth century, until England developed its own sugar plantations in the Caribbean. Portuguese and Dutch Brazil did export significant amounts of sugar to Europe during this period, and sugar consumption continued to grow. But the Portuguese and the Dutch vied for control over the sugar trade between Brazil and Europe in the early seventeenth century, and most Brazilian sugar continued to be funneled through Portugal. As hostilities turned to war in the 1620s, the sugar trade was severely affected. It was not until the mid-1630s that the Dutch established control over part of Brazil's sugar region, and with it the sugar trade; but the subsequent expulsion of the Dutch from Brazil in 1646 pushed up sugar prices through the 1650s.

Twin Colonies and the North American Sugar-Slave Complex

In the sixteenth century, the plantations of the Americas built on and expanded the English market for sugar, but could not satiate it. Production increased enough so that sugar became a well-known and sought after commodity by a large segment of the English population, yet demand continued to outstrip supply. This dynamic helps explain the course of English imperialism. Beginning in the 1640s in Barbados, a tidal wave of sugar production swept through the new English (and French) Caribbean colonies, aided by the Dutch fleeing Brazil and bringing with them slaves, agricultural expertise, plantation management techniques, and perhaps capital. English Barbados, Jamaica, Nevis, Montserrat, and Antigua, along with French Martinique and Guadeloupe, all became immensely successful sugar producers in the seventeenth century. These sugar regions were the greatest supporters of the slave trade to the New World, both because of the dominance of sugar as a colonial commodity and because the brutal nature of the sugar industry required a continual influx of slaves. This forced "migration" of enslaved labor is commonly understood to be "inextricably linked" to "consumer tastes" for sugar, among other commodities.²⁸ The incredible, seemingly bottomless demand for sugar made it the primary engine of the English shipping industry and English colonial growth in the seventeenth century, igniting the English and Atlantic economies.²⁹ By 1701, sugar made up an impressive 57 percent of the value of colonial products imported into England.³⁰

Barbados remained the primary producer of sugar in the Caribbean during this early period; because of geographic and political obstacles, sugar did not become a major crop on other islands in the region until the 1670s. Before the emergence of Barbados as a center of sugar production, the Portuguese had produced most of the Western world's sugar on the northeast coast of Brazil.³¹ Barbados, joined in the last quarter of the century by Jamaica and the other English islands, overtook Brazil by 1700, and by this year almost half of the sugar consumed in Western Europe came from the English Caribbean.³² Spanish and Portuguese possessions in the New World did produce

²⁸Alison Games, "Migrations and Frontiers," in *The Atlantic World*, *1450–2000*, ed. Toyin Falola and Kevin D. Roberts (Bloomington, 2008), 45, 47, 50, 55. As Timothy Buckner observes in the same volume, "Demand for sugar, and the profits created by that demand, massively increased the volume of the Atlantic slave trade." Buckner, "The Slave Trade's Apex in the Eighteenth Century," in *The Atlantic World*, 103.

²⁹The question of the extent to which sugar changed the course of Caribbean, Atlantic, and indeed world history is a subject of much contention. For several decades, historians operated under the assumption that sugar ushered in a "revolution" in plantation agriculture in the West Indies, because previous crops neither generated as much profit nor cultivated as great a volume of slave-produced goods. Recently, Russell Menard, among others, has convincingly shown that the rise of sugar in the mid-seventeenth century should rightly be understood as a "boom" rather than as a revolution. Sugar, though particularly well suited to large-scale operations, vertical integration, and brutal slave regimes, arose in the context of a Caribbean economy already successfully planting and trading tobacco, cotton, and indigo in the first half of the seventeenth century. This story of the rapid and spectacularly successful conversion to sugar monoculture on Barbados from 1640 to 1660, replicated repeatedly elsewhere in the Caribbean, is known in the historiography as the "sugar revolution," implying that sugar was responsible for the dominance of slavery and plantation agriculture in the region for the next two hundred years. Classic works describing this transition are Richard S. Dunn, Sugar and Slaves: The Rise of the Planter Class in the English West Indies, 1624-1713 (Chapel Hill, 1972); Carl Bridenbaugh and Roberta Bridenbaugh, No Peace Beyond the Line: The English in the Caribbean, 1624–1690 (New York, 1972); Gary A. Puckrein, Little England: Plantation Society and Anglo-Barbadian Politics, 1627-1700 (New York, 1984). Russell Menard argues that the sugar "boom" in the 1640s built on a cotton "boom" in the 1630s, when Barbadian planters were renowned for their high-quality cotton. Russell R. Menard, Sweet Negotiations: Sugar, Slavery, and Plantation Agriculture on Early Barbados (Charlottesville, 2006), 23.

³⁰Larry Gragg, Englishmen Transplanted: The English Colonization of Barbados, 1627–1660 (Oxford, 2003), 106–107.

³¹For the Brazilian sugar industry, see Bridenbaugh and Bridenbaugh, *No Peace Beyond the Line*, chap. 3.

³²Dunn, Sugar and Slaves, 18–21, 48, 117.

considerable amounts of sugar in some areas, but England, New England, and the rest of the North American colonies traded very little with these Iberian colonies, owing to English mercantilism and Spanish hostility.³³

Slavery had existed on Barbados from the first days of settlementamong the first English group to land on Barbados were thirty-two Indians from Surinam and ten Africans, all of whom were enslaved. It was not until sugar cultivation began in the early 1640s, however, that Barbadian planters invested heavily in slaves.³⁴ In 1636, the Barbadian government confirmed that slavery was a lifetime condition. English indentured servants flocked to Barbados through the 1640s and 1650s (though a small number were kidnapped there, or "barbadosed"), where they worked in the fields and the mills alongside slaves. But servants often rebelled and were usually unwilling to labor for others past their term of indenture, and they were increasingly reluctant to commit to indenture at all in an industry with harsh working conditions and few prospects for ownership for those with little capital. The considerable cost savings of using slaves to avoid the high wages that otherwise would have been necessary to attract laborers to such punishing work, combined with the historical precedent of using slaves in sugar production, resulted in a rapid transition to slavery on Barbados once sugar had taken hold. Slavery allowed for significantly higher levels of sugar production, consumption, and wealth than would otherwise have been possible.³⁵ By the 1660s, most of Barbados's labor force was probably enslaved. There were six thousand African slaves on Barbados in 1643, and they were, in the words of one visitor, "the life of this place"; by 1650 there were thirteen thousand, and by 1660 they constituted a majority of the population.³⁶

In the early 1640s, with England embroiled in civil war, New Englanders began to establish independent trade networks throughout the Atlantic world. New England's shipping and finance industries would grow dramatically over the next few decades.³⁷ Massachusetts lawmakers tempered their suspicion of "shopkeeping" with legislation that secured access to "such forraine comodities as wee stand in need of." This they mainly did by promoting and protecting

³⁷Bernard Bailyn, *New England Merchants in the Seventeenth Century* (Cambridge, MA, 1955), 83–86.

 ³³ John J. McCusker, Rum and the American Revolution, Vol. 1 (New York, 1989), 106.
³⁴ Gragg, Englishmen Transplanted, 119.

³⁵David W. Galenson, Traders, Planters, and Slaves: Market Behavior in Early English America (Cambridge, 1986), 7–13, 153.

³⁶ Dunn, Sugar and Slaves, 67–74, 226–228; Menard, Sweet Negotiations, 31–47; George Downing to John Winthrop Jr., Aug. 1645, 5:44, Winthrop Family Papers, Massachusetts Historical Society, Boston, MA.

potential domestic export industries, such as wheat in 1641 and pipe staves in 1646, and by investing heavily in trade themselves.³⁸ The Navigation Act of 1651, which forbade Barbadians to trade with their longstanding merchant partners, the Dutch, left planters casting about for investors to buy their sugar and sell them supplies. New Englanders moved quickly into this vacuum. By 1660, to the growing alarm of English officials, New England was "the Key of the Indies, without which Jamaica, Barbados, & the Carybee Islands are not able to subsist."³⁹ By the 1670s, New England ships accounted for almost half of the trade with the West Indies, with the majority of New England ships originating in Boston. Between 1678 and 1684, more ships (for which there are records) arrived in Nevis, St. Christopher, and Montserrat from Boston (seventy-seven ships) than from London (sixty-four ships).

By the 1680s, over half of ships entering and leaving Boston were engaged in trade with the West Indies.⁴⁰ In 1676, English customs official Edward Randolph was forced to report that "Boston may be esteemed the mart town of the West-Indies," providing the islands with essential supplies to feed the industrial sugar economy.⁴¹ Another observer similarly termed Barbados a "mart," noting that as New England was to the North American colonies, "Barbados is the Crown and Front of all the Caribbee Islands ... [t]he greatest mart of trade ... of any island in the West Indies."⁴² Indeed, Boston and Barbados functioned as sister communities, both serving as the economic heart of a large English territory and becoming increasingly interconnected in numerous ways.

In 1667, an imperial report noted New England's "great trade to Barbadoes with fish and other provisions," and a common observation of visitors to the West Indies was that "at Barbadoes they buy much Beef and Meal, and Pease, and Fish from New England." New England was the greatest supplier of corn and meat, the sole supplier of fish and wood products, and an important supplier of horses for the mills of the island.⁴³ The Barbadian climate and sugar monoculture limited food

³⁸Nathaniel B. Shurtleff, Records of the Governor and Company of the Massachusetts Bay in New England (Boston, 1853), 1:337, 2:169.

³⁹ "Captain Thomas Breedon to the Council for Foreign Plantations, March 11, 1661," in *Collections of the New York Historical Society for the Year 1869* (New York, 1870), 18.

⁴⁰Dunn, *Sugar and Slaves*, 210, 336. Somewhat more ships came from English ports overall (139) than from all New England ports (107).

⁴¹Edward Randolph, Edward Randolph; Including his Letters and Official Papers... (Boston, 1898), 2:249.

⁴²Major John Scott, "The Description of Barbados (1677)," in *Some Early Barbadian History*, ed. P. F. Campbell (Barbados, 1993), 246.

⁴³ "Notes Relating to America," in Calendar of State Papers, Colonial Series, American and West Indies, 1661–1668, ed. William Noel Sainsbury (London, 1880), 532; "A Description of the Province of New Albion, 1648," in Tracts and Other Papers, Relating Principally to the

production; planters depended on New England's salt beef and pork, and their slaves survived on New England's refuse fish.⁴⁴ As a visitor to Barbados noted in 1654, "there is no nation which feeds its slaves as badly as the English."⁴⁵ In 1648, merchant John Pease's shipload of over a thousand pounds of fish sailed from Boston, but "[w]hen this fish came to Barbados it proved wast by the sea wett in the voyage," with four hundred pounds of it compromised.⁴⁶ No doubt this spoiled fish ended up as slave rations.

Beginning in the 1640s, wood from New England's vast forests allowed Barbadian planters to build homes and production facilities, fuel the boiling houses, and package their sugar into barrels. Large commercial farms in New England, particularly in the Connecticut River Valley and in Rhode Island, produced horses and cattle for export to the islands to power the mills and work the fields. Many small family farms, too, invested in a few extra animals a year to sell for export to the West Indies.⁴⁷ If nearby New England had not worked so assiduously to gather, cultivate, and export these production inputs, Barbados's sugar production levels would have almost certainly been lower. Planters would have been forced to devote some resources to local food production and to pay more for a less reliable supply of power and materials.

Sugar Products in the Early New England Economy

It was not only New England supplies but also New England demand that nurtured the nascent sugar industry in the West Indies.⁴⁸ Few historians have examined New England's importance as a consumer

Origin, Settlement, and Progress of the Colonies in North America..., ed. Peter Force (Gloucester, 1963), 2:5; Vincent T. Harlow, A History of Barbados: 1625–1685 (New York, 1926), 290.

⁴⁴ Dunn, *Sugar and Slaves*, 210, 275–276; the imperial report cited that of all the fish that New Englanders traded, they sent "the worst to Barbadoes." See: "Notes Relating to America," in *Calendar of State Papers*.

⁴⁵Jerome S. Handler, "Father Antoine Biet's Visit to Barbados in 1654," *The Journal of the Barbados Museum and Historical Society* 32 (1965-66): 56-69.

⁴⁶A Volume Relating to the Early History of Boston Containing the Aspinwall Notarial Records from 1644 to 1651 (Boston, 1903), 140.

⁴⁷Daniel A. Romani Jr., "The Pettaquamscut Purchase of 1657/58 and the Establishment of a Commercial Livestock Industry in Rhode Island," in *New England's Creatures: 1400–1900*, ed. Peter Benes (Boston University, The Dublin Seminar for New England Folklife Annual Proceedings, 1993), 45–60; Menard, *Sweet Negotiations*, 110; Bailyn, *New England Merchants*, 89, 100; see also my analysis of Connecticut farmer Thomas Minor's account books in note 128.

⁴⁸Historians have emphasized the role of the Dutch, and more recently the English merchant investors. Dunn, *Sugar and Slaves*, 59–67, 201; Menard, *Sweet Negotiations*, 49–61.

base for sugar products during this formative period. The lack of surviving records from the years before 1688 makes it impossible to quantify the importance of the North American market for sugar products during the first few decades of English West Indies sugar production, but data from the end of the seventeenth century suggests that New England was a key partner for Barbadian sugar planters, both as consumers and as shippers of the island's produce to the rest of the North American colonies. David Eltis has compiled the most extensive statistics on Barbados's exports. He finds that between 1699 and 1701, 9 percent of Barbados's exports by value went to New England. During the tumultuous decade of the Nine Years' War, beginning in 1688, with Atlantic trade networks disrupted, New Englanders bought more than a fifth of Barbados exports by value.⁴⁹

These numbers seem modest, but their limit to the years after 1688, presentation in value instead of volume, and the lack of differentiation between types of sugar products obscure the fact that New England was an important market for molasses and rum in the first decades of sugar production, when planters were figuring out how to make their operations profitable. In fact, New Englanders, in combination with other North American colonists, were likely buying the majority of Barbados's exports by volume, in lower value molasses and rum. The proportion of Barbados's sugar exports to the island's rum and molasses exports changed radically between 1660 and 1700, with these sugar by-products increasing significantly in economic importance over the second half of the seventeenth century. Eltis asserts: "After the 1660s, rum and molasses emerged as leading products in Barbados; exports of rum rose five times and of molasses ten times during the years to 1700, compared to only a one-fifth increase in muscovado exports."⁵⁰

In the seventeenth century, there was a "distinct lack of any market" for molasses in England; John McCusker finds that the English of the mother country consumed at least twenty-five times more sugar than molasses in 1697. As for rum, in 1697 England imported a grand total of 38 gallons of it from Barbados.⁵¹ It is challenging to find a "typical" year

49 Eltis, "New Estimates," 644-645 and Tables I-V.

⁵¹John J. McCusker, in his massive study of the colonial Atlantic market for sugar, rum, and molasses, largely neglects imports into New England and the North American colonies. He does, however, note the lack of a market for rum and molasses in England. McCusker, *Rum*, 2:891, 930, 974, 1064. Carole Shammas reports similar findings. Shammas, "Changes in English and Anglo-American Consumption from 1550 to 1800," in *Consumption and the*

⁵⁰Eltis, 644–645 and Tables I-V. As Eltis points out, it is difficult to make conclusive statements about seventeenth-century West Indies sugar product exports because records were not always kept; few of those that were kept before 1670 survive; and measures of prices and weights were variable, making comparisons between sets of records difficult. See also A. P. Thornton, "Some Statistics of West Indian Produce, 1660–1685," *Caribbean Historical Review* 4 (1954): 251–180.

from the late seventeenth century, given the near constant disruption of trade by warfare; but, in 1688, the first year for which Eltis has statistics, it is startling to realize that North America took in close to half (43 percent) of Barbadian sugar products to England's 57 percent (by value). New Englanders alone took 21 percent, and are likely responsible for shipping most of the rest up and down the North American seaboard. And considering that almost all of the island's molasses and rum probably went to North America during this period, the majority of barrels leaving Barbados's ports were headed for fellow English colonies rather than for England. New Englanders were likely by far the most enthusiastic Atlantic consumers of molasses and rum, and finding a market for these new consumer goods was an important support for sugar planters. This demand, combined with the region's role as a supplier of production inputs and raw materials, establishes New England as an essential contributor to Barbados's sugar economy. In this way, sugar products were at the forefront of New England's "industrious revolution," such consumers fostered slave societies in the seventeenth century by furnishing the market for sugar plantations' products.

"To Procure Our Necessaries"

Arriving in Barbados in 1645, George Downing wrote to his cousin John Winthrop Jr. that sugar planters had "bought this yeare no lesse than a thousand Negroes; and the more they buie, the better they are able to buye, for in a yeare and halfe they will earne (with gods blessing) as much as they cost."⁵² Why were Barbadian slaves able to "earne" so much for their masters and for all those connected to the Atlantic market; that is, almost everyone, so quickly?

As outlined above, it was the long-awakened desire for sugar, among other tropical commodities, that lay at the core of the slave system. Our growing understanding, as one historian puts it, that "enslavement occurred at the hands of multiple actors," has focused mainly on New England suppliers of investment, shipping, and raw materials to the West Indies.⁵³ I now turn to exploring why and how almost all New Englanders allocated their resources to ensure they could

World of Goods, 182–183. See also Gilman M. Ostrander, "The Colonial Molasses Trade," *Agricultural History* 30 (Apr. 1956): 77–84. The seventeenth century marked the height of the New England market's importance to Barbados. By the mid-eighteenth century, the English islands were distilling their molasses into rum, which did eventually become more popular in England, and New England began smuggling in massive amounts of foreign molasses for their tables and distilleries.

⁵²Sir George Downing to John Winthrop Jr., 26. Aug. 1645, 5:43, Winthrop Papers.

⁵³Wendy Warren, New England Bound: Slavery and Colonization in Early America (New York, 2016), 81.

afford a store of sugar in their larders, as well as enthusiastically accepting the commodity as currency in the complex system of credit that was the foundation of the Massachusetts Bay economy.

The merchant families of Barbados and New England, recognizing the vital role that New England could play in supplying sugar plantations with food, wood products, animals, and other inputs, took advantage of the allure of sugar consumption to draw New Englanders into commercial engagement with the Atlantic economy. As the seventeenth century wore on, more and more ships ventured from New England ports laden with raw materials, often returning to Salem and Boston with holds full of sugar products in a variety of stages of processing, to be distributed not only in urban areas but also throughout the countryside. Sugar, molasses, and rum were considered essential consumer goods in all New England households, and thus took on the role of dependable forms of currency and credit. The hundreds and thousands of pounds of sugar that the richest merchants maintained in their portside warehouses and sold on the international market were only one part of the story of the sugar trade. For all citizens of Massachusetts Bay, merchants, small shopkeepers, artisans, and farmers, sugar consumption played a part in their economic decision making, and all of these actors contributed to the sugar economy.

It is a commonplace among historians that seventeenth-century New Englanders enjoyed enviable good health. A consistently plentiful and nutritious diet, along with the prioritization of such beneficial social mores as self-control and cooperation over the pursuit of individual gain, led to impressive longevity in the region, even though New Englanders had limited access to the latest technologies, medicines, and consumer goods of England and Europe. But were these self-proclaimed communitarians as immune to the attraction of consumer goods, and the markets that such goods created, as their rhetoric suggests? From his observations of New Englanders in the 1660s, traveler John Josselvn noted: "Men and Women keep their complexions, but lose their Teeth; the Women are pittifully Tooth-shaken; whether through the coldness of the climate, or by sweet-meats of which they have store."54 The weather was an unlikely culprit for dental maladies, tending rather to preserve New Englanders from disease; but the "store" of sugary foods that they came to depend on had far-reaching implications not only for their health but also for their culture and economy.

That sugar products were flowing into New England markets from the beginning of English sugar production in the Caribbean, and the

⁵⁴ Paul J. Lindholdt, ed., John Josselyn, Colonial Traveler: A Critical Edition of Two Voyages to New-England (Hanover, 1988), 128.

significance of that fact for understanding colonial economic behavior and power structures, is not something that historians have fully considered for this time period. In 1650, the Massachusetts General Court wrote to England, "Wee formerly have procured Clothing and other necessaries for our families by means of some Traffique in bothe Barbadoes and some other places," emphasizing the colony's dependence on the Atlantic market.55 These "necessaries" that motivated commercial production are universally assumed by historians to be English manufactures, even though during this period the word was most often used to mean the imported salt, sugar, and spices considered essential for a decent quality of life, as Sarah McMahon notes in her examination of widows' allowances in the Massachusetts probate record.⁵⁶ This assumption that European products were the only significant consumer goods imported into New England underlies the tidy description usually offered of how the merchants of Massachusetts Bay prospered: by selling raw materials native to New England in Barbados and then taking the money, credit, or sugar products to England or English creditors to obtain English manufactures to in turn sell to the producers of New England. The reality was messier. Sugar product consumption in New England, along with the direct involvement of New Englanders in sugar production on Barbados, was an integral component of the convoluted system of trade in the seventeenth-century Atlantic world.

Supply-Side Explanations for Sugar Consumption

When John Josselyn wrote his account of his voyages to New England in 1674, he included a long list of supplies for the "intending planter" setting out for Massachusetts Bay, who would be expected to bring enough "victuals" to last his family through the voyage and the first year of settlement. He recommended that the dietary staples of grains, legumes, and oil be "carried out of England," despite the expense of shipping them. But, as for "your Sugar," he advised, "your best way is to buy your Sugar there, for it is cheapest."⁵⁷ This observation underscores the high traffic in sugar between New England and the West Indies, and the competitive advantage of New England's investors and sea captains in being a nearby provider of desperately needed raw materials to the islands.

⁵⁵Quoted in Darrett B. Rutman, "Governor Winthrop's Garden Crop: The Significance of Agriculture in the Early Commerce of Massachusetts Bay," *The William and Mary Quarterly* 20 (July 1963): 412.

⁵⁶McMahon, "Comfortable Subsistence."

⁵⁷ Lindholt, John Josselyn, 15.

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However, it would be a mistake to assume that the popularity of sugar products in New England was a mere outgrowth of its "cheapness" relative to its cost in Europe. One reason it is important to recognize the role of New Englanders in colonizing Barbados, and in creating a market for the island's sugar products across New England and the Atlantic world, is that historians have almost universally attributed the growth of the sugar industry and consumer market in the seventeenth century to a straightforward fall in cost. This supposition is to some extent accurate. Indeed, a contemporaneous commentator noted that "what extraordinary advantages accrue to the Inhabitants of that Island [Barbados] by means of this sweet and precious Commodity, and what satisfaction it brings to their Correspondents in other parts of the world, who have it at so easie rates."58 From 1650 to 1700, retail sugar prices in London fell 50 percent. The introduction of slave labor, improvements in shipping, lower interest rates for capital purchases and improvements, vertical integration, and small energy and technology innovations all increased efficiency. Added to this productivity was the enumeration of sugar in the Navigation Acts of 1660 and 1663, which rendered Europe off-limits to English sugar planters and thus flooded the English Atlantic market with English West Indian sugar. The resulting dip in sugar prices pushed planters to increase production even more and made sugar ever cheaper and more available to English and colonial consumers, who eagerly took advantage of this shift.59

Yet the high elasticity of the demand for sugar—the market's responsiveness to price decreases—was but one aspect of the commodity's enormous growth. It does not in itself explain the rise of the seventeenth-century sugar industry and the trade networks and settlement patterns that supported it. English demand for sugar long predated high production and low prices. Barbadians themselves were importing sugar before its settlers learned how to grow it. When Barbadian settler Thomas Verney wrote to his parents in 1639 asking them to send him essential supplies, he included a request for "tenn pound of suger," a commodity to which he and his fellow planters were already habituated.⁶⁰ And at least before 1655, the English demand for sugar, both in the mother country and its colonies, was in no way the result of falling prices. English colonists, including New Englanders,

⁶⁰Thomas Verney to Edmund Verney, 10 Feb. 1639, in *Letters and Papers of the Verney Family*, ed. John Bruce (London, 1853), 196.

⁵⁸John Davies, *History of the Caribby-Islands* (London, 1666), 196.

⁵⁹Russell R. Menard, "Plantation Empire: How Sugar and Tobacco Planters Built Their Industries and Raised an Empire," *Agricultural History* 81 (July 2007): 317; Menard, *Sweet Negotiations*; Charles M. Andrews, *The Colonial Period of American History: England's Commercial and Colonial Policy* (New Haven, 1964), 4:88.

launched the sugar industry on Barbados as world sugar prices were about to rise, and built it up with prices remaining high—sugar prices rose between 1646 and 1654 because of the enormous disruption in Brazilian sugar production caused by the Dutch invasion of the region.⁶¹ Nor were high prices in themselves what motivated English settlers to shift to planting sugar in Barbados 1640 and 1643, when the switch to sugar occurred, sugar prices actually fell by a third.⁶²

In short, despite short-term variability, sugar prices in England and the American colonies did not change dramatically before 1660. Before the rise of the English sugar industry on Barbados, sugar cost about 1s. 2d. a pound in England and the North American colonies; after the sugar plantations were well established, by the end of the 1640s, prices fell to about 8d. a pound. My analysis of colonial account books indicates that prices fluctuated along this 6d. gap throughout the 1650s, even while demand remained strong—and growing—for sugar, and increasingly for molasses and rum.

Thus, attributing demand simply to such structural factors as price or the availability of labor obscures the underlying reason for the success of the sugar–slave complex: the interest of a network of English colonists in securing a source of sugar products. This interest was so deeply embedded in the colonists' foodways that it altered the trajectory of the Atlantic economy. Of course, it is impossible to untangle the taste for sugar from the drive for power. Since the English desire for sugar was so strong, whoever had a hand in controlling the production and distribution of the commodity would have global influence. This fact was hardly lost on all colonial actors, from the imperial government to the New England puritan elite to the tens of thousands of settlers that ate, bought, sold, traded, and processed West Indies sugar.

Assessing Sugar Product Consumption in Early New England

By 1650, the three thousand settler families of Massachusetts Bay about fifteen thousand people—had begun to produce foodstuffs and other raw materials for export.⁶³ The need to afford imports,

⁶¹Robert C. Batie, "Why Sugar? Economic Cycles and the Changing of Staples on the English and French Antilles, 1624–54," *Journal of Caribbean History* 8 (1976): 19; Larry Gragg, *Englishmen Transplanted: The English Colonization of Barbados, 1627–1660* (Oxford, 2003), 98–99.

⁶² William A. Green, "Supply vs. Demand in the Barbadian Sugar Revolution," *Journal of Interdisciplinary History* 18 (Winter 1988): 403–418.

⁶³David Cressy, Coming Over: Migration and Communication Between England and New England in the Seventeenth Century (Cambridge, 1987), 69–71; Virginia DeJohn Anderson, New England's Generation: The Great Migration and the Formation of Society and Culture in the Seventeenth Century (Cambridge, 1991), chap. 4.

necessitating the production of market commodities for export, drew individuals, families, towns, and the entire region into a commercial economy. Thus arose a multifaceted economic system, directed at assembling commodities from across the countryside for export and distributing imported goods to the colonists now able to purchase them with their labor, skilled craft production, or surplus agricultural products. The economy of Massachusetts Bay was arguably the most complex of all the northern Atlantic English colonies in the seventeenth century. Capital accumulation, labor organization, financial services, shipping industries, and reliable distribution networks were all phenomena that emerged as a result of the consumer interests of English settlers.⁶⁴

Historians have exclusively focused on English manufactures as the central component of this consumer economy. But sugar products were also significant. A close examination of merchants' account books and other sources reveal that the majority of consumers consistently purchased sugar in modest amounts in the 1650s; then, between 1657 and 1663, sugar, molasses, and rum rapidly became items of mass consumption for a large sector of the population. A key expansion in Massachusetts sugar, molasses, and rum consumption took place between 1650 and 1670, as merchants and retailers, driven by the popularity of sugar among English settlers, and working in concert with relatives and friends developing sugar plantations on Barbados, supplied local markets with the island's sugar. Sugar consumption was one of the few puritan material indulgences. Rather than condemned as a crippling dependency or worldly luxury, sugar was recognized as a "necessary."

Until now, no historian has attempted an estimate of sugar product consumption in New England in the seventeenth century. Carole Shammas, the foremost historian of early English and American consumption, attests that "the year by year trend in the consumption of sugar products by Americans is not known."⁶⁵ Similarly, historians have paid little attention to the details of seventeenth-century rum consumption. Scholars of the eighteenth century have found New Englanders' molasses and rum consumption simply astounding, a social phenomenon as well as an important economic "vent" for by-products of

⁶⁴For an analysis of the early commercial orientation of Massachusetts Bay, see Margaret Ellen Newell, *From Dependency to Independence: Economic Revolution in Colonial New England* (Ithaca, 1998), chaps. 4 and 5.

⁶⁵Carole Shammas, *The Pre-Industrial Consumer in England and America* (Los Angeles, 1990), 100–101. For a review of early modern sugar consumption in Europe, see Anne E.C. McCants, "Exotic Goods, Popular Consumption, and the Standard of Living: Thinking about Globalization in the Early Modern World," Journal of World History 18 (2007): 433–462.

island sugar production. I locate the beginnings of this market in the dealings of seventeenth-century merchants, retailers, and customers, tracing a change in economic engagement away from localism and toward interaction with and dependence on the Caribbean.⁶⁶

My research shows that historians' typical portrayal of New England's material culture as austere and production-oriented, resting on the assumption that participation in Atlantic markets was purely a reaction to a need for currency and credit to buy English "necessaries" such as nails and textiles, overlooks the relationship between New England consumers and West Indies commodities. Seventeenth-century economic records are scattered and incomplete but highly informative when brought together. I use several detailed account books, along with court and probate records, government documents, and narrative sources, to evaluate the extent of sugar product consumption in Massachusetts Bay from the mid-seventeenth century onward. Tracking this consumption allows us to better understand New Englanders' economic choices and their enthusiastic engagement with the development of Barbados as well as the rise of the incredibly profitable and politically significant rum and molasses trades by the dawn of the eighteenth century.

Probate Record Evidence

Those with enough resources to invest in trading ventures, or to do business with those investors, were the first on the New England side of the commodity chain to control the sugar supply. These were not only the leading merchant families of Massachusetts Bay; often they were people with minimal assets and only a few dealings in imports. Average families not uncommonly took possession of barrels of sugar at a time, and it was from these barrels that sugar flowed into the households of Massachusetts Bay in the 1640s and 1650s. Massachusetts Bay's major

⁶⁶Typical is John J. McCusker, the foremost scholar on colonial rum, who focuses almost exclusively on the eighteenth century; his seventeenth-century work explores the rum industry in Britain and Europe. The scholarship on molasses is similarly scanty, though intriguing. McCusker estimates that in 1770, after re-exports, American colonists had enough rum for every adult white male to drink twenty-one gallons a year. McCusker, *Rum*, 1:468. He further notes that the "British colonists in North America had a nearly insatiable appetite for molasses." McCusker, "The Business of Distilling in the Old World and the New World During the Seventeenth and Eighteenth Centuries: The Rise of a New Enterprise and its Connection with Colonial America," in *The Early Modern Atlantic Economy*, ed. John J. McCusker and Kenneth Morgan (Cambridge, 2000), 215. Two scholars that assert the vital importance of molasses as a consumer good in New England are Gilman M. Ostrander, "The Colonial Molasses Trade," *Agricultural History* 30 (1956): 77–84, and Carl Bridenbaugh, "The High Cost of Living in Boston, 1728," *The New England Quarterly* 5 (1932): 800–811, but both focus on the eighteenth century. counties—Essex, Middlesex, and Suffolk—were largely rural, but each was anchored by one bustling port (Salem, Charlestown, and Boston, respectively). Those men dealing directly with Atlantic trade tended to be concentrated in these towns, but each had connections to middlemen and farm families in the smaller villages spread over the countryside.

Robert Long of Charlestown was among the first to take a risk on the earliest sugar crops of Barbados. He died in Barbados in 1648, probably on a trading venture, leaving three butts of sugar valued at £60 (as well as an equal amount of sugar still in Barbados, and about three hundred pounds of sugar in his storeroom).⁶⁷ Such large holdings of sugar were a common investment in mid-seventeenth-century Massachusetts, not only for merchants whose primary vocation was shipping and trade but also for anyone with enough resources. Those who were able to access the new areas of production in Barbados, or who knew someone who could, seized on a commodity that they knew would find a ready market all across Massachusetts Bay, from wealthy households in the port towns to modest farm families in the hinterlands.

Cambridge resident William Wilcox, for example, was trading with Barbados in the early 1650s; he had dealings with several planters on the island, and in 1653 owned four hogsheads of sugar valued at £40.⁶⁸ William Clarke was a Salem innkeeper, kept an ordinary in the village in the 1640s, and probably sold sugar in some form at his establishment. He died in 1647, leaving parts of three hogsheads of sugar worth £26.⁶⁹ Nicolas Guy, a Watertown carpenter plying his trade in the 1640s, was not a particularly wealthy man, running a modest farm and shop assessed at £112. Guy put his additional capital into sugar intended for local sale: £50 worth of sugar of varying quality: one barrel of white

⁶⁷Rodgers, *Middlesex County Records of Probate*, 58. Measurements of sugar in the seventeenth century were variable, and price also varied considerably according to quality. Problematically, any barrel of sugar was likely to be termed a "hogshead," even if its size was much smaller or larger than a typical hogshead, and thus we cannot be sure of any one calculation converting the volume of a barrel into pounds of sugar. Storekeepers' accounts, dealing with smaller and more precise amounts, are much more reliable for calculating sugar prices. A "butt" was the equivalent of two hogsheads, and scholars estimate that each hogshead held 500 to 600 pounds of sugar, so each butt likely held 1,000 to 1,200 pounds of sugar. According to these calculations, Long's three butts of sugar would hold 3,000, to 3,600 pounds of sugar; valued at £60, the sugar would have been worth wholesale about 4 to 5 d. per pound. Retail prices were usually higher; it is also possible that these butts held less sugar than would be expected or that the sugar was of low quality. For an analysis of colonial sugar measurements, see McCusker, *Rum*, 2:784, and John J. McCusker, *Essays in the Economic History of the Atlantic World* (London, 1997), especially 38, 804.

⁶⁸Rodgers, *Middlesex County Records of Probate*, 121–126. The record indicates that the sugar was valued at roughly 6d. a pound.

⁶⁹ The Probate Records of Essex County, Massachusetts (Salem, MA, 1916), 1:65; Robert Charles Anderson, The Great Migration Begins: Immigrants to New England 1620–1633 (Boston, 1995), 1:382.

sugar, one barrel of "Muskevadoes," and three hogsheads of muscovado sugar of another grade. Edward Goffe, of Cambridge, in contrast, was prosperous, with land holdings worth in excess of £600, and had small dealings in imports. He held a considerable amount of sugar at his death: 300 pounds, likely muscovado, as its value indicates that its wholesale worth may have been as low as 4 to 5 d. per pound. In 1650, Edward Mellows, of Charlestown, "adventured with Mr. Foster; Mr. Marifeld; Thomas Croe, Mr. Parris, Jno. Founell," and had in storage ten pounds of sugar among other spices.⁷⁰ Ralph Mousall was a prominent resident of Charlestown, but his primary work was as a carpenter, not a merchant. In 1657 he owned a hogshead (about 300 pounds) of sugar worth £10. The wholesale supply of sugar in Massachusetts Bay included such varied investments in sugar, from a small investor's share of a few pounds out of a larger shipment, to a carpenter's purchase of a barrel of fine white sugar, to a merchant's hogsheads of cheaper muscovado. All these stores were probably intended for "resale" in small amounts, mainly in the form of barter and satisfaction of creditors.71

This sugar trickled through the economy, ending up on the tables of villagers who could not afford to invest in large quantities of sugar directly. The wealthy tended to stock larger amounts of sugar in their storerooms, but even subsistence farmers allocated resources to incorporating sugar into their diet, and estate appraisers did sometimes note these small amounts. Sugar probably moved often in small amounts between households; unwilling to do without it, families went into debt to each other to secure it as a "necessary." Most of these exchanges went unrecorded in the system of local credit, but some were noted in the legal record. When Joanna Cummings of Salem made her will in 1644, for example, she carefully listed her debts, including one to a Mrs. Goose for a pound of sugar.⁷²

Sugar's status as a restorative health food made it particularly common in the diet of the ill, and as such sometimes appeared as a final expense in probate records. This pattern emerges more often for the very poor than for anyone else (revealing the depth of sugar consumption across income) because single male boarders nursed by caretakers rather than family were billed for their board after their deaths. Edward Candall, of Salem, died in 1646 with an estate of only £2 11s., but his appraisers noted that he had owed 2s. 4d. to local merchant Mr. Price for

⁷⁰Rodgers, *Middlesex County Records of Probate*, 1–2, 26, 360.

⁷¹Rodgers, 287; Richard Frothingham, *The History of Charlestown, Massachusetts* (Charlestown, 1845), 78–79.

⁷² The Probate Records of Essex County, 1:34–36.

sugar.⁷³ Gunsmith William Plasse had to his name only a featherbed, two pillows, a Bible, a book of psalms, an old chest, his tools, and five pounds owed to him in wages from Salem town when he died in 1646 at the home of Thomas Wickes in Salem, where he had been boarding. A poor man, though perhaps valued for his skills, Plasse nonetheless was nourished with sugar during his final illness. His caretaker drew up a bill for costs incurred "in his sickness," which in addition to meat and bread included 4s. 9d. on sugar (almost as much as the caretaker, Wickes, spent on meat, and far more than on bread, eggs, or any other item).⁷⁴

Well-off families, unsurprisingly, also left evidence of sugar consumption. Their larger stores of sugar may have been intended for barter with neighbors as well as personal use, but much of it was likely consumed by the family. George Williams, a prosperous cooper of Salem, died in 1654 with, among his considerable possessions "14 li. of white suger, 14 s," likely standard fare for his busy household of seven children.⁷⁵ Francis Parrot, a farmer and town clerk of rural Rowley, died in 1655 leaving a hogshead of sugar "of uncertain value."76 Rear-Admiral Thomas Graves, who was instrumental in organizing shiploads of migrants to the new colony, died a wealthy man with many luxury goods, including 24 sugar loaves worth £8 8s., presumably for personal use given his lavish lifestyle.77 Sugar consumption was well enough established in Massachusetts to support a market for sugar paraphernalia, such as the "suger box of tin" that Samuel Andrews, of Charlestown, possessed in 1659, and the "sugar dish" owned by Thomas Shepard, the wealthy pastor of the Cambridge church.78

Sugar appears just as frequently in inventories of humble estates, in varying, and sometimes surprisingly large, amounts. Modest widow Alice Ward, of Ipswich, had assets of only £37 in 1654, but that included £4 3s. in sugar, an impressive hoard of about 125 pounds.⁷⁹ Farmer Hugh Laskin left a "pott" containing about 280 pounds of sugar, valued at £9 6s., when he died in 1659, though his total estate, assessed at £58, included only basic clothing and furnishings, and his stored provisions mainly consisted of "9 pecks of Wheat eaten with Weevells" and "3 Bushells of Indian Corne eaten with Weevells."⁸⁰

⁷³The Probate Records of Essex County, 1:58.

⁷⁴The Probate Records of Essex County, 1:49, 241–242. Plasse's tools are evidence of his trade as well as a reference in "Early Settlers of Essex and Old Norfolk," New England Historical and Genealogical Register (Oct. 1853), 7:359.

⁷⁵ The Probate Records of Essex County, 1:195-198.

⁷⁶ The Probate Records of Essex County, 1:244-245.

⁷⁷ Rodgers, *Middlesex County Records of Probate*, 115.

⁷⁸ Rodgers, 6, 426.

⁷⁹The Probate Records of Essex County, 1:203–204.

⁸⁰ The Probate Records of Essex County, 1:280–281.

Some of these substantial stockpiles of sugar, perhaps obtained through contacts with merchants and intended for resale, probably found their way to friends and neighbors who bought only what they needed for family consumption. One of these was John Perkins Jr., of Ipswich, a small farmer with a wife, "one young child, new born," and £73 to his name, who had in his larder "3 poringers and 6 pound of suger, 8 s. 6 d." in 1659.⁸¹ When John Bibbell died in Malden in 1653, he left behind a decently provisioned home, if only with tools and the most basic of furnishings. But he did have about 16 pounds of "suger in petter mud's hands" promised to him and valued at 11 shillings.⁸² William Bucke, of Cambridge, was a poor man; when he died in 1658, his estate was worth only £26, and he was £5 in debt. His only possessions were the most basic of tools, a bed, one set of clothes, and two pairs of shoes. Yet he chose to spend his limited resources on sugar; his stored foodstuffs consisted of "sugar and bacon Cheese and butter porke," worth all together 10 shillings.83

Account Book Evidence

Probate records alone offer only compelling hints that sugar was an integral component of the culture and economy of mid-seventeenthcentury Massachusetts Bay. The small amounts of sugar that sometimes appear in the estates of modest farmers and artisans are the exception rather than the rule. Indeed, a cursory examination of the probate record might leave the historian with the impression that sugar was a rare indulgence among the people of Massachusetts Bay. This was not because sugar was uncommon but rather because assessors only very irregularly recorded small amounts of foodstuffs intended for the family's personal use.⁸⁴ Abraham Warren, for example, did not leave any record of sugar consumption in his probate. He died very poor in 1689 and would not have appeared to be a likely purchaser of tropical imports except, because of the survival of a Massachusetts Bay shopkeeper's

⁸²Rodgers, Middlesex County Records of Probate, 110.

⁸¹George F. Dow, ed, Records and Files of the Quarterly Courts of Essex County, Massachusetts (Salem, MA, 1911), 1:66, 97, 105, 119, 296, 375, 388, 428; 2:165; Probate Records of Essex County, 1:284.

⁸³Rodgers, 318.

⁸⁴Jan de Vries goes so far as to argue that "inventories are no guide to food consumption." De Vries, "Between Purchasing Power and the World of Goods," 102. Sarah McMahon discusses gaps in the probate record specifically in regards to foodstuffs in colonial Massachusetts in Sarah F. McMahon, "Provisions Laid Up for the Family: Toward a History of Diet in New England, 1650–1850," *Historical Methods* 14 (1981): 4–21.

account book from the 1650s, we can establish that he did buy sugar as early as 1653. 85

Such account books serve as snapshots of the commodities moving through the colony's economy in its earliest years. My analysis of hundreds of purchases recorded in several shopkeepers' account books from the period, primarily those of George Corwin, of Salem; John Pynchon, of Springfield; and Robert Gibbs, of Boston, exposes patterns of sugar, molasses, and rum distribution and consumption in the Massachusetts Bay colony between 1650 and 1670, just as settlers in Barbados were successfully establishing large-scale sugar production.

Even before Barbadian sugar products reached the Atlantic market, sugar was probably a stock item the in the rudimentary shops of Massachusetts Bay. Joseph Weld, for example, had 40 pounds of sugar in his Roxbury shop as early as 1647, which he was selling for 10 shillings a pound.⁸⁶ The merchants of mid-seventeenth-century Massachusetts Bay were often small shopkeepers as well as international investors. It was common for men of some resources to organize and invest in fishing and trading ventures to Barbados and other Atlantic destinations but to expend most of their economic energy bartering with local families, largely collecting local products in exchange for the imports to which they had more access than most settlers.⁸⁷

One of these entrepreneurs was landed gentleman and puritan sympathizer George Corwin, who sailed to Massachusetts with his wife, Elizabeth, in 1638. He became a successful shipbuilder, merchant, and shopkeeper in Salem, financing and operating trading ventures to England, Europe, and the Caribbean as well as rendering foreign commodities accessible to residents of the rural inland region of Essex County through his general store. His son, Jonathan Corwin, born in 1640, continued to build the mercantile business. In 1675, Jonathan married Elizabeth Sheafe Gibbs, widow of Robert Gibbs. This marriage united two mercantile families with roots both in Massachusetts and Barbados. Robert Gibbs, who had emigrated to Boston about 1658, was a Boston merchant who, like Corwin, operated a general store, catering to rural as well as urban customers. Like so many other New England

 $^{^{85}}$ Curwen Family Papers, MSS 45, George Corwin Account Book 1652–1655, Series I, Volume I, Phillips Library, Peabody, MA.

⁸⁶ "An Abstract of the Inventory of the Contents of the Shop of Capt. Joseph Weld of Roxbury, Made February 4, 1646–7," in *Every Day Life in the Massachusetts Bay Colony*, ed. George F. Dow, (New York, 1988), 242–243.

⁸⁷For an analysis of the importance of local commerce for Massachusetts merchants in the seventeenth century, see James E. McWilliams, *Building the Bay Colony: Local Economy and Culture in Early Massachusetts* (Charlottesville, 2007).

families, Gibbs had relatives in Barbados, and he worked closely with these connections to develop the economies of the two colonies.⁸⁸

Seventeenth-century account books used single-entry accounting, organizing accounts by person rather than by credits and debits, and tracing the balance of credit and debt in single or double columns within each person's entry.⁸⁹ To complicate matters, third parties were often drawn into an exchange if they had a commodity that would facilitate the exchange, or if they paid off their debt to one person by settling that person's debt to a third, or both. Because of the scarcity of English money in seventeenth-century New England, people were rarely able to pay for goods at the time of purchase, whether retailers buying from wholesalers or consumers buying from retailers. Prices and payments were calculated in pounds, shillings, and pence, but these units of currency were largely imaginary and used to compare debts rather than reflecting actual coins in circulation.

Though buyers could pay more readily in commodities, and often ended up doing so, they frequently did not have on hand the particular goods that the seller wanted. As a result, credit was the basis of the colonial economy, and the fact that even small farmers and shopkeepers who dealt almost exclusively with friends and neighbors in their communities kept detailed records should not be surprising. Account books were not used to calculate profit or strategize but rather to track indebtedness in an elaborate network of credit. It was the only way people could hope to participate in markets at all. This system of "bookkeeping barter" has left us a few surviving account books from even the earliest days of the Massachusetts Bay colony, and the books' use of commodities rather than currency to make payments allows historians a comprehensive analysis of production and consumption within the colony.⁹⁰

⁸⁸ Phyllis Hunter, Purchasing Identity in the Atlantic World: Massachusetts Merchants, 1670–1780 (Ithaca, 2001), 41–43; John Goff, The Salem Witch House: A Touchstone to Antiquity (Charleston, 2009), 28–39; J. Willard Gibbs, Memoir of the Gibbs Family of Warwickshire, England, and United States of America (Philadelphia, 1879).

⁸⁹Winifred Rothenberg, "Farm Account Books: Problems and Possibilities," *Agricultural History* 58 (April 1984): 110; Sally M. Schultz and Joan Hollister, "Single-Entry Accounting in Early America: The Accounts of the Hasbrouck Family," *The Accounting Historians Journal* 31 (June 2004): 141–174.

⁹⁰W. T. Baxter, "Credit, Bills, and Bookkeeping in a Simple Economy," *The Accounting Review* 21 (April 1946): 154–166. Baxter uses the term "commodity money" to describe the use of popular goods as currency, and points out that this "commodity money" was synonymous with trade goods intended for foreign markets. See also W. T. Baxter, "Observations on Money, Barter, and Bookkeeping," *Accounting Historians Journal* 31 (June 2004): 136; W. T. Baxter, "Accounting in Colonial America," in *Studies in the History of Accounting*, ed. A. C. Littleton and B. S. Yamey (London, 1956); and Larry Kreiser, "Early American Accounting," *Journal of Accountancy* (July 1976): 79.

George Corwin's earliest record book, beginning in 1651, is a series of small accounts with well over a hundred people, who mostly paid him in "country pay." The accounts extend over long periods of time, an average of a year and a half. Overall, 42 percent of people paid Corwin in meat or livestock, 47 percent in grain, 28 percent in dairy, and 19 percent in raw products for beer-making or finished beer.⁹¹ The commodities that colonists most frequently sought at Corwin's store were tobacco, textiles, nails, soap, and brandy. In the early to mid-1650s, most people infrequently but consistently bought sugar (molasses and rum appear to have been as yet unavailable). Corwin's customers tended to make a series of small sugar purchases over the course of a year, typically one to five pounds at a time.

It is not surprising that scholars have not recognized the significance of these sugar sales, because they were not as common as those of some other imports and they often consisted of only small amounts. Further obscuring the extent of the market for sugar in the colony is the illegibility of a large percentage of account book entries, which problematizes the study of any commodity other than the few most popular; also, of course, the dearth of surviving account books makes comprehensive studies impossible. When one of Corwin's customers makes only one or two sugar purchases in a year, it is difficult to know if those purchases represent all of the sugar his family consumed, or if other sugar consumption lies hidden in the illegible sections of the account books, or if the customer was also buying sugar from other shopkeepers whose records have not survived. It is reasonable to assume that the sixty-one people whose accounts are legible enough to reveal that they bought sugar from Corwin 107 times over a four-year period from 1651 to 1655 represent only a tiny fraction both of the Bay colony's sugar consumption over that period and of the commercial production put in place to enable that consumption.92

As indicated by the probate record, some of Corwin's customers bought large amounts of sugar at a time with the intention of reselling it to the broader community, either in the same form or processed in some way. The village tavern was one such distribution point. Though the puritan leadership disapproved of excessive drinking, taverns served as community centers where neighbors and strangers encountered each other, took in the news from near and far, and processed that information together. Relatively large buildings that could accommodate and nourish travelers in every season at all times of day and night,

⁹¹For an excellent analysis of Corwin's account books, see James E. McWilliams, *Building the Bay Colony*, 75–79. McWilliams is one of the few scholars to interpret these records. McWilliams does not look at tropical commodities, however.

⁹²George Corwin Account Book 1: 1652–1655.

taverns naturally served as official meeting places for the Boston courts and the town circuit courts; it was too expensive and inconvenient to maintain courts at the meetinghouses. Officials in Boston and other towns also used taverns for official government functions on a regular basis. In addition, taverns were a place where "popular" or "traditional" English culture, which embraced "immediate gratification," thrived and challenged puritan idealism.⁹³

When innkeepers served sugary drinks or offered pieces of sugar for a penny, it was to the entire spectrum of Massachusetts Bay society. "In Boston," noted John Josselyn in 1671, "I have had an Ale-quart spic'd and sweetned with Sugar for a groat," a practice that put sweetness within the daily reach of consumers.94 One of George Corwin's earliest and most frequent customers was John Gedney, a selectman and leader in the community, who had been an innkeeper in Salem since 1639, and who owned the reputable Ship Tavern in the 1650s. Between 1651 and 1653. Gedney bought large amounts of sugar from Corwin on five separate occasions, once about 30 pounds, once about 60 pounds, and once half a hogshead.⁹⁵ William Clarke, the Salem innkeeper who passed away in 1647 with a stock of 700 pounds of sugar, died before the start of Corwin's surviving account book from the 1650s, but his probate record is also evidence of sugar distribution through ordinaries, inns, and taverns as early as the 1640s; very likely he had purchased sugar from Corwin as well. His sugar stockpile reflects the continuation of the longstanding English custom of consuming sugar mixed with alcohol.

Throughout the Bay colony, both townspeople and rural villagers sought out sugar products by frequenting the port town shops owned by prosperous shopkeeper-merchants with Atlantic connections and the extensive network of small taverns. At the same time that George Corwin was distributing sugar in Salem and surrounding settlements, at the other end of colony, in remote western Springfield on the Connecticut River, the accounts of merchant John Pynchon reveal remarkably similar patterns of demand and supply.

William Pynchon, John's father, had come from a comfortable gentry family in Essex. He was a devout puritan who shared the spiritual intensity of many of the early settlers, and there was a close relationship

⁹³ David W. Conroy, *In Public Houses: Drink and the Revolution of Authority in Colonial Massachusetts* (Chapel Hill, 1995), 12–18, 31, 41–47; Richard P. Gildrie, "Taverns and Popular Culture in Essex County, Massachusetts, 1678–1686," *Essex Institute Historical Collections* 124 (July 1988): 158–185.

94 Lindholdt, John Josselyn, 131.

⁹⁵Henry Fitzgilbert Waters, *The Gedney and Clarke Families of Salem, Mass.* (Salem, MA, 1880), 4–7; Dow, *Records and Files of the Quarterly Courts of Essex County*, 3:18, 80; George Corwin Account Book 1: 1652–1655 (sugar estimates are based on the average price of 8d. a pound).

between his family and that of the Reverend John White. Pynchon was one of the early organizers and leaders of the Massachusetts Bay Company in England and assisted in governing the colony after he arrived in 1630, settling initially in Roxbury. He soon became involved in the Indian fur trade, and in 1636, unhappy with land policies in Roxbury and seeking better access to that trade, he founded a settlement on the Connecticut River (first called Agawam, then Springfield), one of several English settlements that were established in the region around that time. The Massachusetts General Court gave him considerable political authority, and he quickly came to control the fur trade and the general economy over an extensive area in the western part of the colony. Traders dealing with Indians had to be licensed, which Pynchon was, and he was probably the only trader in certain areas north of Springfield. For a brief period at mid-century, fur exports to England and Europe proved lucrative, making the Pynchon fortune.⁹⁶

Through the wealth brought by this trade, Pynchon was able to buy manufactured goods from England, as well as tropical commodities, for sale to the people of western Massachusetts. Pynchon's general store was the center of economic exchange in Springfield, as Pynchon served as a creditor, landlord, or employer to much of the town. Around 1651, the business passed to John Pynchon, who would continue to control the flow of commodities in and out of the Springfield area. Farmers and artisans traded farm products and labor for purchases from Pynchon's warehouse.97 After the mid-1650s, as local furs became scarce and competition from Dutch traders increased, Pynchon found a new type of export and a new destination: agricultural commodities and the West Indies. Because of Pynchon's political and economic power over local farmers and tradespeople, historians have assumed that the general population was forced into commercial farming in order to pay rents to him and to buy the English manufactures necessary for survival on the frontier.98 The pattern of sugar purchases, however, indicates that farmers may have been making more complex decisions about their consumption. These settlers may have, in some measure, labored freely in order to experience the sensory pleasures of sugar.

One early example of the power of sugar consumption to shape behavior on the frontier does not directly involve the Pynchon family.

 96 Bernard Bailyn, New England Merchants in the Seventeenth Century (New York, 1955), 53–54.

⁹⁷Ruth A. McIntyre, *William Pynchon: Merchant and Colonizer* (Springfield, MA, 1961); Bailyn, *New England Merchants*, 30.

⁹⁸ Bailyn, New England Merchants, 54; Warren, New England Bound, 75–76, 80. For this interpretation of commercial farming in Springfield, see Stephen Innes, Labor in a New Land: Economy and Society in Seventeenth-Century Springfield (Princeton, 1983), especially chap. 4.

In 1650, western settler Nathaniel Browne had run up such an outstanding bill for imported foodstuffs, including raisins, thirty pounds of sugar, vinegar, wine, and cakes, that his creditor, Walter Fyler, took him to court. This unusual persecution, in a time when debts typically were allowed to extend for years without incurring legal action, leaves us with evidence in the court record of consumption patterns that probably characterized other households as well. Nathaniel had come from a gentry background in England and was likely habituated to a diet sweetened with sugar. As we have seen, sugar consumption was the norm among the middle class in early seventeenth-century England, and the settlers of Massachusetts Bay brought that habit with them. When Nathaniel found himself on the New England frontier with limited resources, he was not able to reconcile his cravings with his new economic reality, and he sacrificed financial stability to indulge his appetite.⁹⁹

John Pynchon's accounts and personal papers show that sugar flowed up and down the Connecticut River in the mid-seventeenth century. His records of sugar distribution reveal that, in the early 1650s, he likely was still struggling to secure a consistent supply of the commodity, as he worked to support the nascent sugar industry in Barbados by setting up a reliable trade with the island. The desirability of sugar and its relative scarcity meant it was often exchanged between family members and friends as a way of cementing social bonds. Satisfying another's craving for sugar, and in turn having one's cravings satisfied, admitted a vulnerability that brought allies and loved ones closer together. Stopping in Hartford, Connecticut, in 1654, Pynchon sent John Winthrop Jr., then living in the coastal town of Pequot, a firkin (about fifty pounds) of sugar and some red rose conserves.¹⁰⁰ Gifts of sugar tended to flow in both directions, depending on who had a surplus; in 1656, it was Pynchon who was the recipient of a present of sugar from the Winthrops.¹⁰¹

Pynchon's accounts with residents of the greater Springfield area have many commonalities with those of George Corwin. As in Essex County, people on the frontier bought affordable amounts of sugar multiple times over the course of a year. Sugar seems to have been even more sought after in the Springfield area than in the hinterlands of Salem, as each customer of Pynchon's averaged more sugar purchases than did Corwin's, though this may in part reflect the greater market

⁹⁹Joseph H. Smith, ed., Colonial Justice in Massachusetts, 1639–1702: The Pynchon Court Record (Cambridge, MA, 1961), 222.

¹⁰⁰ Carl Bridenbaugh, ed., *The Pynchon Papers: Letters of John Pynchon, 1654–1700* (Boston, 1982), 1:7.

¹⁰¹Bridenbaugh, 1:20.

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Figure 1. Page from John Pynchon's Account Book, 1666, account with William Branch. (Source: John Pynchon, Account Books and Other Records, 1651–1697, microfilm.)

share of Pynchon's frontier establishment. Though customers sometimes also bought vinegar, salt, spices, tobacco, and brandy, sugar was by far the most sought-after food. Approximately fifty people bought sugar from Pynchon over a two-year period, from 1653 to 1655, as recorded in the legible sections of his account book, at a price ranging between 8d. and 1s. 2d. a pound.

Legibility is an even greater problem with Pynchon's account book than it is for Corwin's, as the former tended to cross out closed accounts, and sections of many accounts are unreadable (Figure 1). Thus we can assume that there were more sugar consumers and more purchases per consumer than can be recovered from the legible section of the account book. Though data limitations preclude a comprehensive analysis of sugar consumption in the region, a minimum level of consumption can be established.¹⁰² Sugar purchases also tended to cluster strikingly within each person's account, indicating that sugar may have been only sporadically available as Pynchon's shiploads of goods made it up the river to Springfield. Settlers Thomas Stebbins, Thomas Miller, and Henry Burt, among many others, bought sugar in clusters once or twice a year during the 1650s, with each cluster making up three to six purchases of two to six pounds each. It seems that when a shipment of sugar did arrive, consumers moved quickly to buy it before supplies ran out, but that they preferred to buy it in several smaller amounts rather than in one large purchase, perhaps because their resources were limited.¹⁰³

Doubtless other men with shipping connections also served as distributors of tropical commodities in isolated areas where shopkeepers were scarce. In 1649, John Winthrop Jr., who was establishing the frontier settlement of Pequot in Connecticut at the time, received a barrel of sugar from his brother Adam in Boston. This shipment was not a gift but rather a request that John serve as retailer, for Adam asked that John weigh it and pay him 10d. a pound "or else lett the market sett the prise." Adam's reference to the market makes it clear that John would distribute the sugar in the new settlement rather than keep it for personal consumption. John seems to have had multiple sources of sugar to supply his new settlement; that same summer he bought twenty-two pounds of sugar from John Clark in Saybrook, for £1 9s. 4d.¹⁰⁴ In addition, because of the strength of the local market for sugar. Massachusetts Bay residents also frequently used it as currency. In 1655 John Trumbull bought much of the estate of the deceased Captain Augustine Walker for "seventy pounds in shugers att fifty shill. the hundred."105 Similarly, Thomas Macy paid a debt in 1653 with one hogshead of sugar and four cows.¹⁰⁶

This type of transaction was common, but one of the most striking examples of sugar's importance as currency in this early period of the Bay colony's economy are the well-preserved records of the Harvard College steward, who was responsible for collecting tuition and room and board payments from Harvard students four times a year, settling the accounts, and managing the finances of the College's kitchen. Sugar

¹⁰²John Pynchon, Account Books and Other Records, 1651–1697, vol. 1, microfilm.
¹⁰³Pynchon, Account Books, vol. 1.

¹⁰⁶ Dow, Records and Files of the Quarterly Courts of Essex County, 1:296.

¹⁰⁴This price of 10d. a pound indicates that during this very early period of settlement sugar was a little more expensive in remote areas, but still affordable for most people. Account books show that sugar prices were lower in Massachusetts Bay; the higher price on the frontier was mentioned by Adam, who noted that "it can not be oford cheper I suppos deliverd ther." Adam Winthrop to John Winthrop Jr., June 3, 1649, 5:349–350, Winthrop Papers, 372.

¹⁰⁵Rodgers, Middlesex County Records of Probate, 181.

played an impressive role both as a currency - the college accepted it as payment, knowing that settlers' unwavering demand for sugar meant that it could easily be used in turn to cover the college's debts - and as a stock item in the kitchen, distributed back to the students in the form of meals.

The students of Harvard College in the 1650s were disproportionately from gentry families, particularly families of ministers. However, college fees were low and within many farm families' means; a bushel and a half of wheat, for example, was enough to pay for a quarter's tuition. The General Court ensured that some scholarships were given as well, and students came from a variety of backgrounds.¹⁰⁷ Regardless of their financial position, families of Harvard students rarely could pay their fees entirely or even mostly in money, and in recognition of this the college asked for payment in "Wheat or Malt, or in such provision as shall satisfy the Steward for the time being, & Supply the necessityes of the Colledge."108 The steward indeed used much of the food sent in payment to "Supply the necessityes" of the students' diet, thus limiting the amount of provisions he needed to buy on the market. Beer, beef, mutton, or pork; bread, pottage, or porridge made from the malt; and the wheat, rye, oats, and corn of "country pay" made up the core of breakfast, dinner, and supper. The kitchen must have served some vegetables, though student contributions were largely limited to apples and "pease." Though simple, dishes were not bland, as the steward regularly obtained salt, pepper, and herbs.¹⁰⁹

But this limited diet was made greatly more stimulating by sugar, clearly deemed a "necessitye" if one considers the college's acceptance of it as currency; it was one of the top six commodities that students used as payment in the 1650s, along with wheat, rye, corn, beef, and pork.¹¹⁰ Between 1650 and 1656, sixteen students paid their tuition or room and board in sugar, many of them multiple times. Sugar averaged about 9d. a pound in 1650s Massachusetts Bay, and a year of Harvard's tuition cost thirty-five to forty-three pounds of sugar.¹¹¹

¹⁰⁷Samuel Eliot Morison, *Harvard College in the Seventeenth Century* (Cambridge, MA, 1936), 74–76, 106-107.

¹⁰⁸ "College Laws and Customs," Publications of the Colonial Society of Massachusetts 31 (1935): 332.

¹⁰⁹Morison, Harvard College, 90-97.

¹¹⁰ S. E. Morison, "Chesholme's Steward's Book, Introduction," *Publications of the Colonial Society of Massachusetts* 31 (1935): 9–17. The General Court passed legislation in 1644 recommending that all New England families contribute the equivalent of a quarter bushel of corn to Harvard College to support scholarships for poor students, and sometimes families paid this tax in sugar as well. For example, in 1652 "mr goorre of roxbury" paid his contribution in 7s. 6d. worth of sugar. "Steward's Book," 275.

¹¹¹Morison, "Introduction," 16–17.

The sheer volume of sugar flowing into the steward's storerooms indicates that Harvard students enjoyed sweet foods as part of their regular diet. As Samuel Morison, noted historian of the college, notes, "in some manner the Steward must have used up the considerable quantity of sugar paid in by students.¹¹² Some entries clearly indicate that the steward intended the sugar for consumption at the college, as with the payment he accepted from William Mildmay in 1650 in the form of "suger for the ketchen."113 Though college rules forbade immoderation in clothing, mandating a "modest and sober habit" and forbidding "all lavish Dresse, or excesse of Apparell," as well as all tobacco and "inebriating Drinke," indulgence in sweets was another matter.¹¹⁴ A separate account records the steward's further purchases of sugar when his supplies were exhausted. Between 1656 and 1659, he bought sugar fourteen times, presumably when the sugar paid by students had run out.¹¹⁵ The steward's records, offering a unique glimpse of early colonial eating habits, show that sugar was not considered an "indulgence" at all. As future political leaders, students would prioritize maintaining the colony's sugar supply based on their personal habituation to the commodity as part of their accustomed diet.

Though the evidence indicates that student payments of sugar were mostly or wholly used to feed other students, another possible use of the steward's sugar supply would have been to pay debts to local households. It was a common practice for the steward to serve as a small dealer in retail commodities, funneling those goods that he received as payment into the shops and households of the surrounding villages, exchanging them for other goods that he needed to run his kitchen.¹¹⁶ Like George Corwin, John Pynchon, and John Winthrop Jr., the Harvard steward, representing the college, may have served as an access point for the commodity; he had the resources to keep large stores of sugar on hand, which farmers and artisans could buy in small amounts. The capital and contacts of such wealthier men and institutions ensured that sugar would be available whenever those of lesser means found themselves able to seek it out (Table 1).

¹¹²Morison, Harvard College, 97.

^{113 &}quot;Steward's Book," 21.

¹¹⁴ "College Laws and Customs," 330-331.

¹¹⁵ "Steward's Book," 225–238.

¹¹⁶See, for example, accounts with merchant John Glover, "Steward's Book," 51–52.

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Student	Total Amount of Sugar Paid in 1650s Account	Total Estimated Value of Sugar
William Mildmay	1 lb.	9d.
Urian Oakes	13.5 lbs.	10s. 1d.
John Angier	1 lb.	10d.
Samuel Nowell	182 lbs.	£5 13s. 6d.
Joshua Long	86 lbs.	\$3 2s. 4d.
Jonathan Willoughby	116 lbs.	\$3 12s. 4d.
Matthews brothers	70.5 lbs.	\$ 2 13s.
Thomas Graves	up to 50 lbs.	up to 16s. 4d.
Zechariah Symmes	24.5 lbs.	18s. 4d.
Zechariah Brigden	at least 101 lbs.	<i>§</i> 2 5s. 8d.
John Haill/Hale	125 lbs.	\$3 15s. 4d.
Elisha Cooke	22 lbs.	18s.
John Whiting	36 lbs.	\$1 7s. 4d.
Samuel Belsher	56 lbs.	\$ 2 2 s .
Samuel Seabury	83 lbs.	<i>§</i> 2 15s. 8d.
John Alline	47 lbs.	£1 3s. 6d.

Table 1Harvard College Tuition Payments in Sugar, 1650–1656

Source: "Chesholme's Steward's Book," *Publications of the Colonial Society of Massachusetts* 31 (1935): 21–276.

Note: When no amount or price was given for sugar, I estimated the amount or price based on a price of 9d. a pound (the value of sugar varied considerably depending on quality, but 9d a pound was a common market price in the 1650s). Sugar measures were inconsistent during this period, as summarized by John J. McCusker in "Weights and Measures in the Colonial Sugar Trade: The Gallon and the Pound and Their International Equivalents," *The William and Mary Quarterly* 30 (Oct. 1973): 599–624. I use the "long" hundredweight of 112 pounds to calculate amounts, as this was the most common hundredweight used for sugar in the seventeenth century.

Consumption of Sugar By-Products

As English colonists spread out across the Atlantic and engaged in commercial production of sugar on Barbados and then other islands, the surge in English sugar production, along with the growing surplus of molasses (traditionally a waste product), allowed Massachusetts Bay consumers to sharply increase their consumption of sweets. New Englanders became particularly fond of molasses and its distilled form, rum—tastes that would intensify Atlantic economic growth.

New Englanders' tastes were hardly only a local curiosity. Sugar plantations produced at least one part molasses for every two parts of sugar, and in the mid- to late seventeenth century, New England became a crucial market both for surplus molasses as a foodstuff and for the first efforts of the islands' rum distilleries. English and European consumers preferred sugar to molasses and other liquors to rum, so that Caribbean

planters found the North American market essential to their prosperity. A visitor to Barbados in 1674 noted:

[T]heire rum and molasses heere will becom of no use or vallew to them, with which they have hitherto supplied their plantations with provision and horses ... greate prejudis will accrue to them if they loose the benifitt of those two comodyties, which are vendable in noe part of the world but New England and Virginea.¹¹⁷

West Indian sugar planters understood that their plantations' success rested on consumers' tastes for sugar waste products. The English islands developed distilleries, and so were eventually able to use most of their molasses to make rum for an international market. The French and Dutch, however, were not able to develop distilleries on their islands (metropolitan brandy producers successfully blocked the development of a rum industry on the French islands), and so New England's demand for molasses remained critical. As a result, the rum industries of the English West Indies and of New England were in direct competition, with the stability of sugar production on the French and Dutch islands dependent on the New England market for their molasses, with which New Englanders both filled their stomachs and fed their rum industry.¹¹⁸

Merchant Peleg Sanford followed the pattern of many traders, maintaining his primary residence in New England but living for a time in Barbados and keeping close personal and business relationships with relatives there. Though he operated out of Rhode Island, not Massachusetts Bay, his surviving letter-book is an invaluable source for understanding the sugar trade in the 1660s, as production in Barbados skyrocketed. His records show that rum and molasses were already in high demand in New England by mid-century. Writing to plantation owner John King in Barbados in 1667, he reported that he had sold all of the planter's sugar, and politely appealed that "if yor thoughts are to Send any for these parts: let it be goode Rume or mallasces: wch is most vendable heare."¹¹⁹ Twice within a few months, Sanford wrote to his brother William on Barbados, entreating him that "Rume at present is not be had... thearfore pray... Send what I

¹¹⁷Letter to John Winthrop Jr., Feb. 1, 1674, *Proceedings of the Massachusetts Historical Society* (Boston: MHS, 1891–1892): 2nd series, 7:16–17. The writer notes that he sold his New England horses in Barbados for 3,000 pounds of sugar each.

¹¹⁸Ostrander, "Colonial Molasses Trade," 77–84.

¹¹⁹Peleg Sanford, The Letter-Book of Peleg Sanford, 1666–1668 (Providence), 34.

formerly sent Fore."¹²⁰ Though consumers were well aware of quality distinctions between different types of sugar products, there was a market for even the poorest grade of molasses, probably a robust one among the poor. Again in 1668, Sanford pushed his brother to "indever to by the mallacces by the tunn ... for the last yo Sent me is soe bad that if it were not at present Something Scarse; I could not make Sayle of it."¹²¹ Molasses, which had a strong flavor and could not be processed into the same kinds of conserves, comfits, and other sweetmeats so prized by the English, was considerably cheaper than sugar, and thus allowed for more people to consume it more often.¹²²

George Corwin's accounts with Essex County households reflect this transition to ever greater consumption of sweet foods as West Indian sugar production escalated. Starting around 1657, his customers suddenly increased their purchases of sugar and began for the first time to buy molasses and rum. George Ropes was one of these. He had migrated to Massachusetts in 1635 as a poor servant, and worked up to a modest subsistence as a farmer and carpenter. He died with an estate of land and basic tools and furnishings worth about £76 after his considerable debts were paid. As is typical, his probate record does not reveal any sugar consumption, but because of Corwin's account book we know that he did have a taste for sugar and indulged it when he could, likely even when it put him into considerable debt. In 1653, he bought two pounds of sugar from Corwin, probably all he could afford at the time. But by 1661, perhaps as his financial position stabilized, his sugar purchases became frequent. From April 13 through May 27, 1661, for example, he bought sugar from Corwin on five occasions for a total of seven pounds of sugar. This was not an isolated pattern; his purchases continued similarly through the rest of the year.¹²³

Rum and molasses first show up in Corwin's accounts around 1657, and then skyrocket around 1663, when most customers with recorded accounts made extensive purchases of sugar, molasses, and rum. Within a year or two, first rum, then molasses went from rarely purchased items to essentials appearing in almost every customer's account (and in many cases making up as much as half of a customer's account). The market for sugar products was so vigorous that these items flew off the shelves as soon as Corwin was able to find suppliers. Patterns emerge:

¹²⁰ Sanford, 41, 51.

¹²¹Sanford, 70.

¹²²William Paine's 1661 probate record indicates that a hogshead of molasses sold for three pounds. Dow, *Records and Files of the Quarterly Courts of Essex County*, 2:272.

¹²³George Corwin Account Book, 1:1652–1655, and 3:1657–1662; *The Probate Records of Essex County*, 2:196–198.

customers bought much more sugar and molasses than they had before; molasses partially replaced sugar as a source of sweetness; rum replaced brandy. With the coming of molasses, consumers could indulge their sweet tooth much more frequently. Sugar purchases increased alongside molasses, though it remained more expensive than molasses at 8d. a pound; the initial increase in demand from the previous decade was likely a response to greater West Indian supply. Farmers usually paid with wood and animals, which Corwin could either send overseas or use in his local trade.¹²⁴

Robert Gibbs's account book for his Boston general store tells a similar story. His surviving account book from the years 1671 and 1672 is a small, portable volume with disorganized entries, probably meant for a subset of his business that dealt with farmers coming into Boston to trade.¹²⁵ Nearly every client mentioned in the book bought sugar, and molasses and rum were popular as well. His account book reflects both the high level of sugar consumption in Massachusetts Bay by this time and the steep drop in sugar prices; most of his sugar sold between 2d. and 4d. a pound, so that people like Goody Wiborn could bring Gibbs her surplus milk and take home six pounds of sugar valued at one and a half shillings. Like Goody Wiborn, most of his customers paid in farm products. David Flint bought sugar, molasses, and rum dozens of times from Gibbs over a vearlong period in the early 1670s. He was likely a farmer, given his method of payment, which was almost exclusively in meat: lamb, mutton, beef, suet, head, and tongue. Goody Spring provided Gibbs with fowl, eggs, Indian corn, a "roasting pigg," and turnips, in exchange for sugar; when they reckoned their accounts, she asked that Gibbs settle in sugar. Goodman Wetherington, of Dorchester, paid for his sugar in butter, milk, veal, and cider. The Seever family repeatedly bought sugar from Gibbs, paving in butter, milk, and eggs. These diverse farm products, whether ending up in local or Atlantic markets, are evidence of the farmers of Massachusetts Bay producing a surplus with the specific purpose of exchanging them for sugar products.¹²⁶

A rare farmer's account book from the mid-seventeenth century, yeoman Thomas Minor's diary records a high level of sugar product consumption in the 1660s and 1670s. Scholars examining this unique document, a window into a typical seventeenth-century New England farm household, have emphasized only the agricultural, seasonally

 $^{^{124}\}mbox{George}$ Corwin Account Book, 5:1663–1666; for example, see the accounts of Anthony Needham and John Waters.

 $^{^{125}{\}rm See}$ Margaret Newell's work tracing the residences of Gibbs's customers. Newell, From Dependency to Independence, 100.

¹²⁶ Robert Gibbs Business Records, 1659–1708, Account Book, American Antiquarian Society, Worcester, MA.

oriented character of Minor's rural village. Such analyses have completely overlooked the farmer's consumer behavior. Minor made periodical trips to New London and other ports to trade, and the goods he sought most frequently were molasses and sugar, both of which he bought in prodigious amounts, paying in surplus oats, barley, butter, and other farm products. In a typical entry, from January 1679, he noted that "I delivered to Jonathan perker 30 bushells of oats to be pavd in a barle [barrel] of good malases and other barbados goods." These oats were likely destined to feed a West Indies economy entirely devoted to sugar production, and almost certainly the horses that Minor invested in raising ended up in the West Indies to power the sugar mills. His demand, and that of his family and community, for sugar products seem to have been the main motivation for his trips to port. In 1666, he described the purpose of a recent journey to the coast, noting that "I was at [new] london for malasses." Indeed, Minor clearly had connections in Barbados and Antigua and perhaps did business distributing molasses and sugar to local families; he noted in 1671 that "we wer at new London our mallaces came whome." This molasses may have been a bulk shipment in which he had a stake and helped to distribute.¹²⁷

Because of its interweaving of terse but revealing personal narratives with economic accounts, Minor's diary is compelling in its illustration of the cycle in which New England veomen sent their agricultural surplus to fuel the sugar industry in the West Indies in part to pay for their own consumption of sugar products. In an especially revealing purchase of one day in 1665, Minor "came whome with the sugar I am to pay mr novce 5-11-8 the whole rate is 72-18-9." Mr. Novce was the community's minister, and as one of the town's leaders Minor had a large role in supplying his salary, which was paid largely in foodstuffs. Though his post was in a rural community and he doubtless lived simply. Reverend Novce had negotiated an agreement in which £6 of the £72 of his salary were to be paid in sugar (amounting to at least 180 pounds of sugar a year, and if the sugar was of a cheap grade, perhaps as much as twice that), reflecting both the belief that sugar was an essential part of a decent diet, and the expectation that his congregants would produce for the Atlantic market in order to pay for it.¹²⁸

¹²⁷See Virginia DeJohn Anderson, "Thomas Minor's World: Agrarian Life in Seventeenth-Century New England," *Agricultural History* 82 (Fall 2008): 496–518, and Paul B. Hensley, "Time, Work, and Social Context in New England," *The New England Quarterly* 65 (Dec. 1992): 531–559.

¹²⁸Sidney H. Miner and George D. Stanton Jr., eds., *The Diary of Thomas Minor*, *Stonington, Connecticut, 1653 to 1684* (Ann Arbor, 1976), especially 67, 70, 102, 141–142, 166.

Rum and the American Sugar Economy

The demand for the West Indies' sugar, molasses, and rum is best studied as one market reflecting a historical consumer market built on biological cravings. Scholars have given rum more attention than sugar, in part because of the more evident changes in behavior that the consumption of alcohol produces. The name "rum" comes from the English word "rumbullion," meaning "a great tumult."¹²⁹ Seventeenth-century Essex County court records support this association. In the early 1660s, John Mason, a Salem brickmaker, frequented Corwin's shop in search of brandy and molasses, and increasingly rum. Unsurprisingly, in 1664, the Essex Court cited Mason for drunkenness; in 1670, the court similarly condemned his wife.¹³⁰ Salem sawyer William Smith's numerous rum purchases from Corwin in 1663 foreshadowed his two citations for inebriation in 1665 and 1666.¹³¹

Rum consumption was not limited to the disreputable; upstanding citizens sought it out without any stigma. Anthony Needham was a town leader in Salem, serving as a lieutenant in the Salem militia and frequently witnessing estate inventories. He also was a regular buyer of Corwin's rum from 1659 onward, usually in pints or quarts but occasionally in gallons.¹³² Anthony Buxton, another reputable Salem yeoman with a farm on the Ipswich River, bought rum five times from Corwin over a three-month period in 1657.¹³³

These examples illustrate two developments in the history of Atlantic sugar. First, beginning in the late 1650s, North American consumers suddenly began to prefer West Indies rum over local and European brandy, sack, and other liquors. Second, rum consumption in Massachusetts Bay quickly became significant, permeating all levels of society over a few years. The growth of an addiction that could be fed only by the sugar plantations of the West Indies further bound the two regions together, with ramifications for centuries to come. Though Massachusetts leaders condemned overindulgence in all forms of alcohol, they particularly demonized rum; the tropical intruder evoked

¹²⁹Frederick H. Smith, *Caribbean Rum: A Social and Economic History* (Gainesville, 2005), 16.

¹³⁰ George Corwin Account Book, 5:1663–1666; *Records and Files of the Quarterly Courts of Essex County*, 3:182, 4:274.

¹³¹George Corwin Account Book, 5:1663–1666; *Records and Files of the Quarterly Court of Essex County*, 3:269, 383.

¹³²William Richard Cutter, *New England Families: Genealogical and Memorial* (New York, 1913), 1:10; George Corwin Account Book, 5:1663–1666.

¹³³George Corwin Account Book, 5:1663-1666; Walter Goodwin Davis, *Massachusetts and Maine Families in the Ancestry of Walter Goodwin Davis* (Baltimore, 1996), 248–249.

great anxiety and came to symbolize the destruction of their spiritual community.

Before the emergence of Caribbean sugar in the second half of the seventeenth century, hard alcohol production in the Atlantic world was limited to a relatively small group of apothecaries, French and Dutch brandy-makers, and well-off home distillers. Though the Spanish and the Portuguese grew sugar in their colonies in the Americas, they did not produce rum from it. The sudden abundance of sugar by-products on English and French islands as sugar production began there, starting with Barbados in the 1640s, spurred colonial experimentation with transforming waste sugar into alcohol. Barbados and Martinique were the "cradles" of the Caribbean rum industry, with rum production well established on Barbados by about 1650.134 Though rum was originally distilled from pure cane juice, this method quickly all but disappeared as it was more profitable to use cane juice for sugar. Instead, the vast quantities of molasses and waste sugar "scum" produced in sugar processing, as well as the lighter molasses known as treacle produced in further sugar refining, became main components of rum.¹³⁵

Eventually, New Englanders would come to drink both "West India" rum distilled on the islands, particularly Barbados and Antigua, and locally manufactured rum from imported molasses, which was considered lower in quality but had the advantage of being cheaper.¹³⁶ Indeed, New Englanders and other North American settlers were by far the largest market for the sugar plantations' rum industry; in 1700, almost all of the English islands' rum was consumed in North America.¹³⁷

The puritan emphasis on temperance did not preclude drinking alcohol in moderation. Though excess in any appetite ran counter to puritan theology, daily alcohol consumption was so ingrained in English culture that abstention was unimaginable. Various types of distilled spirits, generally known as "aqua vitae," or "strong waters," were imported in large amounts into New England before the arrival of rum in the late 1650s, as is evident in ship records and shopkeepers' account books.¹³⁸ The profusion of temperance legislation (often quickly overturned), the copious citations for drunkenness and illegal taverns, and the notable reluctance of the colonial elite to renounce alcohol

¹³⁸Kristen D. Burton, "Intoxication and Empire: Distilled Spirits and the Creation of Addiction in the Early Modern British Atlantic" (PhD diss., University of Texas, 2015), chap. 1.

¹³⁴Smith, Caribbean Rum, 10–15; Mark Edward Lender and James Kirby Martin, Drinking in America: A History (New York, 1982), 6–7.

¹³⁵McCusker, Rum, 1:55-58.

¹³⁶Richard Pares, Yankees and Creoles: The Trade Between North America and the West Indies Before the American Revolution (Cambridge, MA, 1956).

¹³⁷Smith, Caribbean Rum, 28–29.

themselves are indications of the high level of alcohol consumption in Massachusetts even before rum became available.¹³⁹

There was something about rum in particular, however, that triggered particularly dramatic rhetoric on the part of puritan leaders, reflecting the belief that the commodity posed an existential threat to the society they had worked so hard to build. The Rev. Increase Mather wrote in 1687:

It is an unhappy thing that of later years a kind of Strong Drink [footnoted as Kill-Devil, another name for rum] hath been common amongst us, which the poorer sort of people, both in Town & Country, can make themselves drunk with, at cheap & easy rates ... for a peny or two pence make themselves drunk How few are there, that if once they be addicted to this vice, do ever truly repent of it or turn from it.¹⁴⁰

His son and fellow minister Cotton Mather was even more alarmed, calling rum the "River of Death," and declaring that "this Bottel do Break this People and this Country."¹⁴¹ The ministry saw rum as precipitating social and spiritual crises, despite that alcohol consumption had been widespread from the establishment of the colony.

Because the ramifications of sugar consumption paled next to those of alcohol abuse, and because its consumption was so entrenched among all ages, genders, and classes, puritan leaders did not denounce sugar in the same way that they did rum. Nevertheless, there was a deep unease within puritan society with all physical indulgences, a fear that such pleasures would result in what Stephen Innes calls "slavery to sinful and impoverishing addictions."¹⁴² Cotton Mather's denunciation of excess of appetite for drink as the "Swinish Pleasure of a little Sensuality," leading

¹³⁹Shurtleff, *Records of Massachusetts*, 4 (2): 37–38; 2:194–195. The extensive legislation aimed at controlling alcohol consumption, much of it quickly repealed in the face of opposition, included forbidding the custom of group toasts, limiting the sale of various types of alcohol, outlawing inebriation itself, maintaining strict licensing requirements for taverns, forcing responsibility for drunkenness on innkeepers, and hiring investigators to enforce sobriety in taverns. Shurtleff, *Records of Massachusetts*, 1:112, 205, 213–214, 258, 266, 271–272; 2:100, 121, 257; 4 (pt. 1):203; 5:211. See also James K. Hosmer, ed., *Winthrop's Journal "History of New England"* 1630–1649 (New York, 1908), 1:325; Dean Albertson, "Puritan Liquor in the Planting of New England," *The New England Quarterly* 23 (Dec. 1950): 477–490; Conroy, *In Public Houses*, 49–56.

¹⁴⁰ Increase Mather, A Sermon, Occasioned by the Execution of a Man Found Guilty of Murder (Boston, 1687), 25.

¹⁴¹Cotton Mather, Sober Considerations on a Growing Flood of Iniquity (Boston, 1708), 3, 11.

¹⁴²Stephen Innes, "Thrift and Prosperity," in *Thrift and Thriving in America: Capitalism and Moral Order from the Puritans to the Present*, ed. Joshua J. Yates and James Davison Hunter (New York, 2011), 118–119, 121–122, 124, 131. Innes describes the "Protestant

men to "sin away the Pleasures of Angels," descended from John Winthrop's concern with gluttony eighty years before, while still a young man in England. Writing of his struggle with the sensual enjoyment of food, Winthrop had explained:

I founde plainely that not keeping a strict watche over my appetite, but feeding more liberally than was meet ... the fleshe waxed wanton, and ... beganne to grow iollye and slouthfull ... and to minde earthly things [W]hen I hould under the fleshe by temperate diet, and not suffering the minde or outward senses to have everye thinge they desire [I] am farre more fitt and cheerefull to the duties of my callinge.¹⁴³

This stated aversion to pleasure, however, did not prevent the Winthrop family from seeking out a steady supply of sugar throughout their years as leaders of the settlement of Massachusetts, as previously noted.¹⁴⁴ Indeed, a rare notebook belonging to John Winthrop's grandson, Jose Winthrop, who had been raised by his devout puritan family on a rural farmstead in what would become Winthrop, Massachusetts, records Jose's taste for sugar, presumably acquired as part of his upbringing. Sometime between 1683 and 1691, Jose wrote out five recipes; all were sweet. "French bisket," he noted, should be "strewed over with beaten loave sugar"; "Princes bisket" was akin to a candy, as it contained as much sugar as flour, with comfits mixed into the dough. Similarly, "preserved Quinces" contained a pint of fruit to a pound of sugar; his remedy for "weakness of the sight" and his health drink "elixir salutis" contain sugar and molasses.¹⁴⁵

The names of these recipes suggest that they were treats rather than everyday foods, but they serve as evidence that food historians have too often taken puritan denunciations of bodily pleasures at face value. In his classic *Albion's Seed*, David Hackett Fischer summarizes New

dilemma," which was the ideology that lauded hard work and prosperity but condemned acquisitiveness and material pleasures.

¹⁴³Mather, *Sober Considerations*, 9; John Winthrop, "Experiencia," (1929) 1:197, Winthrop Papers.

¹⁴⁴The Winthrop family had extensive trade dealings in sugar; see references to their involvement the sugar trade earlier in this article, and see also, for example, Samuel Winthrop to John Winthrop Jr., Sept. 1664, "Letters of Samuel Winthrop," Massachusetts Historical Society.

¹⁴⁵Jose Winthrop, Notebook of Jose Winthrop, 1683, Mss C28, New England Historic Genealogical Society, Boston, MA. Jose Winthrop farmed and served as constable in a rural area adjacent to Boston, now the towns of Winthrop and Revere. Named Jose, he is sometimes misrepresented in the records as Joseph or Jesse. See Oliver Ayer Roberts, *History of the Military Company of the Massachusetts* (Boston, 1895), 1:295–296; *A Report of the Record Commissioners of the City of Boston* (Boston, 1883), 8:232.

England foodways as "austere," for New Englanders "expressed a settled hostility to sensual indulgence at the table," and their "culture made a virtue of sensual restraint" with a "spirit of self-denial." In his detailed discussion of New England diet, he makes no mention of sugar products.¹⁴⁶ Ken Albala similarly describes puritans as "abstemious," emphasizing their "gastronomic simplicity."¹⁴⁷ But as we have seen, historical surveys of New England foodways typically overlook the widespread reality of sugar product consumption. An overreliance on the intellectual history of the puritan philosophy of restraint has obscured dependence on sugar as an influence on early New Englanders' behavior. Crucially for the course of Atlantic economic development, the puritan values of material simplicity and self-discipline did not extend to sweetness.

Puritan leaders' particular demonization of rum likely stemmed not only from an abhorrence of drunkenness but also from concerns about the cultural consequences of New Englanders' rapidly growing involvement with the Atlantic market. As the century wore on, it became apparent that the interests of New England and the West Indies were diverging and puritan influence in both regions was weakening. After appearing before the Barbados Assembly in 1674 to protest the imposition of new customs duties on the New England trade, a disgruntled merchant wrote to John Winthrop Jr. expressing the opinion that dependence on trade with Barbados, despite its financial rewards, had sapped New England's strength:

How advantagius it would prove to New England, if they ware denyed the use of those goods [molasses and rum], haveing a full supply of good mault for beere, & cyder to distill into liquors, & that a smale quantity of sugr will furnish us, haveing a store of good honey; also that greate part of our people will be improved in raiseing manufactures, haveing good wooll, flax, and hempe.¹⁴⁸

This unease with the direction taken by New England consumer culture was likely widespread; prominent merchant John Hull similarly expressed:

¹⁴⁶ David Hackett Fischer, *Albion's Seed: Four British Folkways in America* (New York, 1989), 134–139.

¹⁴⁷Ken Albala, "Premodern Europe," in *Food in Time and Place: The American Historical Association Companion to Food History*, ed. Paul Freedman, Joyce E. Chaplin, and Ken Albala (Berkeley, 2014), 35.

¹⁴⁸Letter to John Winthrop Jr., 1 Feb. 1674, *Proceedings of the Massachusetts Historical Society* (Boston, 1891–1892): 2nd series, 7:16–17.

[B]est good to make us fall Close to all sorts off manufacture and forbeare trading by sea: and so Enable us to liue more of or without Such dependancies if we Co[u]ld be so low and Content in or Spirits as then wo[u]ld be or Condition to Eate no fruite sugr Spice and drinke noe wine but or owne Cyder and weare noe Clothing but of or owne making I doe not know but we might be as helthy and as warme as we are now and It may be more holy righteous and humble.¹⁴⁹

These assertions that Massachusetts Bay could and should free itself from the desire for foreign sugar products (among other imports) had the same basis as did the ministers' horror of rum: that ingrained addictions, perhaps tolerable in themselves, became threatening when they bound the fortunes of the colony to the larger world. These fears were well-founded; by the close of the seventeenth century, the Atlantic sugar industry, rather than the vision of the puritan founders, had come to guide the economic development of Massachusetts Bay.

What Massachusetts farmers grew for themselves, what they produced to sell on the market, and what they chose to buy with the proceeds—these choices had not only economic but also moral implications. Over one hundred and fifty years after New Englanders first developed a symbiotic economic relationship with Barbados, the 1805 Boston *Farmer's Almanack* entreated farmers to expend precious resources in the early spring on tapping maple trees, in order to "make your own sugar, and send not to the Indies for it. Feast not on the toil, pain and misery of the wretched."¹⁵⁰ The "wretched," of course, were the millions of Africans enslaved on the sugar plantations of the Caribbean to satisfy the appetite of New Englanders for sweetness; maple sugaring enjoyed a revival in the early nineteenth century as an expression of abolitionism, reflecting an awareness of the way in which consumption and slavery were interwoven. New Englanders had always understood that their dietary choices were entwined with the destinies of faraway lands.

Conclusion

The article has examined how sugar, as a consumer good, stimulated the growth of Atlantic slavery and the New England economy. In so doing, it builds on recent literature investigating the enmeshment of the early

 $^{^{149}}$ John Hull Letter-book, vol. 2, 411, Folio 3, MSS John Hull Papers, 1624–1685, American Antiquarian Society, Worcester, MA.

¹⁵⁰ Robert B. Thomas, The Farmer's Almanack (Boston, 1804).

New England economy with the slave systems of tropical regions.¹⁵¹ Sugar had been available to English consumers since the medieval period and demand had become seemingly insatiable by the sixteenth century. Thus, when in the mid-seventeenth century demand for sugar products in New England kindled that region's trade with Barbados, sugar was already a familiar and much-desired consumer commodity. New England markets nurtured the West Indies sugar industry by supplying Barbados and other islands with resources, and by importing sugar products, particularly molasses and rum, for consumption. The creation of these markets stimulated further investment and consumption across different classes of New England society. Sugar performed an essential role in the New England consumer culture and economic exchange, as demonstrated by probate records and account books, and it even functioned as currency. These developments complexify our understanding of the early New England colonists' material culture, and illuminate the centrality of early modern consumer behavior in shaping the slavery-based Atlantic world economy.

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¹⁵¹For two recent examples of this literature, see Mark Peterson, *The City-State of Boston: The Rise and Fall of an Atlantic Power, 1630–1865* (Princeton, 2019); and Christy Clark-Pujara, Dark Work: The Business of Slavery in Rhode Island (New York, 2016).