



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

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

a dissertation presented

by

Marion Menzin

to

The Department of History

in partial fulfillment of the requirements
for the degree of
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in the subject of
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Abstract

My dissertation seeks to deepen our understanding of the emergence of capitalism and imperialism in the early modern world both by analyzing the nature of sugar as an early modern commodity and by considering the role that demand for sugar played in the colonization of New England and Barbados. My aim is twofold: to investigate and periodize sugar, molasses, and rum consumption in early seventeenth-century England and then Massachusetts Bay, and to explain the nature of this demand and its consequences for the economy and people of the English Atlantic. I trace the emergence of the local and international business and personal networks that bound together Barbados and New England into an interdependent sugar and slavery region, as well as examining the role that native peoples played in the sugar economy.

I argue that the emergence of capitalism during this period should in part be understood as an expression of pent-up consumerism. Consumerism was not simply an accommodation to a changing socioeconomic system, but a driver of it. The pre-existing demand of English people for sugar must be considered as a factor in efforts to secure and develop the English colonies and Atlantic markets. 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 has not been as well explored.

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. 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 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 in fact quite the reverse: it was sugar dependency that fostered capitalistic behaviors.

The intense reaction that sugar produced in the body – generating sensations associated with healing, life, and nurture – contributed to its unique role in the early modern gift economy. Ironically, this cultural function only reinforced demand for the commodity, resulting in perhaps the most impersonal, profit-driven industrial production process yet seen in the Atlantic world, and rendering sugar a source of social devastation. My dissertation is both a quantitative economic history and a cultural analysis of the processes involved in human choice and behavior. I undertake to uncover why, beginning in the seventeenth century, far-flung groups contributed enormous financial and human resources to large-scale sugar production and trade, changing the face of the Atlantic world and accelerating the pace of modern economic development.

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Introduction

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

The 1805 *Farmer's Almanack* included a list of seasonal instructions for New England farmers. In the raw month of March, the almanac advised, it was time to “keep your barn neat,” “take care of cows that are with calf,” and “prune your fruit trees.” Such tasks suggest a world of insular homesteads bounded by the stone walls that divided one farmer’s property from another’s. But on the contrary, these decisions about the allocation of agricultural labor reverberated across the globe. What 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 moral implications. For this reason, the almanac entreated farmers to expend resources in the early spring to “make your own sugar, and send not to the Indies for it. Feast not on the toil, pain and misery of the wretched.”¹ The “wretched,” of course, being the millions of Africans enslaved on the sugar plantations of the Caribbean to satisfy the appetite of New Englanders for sweetness.

Maple sugaring did enjoy a revival in the early republic as an expression of abolitionism, reflecting an awareness of the way in which consumption and slavery were interwoven. It was an unlikely prospect, however, that an army of New Englanders would descend on the forests of the far north and tap enough maple trees to satiate the region’s sugar market, when the labor-intensive commodity could be produced so cheaply by slaves. Yet New Englanders had always understood that their dietary choices were entwined with the destinies of faraway lands. Concern with securing sugar, molasses, and rum underlay New England’s initial integration into the Atlantic economy.

By as early as 1600 sugar was an entrenched component of English diet, but the sugarcane from which it was extracted was biologically incompatible with the landscapes of England and New

¹ Robert B. Thomas, *The Farmer's Almanack* (Boston: John West, 1804).

England. In those regions, honey and maple sap, along with sweet, starchy fruits and vegetables, had nourished the human predilection for sweetness for millennia, but the appeal of those native products paled in contrast with intensely sweet and user-friendly processed sugar. English sugar hunger underlay the exploitation of land and people in the Americas, beginning in Barbados. It was also a factor in the development of a mercantile, consumer economy with footholds in both the colonial and native villages of New England. Sugar's influence was immense; in the twin colonies of Massachusetts Bay and Barbados, in particular, it cemented relationships and destroyed peoples; it made fortunes and bankrupted others.

* * * * *

The Role of Sugar in the Development of the Atlantic Economy

In these pages, I trace the patterns of sugar product consumption in seventeenth-century New England, from port to countryside, and I explore the way in which physical, financial, and intellectual exchanges between New England and Barbados were at the core of the development of both regions. My research deepens our understanding of the rise of slave-based tropical commodity production and consumption in the Atlantic World. I examine the way in which the emergence of capitalism and imperialism in the early modern world was 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 a closer examination of the history of the Atlantic sugar trade enrich our knowledge of New England's material culture?

My aim is twofold: to investigate and periodize sugar, molasses, and rum consumption in early seventeenth-century England and then Massachusetts Bay, and to explain the nature of this demand and its consequences for the economy and people of the English Atlantic. I trace the

growth of the local and international business and personal networks that bound together Barbados and New England into an interdependent sugar and slavery region, as well as examining the role that native peoples played in the sugar economy. In New England, two groups attempting to preserve their autonomy within a turbulent Atlantic world – Reformed Protestants and Indians – both depended on sugar, despite their perceptions of the threat that the sugar trade posed to the integrity of their societies. Both the failure of New England’s utopian religious experiment and the erosion of native peoples’ political power are representative of the way in which consumerism underlay the rise of capitalism as a social and economic force in the Atlantic world.

My dissertation 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 pent-up consumerism. Consumerism was not simply an accommodation to a changing socioeconomic system, but a driver of it. For example, the pre-existing 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. 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), above all sugar products. I seek to explore the extent to which demand was not simply satisfied by these developments but played a causal role as well.

In particular, then, my dissertation examines the role of mass consumption in fostering 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 has not been as well explored.² 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.³ I argue that sugar was no less a singular and potent force in the history of capitalism.

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 laying the groundwork for the industrial revolution. Scholars of the early modern world have emphasized significance of the spread of durable goods, the reorganization of work, and the technological changes that marked 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 any and all aspects 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.”⁴ This shift, to a world economy based on colonial production of tropical goods to meet a seemingly insatiable

² As 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.

³ See Wolfgang Schivelbusch, *Tastes of Paradise: A Social History of Spices, Stimulants, and Intoxicants* (New York: Pantheon Books, 1992) 9-10, and Paul Freedman, *Out of the East: Spices and the Medieval Imagination* (New Haven: Yale University Press, 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.

⁴ David Eltis, “New Estimates of Exports from Barbados and Jamaica, 1665-1701,” *The William and Mary Quarterly* 52 (1995): 642, 646.

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% of imports by value into England and Wales; in 1772, they were almost 36%. McCants's work on 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 these goods. Though far from a sufficient condition for the spread of capitalism, this reorientation towards consumption was a necessary one. And tropical groceries possessed unique characteristics which quickly overwhelmed traditional constraints on behavior to forge a new economic system.⁵

Sugar was also one of the few colonial crops that was utterly dependent on slavery 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

⁵ Carole Shammas, "The Revolutionary Impact of European Demand for Tropical Goods," in *The Early Modern Atlantic Economy*, ed. John J. McCusker and Kenneth Morgan (Cambridge: Cambridge University Press, 2000). Anne McCants, in "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* 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: Verso, 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: W.W. Norton, 2010), 49.

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.”⁶

Yet the sixteenth- and seventeenth-century Atlantic sugar market remains poorly understood, as do many aspects of early modern eating habits. Craig Muldrew terms diet the “Cinderella” of early modern English historiography, despite the fact that food was the “petrol of the early modern economy.”⁷ 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.⁸ 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.

⁶ Barbara L. Solow, *The Economic Consequences of the Atlantic Slave Trade* (Lanham: Lexington Books, 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: Cambridge University Press, 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.

⁷ Craig Muldrew, *Food, Energy, and the Creation of Industriousness: Work and Material Culture in Agrarian England, 1550-1780* (Cambridge: Cambridge University Press, 2011), 2, 29-30. Recent scholarship on much later periods links sugar consumption to the growth of empire, business, and labor. For example, April Merleaux, *Sugar and Civilization: American Empire and the Cultural Politics of Sweetness* (Chapel Hill: University of North Carolina Press, 2015).

⁸ For 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 Babels: Sugar and the Making of the Atlantic World*, ed. Stuart B. Schwartz (Chapel Hill: The University of North Carolina Press, 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, and 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 colonial New England diet, Sarah F. McMahon’s “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, 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: University of Chicago Press, 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 one of *Consumption and the Making of Respectability, 1600-1800* (New York: Routledge, 2002).

New England and the Atlantic World

The Massachusetts Bay colony (1628) and the colony of Barbados (1627) were established within a year of each other. New England was vital to the development of Barbados during the pivotal period of 1630-1660 both as the supplier of food, timber, and other basic needs of the island, and as part of an Atlantic migration in which great numbers of people as well as goods flowed between New England and the Caribbean.⁹ By 1688, about two-thirds of export commodities leaving Boston went to the West Indies. New England's natural resources, principally timber products, fish, salt beef and pork, and some other agricultural products such as 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."¹⁰ Equally important was New England's dominance of the island's export trade, shipping the island's sugar products to England or re-exporting them up and down the North American coast.¹¹

Historians have characterized New England's role in the sugar-slave complex accordingly. Barbara Solow's summary of the flow of goods and people around the Atlantic is typical: "England's colonies in New England, which had hitherto only a trickle of beaver and wood to export, now

⁹ For connections between the two regions, see Alison Games, *Migration and the Origins of the English Atlantic World* (Cambridge: Harvard University Press, 1999); Karen Ordahl Kupperman, *Providence Island, 1630-1641: The Other Puritan Colony* (Cambridge: Cambridge University Press, 1993); Russell Menard, *Sweet Negotiations: Sugar, Slavery, and Plantation Agriculture in Early Barbados* (Charlottesville: University of Virginia Press, 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: University of North Carolina Press, 1972), 110-116.

¹⁰ Charles F. Carroll, *The Timber Economy of Puritan New England* (Providence: Brown University Press, 1973), 89, 138; W. Noel Sainsbury, ed., *Calendar of State Papers, Colonial Series, America and West Indies, 1669-1674* (TannerRitchie Publishing), 475.

¹¹ Margaret Ellen Newell, *From Dependency to Independence: Economic Revolution in Colonial New England* (Ithaca: Cornell University Press, 1998), 76-78.

found a market in the British West Indies, and with the proceeds of these exports became an important customer for English manufacturers. In this way, the institution of slavery was fundamental in bringing the Industrial Revolution to England.”¹² But this view, which focuses exclusively on New England’s exports of raw materials and the region’s import of English manufactures, is too narrow. Though New England’s role in the colonial Atlantic economy has been investigated and expanded most recently by Eric Kimball and Wendy Warren, who seek to further expose New England’s connections to sugar, slavery, and capitalism, the role of New Englanders as developers of the two regions and as consumers of slave-produced products has not been fully explored.¹³

Much of the sugar, molasses, and rum that New 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 together culturally and economically. The dynamic New England economy that 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 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.¹⁴

¹² Barbara L. Solow, *The Economic Consequences of the Atlantic Slave Trade* (Lanham: Lexington Books, 2014), xiii.

¹³ 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: Liveright, 2016).

¹⁴ The 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: The Pennsylvania State University Press, 2006), 142-144. See also Gloria L. Main and Jackson T. Main, “Economic Growth and the Standard of Living,” and Gloria L. Main, *Peoples of a Spacious Land: Families and Cultures in Colonial New England* (Cambridge: Harvard University Press, 2001), chap. 9, and 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.

Historians have not yet fully explored this high rate of sugar production consumption. The few scholarly treatments of early New England diet are curiously inaccurate on this point, including those of Sarah McMahon and 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. McMahon characterizes seventeenth century foodways as monotonous and aimed at basic subsistence; she implies that the colonists cared only if they had enough food, with little concern for variety or flavor. McWilliams, in his survey *A Revolution in Eating*, asserts that New Englanders maintained a self-sufficient food supply before 1720, and does not even mention tropical groceries in his section on New England foodways.¹⁵ Nor does the rich literature on the cultural and material history of the early settlers and native peoples give sugar products appropriate attention.¹⁶ My research, in contrast, shows that the mass consumption of sugar products on the part of seventeenth-century New Englanders impacted the trajectory of the New England and indeed the Atlantic economy.

¹⁵ See James E. McWilliams, *A Revolution in Eating: How the Quest for Food Shaped America* (New York: Columbia University Press, 2005). Again, the only comprehensive study of early New England diet, McMahon's "A Comfortable Subsistence," offers no analysis of the role of tropical commodities. McMahon observes that "this article deals with staples produced on Massachusetts farms rather than with purchased foods. As a consequence, it is a study of the basic rather than the total diet." She makes only passing reference to allowances for "West India Goods" and lumps all such goods for flavoring foods into a "condiment" category, though noting that such "condiments" were considered "necessary." This inattention to tropical groceries is typical of research on seventeenth-century New England consumer habits. 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 self-sufficiency 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- and eighteenth-century rural New Englanders were "self-sufficient," becoming global consumers only with the rise of commercial agriculture at the very end of the eighteenth century (55-56). In a rare attempt to quantify seventeenth-century tropical grocery consumption in New England, Gloria L. Main finds tropical groceries as a percentage of probated estates at 10-15% between 1630 and 1674, down to 5-8% by 1700, then skyrocketing to close to 50% by 1750-1774. While this data is helpful, it is only a beginning. Based only on probate records, her conclusions are inherently limited, and data indicating that tropical grocery consumption decreased at the end of the seventeenth century seems unlikely to be accurate. Main, *Peoples of a Spacious Land*, 223.

¹⁶ For example, Martha L. Finch, *Dissenting Bodies: Corporealities in Early New England* (New York: Columbia University Press, 2010), and Matt Cohen, *The Networked Wilderness: Communicating in Early New England* (Minneapolis: University of Minnesota Press, 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.

Towards a Better Understanding of Early Modern Consumerism

Though the turn to capitalism required the emergence of a profit-seeking 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 very 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. As 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.”¹⁷ 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 a complex one; 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.¹⁸ Yet at the same time, one of the primary

¹⁷ Carole Shammas, “Explaining Past Changes in Consumption and Consumer Behavior,” *Historical Methods* 22 (1989): 65.

¹⁸ As James Livingston points out in *Against Thrift: Why Consumer Culture is Good for the Economy, the Environment, and Your Soul* (New York: Basic Books, 2011). Though Livingston doesn’t qualify this assertion, this would be setting aside,

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.

Why did sugar, followed by other tropical groceries, calicoes, and ceramics, come to enjoy an unprecedented popularity at the beginning of the seventeenth century?¹⁹ In the 1970s Jan De Vries 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 in order 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 that, "by 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."²⁰

obviously, investments in commodities that are expected to appreciate, and it assumes that people don't consume for the sole purpose of increasing their "cultural capital" and therefore their ability to maximize profits in the future.

¹⁹ For durable good 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: Routledge, 1993), 136, and in the same volume, John Styles, "Manufacturing, Consumption, and Design in Eighteenth-Century England," 527-554.

²⁰ See Jan De Vries, *The Economy of Europe in an Age of Crisis: 1600-1750* (New York: Cambridge University Press, 1976), esp. 187, and "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, he 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

My study of consumer history engages with and builds on that of De Vries, who in his more recent work offers two theoretical frameworks for understanding consumption patterns (though he does not apply these frameworks to particular commodities). First, he posits a division between innate, individually referenced desires and those wants that are socially derived and reinforced. Second, he categorizes both of the above categories of consumption as either aimed at securing comfort (the reduction of physical or socio-emotional “pain or discomfort”) – and/or pursuing pleasure (the experience of physical sensuality or psychological novelty). These dualities are useful both in analyzing my own findings and in understanding how other scholars have thought about the history of sugar consumption.²¹

Consumer historians have tended to favor explanations based on socially-driven aspects of comfort- or pleasure-seeking. The 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,

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.

²¹ De 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: Oxford University Press, 1976). For an exploration of “novelty,” see Maxine Berg, *Luxury and Pleasure in Eighteenth-Century Britain* (Oxford: Oxford University Press, 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’s *The Theory of the Leisure Class* (1899; repr., Oxford: Oxford University Press, 2007). Veblen focused on consumption as a direct expression of monetary wealth, which subsequent commentators have found too simplistic. Pierre Bourdieu, *Distinction: A Social Critique of the Judgment of Taste* (Cambridge: Harvard University Press, 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 mid-twentieth-century France, numerous scholars have investigated, challenged, and refined the ways in which his 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, and Annick Prieur and Mike Savage, “Emerging Forms of Cultural Capital,” *European Societies* 15 (2013): 246-267.

vanity, and vaulting ambition.”²² But not all commodities lend themselves easily to such interpretation. Historians of sugar consumption often vacillate between acknowledging sugar’s unique material characteristics and interpreting demand for it as a mostly social or cultural phenomenon. Usually this type of argument relies on a misperiodization of sugar consumption as a trend that postdated the emergence of capitalism, so that the desire for sugar is explained fundamentally – in my view, incorrectly – as a cultural response to the new social mores of capitalist culture.

It is this interpretation of English sugar consumption that has been popularized in different forms by Sidney Mintz and Woodruff D. Smith, among others. 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

²² 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: Europa Publications, 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.

pressure to emulate the consumption habits of the wealthy and participate in a culture of “respectability.” When ingesting sugar within a rigidly defined ritual, the most prominent example being tea drinking, people were able to signal their ability to restrain their hunger for sugar within acceptable times and forms and to adapt their behavior to new economic pressures. Both Mintz and Smith, though they emphasize the agency of different groups, see sugar consumption as the result of the social and economic transition to capitalism.²³

Taken together, these theories serve as a compelling revision of the notion that sugar consumption is simply a function of price. They are, however, vulnerable to critique. Colin Campbell notes, for example, that historians too often assume that all consumption consists of a form of status-seeking. 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.²⁴ Further, an overemphasis on the social meanings attached to objects and experiences can obscure the ways in which the humans respond physically to the material world across cultures.

²³ Sidney W. Mintz, *Sweetness and Power: The Place of Sugar in Modern History* (New York: Penguin Books, 1985), 37- 38, and chap. 4, esp. 174, 180-181, 186. Mintz argues that different factions of the upper classes may have had opposing interests at times, but that all of these factions supported some aspect of sugar production and consumption. 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 Woodruff D. Smith, *Consumption and the Making of Respectability* (New York: Routledge, 2002) 2-4, 9. See also James Walvin, *Fruits of Empire: Exotic Produce and British Taste* (New York: New York University Press, 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 his essay, “The Changing Roles of Food in the Study of Consumption,” in Brewer and Porter, 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: Oxford University Press, 2013), 5-11. My summary here is limited for the sake of the reader, 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.

²⁴ Colin Campbell, “Understanding Traditional and Modern Patterns of Consumption in Eighteenth-Century England: A Character-Action Approach,” in Brewer and Porter, 40-43, and see a more extensive version of this argument in Campbell, *The Romantic Ethic and the Spirit of Modern Consumerism* (Oxford: B. Blackwell, 1987). Campbell is part of a larger trend; countering simplistic assumptions about the process of social emulation, scholars have moved towards the psychological underpinnings of culture, exploring how ideas, needs, and identities come to be bound up in material objects.

Leora Auslander suggests that historians should recognize the fact of “universal embodiedness,” or that there are “certain traits shared by human beings across time and space.”²⁵

These “traits” may be rooted in evolutionary drives to which, to some extent, all human behavior can be reduced. Social change, then, may not create desires as much as spur new ways to satisfy ancient needs.²⁶ Of course, human instincts are by no means deterministic of behavior – indeed, such instincts often conflict with one another both within the individual and within a society. 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 erroneous assumptions about consumption levels. Distortions in the history of English sugar consumption derive in part from such misconceptions of how people interact with sugar as a commodity.²⁷

²⁵ Leora Auslander, “Beyond Words,” *The American Historical Review* 110 (2005): 1019.

²⁶ For 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: Prometheus Books, 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 various 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 about whether or not they will have access to material goods, and therefore don’t take those material aspects for granted? See Douglas Holt’s analysis of cultural capital in 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. Campbell makes a similar argument in “Consuming Goods and the Good of Consuming,” *Critical Review* 8 (1994): 503-520, differentiating “traditional” societies in which the drive for sensory pleasure can be satisfied, and “modern” societies in which pleasure is an emotional ideal which 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.

²⁷ Anthropologist Marvin Harris puts it this way: “Whether [foods] are good or bad to think depends on whether they are good or bad to eat. Food must nourish the collective stomach before it can feed the collective mind.” Marvin Harris, *Good to Eat: Riddles of Food and Culture* (New York: Simon and Schuster, 1985), 15.

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 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 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 in fact quite the reverse: it was sugar dependency that fostered capitalistic behaviors.

Sugar as an Early Modern Drug

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.²⁸ 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.²⁹ Historians usually assume some degree of innate “liking” of sugar, which would

²⁸ 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.”

²⁹ Works 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: The University of Arizona Press, 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,” and Jordan Goodman, “Excitantia: Or, How Enlightenment Europe Took to Soft Drugs,” in *Consuming Habits: Global and Historical Perspectives on how Cultures Define Drugs*, ed. Jordan Goodman, Paul E. Lovejoy, and Andrew Sheratt (New York: Routledge, 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:

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.³⁰

Scientists have demonstrated that rather than being learned, a craving for sweetness and the preference for sugar over other foods, including more nutritious foods, is universal across cultures, present from birth, and continues into adulthood (whether or not adults were exposed to sugar as children). Because the optimal concentration of sweetness for most people is that found in many ripe fruits, the standard consensus is that humans developed an evolutionary preference for sweetness because of the valuable energy, calories, and nutrients that fruits and other carbohydrates provide. Further evidence for this conclusion is that most herbivores exhibit a similar preference for sweetness, whereas carnivores, whose bodies do not need plant foods, do not.³¹ Humans absorb and digest sugar easily, in contrast to lean protein, and this easy absorption also promotes higher weights. Before settled communities developed the skills for sugarcane cultivation and processing, humans'

Routledge, 2001). See also Brian Cowan, *The Social Life of Coffee: The Emergence of the British Coffeehouse* (New Haven: Yale University Press, 2005), and Marcy Norton, *Sacred Gifts, Profane Pleasures: A History of Tobacco and Chocolate in the Atlantic World* (Ithaca: Cornell University Press, 2008).

³⁰ Historians 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” which 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: Berghahn Books, 1997), 5.

³¹ A.W. Logue, *The Psychology of Eating and Drinking* (New York: Brunner-Routledge, 2004), 69; John Prescott, *Taste Matters: Why We Like the Foods We Do* (London: Reaktion Books, 2012), 31; Carolyn Korsmeyer, *Making Sense of Taste: Food & Philosophy* (Ithaca: Cornell University Press, 1999), 88; Alison K. Ventura and Julie A. Mennella, “Innate and Learned Preferences for Sweet Taste During Childhood,” *Current Opinion in Clinical Nutrition and Metabolic Care* 14 (2011): 379-384. There is also a widespread cross-cultural premodern practice of giving sweet foods to infants, presumably because humans all over the world have noticed that infants respond to these foods. See I.G. Wickes, “A History of Infant Feeding I,” *Archives of Disease in Childhood* 28 (1953): 151, 155. Studies show that people respond positively to both the flavor of sweetness, which is an indicator of a source of energy, and the energy itself, but that foods that contain both the energy and the flavor are more appealing than the flavor alone (as in artificially sweetened foods). Prescott, *Taste Matters*, 34, 73.

primary sources of sweetness were fruit, honey, and maple syrup, gathered to maximize energy storage and survival.³²

Humans have such an essential dietary need for the energy and nutrients in sweet fruits and plants, in fact, that their brains have developed reward systems that react to sweetness the way we do to opioid drugs. Tasting sugar intoxicates the mind, stimulating “hedonic hotspots” across many areas of the brain. Unsurprisingly, medications that block responsiveness to opioid drugs also block responsiveness to sugar. This drug-like characteristic of sugar is an inherent part of the reason humans consume it; people eat sugar because of its ability to provide energy, but also regardless of its nutritive properties. Humans often, and in some situations always, choose sugar over more nutrient-dense foods.³³ There is some evidence that people eat sugar even when it makes them physically ill, in the case of the small number of people who have a sugar intolerance.³⁴ Thus humans can and do become intoxicated by sugar in the sense that their brains have a chemical reaction to sweetness. Indeed, sugar triggers such a strong reward response in the brain that a significant number of people cannot control how much of it they eat.³⁵ One study with rats showed that given

³² Alan K. Outram, “Hunter-Gatherers and the First Farmers: The Evolution of Taste in Prehistory,” in *Food: The History of Taste*, ed. Paul Freedman (Berkeley: University of California Press, 2007), 47-48.

³³ Scientists have mapped these complex “hedonic hotspots” of the brain that respond to the consumption of sugar. Kent C. Berridge, et. al., “The Tempted Brain Eats: Pleasure and Desire Circuits in Obesity and Eating Disorders,” *Brain Research* 1350 (2010): 43-64. They have also tested the brain’s reward systems by administering opioid-blocking drugs, which decrease the consumption of sweet foods, and looking at brain scans, which show that opioid drugs and sugar activate the same areas of the brain. (The preference for sugar is not unlimited, however; there is evidence that the craving for sweetness declines after people consume some sugar, presumably because of a homeostatic process that regulates the consumption of a diverse array of nutrients.) Prescott, *Taste Matters*, 34-35, 88-89, 103. For a description of how taste is transmitted to the brain, see Korsmeyer, *Making Sense of Taste*, 74. For preference for sugar over other foods across age, including a study of infants that showed that their preference for sweet foods was likely due to biochemistry rather than the body’s need for nutrients, see U.S. Department of Health, Education, and Welfare, Public Health Service, National Institutes of Health, “Preference for Sweet in Humans: Infants, Children, and Adults,” by J.A. Desor, Owen Maller, and Lawrence S. Greene, in *Taste and Development: The Genesis of Sweet Preference*, ed. James M. Weiffenbach (Washington, D.C.: U.S. Government Printing Office, 1977), 164-172.

³⁴ Logue, *Psychology*, 71.

³⁵ J.R. Ifland argues that addiction to processed foods (of which sugar is the major component) meets the criteria of a substance use disorder, based on progressive use over time, withdrawal symptoms, lack of control over use, and use despite knowledge of negative consequences. J.R. Ifland, et. al., “Refined Food Addiction: A Classic Substance Use Disorder,” *Medical Hypotheses* 72 (2009): 518-526.

the option, the animals become dependent on sugar, exhibiting bingeing, withdrawal, and craving, “behavioral and neurochemical changes that resemble the effects of a substance of abuse.”³⁶

Humans have similar physical reactions to sweetness; for example, an increased heart rate, related not to carbohydrates entering the bloodstream but simply to the initial taste of sugar, and a slowed sucking rate with increased swallowing, indicating the savoring of the sweet taste, or as one scientist terms it, “joy.”³⁷

But is sugar “addictive” in the sense that we commonly understand the term? Humans do not become physically dependent on sugar to the point where they experience intense withdrawal symptoms when they stop eating it, at least not to the same degree as with other stimulants and narcotics. Rather, sugar is psychologically addictive; it is an “immediate reinforcer,” like morphine and cocaine, meaning that its biochemical effects are felt right away without any physical dependence being established. Environmental conditions can augment these biochemical effects by making sugar more available, more competitive with other foods, and easier to consume, or in contrast by limiting access to sugar, which can also intensify the desire for it.³⁸

Though there is some individual variation in preference for different concentrations of sweetness, all populations crave it.³⁹ The form in which people prefer to consume sweet foods,

³⁶ Nicole M. Avena, Pedro Rata, Bartley G. Hoebel, “Evidence for Sugar Addiction: Behavioral and Neurochemical Effects of Intermittent, Excessive Sugar Intake,” *Neuroscience & Biobehavioral Reviews* 32 (2008): 32.

³⁷ Diana Rosenstein and Harriet Oster, “Differential Facial Responses to Four Basic Tastes in Newborns,” in *What the Face Reveals: Basic and Applied Studies of Spontaneous Facial Expression Using the Facial Action Coding System*, ed. Paul Ekman and Erika L. Rosenberg (New York: Oxford University Press, 2005), 303; Lewis P. Lipsitt, “Taste in Human Neonates: Its Effect on Sucking and Heart Rate,” in Weiffenbach, 125-142.

³⁸ John L. Falk, “Sweet Abuse and the Addiction Model,” in Weiffenbach, 374-386. Increased demand because of limits on access is known as the response deprivation hypothesis or “hedonic hunger;” Prescott, *Taste Matters*, 106, 108.

³⁹ Paul Rozin, “Evolution and Adaption in the Understanding of Behavior, Culture, and Mind,” *American Behavioral Scientist* 43 (2000): 978, 981; Prescott, *Taste Matters*, 36, 132; Logue, *Psychology*, 74. And different populations vary in their sensitivity and preference for different concentrations of sugars in foods, presumably based on varied amounts of experience with sweet foods. Claude Marcel Hladik, “Primate Models for Taste and Food Preferences,” in Macbeth, 22. Similarly, “supertasters” with genetic sensitivity to taste may not like sweet foods as much as the general population. See Valerie B. Duffy and Linda M. Bartoshuk, “Sensory Factors in Feeding,” in *Why We Eat What We Eat*, ed. Elizabeth D.

however, is probably largely culturally determined.⁴⁰ Indeed, its material characteristics render it an object of intense cultural interest. Culture influences exactly how sweet people like their food; what types of flavors and textures they create for processed sweets; when they eat their sugar; to some extent, how often they eat it; and of course, how they interpret their own consumption. This can result in widely varying patterns and forms of sugar consumption across cultures.⁴¹ The cultural meanings attached to sweet foods, usually positive – such as celebration, prestige, health, or luck – do not explain why people eat them. Instead, sweet foods acquire these positive meanings because humans are biologically predisposed to favor their consumption.⁴²

Despite the universal liking for sweetness and eventual adoption of processed sugar as a preferred food everywhere, there is some degree of cultural variation as to the degree of consumption. Historians have done relatively little research on this subject, however, and no consensus exists. For example, scholars disagree about the place of sugar in Chinese history. Some assert that the Chinese never consumed sugar on anything close to the scale of Britain, Europe, and America, even though China had a sophisticated sugarcane processing industry hundreds of years before that of the Caribbean. But Kenneth Pomeranz finds that Chinese sugar consumption in the eighteenth century was comparable to Britain's, and indeed likely significantly exceeded Britain's in the more developed regions of China.⁴³ The French were the slowest society in Western Europe to incorporate sugar into daily diet, and historians originally argued that sugar consumption in France

Capaldi (Washington, D.C.: American Psychological Association, 1996). But despite some variation between populations and among individuals, the evidence is overwhelming for an innate biological craving for sweetness in all humans.

⁴⁰ Korsmeyer, *Making Sense of Taste*, 89; Logue, *Psychology*, 72.

⁴¹ Michael Krondl, *Sweet Invention: A History of Dessert* (Chicago: Chicago Review Press, 2011), 1-14.

⁴² Korsmeyer, *Making Sense of Taste*, 132.

⁴³ Kenneth Pomeranz, "Political Economy and Ecology on the Eve of Industrialization: Europe, China, and the Global Conjecture," *The American Historical Review* 107 (2002): 428-430. For a contrasting view of Chinese sugar consumption, see De Vries, *The Industrious Revolution*, 155, and B.W. Higman, "The Sugar Revolution," *The Economic History Review* 53 (2000): 227.

remained low through the eighteenth century due to indifference to or even rejection of sugar. Recent scholarship has cast doubt on this contention, finding evidence of widespread use of sugar in cooking in France from the sixteenth century onwards. Structural limitations on access to sugar, stemming from France's relatively slow rate of economic development, seem a likely explanation for any remaining lag in the pace of French sugar consumption relative to nearby countries.⁴⁴ Thus even though cultures have varied somewhat in their adoption of sugar products, the similarities outweigh the differences.⁴⁵

Of course, culture can also play a powerful role in food restriction. People depend on social cues to guide how much they eat, when they eat, and what they eat.⁴⁶ One can argue that sugar has a very strong attraction for most people without insisting that the scale of its consumption is predetermined on an individual basis.⁴⁷ Beliefs about the body and the importance of self-control, as well as structural factors such as economic networks, influence the rate and extent to which different groups have adopted sugar as a mainstay of diet. People have the ability to resist drugs and drug-like

⁴⁴ Smith cites the French exception as evidence of cultural influence on sugar consumption; Smith, *Consumption and the Making of Respectability*, 72. His assertion is supported by the work of Martin Breugel, "A Bourgeois Good? Sugar, Norms of Consumption, and the Labouring Classes in Nineteenth-Century France," in *Food, Drink, and Identity: Cooking, Eating and Drinking in Europe Since the Middle Ages*, ed. Peter Scholliers (New York: Berg, 2001). However, these claims of French exceptionalism are countered by Bruno Laurioux, "Medieval Cooking," in *Food: A Culinary History from Antiquity to the Present*, ed. Jean-Louis Flandrin and Massimo Montanari (New York: Columbia University Press, 1999), 299; Stols, "The Expansion of the Sugar Market," 245-248; and Austen and Smith, "Private Tooth Decay," 100. The impoverished and isolated state of the French peasantry, along with the presence of a political elite that recoiled from innovation and actively obstructed transportation and distribution networks, greatly limited the reach of consumer goods in early modern France. Appleby, *The Relentless Revolution*, 51-52.

⁴⁵ Some scholars argue that Europeans already had a native source of sweetness in honey, and so there must be a cultural explanation for the eventual adoption of imported sugar. But this argument ignores the local production of sugar in the Mediterranean and the Atlantic islands from the late Middle Ages. Sugar had largely replaced honey in Europe by the mid-sixteenth century, when Mediterranean production grew large enough to ensure a regular supply in Western Europe. People tend to prefer sugar over honey simply because it is easier to process into stable edible form (honey is embedded in beeswax, which is difficult to remove). See Mark Dawson, *Plenti and Grase: Food and Drink in a Sixteenth-Century Household* (Devon, UK: Prospect Books, 2009), 160.

⁴⁶ Prescott, *Taste Matters*, 87.

⁴⁷ For a thoughtful comparison of the "evolutionary-adaptationist" vs. cultural explanations for human food choices, see Rozin, "Evolution and Adaption." Rozin comes down very much on the side of culture as the basis of dietary choices – with a few exceptions, including sugar. For an examination of the relationship between physiology and culture that focuses on experiences of hunger, see Carla Cevasco, "Hunger Knowledges and Cultures in New England's Borderlands, 1675-1770," *Early American Studies* 16 (2018): 255-281.

foods. However, perhaps precisely because sugar has relatively few negative effects compared to other drugs, most people with access to it have embraced it and allocated resources to maintaining and expanding their supply.

The overcharacterization of sugar consumption as a cultural phenomenon has led to the following misperiodization. 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 the 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 example, that “starting in the nineteenth century, sugar became available to the masses, assuming for example a fundamental role in the nutritional patterns of British industrial workers.”⁴⁸ Such a summary overlooks the impact of the sizable sixteenth 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. This dissertation serves as a correction to the assumption that the English demand for sugar emerged out of the development of the West Indies after 1650, rather than playing a significant role in instigating that development. Further, I seek to investigate the claim that it must not have been until dramatically

⁴⁸ 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, University of California Press, 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.

increased production drove down prices that sugar could become a mass commodity, and that sugar consumption only became widespread in the eighteenth and nineteenth centuries.

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A Note on Sources

As I delved into this research project, I was surprised to discover how little historians knew about the Atlantic sugar market before 1700, when so much painstaking work has been accomplished on the flow of commodities through the region in the eighteenth century and beyond. It is likely that this neglect is due in great part to the paucity of surviving documents that could be used to definitively calculate the volume of sugar trade and consumption during this period. Economists and historians customarily use the comprehensive data sets offered by probate and customs records to estimate the economic and social significance of commodities. In this case, political instability in England and the uniquely independent nature of the New England colonies meant that New England's trade was not well tracked by the imperial record-keeping system before 1680. In addition, the tendency of people to purchase sugar in small amounts, and its nature as a non-durable good, makes it difficult to trace through the probate record. Therefore, no neat data set exists for New England's trade and consumption of sugar in the seventeenth century to tempt the monograph writer.

However, scattered evidence of the importance of sugar products to the New England economy in the seventeenth century abounds. Merchant account books are a particularly important source for tracing sugar consumption. Several account books of well-known merchants with hundreds of customers and spanning decades survive, as well as a farmer's daybook and the Harvard Steward's accounts. Though not as comprehensive as customs records, they offer a rich snapshot of the local economy. The numerous references to sugar in many types of narrative sources and various government records, including shipping logs, are also revealing, and there exists as well as limited

customs and other government data from England and Barbados. Probate records too can help establish a minimum level of sugar consumption on which to build. By piecing together these sources, I have been able to learn a great deal about the social and economic role that sugar products played in the history of seventeenth-century New England and the greater Atlantic world.

Chapter Outline

Chapter One: “Everywhere in Frequent Use”: Sugar Dependency in Early Modern England

“Before the end of the seventeenth century, while sugar was still a precious and rare substance, it had little meaning for most English people...”⁴⁹ This view, popularized by Sidney Mintz, misrepresents the early-seventeenth-century English relationship to sugar, characterizing it as a cultural expression of the elite. In this chapter, I show that by 1600 sugar consumption was widespread in England among all but the most impoverished, but that this demand was constrained by environmental and political factors relating to production. This tension was a factor in the English conquest of the West Indies and North America. Using recipe books, dietaries, narratives, account books, grocers’ probate records, and port records, I establish a hunger for and reliance on sugar among the English middle class, from which most of the migrants to New England came.

Chapter Two: “Well Without Want”: Competency and Dependency in the Foodways of Early New England

New Englanders, noted one early traveler to the region, “looke not so much at abundance, as a competencie.”⁵⁰ This chapter argues that the English migrants that settled New England before 1650 sought local autonomy above all in the religious, political, and economic realms. Yet the settlers brought with them a dependence on sugar, a tropical commodity for which the settlers would have to engage with the wider Atlantic world. Using narratives, letters, sermons, government records, and

⁴⁹ Mintz, *Sweetness and Power*, 154.

⁵⁰ William Wood, *Wood's New-England's Prospect* (Boston: John Wilson and Son, 1865), 54.

shipping records, I find evidence of widespread sugar importation and consumption among the first settlers of Massachusetts Bay, and I contrast this social reality with the aspirations laid out in puritan ideology. A tension between material desires and spiritual principles was embedded in the consumption habits of the migrants.

Chapter Three: “Our New England Friends”: Twin Colonies and the Birth of the North American Sugar Economy, 1630-1660

In 1667 the new governor of Barbados reflected on the island’s recent sugar boom, noting that the planters’ fortunes “had been much worse but for the friendship and bounty of New England.”⁵¹ In this chapter I explore the meaning of this pronouncement, piecing together the economic and social relationships between the families who settled and developed New England and Barbados through the 1660s. Almost all of New England’s leading families had interests in Barbados, and the two colonies are best analyzed together as one interdependent sugar and slavery region. Migrants flowed between the two colonies in the highest exchange of people within the English colonies. The Winthrop, Parris, Corwin, and Gibbs families, among many others, built a trading and retailing empire based on personal relationships with kinfolk among the Barbadian planters. This business empire supplied New England’s rural frontier with sugar, molasses, and rum, as well as securing essential raw materials for sugar production. I use Barbados will and deed books, letters, colony records, narratives, shipping records, and account books to trace the movement of people, goods, and money between the two colonies. Finally, I consider the cultural tensions resulting from New England’s commercial engagement with the Atlantic world as expressed through Salem’s famous 1692 witch trials.

⁵¹ *Calendar of State Papers, Colonial Series, America and West Indies, 1661-1668*, ed. William Noel Sainsbury (London: Longman & Co., 1880), 526.

Chapter Four: “To Procure Our Necessaries”: Sugar Products in the Early New England Economy, 1640-1680

The chastened royal ex-governor of New England, reporting in 1690 on the source of the rebellious region’s economic strength, noted that the Massachusetts colonists, though burdened with “one of the smallest and poorest tracts of land” in the English colonies, “make Boston the store of all the plantation commodities.”⁵² I turn from exploring New England’s involvement in sugar production to reconstructing distribution and consumption patterns of imported sugar products in New England between 1640 and 1680. I argue that a key expansion in sugar consumption took place between 1650 and 1660 in Massachusetts, as a surprisingly extensive array of New Englanders, from prosperous merchants to modest investors, supplied local markets with Barbadian sugar. I locate as well the beginnings of New England’s astounding molasses and rum consumption, a social phenomenon as well as an important economic “vent” for by-products of West Indies sugar production. My analysis draws on the few surviving storekeeper account books of seventeenth-century New England, including those of John Pynchon, George Corwin, and Robert Gibbs, and the even rarer farmer’s daybook of Thomas Minor, as well as probate records, court and government records, sermons and letters, and the records of the Harvard College Steward. This close analysis of sugar product consumption patterns expands our understanding of New England’s material culture.

Chapter Five: “They Liked and Desired More”: Indians, Sugar, and Dispossession in the Atlantic World

Sugar played a role in the relationships between English colonists and native Indian groups from the very beginning of settlement. Edward Winslow’s “miraculous” healing of Wampanoag leader

⁵² "Answer of Sir Edmund Andros to His Instructions" (Order, The National Archives, UK, Kew, CO 5/855 1690/07/01).

Massasoit in 1623 has been the subject of much scholarly analysis; yet curiously, historians have not commented on the significance of the fact that this healing was achieved by forcing a sugary “confection” between the ailing sachem’s teeth. Indians’ relationship to European commodities, including sugar products, must be considered in understanding the political economy of settlement, particularly in regards to land. Trade goods, debt, and the cultural resonance of that debt underlay the negotiations and conflicts of seventeenth-century New England. Yet historians have overlooked the significance of sugar in particular as a source of political and economic instability and cultural transfer. Narratives, letters, court records and other government documents, archeological and linguistic evidence, and a rare early account book kept by the Starbuck family of Nantucket, all serve to uncover the process through which Indians developed into sugar product consumers, and the consequences of that shift for their involvement in the Atlantic sugar-slave complex.

* * * * *

The puritan settlers of seventeenth-century New England believed in a “theology of the body,” that their physical life was an extension of their spiritual state. The native peoples that they encountered were familiar with this concept; they too infused material objects with spiritual significance.⁵³ The intense reaction that sugar produced in the body – generating sensations associated with healing, life, and nurture – contributed to its unique role in the early modern gift economy. Ironically, this cultural function only reinforced demand for the commodity, resulting in perhaps the most impersonal, profit-driven industrial production process yet seen in the Atlantic world, and rendering sugar a source of social devastation. My dissertation is both a quantitative economic history and a cultural analysis of the processes involved in human choice and behavior. I undertake to uncover why, beginning in the seventeenth century, far-flung groups contributed

⁵³ For a discussion of puritan material culture and views on embodiment, see Finch, *Dissenting Bodies*, introduction, esp. 2-3; also see the essays in *A Centre of Wonders: The Body in Early America*, ed. Janet Moore Lindman and Michele Lise Tarter (Ithaca: Cornell University Press, 2001).

enormous financial and human resources to large-scale sugar production, changing the face of the Atlantic world and accelerating the pace of modern economic development.

Chapter One

“Everywhere in Frequent Use”: Sugar Dependency in Early Modern England

In 1633, James Hart, a physician and scholar of the human body, noted with alarm a disturbing social trend that had taken hold in his native England. It was clear, he wrote, that “sugar hath now succeeded honie, and is become of farre higher esteem, and is far more pleasing to the palat, and therefore everywhere in frequent use, as well as in sicknesse and in health.” But though it was widely popular and, by his own admission, “opening and cleansing,” “yet being much used produceth dangerous effects in the body...Our forefathers in former times; found honie very wholesome; but now nothing but the hardest Sugar will downe with us in this our effeminate and gluttonous age.” His appeal to the “wise, sober, and temperate” to avoid this “perill” was too late: almost impossible to resist, sugar fed the “intemperate apitian palates” of the masses who “preferre their bellies before health.”⁵⁴ What he did not foresee was that it was not only public health that would suffer: the English desire for sugar would shape the development of its Atlantic colonies. From the beginning of English sugar production on Barbados in the 1640s, sugar was more profitable than any other American crop, spawning a brutal slave trade and serving as the foundation of the Atlantic economy.⁵⁵

England dedicated so many political and economic resources to its sugar empire because by 1600 both the middle and upper English classes were already dependent on the commodity, with extensive local markets for a variety of grades of sugar and an array of cheap processed candies, from suckets, syrups, and comfits to conserves, preserves, and lozenges. Despite the fact that the

⁵⁴ James Hart, *Klinike, or the Diet of the Diseased* (London: John Beale, 1633), 96-97.

⁵⁵ Richard S. Dunn, *Sugar and Slaves: The Rise of the Planter Class in the English West Indies, 1624-1713* (Chapel Hill: University of North Carolina Press, 1972), 188.

sugar industry dominated the early modern Atlantic economy, historians rarely take demand for sugar into account in explaining the motivations for English colonization of the New World. First, much of the literature depicts sugar in the early seventeenth century as a luxury restricted to the wealthy and posits a limited and symbolic role for sugar even for this group, particularly as a medicine and an ostentatious ornament. Second, most historians assume that English consumers' interest in sugar developed only after the rise of the sugar plantations in the English West Indies, at the earliest after 1660. The prevailing view is that English habituation to sugar followed the development of plantations in the English Caribbean and was related to the spread of tea, coffee, and chocolate in the eighteenth century. In contrast, my research shows that widespread English sugar consumption emerged much earlier and was a cause, not a consequence, of the development of the English sugar islands in the mid-seventeenth century; that it was eaten primarily to satiate a craving for sweetness; and that its use evolved independently from and prior to the spread of tropical beverages.

Critically, human biology, not culture, best explains patterns of sugar consumption; the history of sugar should be understood as the story of a drug as well as a food. Though early modern peoples infused sugar, particularly in processed forms, with meaning, its meaning was not the reason for its use.⁵⁶ Sidney Mintz's examination of the connections between sugar production and consumption in the Atlantic world, *Sweetness and Power*, has remained the standard reference on the commodity for the last thirty years. According to Mintz, the rise of the sugar plantations resulted in "the insertion of an essentially new product within popular European tastes and preferences,"

⁵⁶ For the similarities between food and drugs as consumer categories, see Felipe Fernandez-Armesto and Benjamin Sacks, "The Global Exchange of Food and Drugs," in *The Oxford Handbook of the History of Consumption*, ed. Frank Trentmann (New York: Oxford University Press, 2012), 127-144. Eddy Stols makes a specific comparison to sugar in early-seventeenth-century Europe and "drugs today in poor neighborhoods." Eddy Stols, "The Expansion of the Sugar Market in Western Europe," in *Tropical Babylons: Sugar and the Making of the Atlantic World, 1450-1680*, ed. Stuart B. Schwartz (Chapel Hill: The University of North Carolina Press, 2004), 275.

supporting the formation both of a slave population and an industrial working class. Following this logic, the eighteenth century was the dawn of the age of sugar, as until then “sugar was really the monopoly of a privileged minority.”⁵⁷ Elsewhere, he argues that in the seventeenth century “sugar was still a precious and rare substance, it had little meaning for most English people, though if they ever got to taste sugar, they doubtless thought it desirable.” Instead, in his view, it was a plaything and status symbol for the rich, a sign of “social validation, affiliation, and distinction.”⁵⁸

In contrast, I argue that there existed by the early seventeenth century a powerful English habituation to sugar in confection form, rooted in a long-standing trade relationship with Mediterranean sugar production zones and the extensive integration of sugar foods into the middle-class English diet, and that this demand contributed to English imperialism. When historians associate sugar use only with modern forms of consumption, particularly the sweet beverages and baked goods that became popular in the eighteenth century, they fail to recognize that the English transition to dependence on sugar took place much earlier. Though sugar was still employed extensively in “savory” preparations in early modern England, this use does not mean that it was merely one of many spices and flavorings. For one thing, many typical dishes incorporating multiple

⁵⁷ Sidney Mintz, *Sweetness and Power: The Place of Sugar in Modern History* (New York: Penguin Books, 1985), 45, 67.

⁵⁸ Sidney Mintz, “Sweetness and Meaning,” in *The Taste Culture Reader: Experiencing Food and Drink*, ed. Carolyn Korsmeyer (New York: Berg, 2005), 116. Similar characterizations of sugar as a luxury good restricted to the wealthy include Craig Muldrew, *Food, Energy, and the Creation of Industriousness: Work and Material Culture in Agrarian England, 1550-1780* (Cambridge: Cambridge University Press, 2011), 113-114; Ken Albala, *Food in Early Modern Europe* (Westport, CT: Greenwood Press, 2003), 59; Brian Cowan, “New Worlds, New Tastes: Food Fashions after the Renaissance,” in *Food: The History of Taste*, ed. Paul Freedman (Berkeley: University of California Press, 2007), 219-20; also 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 (Berkeley: University of California Press, 2014), 329. Ralph A. Austen and Woodruff D. Smith characterize the market for sugar before 1700 as “dynamic” but “limited” precisely because, in their view, sugar had primarily cultural uses rather than dietary ones during that period. Ralph A. Austen and Woodruff D. Smith, “Private Tooth Decay as Public Economic Virtue: The Slave-Sugar Triangle, Consumerism, and European Industrialization,” *Social Science History* 14 (1990): 102. One of the only explorations of tropical groceries as drugs rather than foods ignores sugar as a drug in its own right and emphasizes instead its combination with tea, coffee, and chocolate in the late seventeenth century as the starting point of a “soft-drug culture of the eighteenth century.” Jordan Goodman, “Excitantia, Or, How Enlightenment Europe Took to Soft Drugs,” in *Consuming Habits: Global and Historical Perspectives on How Cultures Define Drugs*, ed. Jordan Goodman, Paul E. Lovejoy, and Andrew Sherratt (New York: Routledge, 2007), 121-141. Most histories of sugar consumption in the Atlantic world tie the commodity to tea, coffee, and chocolate consumption.

spices contained so much sugar that their dominant flavor was extremely sweet. In addition, by 1600 much of English society frequently enjoyed an enormous array of overwhelmingly sweet confectionery, including inexpensive lumps of low-grade sugar that were affordable for almost everyone. Long before the eighteenth-century cultural innovations of the dessert course and the daily tea, the English considered sugar an essential component of an adequate diet.

The Global Sugar Industry Before 1650

Sugarcane cultivation originated in India, Asia, and Polynesia about ten thousand years ago. People grew and enjoyed the plant for thousands of years, but they first began to process it into solid crystallized sugar in India and the Middle East around 500 B.C., when Greek texts indicate that processors were converting the liquid that oozes from raw sugarcane into a form which allowed it to be stored and traded. India and China eventually became centers of sugar production, refining, and trade, and knowledge of its cultivation unfurled across the Middle East.⁵⁹

It was through the Crusades, around the year 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. Madeira in particular produced an enormous amount of sugar for export to Europe, approximately 3.7 million pounds a year by the early sixteenth century.⁶⁰ Most of the technology and processing techniques that would be used in the vastly expanded production of New World sugar

⁵⁹ Andrew Dalby, *Dangerous Tastes: The Story of Spices* (Berkeley: University of California Press, 2000), 26-29; Michael Krondl, *Sweet Invention: A History of Dessert* (Chicago: Chicago Review Press, 2011), 34.

⁶⁰ Alfred W. Crosby, *Ecological Imperialism: The Biological Expansion of Europe, 900-1900* (Cambridge: Cambridge University Press, 1986), 77; David Mancall, *Deadly Medicine: Indians and Alcohol in Early America* (Ithaca: Cornell University Press, 1995), 31-32.

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. Sugar processors boiled sugarcane juice until it crystallized into a thick, wet, brown sludge, and then packed it into earthenware cones, leaving the brown molasses syrup to drain out through a small hole in the bottom. This resulted in a cone-shaped loaf of sugar, for centuries the standard form in which it was retailed. Sometimes sugar would be refined further, by reboiling the drained sugar to further absorb and evaporate syrup and impurities, leaving a pure white product.⁶¹

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 very 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 migration 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 on 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 Caribbean was marked by sophisticated technology (including animal- and water-powered roller mills), large plantations worked by hundreds of slaves, and vertical integration incorporating the processing of sugarcane

⁶¹ Krondl, *Sweet Invention*, 88-89.

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.⁶²

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 was able to develop 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 were able to establish 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.⁶³

In the sixteenth century, then, the plantations of the Americas built on and expanded the

⁶² For a summary of the constraints on sugar production during this period see Andrew F. Smith, *Sugar: A Global History* (London: Reaktion Books, 2015), 14-24; also Stuart B. Schwartz, *Sugar Plantations in the Formation of Brazilian Society, 1550-1835* (Cambridge: Cambridge University Press, 2004), chap. 1. This discussion of the evolution of the global sugar industry is based on Mintz, *Sweetness and Power*, chap. 2; John J. McCusker, *Rum and the American Revolution: The Rum Trade and the Balance of Payments of the Thirteen Continental Colonies* (New York: Garland, 1989), 1: chap. 2; Russell Menard, *Sweet Negotiations: Sugar, Slavery, and Plantation Agriculture in Early Barbados* (Charlottesville: University of Virginia Press, 2006), chap. 1; Noel Deerr, *The History of Sugar* (London: Chapman and Hall, 1950), vol. 2; and J.H. Galloway, "The Mediterranean Sugar Industry," *Geographical Review* 67 (1977): 177-92. For the development of sugar technology and plantations in the New World, see Russell R. Menard, "Plantation Empire: How Sugar and Tobacco Planters Built Their Industries and Raised an Empire," *Agricultural History* 81 (2007): 309-332.

⁶³ For imperial conflicts and their effect on sugar production, see Jonathan I. Israel, *Dutch Primacy in World Trade, 1585-1740* (Oxford: Clarendon, 1989), 106-109, 156-170.

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, alongside 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.⁶⁴ The purpose of this chapter is to locate and analyze the domestic English sugar market that underlay the development of these English sugar colonies.

Medieval English Sugar Consumption

Sugar was a common ingredient in upper-class English food and medicine during the Middle Ages. Merchants imported it from North Africa, Sicily, and the Atlantic islands of Sao Tome, Madeira, and the Canaries, creating the “sugar bowl” of Europe, from England south through Spain, Italy, and Portugal.⁶⁵ An Arab sugar culture of syrups and sweets spread to England from the Mediterranean and the Middle East through trade, war, and family connections between the English

⁶⁴ Alison Games, “Migrations and Frontiers,” in *The Atlantic World, 1450-2000*, ed. Toyin Falola and Kevin D. Roberts (Bloomington: Indiana University Press, 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.

⁶⁵ Bruno Laurioux, “Medieval Cooking,” in *Food: A Culinary History from Antiquity to the Present*, ed. Jean-Louis Flandrin, Massimo Montinari, and Albert Sonnenfeld (New York: Columbia University Press, 1999), 299.

and Sicilian rulers.⁶⁶ Not only the nobility but all people of some means ate sugar, both in savory dishes and as the main ingredient in a wide array of confectionery.⁶⁷ Historians commonly contend that sugar was used as a spice during this period, mixed with many other flavorings in cooking rather than used to produce a pure sweet flavor.⁶⁸ This blanket assertion that sugar was simply a condiment overlooks the ways in which it was different and in some ways more important than the savory flavors of pepper, ginger, cinnamon, saffron, nutmeg, and cloves. Although sweetness was often used as one seasoning among many in main dishes, the English also delighted in purely sweet flavors. Sugar's unique effect on the body also set it apart from other imported foods.

Historians tend to let the fact that sugar is a good preservative, ornament, was believed to have important medical uses, and was a good medium for other medicines and foods overshadow its primary role even in medieval times: to satisfy biological cravings. This misplaced emphasis may be due to the seemingly premodern cultural forms that sugar foods took during this period. Certainly the knowledge that sugar can actually be harmful to the body has limited its use in modern medicine (although it lingers in certain forms, such as cough drops, to enhance palatability). The tradition of enhancing confections' inherent appeal by using sugar's versatility as an ornament, however, remains strong today, though fashions have evolved over time.

Sweet cooked sugar foods took a variety of forms during the Middle Ages, from the simple to the elaborate, and reveal an extensive culture built up around sugar consumption. One of the purest of these was sugar "candy," smooth lumps of sugar made by dissolving sugar in water, boiling it, sometimes flavoring it with rose or violet, and letting it crystallize into solid pieces. A similar candy with a different texture was penidia or pennet, sugar cooked into a soft white form and usually

⁶⁶ Colin Spencer, *British Food: An Extraordinary Thousand Years of History* (New York: Columbia University Press, 2002), 47-48.

⁶⁷ C.M. Woolgar, "Feasting and Fasting: Food and Taste in Europe in the Middle Ages," in *Food*, ed. Freedman, 177.

⁶⁸ Sidney Mintz, *Tasting Food, Tasting Freedom: Excursions into Eating, Culture, and the Past* (Boston: Beacon Press, 1996), 56.

made into twisted pieces. Manus Christi was a ubiquitous form of this type of white confection, often given as a gift; its taste and appearance varied widely, but it was shaped like a finger, often flavored with cinnamon, violets, or rosewater, and sometimes flecked with gold leaf.

The second type of confectionery was that based on fruit. Fruit confections took a vast array of forms, from a liquid syrup with solid pieces, eaten with a utensil, to dry solid lumps more akin to modern candies. Soft fruit confections were called conserves, wet sucket or sucket candy, and ranged from a wet sugary fruit mixture similar to jam, to more solid jellies and pastes that could be cut into pieces. Succade, a highly popular form of candied citrus or citrus peel, was an important variant on conserves. Still chewier gummy candies were known as lozenges or gums, thickened with gum arabic or gum tragacanth.

Comfits – fruit, nuts, or seeds repeatedly dipped in sugar syrup and then coated in solid sugar – were a popular and highly portable upper-class treat. The elaborate edible sculptures known as “subtleties,” a favorite at the feasts of the wealthy, were constructed from marzipan, molded sugar, or gummy sugar paste or “plate.” These impressive achievements stand out in the historical imagination, but they do not represent typical sugar consumption. Finally, there were the ancestors of contemporary baked goods, including gingerbread, “biscuit-breads,” and cakes, but these had not attained the dominant place in diet that they would in later centuries. Thus early English sugar consumption consisted mostly of extremely sweet candies, made almost entirely of sugar, rather than the relatively less sweet baked goods and puddings popular today.⁶⁹

⁶⁹ Paul Freedman, *Out of the East: Spices and the Medieval Imagination* (New Haven: Yale University Press, 2008), 30, 48; Spencer, *British Food*, 91; Tim Richardson, *Sweets: A History of Candy* (New York: Bloomsbury, 2002), chap. 4; Margaret Wade Labarge, *A Baronial Household of the Thirteenth Century* (Totowa, NJ: Barnes and Noble, 1980), 96-97; C. Anne Wilson, “The Evolution of the Banquet Course: Some Medicinal, Culinary, and Social Aspects,” in *Banquetting Stuffe: The Fare and Social Background of the Tudor and Stuart Banquet*, ed. C. Anne Wilson (Edinburgh: Edinburgh University Press, 1991), 26-27.

There was little distinction in medieval England between food and medicine, and patterns of sugar distribution reflect this integration. Sugar and confections (when not made at home) were sold directly by merchants or retailed by “spicers” or medical apothecaries, then later also by grocers and confectioners.⁷⁰ Healers and their clients believed that sugar had powerful curative properties as a medicine or health food in itself, and it was also an essential component of many other remedies. Both sugar’s pleasurable biological effects and its versatile material nature gave it a prominent role in medieval and early modern foodways and medicine.

From the Middle Ages onward, the English believed that their choice of foods held greater significance than simple sustenance. The ancient and widely accepted theory of the four humors – heat, cold, moisture, and dryness – as the building blocks of life led people to conclude that the very essence of any living thing could be changed by a shift in its humoral environment. Food, exercise, sleep, air, repletion, and emotions could all affect the moral and physical essence of a person. Authors of sixteenth- and seventeenth-century medical and philosophical texts advised people to tailor their diets to their specific humoral needs in order to achieve virtue, or health: the ideal mental and physical states.⁷¹ Food preferences were explicitly and rigidly bound up with beliefs about foods’ humoral, and therefore medical, properties. Each individual food had specific properties that must be considered in light of the individual’s health needs and in balance with other foods in that individual’s diet.⁷² Sugar had a special status in the humoral belief system as a potent health food that balanced the humors and promoted the ideal “sanguine” temperament. Confectionery manuals were

⁷⁰ Freedman, *Out of the East*, 117-119. Apothecaries did not become a separate formal category of profession until 1617.

⁷¹ Trudy Eden, *The Early American Table: Food and Society in the New World* (DeKalb: Northern Illinois University Press, 2008), 11-22; Brian Cowan, “New Worlds, New Tastes: Food Fashions After the Renaissance,” in *Food*, ed. Freedman, 199; for an in-depth analysis of humoral and other early modern theories of the body, see Joyce E. Chaplin, *Subject Matter: Technology, the Body, and Science on the Anglo-American Frontier, 1500-1676* (Cambridge: Harvard University Press, 2001), 120-123.

⁷² Karen Hess, ed., *Martha Washington’s Booke of Cookery* (New York: Columbia University Press, 1981), 206-209.

invariably presented as medical books and often published on their own, separately from cookbooks. “Sweet” and “healthy” were synonymous.⁷³

Sugar also had an indispensable role as a medium for other medicines. Many medicines were mixed and served in sugar syrup, perhaps to expand, preserve, and render more palatable other ingredients. A particularly popular all-purpose type of medicine, theriac, which was prepared in drained sugar syrup, came to be known as “treacle.” The sugar syrup was the dominant component of the medicine, and eventually the word came to refer to the syrup itself rather than what was put into it.⁷⁴ Sometimes these sugary medical mixtures thickened when cooled, and the resulting solids, ranging in texture from hard to gummy, were eaten in pieces as lozenges.⁷⁵ Thus in a variety of forms, from liquid to solid, medicines were often actually types of sweets. But this does not mean that people ate sugar primarily because they believed in its healing properties, as many historians imply. In fact, it seems likely that the reverse was true: that sugary medicines became popular because people craved their sweet taste.

The question remains as to whether this dependence on sugary foods and medicines was limited to a small elite or encompassed a larger sector of medieval society. Certainly the wealthy indulged in it in considerable quantities. In the year 1287 alone the English royal household consumed 2,877 pounds of various types of sugars. But food historian Paul Freedman asserts that sugar was not restricted to the showpiece banquets of the nobility. During the Middle Ages sugar was “wildly popular” in England and the English used sugar “extensively” by the fourteenth century, with sugar a “basic” and “relatively affordable” spice; “what is certain is that a person of even

⁷³ Albala, *Food in Early Modern Europe*, 216; Richardson, *Sweets*, 162-165; Eden, *Early American Table*, 17.

⁷⁴ Stanley Mintz, *Tasting Food*, 60-61.

⁷⁵ Freedman, *Out of the East*, 13.

modest affluence consumed impressive quantities of spices,” presumably including sugar.⁷⁶ About thirty percent of the recipes of the fourteenth-century *Forme of Cury*, the best-known English medieval cookbook, call for sugar, and about forty to fifty percent of its recipes in the fifteenth-century edition require it.⁷⁷ Every sizable English town in the Middle Ages had an apothecary, pepperer, or spicer retailing sugar.⁷⁸ One scholar’s estimate is that a fifteenth-century London craftsman’s daily wage was equivalent to half a pound of sugar, and that sugar was cheaper than pepper and all of the other spices except for ginger.⁷⁹ Thus small amounts of sugar would have been possible in a middle-class family’s daily diet in the late medieval period, with larger amounts on special days. The fact that such consumption occurred in forms that appear culturally alien to the modern consumer should not obscure the fact that there is no reason to think that biology was any less of a factor in shaping premodern tastes than it is today.

“Daily and Continuall Use:” The Extent of Early Modern English Sugar Consumption

By the end of the sixteenth century, the English predilection for sugar was so marked that most descriptions of English society noted it. “[T]he taste of the English is thus delighted with sweetnesse,” travel writer Fynes Moryson observed in 1617, explaining the widespread early-seventeenth-century English practice of adding sugar to wine.⁸⁰ Daily ingestion of comfits, conserves, and the like famously rendered Queen Elizabeth’s teeth “black; a defect the English seem subject to, from their too great use of sugar.”⁸¹ In 1640, just before English colonial planters first

⁷⁶ Freedman, *Out of the East*, 23-27, 32, 45-46, 128.

⁷⁷ Constance B. Hieatt and Sharon Butler, eds., *Curye on Inglysch: English Culinary Manuscripts of the Fourteenth Century* (New York: Oxford University Press, 1985).

⁷⁸ Richardson, *Sweets*, 167.

⁷⁹ John Munro, “Oriental Spices and Their Costs in Medieval Cuisine: Luxuries or Necessities?” (lecture, University College, Toronto, 1988.)

⁸⁰ Fynes Moryson, *An Itinerary Containing his Ten Yeeres Travell...*(1617; Glasgow: J. MacLehose, 1907), 4:176.

⁸¹ Paul Hentzner, *Paul Hentzner’s Travels in England, During the Reign of Queen Elizabeth*, trans. R. Bentley, ed. Horace Walpole (London: Edward Jeffery, 1797), 34.

successfully harvested sugarcane, the prominent English botanist and apothecary John Parkinson observed that “[t]he Sugar that is made of the Sugar Reede, hath obtained now a dayes so continuall and daily use...”⁸² William Harrison, a scholar and clergyman whose classic sixteenth-century *Description of England* is one of the richest narratives of English social life of the era, gave an illuminating analysis of a feast enjoyed by a group of local merchants. The meal included a dazzling array of sweet foods: both the common English conserves, suckets, marmalades, and subtleties, and “sundry outlandish confections.” All these were “altogether seasoned with sugar...a device not common or greatly used in old time at the table, but only in medicine...”⁸³ Though the banquet he described was not a typical meal, most of the featured sweetmeats were commonplace. In fact, he not only contrasted ordinary confections with unusual feast day ones, calling the latter “outlandish,” but also pointed out the shift from the association of sugary foods with medicine to what was by the sixteenth century the common practice of eating sugar purely for pleasure. Such narratives challenge the assumption that sixteenth- and seventeenth-century sugar consumption, however high, was limited to an elite. Further evidence presented later in this chapter indicates that by 1600 sugar saw “daily and continuall use” among the middle and even the lower classes.

Most of the research on European sugar consumption in the early modern period has focused on areas outside of England. There is considerable evidence for extensive sugar consumption among the middle as well as upper classes in Spain, Portugal, Italy, and the Netherlands by the sixteenth century. These countries had good access to sugar producing regions in the Caribbean and the Mediterranean, and they had developed extensive confectionery industries. The character and extent of sugar’s popularity among early modern English, however, has remained

⁸² John Parkinson, *Theatrum Botanicum* (London: Tho. Cotes, 1640), 1211.

⁸³ William Harrison, *The Description of England* (Ithaca: Cornell University Press, 1968), 129.

mysterious.⁸⁴ No thorough quantitative research has been conducted on sugar consumption across all classes of English society before 1660, and as a result historians tend either to skip over this time period in their accounts, or to draw vague and even contradictory conclusions. Often scholars will note sugar's ubiquity and scarcity within the same paragraph, coming up with plenty of examples of both. Even the pioneering social historian Fernand Braudel struggled to describe early modern patterns of sugar consumption, terming them "irregular."⁸⁵

The best analysis that we have of English sugar use comes from Carole Shammas, a leading scholar of early modern consumption habits. She takes data based on sugar imports into England, compares the volume of these imports to the English population, and concludes that in the first half of the seventeenth century sugar consumption in England was quite low. Her earliest figures are for the 1660s, and she asserts that at mid-century sugar consumption averaged two pounds per person per year, meaning that though sugar was well-known, most people would not eat it every day. She bolsters this conclusion by noting that sugar's high price in the sixteenth century would have made consuming large amounts of it impossible for most of the population. By the end of the seventeenth century, trade statistics indicate that per capita annual consumption had risen to four pounds, nudging sugar into the category of daily need for a quarter of the English population, assuming that consumption was unequal across classes and social groups. This figure, four to four and a half pounds per person in 1700, is frequently cited by other scholars, and has become the basis of the widespread historical assertion that sugar became an item of "mass" consumption around 1700.⁸⁶

⁸⁴ Stols, "Expansion of the Sugar Market." Stols notes that the extent of sugar consumption among the lower classes in Europe remains to be investigated, but concludes that it is likely that such consumption was widespread before prices decreased with the colonization of the West Indies, and that sugar's importance in the early-seventeenth-century European economy has been underestimated.

⁸⁵ Fernand Braudel, *The Structures of Everyday Life: The Limits of the Possible* (New York: Harper & Row, 1981), 226.

⁸⁶ Carole Shammas, *The Pre-Industrial Consumer in England and America* (Los Angeles: Figueroa Press, 1990), 100-101. She bases her conclusions solely on customs records compiled by Richard Sheridan and Elizabeth Schumpeter, as most scholars do, for example, Austen and Smith, "Private Tooth Decay," 99. These customs records can be found in Elizabeth Boody Schumpeter, *English Overseas Trade Statistics, 1697-1808* (London: Clarendon Press, 1960), and Richard

The weakness of this claim is that it is based entirely on customs records, which are of dubious scope and accuracy and should at the very least be combined with other types of quantitative study. Of equal concern is the tendency of scholars to make assumptions about or misrepresent how the poorer classes would have encountered and reacted to sugar in the century before 1630. Thus the standard view that most English people had minimal access to and little experience with sugar before the development of English sugar plantations in the Caribbean is based on inadequate analysis and research.

Who would have been able to afford to eat sugar on a regular basis in early-seventeenth-century England? In 1600 sugar cost about fourteen pence a pound, about the amount that a skilled worker earned in a day. The price fluctuated considerably in the late sixteenth and early seventeenth centuries, exacerbating the difficulty of assessing its affordability. During the years 1600-1630, when the future migrants to New England were coming of age, sugar in England averaged about a shilling a pound for coarser sugar and between one and two shillings a pound for fine sugar, and many years it was cheaper.⁸⁷ Scholars often assume that this means that the lower classes never tasted sugar, since the cost of buying pounds at a time seems prohibitive.⁸⁸ One scholar, reviewing price and currency fluctuations over the course of the sixteenth century, concludes that merchants and

Sheridan, appendices to *Sugar and Slavery: An Economic History of the British West Indies, 1623-1775* (Jamaica: Canoe Press, 1974). In another study based on domestic records, Shammass finds that poorhouse and hospital records (concerning the most impoverished sector of English society) do not mention sugar in their accounts before 1650. Carole Shammass, "Food Expenditures and Economic Well-Being in Early Modern England," *The Journal of Economic History* 43 (March 1983): 97. This finding, however, tells us little about middle- or even lower-class sugar consumption. Overall, Shammass's attempts to sum up English sugar consumption in the seventeenth century suffer from the lack of available research, as do the conclusions of other scholars. See, for example, her characterization of the commodity as something that "[t]he English population was quite familiar with...long before the sixteenth century" while at the same time it was "kept...out of the daily life of most people." Shammass, "Changes in English and Anglo-American Consumption from 1550 to 1800," in *Consumption and the World of Goods*, ed. John Brewer and Roy Porter (London: Routledge, 1993), 182.

⁸⁷ Scholarly estimates of sugar prices vary slightly, and include C. Anne Wilson, *Food and Drink in Britain: From the Stone Age to the 19th Century* (London: Constable and Company, 1973), 298-99; Spencer, *British Food*, 131; James E. Thorold Rogers, *A History of Agriculture and Prices in England* (Oxford: Clarendon Press, 1887), 5:472-473; Paul S. Lloyd, *Food and Identity in England, 11540-1640: Eating to Impress* (New York: Bloomsbury, 2015), 120; Deerr, *History of Sugar*, 528.

⁸⁸ For this assumption, see, for example, Alison Sim, *Food and Feast in Tudor England* (Thrupp: Sutton, 1997), 9, and C. Anne Wilson, "Introduction: The Origin of 'Banqueting Stuffle,'" in *Banqueting Stuffle*, ed. C. Anne Wilson.

landowners, who were able to take advantage of easy credit and rising prices for agricultural and other commodities, account for the steady demand for sugar despite its high price.⁸⁹ And indeed, this middle class did make up the bulk of sugar consumers (as well as many of the first group of settlers of New England). But as Craig Muldrew cautions, it is a mistake to make assumptions about early modern food consumption choices based on prices or wages.⁹⁰ The poor probably bought sugar frequently in small amounts. Though workers were unlikely to spend an entire day's earnings on a pound of sugar, a piece of candy would have been well within reach. The unremarkable "pennyworth of sugar-candy" that Falstaff carries in his pocket in Shakespeare's *Henry IV*, written in the 1590s, was likely a lump shaved off a grocer's large sugar loaf.⁹¹

What other sources can we use to investigate the sugar consumption of the middle classes, those who had plenty of food but not unlimited resources, from yeomen to artisans and shopkeepers to small gentry? A compilation of several types of evidence, including account books, grocers' probates, and cookbooks, give a fuller picture of English sugar consumption in the early seventeenth century than a reliance on trade statistics alone. The few account books that survive provide a valuable window into the purchasing patterns of the rural gentry. General probate inventories, the most common source for historians examining consumption patterns, usually do not include foods other than large stores of agricultural products. If sugar and confections were bought frequently in relatively small amounts for short-term use, rather than stored in large amounts, consideration for the family's needs would have led estate appraisers to leave them out of listed

⁸⁹ Ellen Deborah Ellis, *An Introduction to the History of Sugar as a Commodity* (Philadelphia: The John Winston Co., 1905), 72-78.

⁹⁰ Muldrew makes this point generally, asserting that "what laborers ate was much more varied than we are often led to believe." Curiously, he does not extend this analytical lens to sugar. Muldrew, *Food, Energy, and the Creation of Industriousness*, 11, 36-42, 113-114. 115.

⁹¹ *King Henry IV, Part One*, ed. David Scott Kastan, 3.3.158 (London: Thomson Learning, 2002), 277. Joan Thirsk, an authority on the early modern English economy, argues that middle-class households in this period could easily afford frequent purchases of tropical imports. Thirsk, *Food in Early Modern England: Phases, Fads, Fashions 1500-1700* (New York: Continuum, 2006), 52-53.

assets, along with other small amounts of food. Indeed, “there was often as strong a pressure to on appraisers to get things wrong as to get things right,” as one scholar puts it.⁹² Lists of shopkeepers’ goods at their time of death, however, indicate what people were buying in different parts of the country. Widely read cookbooks, aimed at comfortable housewives, describe how people processed and ate sugar in their homes. These sources reveal that by the early seventeenth century sugar consumption was widespread in early modern England.

As previously noted, by the turn of the seventeenth century sugar had flourished in English markets for hundreds of years. English as well as Dutch processors often improved it, transforming coarse brown sugar into a finer, whiter product by boiling it and clarifying it with egg white and clay. Sugar was thus available in many different stages of refinement. Physician Thomas Moffett described several forms of sugar commonly used in England in 1655, much of which still came from the Mediterranean or Atlantic islands:

“The best Sugar is hard, solid, white, exceeding white and sweet, glistening like Snow, close and not spungy, melting...very speedily in any liquor. Such cometh from Madeira in little Loaves of three or four pound weight a-piece; from whence also we have a coarser sort of Sugar-loaves, weighing seven, eight, nine, or ten pounds a-piece, not fully so good for candying Fruits, but better for Syrups and Kitchen Uses. Barbary and Canary Sugar is next to that, containing 12, 16 and 17 lb. in a Loaf. But your common and coarse Sugar, called St. Omer’s Sugar, is white without and brown within, of a most gluish substance, altogether unfit for candying or preserving, but serving well enough for common Syrups and seasoning of Meat.”⁹³

Though white sugar was the ideal, the lower and middle classes often contented themselves with the much more affordable lower-grade sugars and candies.

Sugar was available everywhere in England by the end of the sixteenth century. Customs records reveal that from December 1612 to December 1613 merchants imported approximately

⁹² D.G. Vaisey, “Probate Inventories and Provincial Retailers in the Seventeenth Century,” in *Probate Records and the Local Community*, ed. Philip Riden (Gloucester, UK: Alan Sutton, 1985), 101.

⁹³ Thomas Moffett, *Health’s Improvement: or Rule, Comprizing and Discovering the Nature, Method, and Manner of Preparing all Sorts of Foods Used in this Nation* (1655; London: T. Osborne, 1746), 349-350.

253,274 pounds of various varieties of sugar into the port of Bristol. In the year 1639, merchants imported 3,736 pounds of sugar into the rural Lincolnshire port of Boston.⁹⁴ Though it is impossible to know exactly where this sugar ended up – Boston was a small port with a limited hinterland, but Bristol was one of the largest distribution centers in England – it gives us an idea of the amount of sugar being imported into English ports both large and small every year, and from there transported coastwise and inland. Not only was sugar a standard grocer’s item, but confectioners and comfit makers were common in London and larger towns. Urban and village grocers, mercers, and chapmen; confectioners and comfit makers (outgrowths of the medieval spicers and apothecaries); as well as peddlers to rural areas, and retailers at county fairs, sold sugar in various stages of refinement and processing.⁹⁵ A whimsical sixteenth-century poem written in the voice of a grocer noted the common confections one would expect to find at a well-stocked establishment. “I have Sucketes SIRRUPES Grene ginger and Marmalade, Biskites Cumfectes and Carawayes, as fine as as can be made: As for Poticary and Grocery, I have all that trade...”⁹⁶

By the end of the sixteenth century, the control of the mercers’ guild over entry into shopkeeping had greatly diminished, and small shopkeepers carrying sugar and spices among other “luxuries” proliferated, with the inventories of mercers, grocers, and apothecaries overlapping, especially in the area of sugar and confections. It was a dynamic, competitive industry with a mobile and enthusiastic customer base. Shopkeepers commonly carried a few expensive items for gentry, but most of their goods were marketed to farmers and artisans. The “core” of the grocer’s business

⁹⁴ My calculations, based on the Bristol Port Records in “Merchandise Imported into Bristol, December 1612-December 1613,” in *Merchants and Merchandise in Seventeenth-Century Bristol*, ed. Patrick McGrath (Bristol: J.W. Arrowsmith, 1955), 284-285; R.W.K. Hinton, *The Port Books of Boston, 1601-1640* (Hereford: Hereford Times, 1956).

⁹⁵ Thirsk, *Food in Early Modern England*, 31, 56-57, 325-326.

⁹⁶ Thomas Newbury, *Dives Pragmaticus* (London: Alexander Lacy, 1563).

was sweets, spices, and fruit.⁹⁷ A typical early seventeenth-century town grocer stocked several grades of sugar, several forms of sugar, including loaf, powdered, and sugar syrup such as treacle, and simple solid sugar “candy,” comfits, and conserves. All of these would be within the means of the middle classes. In fact, grocers’ records show that many people bought small amounts of sugar at a time, often on credit if they did not have the means to pay immediately. Those who lived farther from retail areas could buy sugar at fairs and from peddlers, or could make periodic journeys to shops to stock up on sugar and other imported goods.⁹⁸ People frequently traveled to buy such items around the towns in their area, seeking variety and casually crossing shire borders to do so.⁹⁹

Most sixteenth- and seventeenth-century sugar was produced in cones or “loaves,” as in earlier centuries. These were often quite large, solid pieces of sugar in various stages of refinement. Bristol wholesale merchant George Lane’s 1613 probate inventory contained a “piercer for suger” which he probably used to break up sugar loaves to sell to the many grocers with whom he had accounts.¹⁰⁰ Retail customers would either buy a smaller whole loaf or part of one, but in either case, sugar cutters were a widespread and necessary tool to break off smaller amounts of sugar for purchase or use.¹⁰¹ Those with more resources bought many pounds at a time in solid loaves; but even those of modest means could purchase as little as an ounce or two cut off from a loaf. People could then further refine sugar at home if they wished, and cooking and husbandry books contained instructions for boiling brown sugar with egg whites and oil, for example, and then straining the

⁹⁷ R.M. Berger, “The Development of the Retail Trade in Provincial England, 1550-1700,” *Journal of Economic History* 40 (1980): 126. Both grocers and apothecaries sold sugar foods; their spheres of control over various foods and medicines overlapped and were a source of contention in the early seventeenth century.

⁹⁸ Stobart, *Sugar and Spice*, 19-30.

⁹⁹ Ronald M. Berger, *The Most Necessary Luxuries: The Mercers’ Company of Coventry, 1550-1680* (University Park, PA: The Pennsylvania State University Press, 1993), 9, 38, 85.

¹⁰⁰ “George Lane’s Inventory, 1613,” in *Merchants and Merchandise*, ed. McGrath, 73.

¹⁰¹ Elizabeth David, *English Bread and Yeast Cookery* (New York: Penguin Books, 1980), 138-139.

thick syrup and draining out the molasses.¹⁰² Besides being sold by many grocers, confectionery was also made at home and by professional confectioners and comfit makers in urban areas.¹⁰³

The more urban an area, and the more access an area had to imports, the more likely its inhabitants would integrate sugar into their diet; but rural dwellers had surprisingly good access to sugar as well. As we will see, rural grocers supplied villagers both with the poorer grades of sugar and with confections. The minor gentry of the countryside could and did supplement these with larger amounts of sugar and more elaborate confections ordered from London and other cities. Analyses of gentry account books find that the first decades of the seventeenth century were the turning point for middle-class sugar consumption in more rural areas, with rural gentry families increasing their sugar and candy purchases markedly.¹⁰⁴ An analysis of the Shuttleworth family of Lancashire, which left unusually comprehensive records of their household accounts, shows growing use of sugar and confections between 1600 and 1615, from powdered sugar to candied fruits to almond comfits.¹⁰⁵ When the Best family of Essex moved to Yorkshire in 1617 to take up a rural life as “muddy-booted, work-a-day gentry,” they brought with them eighteen pounds of sugar pieces, ten pounds of refined sugar, and marmalade.¹⁰⁶

In Suffolk county, home of John Winthrop and Nathaniel Ward (close to half of the English migrants to New England before 1633 came from this general area of southeastern England, and the majority of migrants overall came from large market towns), two of the most influential leaders of the puritan migration to New England, there was a robust “carrying” trade of contractors that would

¹⁰² Sim, *Food and Feast in Tudor England*, 150; Hugh Plat, *The Jewell House of Art and Nature* (London: Peter Short, 1594), 110-112.

¹⁰³ Wilson, *Food and Drink in Britain*, 298-99, 302.

¹⁰⁴ Lloyd, *Food and Identity*, 124-125; Thirsk, *Food in Early Modern England*, 56, 86-87.

¹⁰⁵ See Thirsk, *Food in Modern England*, 86-87, for an analysis of the Shuttleworths’ sugar and confectionery purchases.

¹⁰⁶ Donald Woodward, ed., *The Farming and Memorandum Books of Henry Best of Elmswell, 1642* (London: Oxford University Press, 1984), lvii, 160.

procure goods from London, with at least two working in the town of Ipswich in 1599.¹⁰⁷ But it would not have been necessary to order from London to satisfy one's demand for sweets. As far back as 1569, the nearby city of Norwich had 150 grocers, as well as numerous mercers and apothecaries.¹⁰⁸ In the late sixteenth and early seventeenth centuries, Norwich had at least three sugar bakers and a comfit maker.¹⁰⁹ Likely Winthrop and Ward bought sugar and confections from small shops in their home villages as well.

Though probate inventories usually do not include many foodstuffs, shopkeepers' probates do. These snapshots of grocers' storerooms and shelves at their time of death reveal what the general population was buying and eating. The most recent monograph on early modern grocers in England uses probate records to conclude that about half of early-seventeenth-century grocers, both in urban and rural areas, carried sugar; many more may have carried a form of processed sugar, such as confections, candy, molasses, and treacle.¹¹⁰ The market for sugar was even more robust than this evidence suggests, when one takes into account possible omissions from grocers' inventories and the presence of competing retail trades, including mercers, chapmen, apothecaries, confectioners, comfitmakers, peddlers, and sellers at regional fairs.

Not only cities but most small towns in every region of England had a shop selling sugar or processed sugar goods, from London, to Yorkshire in the rural north, to the market towns of Essex and Suffolk, the home of many future settlers of Massachusetts Bay. Roger Sankey, grocer of Ormskirk in Lancashire, carried the "usual" sugar until he died in 1613.¹¹¹ William Clarke, serving

¹⁰⁷ T.S. Willan, *The Inland Trade: Studies in English Internal Trade in the Sixteenth and Seventeenth Centuries* (Totowa, NJ: Rowman and Littlefield, 1976), 12; Gloria Main, *Peoples of a Spacious Land: Families and Cultures in Colonial New England* (Cambridge: Harvard University Press, 2001), 32-33.

¹⁰⁸ Willan, *Inland Trade*, 59.

¹⁰⁹ Percy Millican, ed., *The Register of the Freemen of Norwich, 1548-1713* (Norwich: Jaorrolld & Sons, 1934), 38, 123.

¹¹⁰ Stobart, *Sugar and Spice*, 26-27.

¹¹¹ Vaisey, "Probate Inventories," 105; Willan, *Inland Trade*, 80.

the community of Oxford, had treacle, sugar, and comfits on his shelves when he died in 1612.¹¹² James Backhouse kept a country store in 1578 in an isolated town in Kirkby Lonsdale near Yorkshire. His customer base of rural yeomen generated enough demand for him to stock “suger,” probably in several varieties, and “candye,” also of several types, including “white candye,” “sugar candye,” “comfettyts,” and “Senemond comfets.”¹¹³ Another shopkeeper from Yorkshire, James Willinson, was also selling sugar at the time of his death in 1558.¹¹⁴ Lawrence Tench sold sugar, candy, and marmalade in his store in Nantwich in 1623.¹¹⁵ Thomas Harris, mercer of the small town of Charlbury in 1632, sold “browne sugar candy” and powdered sugar.¹¹⁶ Thomas Cowcher, mercer of Worcester, stocked about 137 pounds of varieties of sugar in 1643.¹¹⁷ Edward Collis, mercer of Northampton, did not have sugar in his shop when he died in 1625 (he carried almost exclusively textiles) but he did have sugar loaves and sugar candy in his parlor.¹¹⁸

One of the few surviving grocers’ account books from the early seventeenth century is that of William Wray, a shopkeeper in the remote and landlocked northern town of Ripon in Yorkshire, over two hundred miles from London. His business records, dating from 1580 to 1599, reveal that even in this outlying area of England sugar, comfits, and candy were for sale at the village store. Though most of his business was in textiles, he notes several sales of sugar, along with comfits and candy. Mixed into his accounts are two recipes, for conserve of roses and violets. “To make

¹¹² Vaisey, “Probate Inventories,” 106.

¹¹³ James Raine, ed., *Wills and Inventories from the Registry of the Archdeaconry of Richmond* (London: J.B. Nichols, 1853), 275-281.

¹¹⁴ Raine, *Wills and Inventories*, 125-127.

¹¹⁵ Eric Garton, *Tudor Nantwich: A Study of Life in Nantwich in the Sixteenth Century* (Cheshire: Cheshire County Council, 1983), 27.

¹¹⁶ D. G. Vaisey, “A Charlbury Mercer’s Shop, 1623,” *Oxoniensia* 31 (1966): 107-116.

¹¹⁷ R.G. Griffiths, “An Inventory of the Goods and Chattels of Thomas Cowcher, Mercer, of Worcester,” *Transactions of the Worcestershire Archaeological Society* 14 (1937): 45-60.

¹¹⁸ Mona C. Harrison, “The Probate Inventory of an Early Seventeenth Century Northampton Mercer and Linen Draper,” *Northamptonshire Past & Present* 6 (1982-83): 313-317.

Conserve of Roses,” he noted, “Take fresh Red Roses not quite Blowne, beate them in a stone mortar, mix them with double their weight in Sugar...” The resulting paste, besides being exceptionally palatable, was “good to coule the stomach harte and bowels.” “Conserve of violets” was similarly saccharine and “helpelth the throate of hot hurtes.” The demand for these medicinal treats must have been high enough that it made financial sense for him to process some of the sugar on his shelves into a premium product. It is likely that this country grocer put conserves within the economic reach of rural households. Villagers may have lacked the knowledge and resources necessary to make whole batches of conserves at a time, but this did not mean that they were not used to buying and consuming it in small portions.¹¹⁹

Small grocers, often called chapmen, who generally catered to the poorer classes, sold sugar too. Richard Kent, a chapman who operated a small store in the village of Great Faringdon in 1604, had only eleven pounds’ worth of goods in stock when he died, but these included sugar and sugar candy.¹²⁰ Chapman Thomas Cobbe of Lincolnshire’s stock was similarly small in value, but included one pound six ounces of sugar. This small amount of sugar would not have been intended for the wealthy, who bought multiple pounds at a time. More likely it was sold in lumps for pennies to people of modest means. He carried the cheaper form of sugar, treacle, as well.¹²¹ Some peddlers carried a piece of a sugar loaf from which they could shave off slivers for customers as they went from home to home.¹²² Sugar and confections were thus eaten across regions and across class, widely available in many forms and from many types of retailers. Sugar and sweets were sold both in large amounts to comfortable households and gentry that could afford it, and in small amounts to

¹¹⁹ “The Account Book of William Wray,” *The Antiquary* 32 (1896): 54-57, 76-81, 117-120, 178-180, 212-214, 242, 278-281, 316-317, 346-347, 369-375.

¹²⁰ Vaisey, “Probate Inventories,” 107.

¹²¹ “Inventory of Thomas Cobbe of Sutton St. James,” in Margaret Spufford, *The Great Reclothing of Rural England: Petty Chapmen and Their Wares in the Seventeenth Century* (London: Hambledon Press, 1984), 178-180.

¹²² Spufford, *Great Reclothing*, 62.

those who rarely ventured further than their village store and could only afford some shavings of sugar or a few comfits at a time.

The ubiquity of sugar consumption was reflected in English cultural commentary by the early seventeenth century. A 1620s play satirizing English consumption habits, *Wine, Beere, Ale, and Tobacco*, replete with “purely English allusions” and the “incessant rattle of English puns,” takes sugar’s popularity, affordability, and accessibility for granted. Written just before the English descended on the islands of the Caribbean, the play depicts a culture already saturated with Mediterranean and eastern Atlantic sugar, in which it was “well-known” that sugar came from “Barbary” (North Africa). The character “Tost” mocks his rival “Sugar,” unimpressed with the sugar loaf’s size because “I have known him sold for two pence, when he was young, wrapt in swadling clouts of Paper.” “Wenches licke their lips after you;” Tost notes, and Wine likewise warns that “I heare you runne a wenching, and keepe womens company too much.” Sugar admits that women “are the best friends I have, for I am alwaies in their mouths.” The banter continues as the author plays on the perception that women, at least, had an indecent physical craving for sugar; Sugar declares that women “but for shame, to betray their affections to mee, they would bring whole sheets for me to lie in.”¹²³ A well-known contemporary play, Thomas Middleton’s *A Chaste Maid in Cheapside*, features a home delivery from a comfit-maker and the complaint that “Women have no consciences at sweet meats.”¹²⁴ The study of the rate of dental cavities in England bears out this out; having remained relatively cavity-free for two thousand years, the English suddenly began to develop

¹²³ James Holly Hanford, ed., “Wine, Beere, Ale, and Tobacco: A Seventeenth Century Interlude,” *Studies in Philology* 7 (Jan.1915; repr., London: John Grove, 1629): 6, 23-25.

¹²⁴ Thomas Middleton, *A Chaste Maid in Cheapside* (Menston: Scolar Press Limited, 1969; repr., London: Francis Constable, 1630), 26, 33. It is estimated that this play was written as early as 1615.

cavities sometime after 1600, probably due to increased consumption both of sugar and of refined grains.¹²⁵

Early Modern Sugar Culture

One reason that scholars have not recognized the extent of sixteenth- and seventeenth-century sugar consumption may be the distinctly premodern character of early modern foodways. Historians often cite the use of sugar in coffee, chocolate, and tea, for example, as an enormously significant innovation in the history of the sugar trade. However, these beverages were not yet commonplace in the England from which the first American settlers departed. It was not until the second half of the seventeenth century that these imported beverages spread through England, and it was some time before sugar became associated with their consumption.¹²⁶ Similarly, the transition to “modern” dining habits was just beginning in the decade before 1650. Bread trenchers had given way to wood and pottery; the gentry were adopting modern cutlery, place settings, and private dining rooms; social life was becoming more urban, and consumption of all types was increasing; but these cultural changes were still modest. As had been the preference since medieval times, cooks used pepper, sugar, and other spices heavily, creating complex, highly flavored dishes that would fall out of favor in the decades to come. Yet within this traditional English food culture, sugar and sweetness played a substantial role.

Early-seventeenth-century English sugar consumption took several forms. First, sugar was a common, perhaps the most common, ingredient in recipes for “savory” dishes; the medieval passion for other spices had waned somewhat, but liberal use of sugar remained and even increased. Second, sweet tarts, pies, and puddings were popular, but served with the rest of the meal; sweet desserts as a

¹²⁵ W.J. Moore, “Dental Caries in Britain from Roman Times to the Nineteenth Century,” in *Food, Diet and Economic Change Past and Present*, ed. Catherine Geissler and Derek J. Oddy (London: Leicester University Press, 1993), 55-56.

¹²⁶ Brian Cowan, “New Worlds, New Tastes: Food Fashions After the Renaissance,” in *Food*, ed. Freedman, 220-222; Mintz, *Sweetness and Power*, 110-11.

final course were still not the cultural norm. Third, confectionery grew ever more widespread as an everyday indulgence, promoting professional and home production. And finally, beginning in the sixteenth century, originating in the feasts and subtleties of the Middle Ages, dessert “banquets” became popular as a luxurious pastime, incorporating a wide variety of elaborate sweets. The varied and extensive use of sugar emerges most clearly from the incredible array of confectionery cookbooks published during this period, written for and heavily used by the middle classes.

An examination of sixteenth- and early-seventeenth-century cookbooks reveals an impressive use of sugar as an ingredient in every kind of food preparation. As had been the practice for hundreds of years, people used sugar liberally in savory dishes. It was a central ingredient in meat, starch, and vegetable food preparation for families of any means. Gervase Markham’s *The English Housewife*, widely read among the middle and upper classes and first published in 1615, included sugar in its recipes for salad, egg dishes, fritters, pancakes, and a variety of meats, puddings, and fish, as well as in purely sweet pastry, preserves, breads, and cakes. In fact, a full seventy percent, or 118 out of the approximately 168 recipes included in Markham’s book, called for sugar, often in copious amounts. (Exact measurements were rare in cookbooks of this era, but Markham’s recipes for main dishes often require a “good store” of sugar.) To make “a herring pie..,” Markham advised, “put to it good store of currants, sugar, cinnamon, sliced dates...When it is sufficiently baked, draw it out, and take claret wine and a little verjuice, sugar, cinnamon, and sweet butter, and boil them together...and so serve it up, the lid being candied over with sugar, and the sides of the dish trimmed with sugar.”¹²⁷ Meat pastries and pies were similarly expected to be sweet, with the question being not whether or not to sweeten but how to best to incorporate the sugar; “some that to this paste use sugar,” Markham reflected, “but it is certain it will hinder the rising thereof;” instead he offered an

¹²⁷ Gervase Markham, *The English Housewife* (London: Nicholas Okes for John Harison, 1631), 60-124, 101. For another period cookbook with a similar distribution of sugar across recipes, see John Murrell, *Murrells Two Books of Cookerie and Carving* (London: M. Flesher, 1638).

alternative way of ensuring sweet meat pastries, advising the reader to “dissolve sugar into rose-water, and drop it into the paste as much as it will by any means receive...it will be sweet enough.”¹²⁸

Purely sweet dishes, such as fruit or dairy puddings, pies, and tarts, were still placed on the table with savory dishes; dinner or supper for a middle-class family would ideally consist of several dishes, perhaps including a sweet pie or tart.¹²⁹ *The English Housewife's* recipes for pies, tarts, and puddings call for “a great store of sugar,” often with several layers and coatings of sugar, and with instructions to taste for sweetness, “and if it be not sweet enough, then put in some more sugar...”¹³⁰ Another popular cookbook published in 1588 called for a pound and a half of sugar to eight to ten quinces to make a quince pie.¹³¹ Cakes, “biscuits” or “fine bread” were cookies, often sweeter than modern-day pastries, typically made with equal parts flour and sugar.¹³² Though even middle and upper-class English meals did not typically include a dessert course, many common dishes in everyday meals were as sweet as modern-day desserts.

Perhaps the foremost way in which the early-seventeenth-century English ate their sugar was in the form of confectionery. People still understood diet to be a crucial component of health and healing, and sugar was the most important food for preventative health care and for medicine. Writing in the mid-sixteenth century, Andrew Boorde summarized the early modern English understanding of sugar. “All meates and drinckes the which is swete, & and that suger is in, be

¹²⁸ Markham, *The English Housewife*, 98.

¹²⁹ Mintz, *Sweetness and Power*, 131-132; J.C. Drummond and Anne Wilbraham, *The Englishman's Food: A History of Five Centuries of English Diet* (London: Pimlico, 1991), 112; Peter Brears, “Seventeenth-Century Britain,” in *A Taste Of History: 10,000 Years of Food in Britain*, ed. Peter Brears, Maggie Black, Gill Corbishley, Jane Renfrew, and Jennifer Stead (London: British Museum Press, 1993), 181-198.

¹³⁰ Markham, *The English Housewife*, 104-110.

¹³¹ Anonymous, *The Good Hous-Wives Treasurie* (London: Edward Allde, 1588), 6-7.

¹³² Markham, *The English Housewife*, 157; Thomas Dawson, *The Good Huswifes Jewell* (London: E.A. for Edward White, 1610), 38.

nutrytyue...”¹³³ Building on medieval tradition, philosophers, scientists, and doctors in early modern England overwhelmingly believed that sugar had a “wholesome and comfortable” effect on the body and mind, and encouraged their readers to seek it out. Scholars of the day saw sugar as superior to honey, so that it “agreeth with all ages, and all complexions; but contrariwise, Honie annoyeth many...Sugar by how much the whiter it is, by so much the purer and wholsomer it is...”¹³⁴ Thomas Moffett argued that sugar was an essential ingredient for good health, for “[c]oncerning the uses of this worthy and sweet salt, they are many and good...furthermore, it nourisheth very plentifully, yea, it maketh many things to become exceeding good Meat...Besides this, it pleaseth the Stomach, delighteth the Blood and Liver, Cleaneth the Breath, Restoreth the Lungs...”¹³⁵ William Vaughan, writing in 1600, asserted that “Sugar mitigareth and openeth obstructions. It purgeth fleagme, helpeth the reines, and comforteth the belly.”¹³⁶ Sugar and confections were sold at apothecaries as medical treatments, but also by grocers and confectioners as foods. Cookbooks frequently included confectionery in separate “medical” sections, and medical confectionery manuals were often published on their own. Indeed, the sizable amount of space devoted to sugar foods in cookbooks and confectionery manuals is itself an indicator of the centrality of sugar in the English diet.

The English depended on an impressive collection of common confections to satisfy body and mind. As we have seen, studies indicate that the positive medical associations with sugar foods were a cultural construct that expressed the biological drive of humans to seek out and consume

¹³³ Andrew Boorde, “A Compendyous Regyment or a Dyetary of Health,” in *Andrew Boorde’s Introduction and Dyetary*, ed. Frederick James Furnivall (London: Early English Text Society, 1870), 296.

¹³⁴ Thomas Elyot, *The Castel of Helth* (New York: Scholars’ Facsimiles and Reprints, 1936; repr., 1541), 36-37; Hugh Plat, *Divers Chymicall Conclusions Concerning the Art of Distillation* (London: Herb Lovers Book Club, 1941; repr., 1594), 13-14; Tobias Venner, *Via Recta Ad Vitam Longam* (London: T.S. Snodham, 1622), 101-102.

¹³⁵ Moffett, *Health’s Improvement*, 350.

¹³⁶ William Vaughan, *The Naturall and Artificial Directions for Health Derived from the Best Philosophers, as Well Moderne, as Auncient* (London: Richard Bradocke, 1600), 24.

large amounts of sugar. Although it is difficult to differentiate consumption of these sweets as foods from their consumption as medicines, especially since such a distinction was foreign to early modern beliefs about food and the body, what is clear is that the preparation and consumption of these sugar foods were an essential part of every middle-class household. Sweets of the early seventeenth century were similar to those of medieval times, with their most common characteristic being extreme sweetness. Typical is Markham's recipe for "ordinary quince cakes," which directed cooks to take quince preserves – already half sugar – and mix the confection with more sugar, forming a stiff paste that must have been achingly sweet.¹³⁷

By the sixteenth century, the making of confectionery had become its own art and business, conducted by professional confectioners and by housewives as well as apothecaries. Confectionery manuals for the home, presented as books on home healing, were everywhere, and they were almost entirely centered on sugar. It was increasingly seen as a female occupation, because of its association with healing and its aesthetic aspects. By the early seventeenth century, middle-class housewives as well as ladies of the gentry class were expected to produce these sugar foods and medicines at home as a part of caring for her household. Confectionery cookbooks went through many editions and were heavily used.¹³⁸ Physician John Partridge's *The Treasure of Commodious Conceites*, a confectionery manual that sold out many printings between 1573 and 1656, was addressed to "every good Huswife to use in her house, amongst her owne Familie."¹³⁹ One especially well-preserved example of an early modern confectionery manual is the *Booke of Sweetmeats*, dating from the late sixteenth and early seventeenth centuries and kept as a family heirloom in the American colonies by Martha Washington. Typical of confectionery manuals of the period, it began with how to clarify and boil

¹³⁷ Markham, *The English Housewife*, 114.

¹³⁸ Kate Culquhoun, *Taste: The Story of Britain Through Its Cooking* (New York: Bloomsbury, 2007), 103.

¹³⁹ C. Anne Wilson, "Evolution of the Banquet Course," 30-31; Thirsk, *Food in Early Modern England*, chap. 3; John Partridge, *The Treasure of Commodious Conceites and Hidden Secrets* (London: Eliot's Court Press, 1627).

sugar to make syrups and candies, and included sections on preserves and conserves; candied flowers and fruits; plain solid sugar candy; sugared dried fruit; Manus Christi; lozenges; sugared fruit pastes; cakes, biscuits, and other baked goods; elaborate banquet foods; comfits; and medicinal drinks.¹⁴⁰ All these were traditional English sweets dating from medieval times, as described earlier in this chapter, and most were extremely sweet.

All-purpose medicines tended to be especially sweet, reflecting the belief that if someone were ill, a sugary food was likely to promote healing. And the fact that a sweet taste would heighten the appetite of the ill for medicines was not lost on the author of the 1631 edition of *The Widowes Treasure*, a widely read medical manual, who regularly advised the reader to “put in Sugar to make them pleasant.” A recipe for spiced jelly, an all-purpose medicine, was mainly sugar and wine.¹⁴¹ *The English Housewife* instructed that sugar be included in treatments for “any infection at the heart;” “for a new cough;” “for an old cough;” “the pin and web in the eye;” “for the phthisic;” “for the consumption;” “to staunch blood;” “for the wind colic;” “the colic and stone;” “for hot urine;” “for the green sickness;” “for any old sore;” “to take away dead flesh;” and “to expel heat in a fever.”¹⁴² Markham drew heavily from previous writers in his prescriptions, building on a long tradition of sugar as medicine. Sugar was understood to be effective in treating an impressively wide assortment of ailments – or at least to bring some momentary comfort to the patient.

Super-sweet fruit or flower preserves or “conserves,” meaning fruit cooked in sugar syrup, were an essential component of English diet in the early seventeenth century. It is hard to appreciate today that these sweets had a variety of consistencies, sometimes soft, sometimes firm like a gummy candy, and that they were eaten on their own by the plateful. Pieces of fruit preserved in sugar were

¹⁴⁰ Hess, *Martha Washington's Booke of Cookery*.

¹⁴¹ *The Widowes Treasure* (London: 1631), 24.

¹⁴² Gervase Markham, *The English Housewife*, ed. Michael R. Best (Kingston: McGill-Queen's University Press, 1986) 13; 15; 22; 23; 26; 27; 33; 35; 36; 38; 44; 48; 55. This transcribed version of Markham's masterwork is the 1631 edition.

usually called preserves, and fruit pounded with sugar for a smoother texture tended to be classified as conserves. Preserves and conserves had a particularly strong association with healing, and they were included in any book on cookery, household management, confectionery, or household remedies. They were typically made with at least equal parts sugar and fruit, and sometimes as much as three parts sugar to one part fruit.¹⁴³ Conserve of red roses, a popular health food that “comforteth the Stomacke, the heart and all the bowels,” typically used three parts sugar to one part roses.¹⁴⁴

Sugar-coated or candied seeds, fruit, and flowers were another major category of confectionery. Confectioners, apothecaries, and housewives dredged fruit, flowers such as roses, marigolds, and violets, and even herbs such as rosemary, in sugar syrup and left to them to harden. These flavored sugar candies varied in price and availability, but pure sugar candy, lumps of sugar with little or no flavoring, was easy to make and affordable. Sucket or succade, also a staple candy, usually referred to candied, sugar-coated fruit rather than conserves. Often they were made with oranges and lemons that had already been preserved in sugar; these preserves were dipped in sugar syrup once again and left to harden into solid sugar candy.¹⁴⁵ Fruit pastes, yet another popular treat, were fruit cooked in their weight in sugar, cooled to a solid, then cut and often rolled in sugar once more.¹⁴⁶

Lozenges and comfits formed a category of their own. Lozenges were sugar pills with vague medical connotations. A typical recipe called for half a pound of medicinal herbs, two ounces of

¹⁴³ Anonymous, *A Closet for Ladies and Gentlewomen, or, the Art of Preserving, Conserving, and Candyng* (London: Arthur Johnson, 1611), 53-54; Thomas Dawson, *The Good Huswife's Jewell* (London: John Wolfe, 1587), 38-40, 72-73; John Partridge, *The Widowes Treasure* (London: 1631), 16, 20; Markham, *The English Housewife*, 111, 116; *The Good Hous-Wives Treasurie*, 15.

¹⁴⁴ Partridge, *Treasurie*, chap. 20; Hess, *Martha Washington's Booke of Cookery*, 278.

¹⁴⁵ Markham, *The English Housewife*, 120; Hess, *Martha Washington's Booke of Cookery*, 280, 289.

¹⁴⁶ Hess, *Martha Washington's Booke of Cookery*, 294-302.

rosewater or other liquid, and two ounces of gum tragacanth for texture, all mixed with two pounds of sugar.¹⁴⁷ Comfits, seeds such as coriander or anise soaked and dried over and over in sugar syrup, were very common, but required substantial equipment, time, and patience to make because of their many layers of sugar. Thus by 1600 a professional class of comfitmakers had arisen in England, though cookbooks for upper-class families with household help included recipes for comfits. Comfits were essentially pure sugar candy; recipes generally called for a quarter pound of seeds to two or three pounds of sugar for “faire and large” comfits.¹⁴⁸

Though alcohol distilled directly from sugar or sugar products was relatively unknown in the early seventeenth century, England had a long tradition of sweet-tasting alcoholic beverages.¹⁴⁹ A sixteenth-century observer noted that “they put a great deal of sugar in their drink.”¹⁵⁰ Tavernkeepers and drinkers habitually mixed sugar with wine or other fermented drinks to enhance the beverages’ appeal.¹⁵¹ As alcohol consumption was high, this was yet another way that the English sought to make the taste of sugar part of everyday life. Indeed, the most striking thing about early-seventeenth-century confections was their intense sweetness, with few thickeners or diluters other than fruit. The more sugar that could be incorporated into a sweet, the better, with fruit and flowers added only for interest or medical reasons. Though poor or rural customers probably only had access to the simpler, coarser sugar candies and sugar, with only the occasional taste of complex flavorings and preparations, for more urban and prosperous customers the choices were as varied and dazzling as they are today.

¹⁴⁷ Hess, *Martha Washington’s Booke of Cookery*, 291.

¹⁴⁸ Hugh Plat, *Delights for Ladies* (London: H. Lownes and R. Young, 1628), D1-5.

¹⁴⁹ Mark Dawson, *Plenti and Grase: Food and Drink in a Sixteenth-Century Household* (Totnes: Prospect Books, 2009), 159.

¹⁵⁰ Hentzner, *Travels in England*, 64.

¹⁵¹ Mintz, *Sweetness and Power*, 136-137. This custom is reflected in aforementioned 1620s play *Wine, Beere, Ale, and Tobacco*; in the opening scene of the play, “Nutmegge” asks “Sugar” “how chance you waite not upon your Maister, where’s Wine now?” Hanford, “Wine, Beere, Ale, and Tobacco,” 23.

In the sixteenth century, a final dessert course called a “banquet” became a frequent indulgence among the wealthy and an occasional one for the middle class, evolving out of the medieval custom of retiring to another room for wine and confections. The custom grew to incorporate separate banqueting rooms or houses and a great variety of extremely elaborate confections.¹⁵² Many housewifery manuals, confectionery manuals, and cookbooks included recipes for “banqueting stuffe” such as marchpane and sugar plate, which were molded into intricate shapes and sculptures, and fine cakes and pastries. Though clearly this extreme form of sugar indulgence was of limited accessibility to the general population, banquets’ exclusiveness was more a matter of degree than content. Banquets were an elite, conspicuous form of sugar consumption, but these impressive feasts should not obscure the fact that everyone indulged in some form of sugar.¹⁵³

A Sweet New World

In 1629, the year before famous New England pioneer John Winthrop sailed for Massachusetts, his family mourned the loss of his brother-in-law, Thomas Fones, with twenty pounds worth of sugar, comfits, and wine.¹⁵⁴ This was likely a casual purchase for the family, involving a short trip to the neighboring village of Boxford, or if they preferred, to the nearby bustling market towns of Norwich or Ipswich. In their new settlement of Ipswich in Massachusetts Bay, as well as in the sugar islands of the West Indies, the extended Winthrop family would recreate the life they had known in England, and the production and consumption of sugar was no small part

¹⁵² Eden, *Early American Table*, 31; Sim, *Food and Feast in Tudor England*, chap. 10.

¹⁵³ Tellingly, Markham distinguishes these elaborate confections from everyday candies, feeling the need to justify their inclusion. He notes that they “are not of general use,” and that he is including them only because knowledge of their proper preparation is necessary for a banquet should that occasion arise. The fact that most confections were not for special occasions is implicit in his distinction. Markham, *The English Housewife*, 110.

¹⁵⁴ “Diary of Adam Winthrop,” *Winthrop Papers* (Boston: The Massachusetts Historical Society, 1929-47), 1:144. Families of any means were expected to serve a meal after a burial, and sweets were a usual part of this meal. Peter C. Jupp and Clare Gittings, eds., *Death in England: An Illustrated History* (Manchester, UK: Manchester University Press, 1999), 158-159; David Cressy, *Birth, Marriage, and Death: Ritual, Religion, and the Life-Cycle in Tudor and Stuart England* (New York: Oxford University Press, 1997), 443-449.

of their project. Habituation to sugar consumption was widespread far earlier than histories of England – and particularly New England – have accounted for. These are significant refinements to the history of tropical commodity markets in the early modern Atlantic world, helping us to understand why a countercultural group of migrants seeking to build a society in splendid isolation would place a such high importance on markets and trade even as they rejected much of English consumer culture. Their need, along with that of hundreds of thousands of others, accounts for the rise of the English sugar plantations in the West Indies and influenced the economic development of colonial Massachusetts. Sugar would shape the colony’s relationship with the West Indies and the Atlantic world, miring it in a sticky world market.

Chapter Two

“Well Without Want”: Competency and Dependency in the Foodways of Early New England

“[W]hatsoever we stand in neede of is treasured up in the Earth by our Creator, and to be feched thense by the sweate of our browes.”

– Forth Winthrop, about 1629¹⁵⁵

In the depths of the winter of 1636, Mary Winthrop Dudley of Ipswich, a tiny, isolated frontier village, a “towne of the land remote from neighbors” in the new colony of Massachusetts Bay, wrote a thank you letter to her brother, John Winthrop Jr., who was living at the time in Boston.¹⁵⁶ Ipswich had come into existence only three years before, when a band of English bent on claiming the area for their colony had hurriedly taken up residence to prevent the French from settling there. It was perhaps not ideal timing. One scholar has termed the first half of the decade of the 1630s a “season of want,” a “time of dearth and desperation” in which settlers overwhelmed food supplies.¹⁵⁷ Life was precarious in the new settlement, houses and possessions were crude, and people were often hungry.¹⁵⁸ The Reverend Nathaniel Ward, spiritual leader of the new community, had also written to John Winthrop Jr. just two months earlier, begging him to send supplies from a

¹⁵⁵ “Reasons to be Considered, and Objections With Answers,” *Winthrop Papers* (Boston: The Massachusetts Historical Society, 1929-47), 2:144.

¹⁵⁶ Rev. Nathaniel Ward to John Winthrop Jr., Dec. 24 1635, *Massachusetts Historical Collections* (Boston: John Wilson, 1865), 4th ser., 7:24-26.

¹⁵⁷ As described by Katherine Grandjean, who argues that food scarcity helps to explain the eruption of violent conflict with the native Pequots in the 1630s. Katherine A. Grandjean, “New World Tempests: Environment, Scarcity, and the Coming of the Pequot War,” *The William and Mary Quarterly* 68 (January 2011): 75-100.

¹⁵⁸ Indeed, an inventory of John Winthrop Jr.’s Ipswich home in 1635 or 1636 reveals that even this prominent resident owned only basic textiles, bedding, cooking utensils, arms, and tools; his only luxuries were a few pieces of silver and a silk mantle. “An Inventorie of Mr. Winthrop’s goods of Ipswich,” *Massachusetts Historical Society Collections* (Cambridge, MA: John Wilson, 1897): 2nd ser., 11:4-6. This material simplicity was typical of early homes in Ipswich as well as in other towns. The wealthier settlers had up to four rooms in their homes and enough textiles and tools to keep everyone in the family warm and fed, with a few additional treasured possessions such as silver pieces; everyone else had one room and only the most basic wooden and metal goods. See, for example, the inventory of the John Dillingham estate of 1636 Ipswich, as described in George F. Dow, *Every Day Life in the Massachusetts Bay Colony* (New York: Dover Publications, 1988), 32-35.

provisioning ship. “I intreate yow...to reserve some meale & malt, &...victualls...I am very deestitute; I have not above 6 bushells corne left...”¹⁵⁹ Mary’s message to her brother, however, suggests that although colonists were willing to subsist in harsh, even brutal, conditions in their effort to establish a new world, there was a “luxury” that they considered a necessary. “I give you many thanks,” wrote Mary, “for your many tokens that you sent me which will doe me a great pleasure being I had but a little suger ith house...”¹⁶⁰ Her phrasing indicates, surprisingly, that her family kept a large enough store of sugar to last through the winter in a new and isolated settlement. Even more revealing is Mary’s expectation that even in the midst of her mission to establish a godly community in the wintry wilderness her larder would be stocked with sugar – a tropical commodity produced in a world that was physically and socially far removed from her own. This is what Carole Shammas has termed the “continual longing” of early modern people for “greater quantities” of tropical groceries, and it helps to explain both the dissonance between Mary’s spiritual commitments and her earthly concerns, and the story of the rise of sugar in the Atlantic world.¹⁶¹

Mary and her fellow New England colonists, wrote an observer in 1634, “looke not so much at abundance, as a competencie...”¹⁶² It was lucky (though hardly coincidental) for these early settlers that their economic goals were modest; in 1630, John Smith observed that New England’s colonists were living “well without want,” but as historian Darrett B. Rutman has noted, their villages and homes must also be described as “well without luxury.”¹⁶³ This modest existence was in part what attracted the settlers of the Massachusetts Bay colony, at least according to some; a promotional

¹⁵⁹ Rev. Nathaniel Ward to John Winthrop Jr., Dec. 24 1635.

¹⁶⁰ Mary Dudley to John Winthrop Jr., February 1636, *Winthrop Papers* (Boston: The Massachusetts Historical Society, 1947), 3:228.

¹⁶¹ Carole Shammas, *The Pre-Industrial Consumer in England and America*, 2nd ed. (Los Angeles: Figueroa Press, 2008), 176.

¹⁶² William Wood, *Wood’s New-England’s Prospect* (Boston: John Wilson and Son, 1865), 54.

¹⁶³ John Smith, “Advertisements for the Unexperienced Planters of New England, or Any Where,” in *Works of Captain John Smith, 1608-1631*, ed. Edward Arber (Birmingham, 1884), 954; Darrett B. Rutman adds “well without luxury” in *Husbandmen of Plymouth: Farms and Villages in the Old Country* (Boston: Beacon Press, 1967) 13.

tract for potential emigrants described the earlier settlers at Plymouth as “living and subsisting though not in a flourishing state, yet in a convenient and comfortable condition.”¹⁶⁴ Over the long decade from 1628 to 1642, settlers from England transformed their surroundings from precarious camps in the wilderness into settled villages with productive farms. They embraced lives of material simplicity but social and economic security, an arrangement which complemented their religious beliefs.

Yet this fervently religious, quasi-utopian settlement movement that built the Massachusetts Bay colony in the 1630s and the development of a profit-driven slave economy of staggering scale and brutality in Barbados in the 1640s and 1650s were intertwined. This connection is key to understanding why capitalism and slavery flourished in the new Atlantic World. In this chapter, I argue that the first colonists were dedicated to establishing self-sufficient communities consumed with heavenly matters above all, and that they were surprisingly successful. The leaders of the colony condemned attraction to most durable consumer goods and they put considerable resources into import substitution for essential commodities such as iron and textiles. In particular, their dependence on food imports for survival was minimal; this local control over the food supply was an important part of the puritan ideal of socioeconomic insularity and autonomy that underlay the founding of the colony. Yet despite this, the weakness of the settlers for tropical goods, particularly sugar, would influence private and collective economic life, pulling everyone from rural farmers to urban merchants into the formation of powerful international tropical grocery markets.

Nuanced analyses of the economic culture of early New England abound, in an effort to explain how the great merchant capital of the English New World could flourish in a colony founded on the premise of an all-encompassing church. The colonists themselves commented

¹⁶⁴ John White, *John White's Planters Plea 1630*, (Rockport, MA: Sandy Bay Historical Society, 1930), 51.

frequently and explicitly on the potential tension between the colony's economic and spiritual goals. Terms such as "competency" and "moral economy" attempt to encapsulate the entanglement of an anti-materialist, intellectually rigorous spiritualism with profit-seeking market behaviors. Nor have historians seen this culture as static. There is a general consensus that after 1660 there was a simultaneous expansion of commercial and mercantile activity and a cultural shift towards more moderate forms of religious zealotry. Attempts to characterize and explain this shift include Perry Miller's theory of religious "declension," Phyllis Hunter's assertion of the development of a "polite and commercial" cultural identity "based on goods and manners," and Mark Valeri's suggestion of a transition to "postpuritan Protestantism."¹⁶⁵

¹⁶⁵ Perry Miller, *The New England Mind: The Seventeenth Century* (Boston: Beacon Press, 1961), and *The New England Mind: From Colony to Province* (Boston: Beacon Press, 1961); Phyllis Hunter, *Purchasing Identity in the Atlantic World: Massachusetts Merchants, 1670-1780* (Ithaca: Cornell University Press, 2001), 4, 173; Mark Valeri, *Heavenly Merchandize: How Religion Shaped Commerce in Puritan America* (Princeton: Princeton University Press, 2010), 10. Joyce Appleby makes a convincing argument that the essence of capitalism rests in culture; Joyce Appleby, *The Relentless Revolution: A History of Capitalism* (New York: W.W. Norton, 2010), 4,7, 118. The question emerges, then, of what to make of a society that appears to be profit-seeking but culturally anti-materialist; what might explain economic behavior? To deal with this tension, historians have formulated the concept of "competency," the idea that early New Englanders actively sought modest prosperity, but with the goal neither of substantial profits nor of substantially enhanced consumption, but precisely the opposite: the ability of each family and community to choose not to submit themselves to markets, but instead to be able to feed, clothe, and shelter themselves independently. This socioeconomic purpose, that of maintaining and transmitting a decidedly anti-materialist Reformed Protestant culture, was emphasized in studies such as Kenneth Lockridge's *A New England Town: The First Hundred Years* (New York: W.W. Norton, 1970) and Philip Greven's *Four Generations: Population, Land, and Family in Colonial Andover, Massachusetts* (Ithaca: Cornell University Press, 1970). The concept has been espoused, attacked, and remade by numerous historians over the last few decades, notably Allan Kulikoff, *The Agrarian Origins of American Capitalism* (Charlottesville: University Press of Virginia, 1992); Christopher Clark, *The Roots of Rural Capitalism: Western Massachusetts, 1780-1860* (Ithaca: Cornell University Press, 1990); Richard M. Bushman, "Markets and Composite Farms in Early America," in *Colonial America: Essays in Politics and Social Development*, ed. Stanley N. Katz, John M. Murrin, and Douglas Greenberg (New York: McGraw-Hill, 2001); and Michael Merrill, "Putting 'Capitalism' in Its Place: A Review of Recent Literature," *The William and Mary Quarterly* 52 (1995): 315-326. These scholars attempted to move the debate over the meaning of early modern capitalism forward by giving it more nuance, but the more expanded the concept becomes, the less useful it is. James E. McWilliams, *Building the Bay Colony: Local Economy and Culture in Early Massachusetts* (Charlottesville: University of Virginia Press, 2007), 23, calls the early New England economy "moral capitalism;" Daniel Vickers, *Farmers and Fishermen: Two Centuries of Work in Essex County, Massachusetts, 1630-1850* (Chapel Hill: University of North Carolina Press, 1994) describes a social balance between consumerism and independence that he labels "comfortable competency;" Mark Valeri, *Heavenly Merchandize*, 6-7, terms the economic culture of early New England "a certain kind of economic pragmatism" that "might appear to our eyes as mere profit seeking" but in fact had an intentionally spiritual basis. Margaret Newell sees the Puritan leaders of New England in the 1620s and 1630s as partial proponents of economic liberalism; in her view, they championed industry and frugality as religious values, but denounced consumption, and thus were only very limited supporters of commercialism. Margaret Ellen Newell, *From Dependency to Independence: Economic Revolution in Colonial New England* (Ithaca: Cornell University Press, 1998), 24-35, and see Joseph A. Conforti, *Saints and Strangers: New England in British North America* (Baltimore: The Johns Hopkins University Press, 2006), 41-43. Brian Donahue, in his environmental study of colonial Concord, examines how this complex ideology operated in the material world. He argues that early settlers used advanced agricultural techniques, but

Though, as Bernard Bailyn puts it, in highly literate, introspective New England, “doctrine literally preceded practice,” a close examination of material life as expressed through consumer habits may unearth a different sort of explanation for the trajectory of the seventeenth-century New England economy.¹⁶⁶ In this chapter I will examine the relationship between the colonists’ foodways and their attitudes towards commerce and consumerism, exploring what might have motivated New Englanders to become so deeply involved in the development of Barbados by the 1640s. I argue that historians have overlooked the dependence of New England’s settlers on sugar, an addictive commodity that could not be produced locally, and that this dependence would threaten the autonomy of their deliberately designed communities.

The “Puritans” of Massachusetts Bay

One of the great challenges in constructing a coherent narrative of early colonial New England lies in the diversity of the region, though the majority of settlers were deeply pious. As John White, one of the most active proponents of the settlement of New England, wrote in 1630, “[a]s it were absurd to conceive they all have one minde, so it were more ridiculous to imagine they all have one scope. Necessitie may presse some; Noveltie draw on others; hopes of gaine in time to come

with the goal of sustainability, not profit. Brian Donahue, *The Great Meadow: Farmers and the Land in Colonial Concord* (New Haven: Yale University Press, 2004). Other historians see tension rather than coherence in puritan economic culture. See Stephen Innes, *Creating the Commonwealth: The Economic Culture of Puritan New England* (New York: W.W. Norton, 1995), 37, who outlines the creation of “a capitalist world the New Englanders simultaneously desired and abhorred.” Other scholars, such as Winifred Rothenberg, Gloria Main, and Eric Kimball, have conducted quantitative research that shows economic growth, market convergence, and New England’s key role in supporting and benefitting from Atlantic slavery. They have done much to increase our understanding of what New England families grew, made, bought, and sold, but do not address the question of why these families made the decisions that they did, beyond the pursuit of “profit” or the “need” to pay for imported manufactures. Winifred B. Rothenberg, *From Market-Places to a Market Economy: The Transformation of Rural Massachusetts, 1750-1850* (Chicago: University of Chicago Press, 1992); Gloria L. Main, *Peoples of a Spacious Land: Families and Cultures in Colonial New England* (Cambridge: Harvard University Press, 2001); Eric Kimball, “An Essential Link in a Vast Chain: New England and the West Indies, 1700-1775” (PhD diss., University of Pittsburgh, 2009). It is my intention to enhance this area of scholarship by exploring the nature and scope of seventeenth-century New England consumer demand through the examination of the ubiquitous use of sugar.

¹⁶⁶ Bernard Bailyn, *New England Merchants in the Seventeenth Century* (New York: Harper & Row, 1955), 23.

may prevaile with a third sort; but that the most and the most sincere and godly part have the advancement of the Gospel for their maine scope I am confident.”¹⁶⁷ Some areas of New England were in constant contact with the commerce and migrants of the wider Atlantic world; some saw strangers from outside their village only infrequently. Some households produced little more than what they needed to survive; some specialized in timber or livestock production; some in more fertile areas succeeded in producing bountiful grain harvests for export. Religious and social differences, seemingly negligible to us now but of grave importance to the settlers themselves, led to divergent ways of organizing their villages politically and socially. Yet all of these communities were rooted in some form of Reformed Protestant English culture and tradition; and within that tradition, the strongest elements were localism - the self-sufficiency and autonomy of the community – and faith – the prioritizing of spiritual over material prosperity.

This pursuit of autonomy – spiritual most of all, but necessarily political and economic as well – underlay the settlement of Massachusetts Bay. The common thread that shaped the culture of these dispersed settlements was the belief that local control must be supported and protected as the foundation of a stable and prosperous society. This belief, long held in England, was heightened by the autocratic rule of Charles I, who upon ascending the throne in 1625 began a campaign of interference in local religious and economic affairs that threatened the relationship between gentry and peasant and indeed the social stability of the country. The puritan migrants of the 1620s and 1630s were in part fleeing this threat to the social order, and Massachusetts Bay was founded on the premise that local autonomy was one of society’s highest priorities. To understand the economic, political, and social behavior of Massachusetts residents in the first decades of the colony, then, we must look first at their most important values: as summarized by T.H. Breen, “continuity,

¹⁶⁷ John White, *Planters Plea*, 64-65.

independence, and insularity.”¹⁶⁸ The most essential task of the settlers, endeavoring to live out these principles, was to establish economic independence on the colony, community, and household levels.

The early settlers’ focus on competency makes sense when viewed within the context of the England from which they came. The poor and dispossessed haunted the fields, villages, and towns of early-seventeenth-century England, “where the people are a burden.”¹⁶⁹ Changing structures in English society and economy between 1595 and 1630, particularly an increasing population, a reorientation towards production for markets, and rising prices and land values, appeared to threaten the traditional social order and immiserated the poorest laborers, though the food supply remained secure for most people. “Many among us live without employment...even folke willing to labour...” observed John White in 1630, and the state “groanes under” the burden of “making supply to the scantie meanes of many thousands...”¹⁷⁰ Social disorder, begging, and crime were the inevitable and ever-present result.

The masses of poor served as a constant reminder to the more materially secure class of landowning yeomen, middling craftsmen, and modest gentry of the perils and proximity of poverty. Writing from the new Massachusetts Bay settlement of Salem in 1629, the pioneering migrant Reverend Frances Higginson eloquently cast this economic dislocation as a threat to morality and civilization, arguing that “[England] grows weary of its inhabitants, so that man wch is ye most precious of all creatures is here more vyle & base then ye earth they tread upon; so as children

¹⁶⁸ T.H. Breen, *Puritans and Adventurers: Change and Persistence in Early America* (New York: Oxford University Press, 1980), 16. Breen develops this argument about localism through several essays in this volume. In “Transfer of Culture: Chance and Design in Shaping Massachusetts Bay, 1630-1660,” he cites several factors that enabled Massachusetts settlers to reestablish and protect local sovereignty so successfully in the New World: an agricultural environment similar to England; the lack of Indian resistance due to disease; the health and longevity of families and individuals; a common English mother culture; and the physical presence of meetinghouses as community anchors.

¹⁶⁹ John Winthrop, “General Conclusions and Particular Considerations: Early Draft,” *Winthrop Papers*, 2:127.

¹⁷⁰ John White, *Planters Plea*, 17-19.

neighbours & friends especially of ye poore, are counted ye greatest burdens, wch if things were right would be ye highest earthly blessings.”¹⁷¹ Viewed in this light, the power of the puritan ideal – the self-sustaining household and village – becomes clear. Possession of land, skills, and tools, and the means to maintain them, were precious, all that stood between the small freeholding class and potential misery; and the creation of a new economy in New England offered the chance to remake society as well, to balance the economy so that all could support themselves but none strove after more than their share.¹⁷²

Though small English settlements, including the one established at Plymouth, struggled to survive on the edge of the continent in the 1620s, the settlement of Massachusetts began in earnest in 1628, when a small ship reached Salem under the leadership of zealous puritan John Endecott. This settlement expanded in 1629 when another several hundred settlers arrived, led by Reverend Higginson. With the arrival of a fleet of eleven ships under the governorship of John Winthrop in 1630, the Great Migration began. Over the years from 1628 to 1642, about 20,000 settlers arrived in the colonies of Massachusetts Bay and Plymouth.¹⁷³ The majority of these travelers were family units of either relatively well-off urban cloth workers and other artisans or “middling people of the countryside” from the “wood-pasture” regions of England with enclosed family farms and a focus

¹⁷¹ Frances Higginson, *New England's Plantation, with the Sea Journal and Other Writings* (Salem, MA: Essex Book and Print Club, 1908), 41-42.

¹⁷² Craig Muldrew has conducted the most recent research on early modern English living standards. He concludes that the early seventeenth century was marked by population growth and poor harvests, leading to economic and social stress, but that food supplies were for the most part secure and families likely employed strategies such as increasing work hours to maintain their standards of living. Craig Muldrew, *Food, Energy, and the Creation of Industriousness: Work and Material Culture in Agrarian England, 1550-1780* (Cambridge: Cambridge University Press, 2011), 2-3, 226-7, 319. Earlier studies include Carl Bridenbaugh, *Vexed and Troubled Englishmen, 1590-1642* (New York: Oxford University Press, 1967), 48-51, 375-385; D.C. Coleman, *The Economy of England, 1450-1750* (London: Oxford University Press, 1977), 42-47; Brian Donahue, *The Great Meadow*, 68-69; Virginia DeJohn Anderson, *New England's Generation: The Great Migration and the Formation of Society and Culture in the Seventeenth Century* (New York: Cambridge University Press, 1991), 124; Stephen Innes, *Creating the Commonwealth*, 67; Alison Games, *Migration and the Origins of the English Atlantic World* (Cambridge: Harvard University Press, 1999), 16-17.

¹⁷³ Richard Archer, *Fissures in the Rock: New England in the Seventeenth Century* (Hanover, NH: University Press of New England, 2001), 21; Main, *Peoples of a Spacious Land*, 25.

on commercial livestock raising. The costs associated with emigration also meant that many emigrants were families of some means. Once arrived in New England, the relative accessibility of land, the costs involved in setting up a trade, the dispersed customer base, and above all the value placed on the security of land ownership meant that most emigrants turned to farming as their main means of support, though woodworkers and shoemakers, whose raw materials were abundant in the new world, were sometimes successful in earning a living as artisans.¹⁷⁴

English agriculture in the early seventeenth century was in transition. It was decidedly pre-industrial, with a traditional emphasis on common land management, low tolerance for risk, and traditional rights and responsibilities, but it was also growing increasingly productive and commercial, so that the language and concepts of profit were widespread.¹⁷⁵ Thus Massachusetts Bay was founded by a population that was familiar with a market economy and urban economic and social structures. But the relative economic sophistication of the settlers did not mean that their adventure was motivated by profit; both their professed ideology and their patterns of settlement show otherwise. Indeed, since most of the earliest migrants were living comfortably enough in England, it is hardly likely that the desire for simple material improvement would have sparked a massive movement that uprooted people from country and community, in most cases, forever. Demographic studies show that the largest group of migrants were headed by skilled artisans with good earning potential in the towns and cities of England; they could not expect similar prosperity in the wilderness, as letters and accounts from the earliest settlers made clear.

Indeed, given the cost of provisioning themselves for the journey and for the first year or two of living, many settlers would arrive with no reserves or even in debt. And most (though

¹⁷⁴ DeJohn Anderson, *New England's Generation*, 15, 30-31, 62, 142-147, 153; Main, *Peoples of a Spacious Land*, 29; Bridenbaugh, *Vexed and Troubled Englishmen*, 85; Vickers, *Farmers and Fishermen*, 16-17.

¹⁷⁵ Vickers, *Farmers and Fishermen*, 34-35.

certainly not all) of the migrants to New England were families with dependents, including infants and grandparents, for whom economic risk-taking and certain material deprivation made little sense. What they could expect from their new world was independence in the form of land ownership, both as individuals and as a community. They were the product of a culture that prized land ownership above all else, a society that tied land and self-employment to political control and social status, as well as economic security. And for them, the economic and religious spheres were intrinsically intertwined; land ownership, political power, and the supremacy of correct religious belief were inseparable.¹⁷⁶

Predominant among the migrants of the Great Migration were members of what historians term the Reformed Protestant movement, the largest sect of which we typically refer to as “puritans.” For these migrants, religious belief was the foundation for all decisions. Puritan ministers and lay leaders had enormous social, political, and economic influence in controlling the patterns of settlement and the character of the new society. Many migrants were personally investigated by the Winthrop family (John Winthrop became governor of the Massachusetts Bay Company in 1629 and led the recruitment and planning efforts of the first Company voyages) and their trusted circle to ensure that the colony was settled by people of godly character and pure motives.¹⁷⁷ Even those migrants who were not self-declared “puritans” must have been sympathetic to the movement’s

¹⁷⁶ See, for example, DeJohn Anderson, *New England's Generation*, 31-35; she argues that motives for migration to New England were highly ideological rather than material. David Cressy, *Coming Over: Migration and Communication Between England and New England in the Seventeenth Century* (New York: Cambridge University Press, 1987), 81-83, 123, has a more comprehensive view, arguing that religious and economic reasons for migration were “blended,” and that “untidy” explanations taking into account personality characteristics and personal circumstances as well as puritanism and puritan economic philosophy are more accurate.

¹⁷⁷ Some historians now prefer terms such as “Reformed Protestant,” “evangelical,” or “the hotter sort of Protestant” to the term “puritan.” All of these terms describe fervently religious English Calvinists who sought a life of spiritual introspection and reform of (although usually not separation from) the Church of England. Francis J. Bremer, *John Winthrop: America's Forgotten Founding Father* (New York: Oxford University Press, 2003), 33; Archer, *Fissures in the Rock*, 30-31, 58; Cressy, *Coming Over*, 49-50.

ideology in order to throw in their lot with a puritan-led community and leave behind the relative cosmopolitanism of their home.¹⁷⁸

For those puritans who left records, at least, it is clear that a passionate piety shaped their every interaction with the world. Their greatest concern was living a godly life marked by prayer, good deeds, and repentance. Though practical measures against hunger and cold certainly had their place, fasting and prayer were the likely responses to economic misfortune.¹⁷⁹ Immediate and frequent disputes over spiritual matters occupied much of the early colonists' attention, and those found to be placing material over spiritual goals were ostracized and even expelled. Many, if not most, migrants seem to have been sincerely pursuing an honest, godly competency in the New World: an independent living to ensure their basic needs were met and they were beholden to no one, so that they could devote their remaining time and energy to spiritual pursuits. The freedom of the individual, however, was a distant second to the autonomy of the community. The settlers believed in the power of a community, bound together by a covenant, to control its own spiritual, political, and economic affairs, without dependence on other communities with divergent values. John Winthrop's famous Christian charity sermon, given upon departure for the New World, may seem hopelessly utopian in its insistence placing love and spiritual growth over private interests and desires, but this idea was a "commonplace" among Puritan believers at the time.¹⁸⁰

"For Many Things:" Foodways of Migration

The settlers of the Great Migration, crowded as they were on sailing ships, and committing all of their resources for founding settlements, could bring only the most essential or treasured clothing, tools, durable goods, and food with them; yet these would have to be enough to see them

¹⁷⁸ DeJohn Anderson, *New England's Generation*, 39-40.

¹⁷⁹ DeJohn Anderson, *New England's Generation*, 81-88.

¹⁸⁰ Bremer, *John Winthrop*, 166-167, 174-180.

through at least their first year, with unknown ability to procure trade goods even if merchant ships arrived after that. Thus an examination of what the migrants chose to bring with them reveals much about what they considered indispensable. Ships traveling to New England in the 1630s were extremely consistent in their provisions, beginning with the fleet organized by the Massachusetts Bay Company in 1630. The Company, whose example was followed throughout the next decade by other groups of migrants and their ship captains, arranged for a shipboard diet of bread, beef, bacon, peas, wheat meal and oatmeal, salt fish, oil, vinegar, suet, butter, and cheese. These were the foods of survival during the voyage and the first year of a family's settlement, before the first harvest could be brought in. Simple though this fare was, it was not necessarily bland. Ships also often brought mustard seed, presumably to enhance palatability, as well as salt. Drink similarly included some variety; in addition to beer, which was a mainstay of English diet, migrants brought wine and "aqua vitae" or "strong waters," terms for distilled wine, brandy, or other fermented and distilled fruit juices. The *Talbot*, for example, set out for Massachusetts Bay in 1630 with a moderate supply of aqua vitae and ten gallons of wine per person; in 1634 the *Elizabeth and Dorcas* brought six hundred gallons of "stronge waters," and in the same year the *Neptune* carried a half hogshead muscadell, six gallons of wormwood wine, and seven gallons of aqua vitae. Reverend Higginson recommended a standard practice of bringing a gallon of aqua vitae for each man.¹⁸¹

¹⁸¹ The Massachusetts Bay Company bought foodstuffs in bulk for the initial voyages to New England, charging passengers for their portion, and migrants also bought their own provisions based on the recommendations of the Company (later the government of the colony) and on the letters and narratives of earlier travelers. Nathaniel B. Shurtleff, ed., *Records of the Governor and Company of the Massachusetts Bay in New England* (Boston: William White, 1853), 1:26-27, 32, 37; "Proportion of Provisions Needfull for Such as Intend to Plant Themselves in New England, for One Whole Yeare, Collected by the Adventurers, With the Advice of the Planters," reproduced in Edmund S. Morgan, "Provisions for the Great Migration," *The New England Quarterly* 12 (1939): 98-99; "Agreements for Bread and Meat," November 18-19 1630, *Winthrop Papers*, 2:171-172; "A Note of Provisions Sett Downe for the Ship Arbella for her Voyage 1629," *Winthrop Papers*, 2:278; "Account and Receipt of Joseph Brand," March 17 1630, *Winthrop Papers*, 2:218; London Port Book Entries for the *Jonas*, the *Recovery*, the *Reformation*, the *Elizabeth Bonaventure*, the *Elizabeth*, the *Seaflower*, the *Planter*, the *Elizabeth and Dorcas*, the *Truelove*, and the *Neptune*, *Winthrop Papers*, 3:154-162; Higginson, *New-England's Plantation*, 111; London Port Book Entry for the *Elizabeth and Dorcas* and the *Neptune*, 1634, *Winthrop Papers*, 3:161-162.

Many migrant groups and families were able to supplement the standard shipboard diet with their own provisions. “[W]ee were not tyed to ye ship’s diet,” explained Richard Mather, who settled in Dorchester in 1635, “but did victuall orselves, wee had no want of good and wholesome beere and bread; and as or land-stomaches grew weary of ship diet, of salt fish & salt beefe & ye like, wee had liberty to change for other food which might sort better with or healthes and stomaches; and therefore sometimes wee used bacon & buttered pease, sometimes buttered bag-pudding made with curraynes and raisins, and sometimes drinke pottage of beere and oat-meale, and sometimes water pottage well buttered.” It was common practice for migrants to bring private stores of food both for enjoyment and for health reasons.¹⁸²

This practice extended to sugar. The transitional nature of sugar in English diet during the first half of the seventeenth century is reflected in its omission from the standard shipboard supplies provided as part of the cost of passage, yet its probable presence on board every ship bound for New England. Customs documents revealing the actual cargo of these ships, as well as private requests, recommendations, and accounts, tell us about sugar’s status in the economy and society of 1630s England. Sugar was understood to be an essential part of diet; it was a known, desired, and frequently consumed commodity among the middle and upper classes, or in the parlance of the day, a “necessary.”

All those with the means to do so likely brought sugar or sweet processed confections with them on the voyage. In letters and narratives, sugar was usually categorized separately from food, as in John Josselyn’s account of his voyage to New England in the 1630s, which included advice for future travelers on what supplies to bring. Along with his lists of provisions and cost estimates, he

¹⁸² Richard Mather, “Journal of Richard Mather, 1635,” *Dorchester Antiquarian and Historical Society Collections*, (Boston: David Clapp, 1850), 3:32; see also John Winthrop to Margaret Winthrop, July 23, 1630, *Letters from New England: The Massachusetts Bay Colony, 1629-1638*, ed. Everett Emerson (Amherst: University of Massachusetts Press, 1976), 46-47.

included a separate note on “sugar and spices.”¹⁸³ Perhaps acting on behalf of the Massachusetts Bay Company, John Winthrop bought a variety of dried fruits, nuts, spices, and twenty pounds of sugar in the spring of 1630 for the initial voyage to Massachusetts.¹⁸⁴ These twenty pounds were consumed quickly, whether by Winthrop himself or shared among the group, for within a couple of months of his arrival, he was writing to his son, who was to join him the following year, asking him multiple times to bring sugar and conserves among other provisions. The most important commodities to pack, he instructed, were “meale and pease, and some oatmeale and Sugar, fruit, figges, and pepper...Saltpeeter, and Conserve of redd roses, and mithridate...”¹⁸⁵ These last two commodities, conserve and mithridate, were extremely sweet medicinal confections made by mixing or cooking sugar and water and adding rose petals or other flavorings.¹⁸⁶

The settlers clearly intended their sugar stores for comfort and healing as well as sustenance. As discussed in chapter one, a complex English sugar culture grew up around habituation to the commodity in the century before the first settlers arrived in Massachusetts Bay, and the migrants viewed sugar as essential for health as well as pleasure. Reverend Higginson, in an effort to assist other migrants in their journey, sent back to England in 1629 a “Catalogue of such needefull things as every Planter doth or ought to provide to go to New-England.” He included sugar on the list, considering it “needefull,” but the organization of the document reveals the early modern understanding of foodstuffs that prevailed in the early seventeenth century. He arranged “victuals”

¹⁸³ John Josselyn, *An Account of Two Voyages to New-England* (Boston: William Veazie, 1865), 16.

¹⁸⁴ “Receipt of Francis Clarke,” March 6 1630, *Winthrop Papers*, 2:216-217. This purchase was probably for his own use, as these commodities do not appear on the provisions list for Arbella.

¹⁸⁵ John Winthrop to John Winthrop, Jr., March 28, 1631, *Winthrop Papers*, 3:21; in another letter, Winthrop asks for sugar, fruit, pepper, ginger, and conserve of red roses. John Winthrop to John Winthrop Jr., September 9, 1630, *Winthrop Papers*, 2:314.

¹⁸⁶ See recipes detailed in the previous chapter; also Ann Leighton, *Early American Gardens “For Meate or Medicine,”* (Boston: Houghton Mifflin, 1970), 99-100.

and “spices” as entirely different categories, with sugar appearing as a spice along with pepper, cloves, mace, cinnamon, nutmegs, and fruit.¹⁸⁷

Settlers saw sugar as having a “use,” rather than serving simply as sustenance. In his treatise advising immigrants on settlement, one of the earliest first-hand descriptions of New England, William Wood recommended that families bring sugar “for many things” on their journey to the New World, as well as a store of sugar for use after arrival. (Indeed sugar was first on his list of essential “grocery wares.”) He also advised conserves “for such as have ability.”¹⁸⁸ Similarly, in his narrative John Josselyn recommended keeping sugar and rose conserve accessible on board ship “in case you, or any of yours should be sick at sea.” He also included a recipe for a concoction to combat seasickness, a paste of sugar, gum-dragagant, cinnamon, ginger, and musk.¹⁸⁹ Sugar, whether on its own or in prodigious amounts in conserves and other preparations, made a frequent appearance at shipboard meals, providing a welcome sweetness and a rush of quick energy. The settlers would continue to crave it both physically and psychologically even or especially in the challenging new environment in which they soon found themselves.

Import Substitution and Competency in the New Colony

The problem with the allure of sugar was that dependence on tropical goods had no place in the vision that the settlers of Massachusetts Bay had for their new world. As discussed earlier, most historians characterize the Massachusetts Bay settlers as motivated by a commitment to competency, with a priority placed on maintaining economic independence over increasing profit or consumption. Understanding the social and economic nature of early-seventeenth-century farming villages is essential to tracing economic change in Massachusetts Bay, for agriculture was the

¹⁸⁷ Higginson, *New-England's Plantation*, 111-112.

¹⁸⁸ Wood, *New England's Prospect*, 69, 71.

¹⁸⁹ Paul J. Lindholt, ed., *John Josselyn, Colonial Traveler: A Critical Edition of Two Voyages to New-England* (Hanover: University Press of New England, 1988), 14-15.

socioeconomic basis of life for the overwhelming majority of New Englanders. Industries that would develop later in the century, such as fishing, timber, and shipbuilding, were minimal before 1650. Only a tiny number of Massachusetts settlers earned their living from the sea in the 1630s, as abundant land and the cultural preference for agriculture deterred men from working as fishermen, except as a part-time strategy to secure their status as independent farmers. The disruption in trade caused by the English Civil War created an opportunity for merchants in the 1640s to establish a small fishing industry and trade network, but full-time fishermen remained [few in number]. For most New Englanders, the idea of giving up the chance for competency in a cooperative, socially cohesive agricultural community for dependency on fishing was, in the words of one historian of Essex County, “intolerable.” Most seventeenth-century New Englanders made their social and economic decisions within the context of the family farm and the rural village.¹⁹⁰

That the colonists sought to maximize security, not profit, does not mean that their agriculture was primitive. On the contrary, as recent scholarship has shown, the settlers brought with them from England a sophisticated system of husbandry that combined the resources of fields, meadows, and forest in order to maximize food production. The England that the colonists left in the early seventeenth century had not yet shifted from communal agricultural methods to commercially-oriented strategies (though such change was underway). The modern conception of the family farm, a contiguous parcel of land owned and operated by one family in economic isolation from its neighbors, was unknown to the settlers of early New England. Such an arrangement would have been viewed as socially and economically undesirable, and indeed would have been infeasible in the New England “wilderness” of the early seventeenth century. Complex and effective subsistence practices, developed over hundreds of years in England, were quickly

¹⁹⁰ Vickers, *Farmers and Fishermen*, 97, 129.

adapted to the similar climate of Massachusetts Bay. Varying ratios of different types of land, as well as a harsher and wilder climate and natural environment, meant that the colonists had to tweak their inherited wisdom – for example, the greater need for winter fodder in the new colony meant that villages centered around the distribution of meadow land – but in general the colonists employed longstanding, ecologically sound agricultural practices.

As in England, the colonists had to keep a careful balance between the amount of land under cultivation and the amount of land kept for grazing; grazing lands were essential not just for meat but probably more importantly for the production of manure to keep the arable land fertile. In fact, the nutrient-poor soils of New England made the need for fertilization with manure even more pressing than it had been in England; the colonists employed traditional practices such as folding, or pasturing cattle in arable fields for short periods of time, and mucking, or transporting manure from the barnyard to the crop lands. Thus the rapid growth of livestock herds among the settlers reflected their pivotal role in subsistence food production, rather than a market orientation.¹⁹¹

One reason that Massachusetts Bay families succeeded so well in establishing a dependable food supply was their cooperative agricultural strategy, also an adaptation from England. Allowing individual families to spread their holdings across different types of common fields, reducing the labor to maintain those fields, greatly strengthened food security. With impressive focus, townspeople maximized each family's food production through cooperation. They combined resources to build and maintain fenced common fields and to support common shepherding of animals, increasing the number of crops and animals that each family could raise. In most towns, each family owned private fields, but they were grouped together so that the whole village could share the cost of fencing and the raising of meadow grasses. The townspeople held large amounts of

¹⁹¹ Brian Donahue, *The Great Meadow*, 58, 73, 91-92. For example, new settlements spread out from Newtown, Watertown, and Roxbury partly because of a shortage of meadow land; J.K. Hosmer, ed., *Winthrop's Journal, History of New England, 1630-1649* (New York: Barnes and Noble, 1966), 1:124, 151.

land as public commons that residents could use for the natural resources of wood, sand, clay, and gravel, without the cost of private ownership. Towns organized the care and pasturing of the townspeople's livestock through the this creation of common meadows and fields and through the coordination of labor. One of the basic functions of every town government was finding and funding town keepers, herdsman, fenceviewers, hogreeves, and poundkeepers, all aimed at managing the livestock population with maximum efficiency. They also shaped the quality of town's herds as a whole through legislation regulating animal breeding.

When they deemed it necessary for self-sufficiency, town and colony leaders legislated cooperation in harvesting, crop-raising, and the like.¹⁹² Rather than prioritize the acquisition of essential goods that they could not produce themselves, New Englanders found ways around the market. For example, few farmers in Massachusetts before 1650 owned a plow; such equipment was shared.¹⁹³ This kind of cooperation reduced the need to depend on outside markets, and was rooted in the objective of self-sufficiency and independence.¹⁹⁴

An examination of community land policy also reveals a cooperative, rather than an acquisitive, mentality. Though the settlers of New England brought with them a hierarchical society in which some commanded more wealth and respect than others, still the way they divided up land was highly revealing of their essential commitment to competency. Townsmen negotiated divisions that would leave every family with a means of support; outright sale of town land to the highest bidder would have been repugnant. Though proprietors who paid the start-up costs of establishing a town received much larger land grants, and towns differed as to the complexity and duration of land

¹⁹² Percy W. Bidwell and John I. Falconer, *History of Agriculture in the Northern United States, 1620-1860* (Clifton, NJ: Augustus M. Kelley, 1973), 21; Virginia DeJohn Anderson, *Creatures of Empire: How Domestic Animals Transformed Early America* (New York: Oxford University Press, 2004), 161-163.

¹⁹³ Bidwell and Falconer, *History of Agriculture*, 35; De John Anderson, *New England's Generation*, 127-128.

¹⁹⁴ This cooperation can also be traced to the intense localism and "neighborliness" of their native English villages. Bridenbaugh, *Vexed and Troubled Englishmen*, 66.

negotiations and final divisions, the understanding that each family deserved enough land to support itself underlay town formation and growth into the mid-seventeenth century. The size, location, and degree of consolidation of land holdings varied widely, but the fundamental premise that underlay land division was that each family needed enough of the distinct types of land necessary for self-sufficiency (woodlands, hay meadows, and tillable land); enough acres of land to establish the next generation; and access to common resources.

“Short-run” migration within New England was common in the seventeenth century, not because people lacked community, but quite the opposite: the founding families of each town took such pains to reserve sufficient land for themselves, their sons, and their grandsons, and had so little interest in selling in the open market, that communities quickly became closed to outsiders for all practical purposes. The solution was to continually found new communities that would offer the same security for later settlers seeking “long-run” proprietorship (as well as serve as escape valves for religious and social dissidents, preserving the cohesion of founding communities). Thus insularity drove the pattern of land ownership over the seventeenth century.¹⁹⁵

There were two manufactures that the first generation of settlers identified as essential to their survival in the new world: iron and textiles. These figured prominently in the supplies sent to the Massachusetts Bay Colony in its first years.¹⁹⁶ Given the settlers’ commitment to self-sufficiency, one would expect them to be dissatisfied with this dependence on imports, and indeed they were. Even before the first migrants arrived, the founders of Massachusetts Bay sought out and funded the voyages of men knowledgeable about such important manufacturing industries as iron, salt, and other metals, securing their assistance in planning and establishing ironworks and other industries in

¹⁹⁵ Donahue, *The Great Meadow*, 102-111; DeJohn Anderson, *New England’s Generation*, 89-100, 114, 129-130.

¹⁹⁶ See, for example, Edward Hopkins to John Winthrop, Jr., August 16, 1635, *Winthrop Papers*, 3:202; London Port Book Entries for 1634, *Winthrop Papers*, 3:154-163.

the new colony.¹⁹⁷ Once the initial period of adjustment was over, the General Court, the colony's governing body, supported the development of ironworks in Braintree and Lynn. The cultural affront presented by wage labor and manufacturing was tolerated because iron products truly were necessities that supported New England's self-sufficiency.¹⁹⁸ The explicit purpose of these ironworks was to make iron parts for the local community – the pots, nails, tools, and bar iron necessary to build homes, boats, and farms – not to produce iron for export. The General Court required the ironworks to manufacture these tools as well as to produce raw iron; to satisfy all local need for iron products before any iron could be exported; and to accept “country pay” – farm products – instead of currency in exchange for iron manufactures. In these ways the settlers ensured that the ironworks supported competency, not profit. In fact, the General Court was prepared to let the ironworks fail rather than allow their English investors to pursue market-oriented strategies, and eventually the ventures did collapse. The incompatibility of a capital-intensive industry with the deeply held values of the villagers of Massachusetts Bay doomed the domestic manufacture of iron.¹⁹⁹

Textiles were another indispensable commodity. A new settler wrote to his father in 1631 begging him to send “a corse clothe of fouer pound preise so it be thicke...” for “whare we live her is no...clothe to be had to mak no parell...”²⁰⁰ Massachusetts leaders endeavored to establish a local textile industry as early as 1640, trying both rewards, in the form of payments for cloth production,

¹⁹⁷ Shurtleff, *Mass. Bay Recs.*, 1:28, 32-33.

¹⁹⁸ These early ironworks met with little success, however. There were several challenges which investors and operators of these native ironworks found difficult to overcome, including lack of liquidity (consumers could not pay for iron in cash, and thus investors found it difficult to meet the fixed costs of machinery, land, and skilled labor) and the type of iron available (bog ore, the type found in Massachusetts, did not convert to raw iron very efficiently). Susan M. Ouellette, “All Hands Enjoined to Spin: Textile Production in Seventeenth Century Massachusetts” (PhD diss., University of Massachusetts, 1996), 3-4.

¹⁹⁹ Bailyn, *New England Merchants*, 62-71. The General Court tried to find local settlers to invest in the ironworks, but New Englanders did not have enough capital. Their refusal to support a commercially oriented industry in their midst ironically left them dependent on international markets for iron.

²⁰⁰ Letter to William Pond, March 15, 1631, *Winthrop Papers*, 3:18.

and coercion, through quotas and fines (though it is unlikely that these were enforced). The raw materials of flax, hemp, and wool could all be produced locally, and the General Court offered incentives for growing flax and hemp to ensure their supply. Raw cotton was available from the West Indies, though its use was limited. Wool from domestically raised sheep was preferable, but its production was slow as the herds took time to mature. In 1640 the General Court, “taking into serious consideration the absolute necessity for the raising of the manufacture of linnen cloth,” instructed the towns to take stock of their skill and materials and report back to the Court their plan for making linen and “cotton woole.” They offered subsidies to those making linen, woolen, and cotton clothes in the same year, and repeatedly instructed all families to process hemp and flax. Massachusetts families were not able to become as self-sufficient in textiles as they would have liked, essentially because their desire for varied clothing and fabrics necessitated more labor than they had available when devoting most of their time to building and maintaining self-sufficient farms.²⁰¹ But though domestic iron and textile production met with limited success, the extensive political and economic energy expended with that goal in mind was a sign of the value the settlers placed on avoiding reliance on imports.

After twenty years of building a remarkably independent society, Massachusetts Bay was a colony of diversified family farms working together in a highly cooperative manner that ensured both autonomy and security for most households. Though some wealthy families did own large estates that employed landless laborers, particularly near Boston and Salem or in very fertile areas,

²⁰¹ Shurtleff, ed., *Mass. Bay Recs.*, 1:194, 294, 303, 322; the subsidies were later repealed, but only because of excessive cost to taxpayers. Though it might seem that cloth production should be a natural component of New England’s agricultural self-sufficiency, households were not able to achieve it on a sufficient scale. There were several problems. Many farmers did not have enough resources to care for sheep and produce wool; sheep required better pasture and more protection from predators than they could provide. Other raw materials for textiles, such as hemp and flax, were similarly demanding to produce. Then there was the question of labor. Though some emigrant clothworkers did bring their looms with them and did use them in the New World, most of them put the majority of their effort towards maintaining their farms, as did their wives and children. Whether trained artisans or not, few New Englanders wanted to put much time into cloth production when subsistence was their main aim. DeJohn Anderson, *New England’s Generation*, 134-140; Bailyn, *New England Merchants*, 71-74.

the vast majority of households did not have servants and the number of people living principally off agricultural wage labor was very small. There were a modest number of tenant farmers, but land was relatively plentiful and those who did not own the land they farmed still maintained a high level of independence and negotiating power. Instead, neighbors and extended families worked for each other in complex webs of reciprocity that most historians agree cannot be termed “capitalist.”²⁰² During the first two decades of the colony’s founding, the “faithfull, skillfull, honest husbandmen” of Massachusetts Bay worked to build an economy and society that would minimize the import of external ideas, practices, and goods.²⁰³ Along with English manufactures, a seemingly benign dependence on sugar would come to undermine these aspirations.

Monotonous, Local, and Secure: Seventeenth-Century New England Foodways

This dependence on sugar endured despite the fact that the settlers achieved remarkable success in the import substitution of foods, both through the integration of native species into their diet and through the establishment of old world crops in the new environment. Though the initial harvests of the Massachusetts Bay settlements in 1629 and 1630 were promising, the early 1630s were a time of rapidly swinging periods of want and plenty, as settlers adjusted to a different climate, experienced extreme weather events, experimented with various crops, and coped with the unpredictable arrivals of colonists, domestic animals, and provisions. During this decade the newly founded villages, particularly those in outlying areas, were dependent on supplies, especially grain, from local Indian groups and from English ships.²⁰⁴ In 1629, Rev. Higginson warned that “[a]ll that

²⁰² Vickers, *Farmers and Fishermen*, 52-83.

²⁰³ “Essay on the Ordering of Towns,” 1635, *Winthrop Papers*, 3:183.

²⁰⁴ Thomas Dudley to the Lady Bridget, Countess of Lincoln, March 12 and 28, 1631, in Emerson, *Letters From New England*, 74-75. This food insecurity, especially in frontier areas, contributed to the Pequot War of 1636-1638; Grandjean, “New World Tempests,” 77. In 1631, Governor Winthrop complained that provisions sent from England were sold at “excessive rates” and noted that Massachusetts colonists were buying corn from Virginia and Maryland. He often noted food supplies coming from England as well, and the settlers bought considerable amounts of corn from the Indians. Hosmer, *Winthrop’s Journal*, 1:59,64-65, 132, 138; in 1636 the arrival of a ship from Bermuda carrying potatoes was “a great relief to our people,” 1:176. Governor Winthrop ordered provisions sent from England in the fall of 1630; “Bill of

come must have victuals with them for a twelve-month...otherwise so many may come without provision at the first as that our small beginnings may not be sufficient to maintain them.”²⁰⁵ The specter of hunger hung over the early years of settlement. “[H]er we may live if we have supplies every yere from ould eingland other weyse we can not subeseiste,” wrote one settler plaintively in the spring of 1631.²⁰⁶

Much more dramatic than this “starving time,” however, was the rapidity with which the colonists became agriculturally self-sufficient. Though harvests continued to be uneven, the settlers’ well-organized, cooperative farming villages soon produced enough food to avoid starvation. The fall of 1631 brought “a plentiful crop,” according to Governor John Winthrop, and he noted with pleasure how quickly the colonists assembled a feast of “fat hogs, kids, venison, poultry, geese, partridges, etc....” to celebrate the arrival of the ship *Lyon* with the governor’s family aboard. The summer of 1632 was a cold one and some of the corn did not do well, though barley and oats were harvested successfully in Saugus. Shellfish were plentiful, if not the settlers’ first choice of meal, with a “great store of eels and lobsters in the bay...Two or three boys have brought in a bushel of great eels at a time, and sixty great lobsters.” In 1633 there was again “great scarcity of corn, by reason of the spoil our hogs had made at harvest, and the great quantity they had even in the winter...yet people lived well with fish and the fruit of their gardens.”²⁰⁷ In the same year Boston minister John Eliot asserted that of the eleven towns that the settlers had established in Massachusetts Bay, eight were “competent.”²⁰⁸ In 1636 there was again a “great scarcity of corn...” prompting a fast day; and

Captain Pierce,” November 18 1630, *Winthrop Papers*, 2:318; John Winthrop Jr. to John Winthrop, April 30 1631, *Winthrop Papers*, 3:31-32; Emanuel Downing to John Winthrop Jr., March 1 1636, *Winthrop Papers*, 3:233.

²⁰⁵ Rev. Francis Higginson to His Friends at Leicester, July 1629, in Emerson, *Letters from New England*, 26.

²⁰⁶ __Pond to William Pond, 15 March 1631, *Winthrop Papers*, 3:19.

²⁰⁷ Hosmer, *Winthrop’s Journal*, 1:69, 70-71, 90, 105.

²⁰⁸ John Eliot to Sir Simonds D’Ewes, September 18, 1633, in Emerson, *Letters From New England*, 106.

in some areas “[t]he people...were put to great straits for want of provisions,” as a hurricane in the previous year and a sudden influx of settlers strained available resources. Indeed the “scarcity of victuals” affected the administration of government, as it was too difficult to feed large gatherings of lawmakers, and during certain seasons all men were needed for labor in the fields.²⁰⁹ Feeding their families and planning their strategies for long-term food security occupied much of the settlers’ attention during the 1630s.

The colonists hoped to establish familiar Old World grains as the basis of their diet in the New World, and by 1633 they appear to have been successfully growing small amounts of rye, barley, and oats. They had a harder time growing wheat, which did not flourish near the sandy coast, did not fare well in the harsh Massachusetts winters, and was vulnerable to disease. Adaptions such as switching to spring rather than winter wheat led to some success. The Connecticut River valley, far inland, became a “wheat belt” by 1650, exporting wheat to Boston and elsewhere.²¹⁰ But on the whole, English grains were imperfectly adapted to New England in comparison with native corn, which as John Winthrop Jr. noted a generation later, “was the most common diet of the planters, at the first beginning of planting in these parts and is still in use among them...” Despite an initial disdain for corn in England when it was first introduced there in the sixteenth century, the colonists were able to make a cultural substitution; Winthrop Jr. proclaimed in a letter to the English intellectual Robert Boyle that the “Beautifull noble Eare of Corne” was a “wholesome and pleasant for Food of which great Variety may be made out of it.”²¹¹ Probably what endeared it most to

²⁰⁹ Hosmer, *Winthrop’s Journal*, 1:175, 178; John Endecott to John Winthrop, April 12, 1631, *Winthrop Papers*, 3:26; Edward Trelawny to Robert Trelawny, January 10, 1636, in Emerson, *Letters From New England*, 186. The mid-1630s were also marked by the double threat of the external war with the Pequots and the internal war over religious belief. The colonists’ success in establishing self-sufficient farms and villages is especially impressive in light of these disruptive traumas.

²¹⁰ William Pynchon to John Winthrop, July 1646, *Winthrop Papers*, 5: 90.

²¹¹ Fulmer Mood, “John Winthrop, Jr., on Indian Corn,” *New England Quarterly* 10, no. 1 (1937): 125, 131.

Winthrop and his compatriots was the fact that its fertility was another major factor in enabling New Englanders to achieve self-sufficiency so quickly. Compared to English grains, it yielded more per acre, ripened earlier and more dependably, and could be planted in fields that had been cleared using the labor-saving methods of girdling and burning.

Corn breads, stews, and porridges of various consistencies, sometimes enriched with beans, meat, or vegetables, but more often prepared simply with dairy products or just water, were the staple meals of the seventeenth century.²¹² In addition, almost all families raised kitchen gardens, growing “sundrie sorts of fruits, as musk-millions water-millions, India-Pompions, Indian-Pease Beanes...,” which significantly enriched their diet in the summer and fall. Pumpkins and squash, as well as the English crops of turnips, parsnips, and carrots, abounded, and grapes, apples, pears, peaches, berries, cherries, and plums were successful too. The seasons dictated diet to an extensive degree, with late winter and early spring a time of particularly limited availability of local plants and animals.²¹³

Domestic animals flourished in New England from the beginning of settlement, and most ships bringing human migrants to settle in Massachusetts Bay in the 1630s brought animals as well. In 1629, only a year after the establishment of a settlement at Salem, Reverend Higginson observed “[i]t is scarce to be beleevved how our Kine and Goats, Horses and Hogges do thrive and prosper

²¹² John Wiswall to George Rigby, September 27 1638, in Emerson, *Letters From New England*, 232; DeJohn Anderson, *Creatures of Empire*, 144; Bidwell and Falconer, *History of Agriculture*, 10-12, 43; Sarah F. McMahon, “A Comfortable Subsistence: The Changing Composition of Diet in Rural New England,” *The William and Mary Quarterly* 42 (1985): 32; Karen Ordahl Kupperman, “Climate and Mastery of the Wilderness in Seventeenth Century New England,” in *Seventeenth-Century New England*, ed. David D. Hall and David Grayson Allen (Boston: Colonial Society of Massachusetts, 1984), 22-24; William Hammond to Sir Simonds D’Ewes, September 26 1633, in Emerson, *Letters From New England*, 112; Howard S. Russell, *A Long Deep Furrow: Three Centuries of Farming in New England* (Hanover, New Hampshire: University Press of New England, 1976), 30-46; Darrett B. Rutman, *Husbandmen of Plymouth*, 46, 50.

²¹³ Higginson, *New-England’s Plantation*, 110; John Winthrop to Nathaniel Rich, May 22 1634, and Edmund Browne to Sir Simonds D’Ewes, September 7 1638, in Emerson, *Letters From New England*, 116, 227; McMahon, “A Comfortable Subsistence,” 32-40; Russell, *A Long Deep Furrow*, chap. 10; James E. McWilliams, “‘To Forward Well-Flavored Productions’: The Kitchen Garden in Early New England,” *The New England Quarterly* 77 (2004): 25-50; Gloria L. Main, *Peoples of a Spacious Land*, 38.

here and like well of this Countrey...We have here about 40 goats that give milke, and as many milch kyne; we have 6 or 7 mares and a horse...”²¹⁴ When John Winthrop arrived with his seven hundred settlers in 1630, he also brought hundreds of animals, including cows, goats, pigs, and horses.²¹⁵

Though the passage from England was difficult and an enormous number of animals perished on the way, hundreds more animals arrived over the next few years, and they multiplied quickly; by one estimate Massachusetts Bay’s animal population was self-sufficient by 1640. By the 1650s, perhaps 12,000 cattle and 3,000 sheep roamed New England, and in many towns livestock outnumbered people considerably.²¹⁶ Pigs especially increased so rapidly that many went feral, destroying crops and straining relationships with local Indians; as early as 1635 some communities were legally banishing them.²¹⁷ With such reproduction, the challenge was not finding meat, but feeding it and containing it. In these early years, proximity to fresh or salt marsh for winter fodder was essential to the keeping of livestock and thus determined the pattern of settlement. The care that New Englanders put into nurturing their animal population was impressive; carefully thought out communal grazing and breeding strategies increased the size and quality of the region’s herds.

Thus for most Massachusetts families at mid-century, meat was plentiful enough, though its availability varied with the seasons. In addition to seasonal consumption of domestic animals, the settlers enriched their diet with fish and “exceeding fat, sweet and fleshy” wild birds.²¹⁸ Meat was not

²¹⁴ Frances Higginson, *New England’s Plantation*, B2, 118; John White also remarks on the successful transportation of horses, cattle, and other “beasts” to Salem in 1629. John White, *Planters Plea*, 77.

²¹⁵ John Winthrop to his Wife, March 28 1630, *Winthrop Papers*, 2:225. The importance of such animals in the minds and stomachs of the settlers is apparent throughout Winthrop’s journal; he noted the arrivals of animals more thoroughly than he does of people. In the summer of 1631, for example, he recorded that the *Friendship* arrived carrying eight heifers, one calf, and five sheep, and that the *White Angel* brought twenty-one heifers; but the people on board drew no mention. Hosmer, *Winthrop’s Journal*, 51-53.

²¹⁶ DeJohn Anderson, *Creatures of Empire*, 103-104; Wood, *New England’s Prospect*, 69, describes a self-sufficient livestock population.

²¹⁷ Russell, *A Long Deep Furrow*, 30-46; DeJohn Anderson, *Creatures of Empire*, 145, 150-151, 162.

²¹⁸ Higginson, *New-England’s Plantation*, 101.

the only benefit of established livestock populations; colonists carefully harvested manure between November and April, using it to prevent soil exhaustion, expand the areas under cultivation, support a rapidly growing population, and grow yet more winter fodder for yet more animals. Calculated use of livestock was thus a cornerstone of the early self-sufficient New England village. Milk cows, too, were common by 1650; the typical Massachusetts Bay family had at least one. Butter and cheese, like meat, were seasonal products, although not as much as have been assumed; for example, social structures, such as distribution methods that created a “social refrigerator,” and a variety of methods to prevent spoilage, allowed for butchering in the summer.²¹⁹

Historians have widely noted the impressive achievement of agricultural self-sufficiency in Massachusetts Bay in a short amount of time.²²⁰ Though weather, plant diseases, and other environmental threats always hovered in the background, in some years endangering food security, by mid-century most colonists produced their own nourishing and relatively varied diet of plant and animal products, all of which rested in on the values of hard work and family and community independence and interdependence. Each new group of migrants would bring food supplies and supplement them their first year by sowing corn themselves and buying it from Indians and established settlers. It took about ten years for a town to establish a robust and diverse grain crop of corn and English grains.²²¹ Governor Winthrop recorded how much improved the harvests were as early as 1637, and in that year Hugh Peter, minister of Salem, noted that “Corne [is] cheaper here

²¹⁹ DeJohn Anderson, *Creatures of Empire*, 155-158; McMahon, “A Comfortable Subsistence,” 32-40; Russell, *A Long Deep Furrow*, chap.10; Bidwell and Falconer, *History of Agriculture*, 18-22, 44. Recent scholarship has shown the limitations of probate inventories as a definitive source on diet; because fresh meat, dairy, and produce were less likely to show up in inventories than salted or otherwise preserved foods, studies that rely on these inventories underreport fresh foods (as well as other foodstuffs that were rapidly consumed). See Joanne V. Bowen, “A Study of Seasonality and Subsistence” (PhD diss., Brown University, 1990), 108-113, 147-149.

²²⁰ Rutman, *Husbandmen of Plymouth*, 13-16; James McWilliams, *A Revolution in Eating: How the Quest for Food Shaped America* (New York: Columbia University Press, 2005), 63.

²²¹ McMahon, “A Comfortable Subsistence,” 31.

than in England.”²²² The poor harvest of 1643, following a cool, wet summer, was an anomaly; Winthrop observed that it came as a surprise after years of corn so plentiful that farmers could not find a market for their surplus.²²³ By 1645 the grain crops, rye, peas, and barley, and especially corn, were dependable, domestic animals were flourishing, and kitchen gardens prospered.²²⁴

Not only were they able to fulfill their own nutritional needs, the older towns produced a surplus of grain and animals that supported Boston and the trading posts up and down the Atlantic coast. In 1645, Massachusetts Bay farmers produced such a surplus that the colony exported 20,000 bushels of grain, as well as meat, peas, and vegetables.²²⁵ By 1650 beef, pork, and dairy products were plentiful throughout the countryside and urban areas, as many farmers had surplus animal products to sell to merchants and craftsmen. Indeed, wealthier families had so many animals that they were able to bring surplus livestock to urban centers and ship them throughout the Atlantic world, including to the West Indies. In mid-century Essex County, “they have many hundred quarters to spare yearly, and feed, at the latter end of Summer, the Towne of Boston with good Beefe...”²²⁶ With an air of righteous satisfaction, Winthrop surveyed the state of trade in 1647, observing that New England, once a place that English merchants “were wont to despise as a poor, barren country, should now be relieved by our plenty.”²²⁷ Edward Johnson, one of the founders of the village of Woburn, recorded in a chronicle of Massachusetts Bay published in 1653 that by 1650 Virginia, Barbados, and much of the Atlantic world “hath had many a mouthful of bread and fish

²²² Hugh Peter to John Winthrop, Jr., January 1637, *Winthrop Papers*, 4:4.

²²³ Hosmer, *Winthrop's Journal*, 2:91-92.

²²⁴ John Winthrop to the Earl of Warwick, September 1644, *Winthrop Papers*, 4: 491-492.

²²⁵ Hosmer, *Winthrop's Journal*, 2:245; 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 (1963): 402; McWilliams, *Building the Bay Colony*, 64.

²²⁶ J. Franklin Jameson, ed., *Johnson's Wonder-Working Providence, 1628-1651* (New York: Barnes and Noble, 1959), 96.

²²⁷ Hosmer, *Winthrop's Journal*, 2:328.

from us.”²²⁸ New England cattle, salt meat, grain, and other foodstuffs now served as a vital prop for the West Indies staple crop economies and as a source for provisioning English ships.

Scholars have emphasized monotony and seasonality of seventeenth-century diet in New England, characterizing it as nutritious and plentiful but essentially one of “basic subsistence,” with little difference in quality between those of greater and lesser means. As noted, at mid-century New Englanders’ meals were based on bread or pottage made primarily from corn, with some other grains becoming more common over the years. Beans, peas, and meat were often cooked with the corn, adding protein, and seasonal dairy products were consumed daily too. Squash and pumpkins were also frequently added to grain pottage or baked on their own. Families relied on vegetables and fruits from the kitchen garden, as well as wild berries, to enrich their diet. Home-brewed beer, supplemented by homemade cider, was a staple beverage.²²⁹

Yet this account of seventeenth-century foodways in New England neglects a significant component of diet, relatively small in quantity but with immense psychological and cultural value: sugar products. Some, probably most, settlers supplemented their diet with sugar, dried fruits, spices, wine, distilled liquors, and other “dayntyes,” continuing to actively seek out and import these luxuries from England, the Atlantic Islands, and the West Indies.²³⁰ The Massachusetts Bay settlers’ food economy was in most ways simple, local, and secure; but crucially, not in all ways. Historians’ oversimplified characterization of food sources and preferences overlooks a critical factor on the development of the Atlantic economy.

²²⁸ Jameson, *Johnson’s Wonder-Working Providence*, 247.

²²⁹ McMahan, “A Comfortable Subsistence,” 42-44; Russell, *A Long Deep Furrow*, chap. 11. James McWilliams finds that between 1635 and 1660, at least half of households in Essex County were clearly brewing their own beer for household consumption. This beer, brewed by the women in the family, was also used in local barter and served in village “ordinaries,” or household beer shops. Thus New Englanders slipped easily into the familiar English patterns of local alcohol production and consumption. James E. McWilliams, “Brewing Beer in Massachusetts Bay, 1640-1690,” *The New England Quarterly* 71 (1998): 543-546.

²³⁰ Bill of William Hudson, Sr., 1640, *Winthrop Papers*, 4: 271-272; London Port Book Entries for the Mary and John and the Planter, 1634, *Winthrop Papers*, 3:149, 161; Stephen Winthrop to John Winthrop, March 1646, *Winthrop Papers*, 5:64.

Exciting, Imported, and Expensive: The Role of Sugar in Early Massachusetts Bay

Even in the earliest years of the first permanent English settlement in Massachusetts, when the Plymouth colony suffered from starvation, isolation, and ships that brought more colonists than they did supplies, the English settlers maintained a supply of sugar. Indeed, sweets played a key role in diplomacy. Tensions between the Plymouth settlers and their Wampanoag neighbors were running high when English leader Edward Winslow paid a visit in March of 1623 to the Wampanoag chief Massasoit, who lay gravely ill. Seeing Massasoit's distress and the failure of Indian remedies to help him, Winslow pried open the chief's mouth and forced in "a confection of many comfortable conserves." The chief was able to swallow the candy, though he had not been able to eat anything for two days; Winslow gave him more, then made some sugar water out of conserves and water and got Massasoit to drink. This treatment brought a "great alteration" to the Wampanoag leader, bringing Massasoit back from the brink of death.²³¹

Such medicinal use of sugar (as well as its eager reception by the patient) reflected the sugar culture of early modern England. During the early and mid-seventeenth century, the food culture of New England, like that of the mother country, was still rooted in the medieval tradition, emphasizing highly spiced, elaborate foods and extensive use of sugar in all types of dishes. Though complex cooking methods and daily consumption of an array of spices were not within the means of all classes, they were idealized; the transition to more "simple" foodways featuring fresh vegetables, purer flavors, and separate desserts had not yet occurred.²³² In Massachusetts Bay sugar was truly, as

²³¹ Edward Winslow, "Good News From New England," in *Good News From New England* by Edward Winslow, ed. Kelly Wisecup (Amherst: University of Massachusetts Press, 2014), 81-82.

²³² James W. Baker, "Seventeenth-Century English Yeoman Foodways at Plimoth Plantation," in "Foodways in the Northeast," ed. Peter Benes, *The Dublin Seminar for New England Folklife, Annual Proceedings* (Boston: Boston University 1982), 112-113.

William Wood had noted, a sought-after commodity “for many things;” for health, for energy, for taste, and to satiate biological cravings.

Though colonists had found many substitutes for English grains and plants, there was no native source of sweetness in New England, a lack that the first colonists felt keenly. Creatures analogous to the English honeybee were nowhere to be found, and maple sugaring was not practiced by the tribes of southern New England (nor, during this early period, is there conclusive evidence that northern native peoples had the technology to reduce sap to sugar, either).²³³ During the first two decades of settlement in Plymouth and Massachusetts Bay, the English colonists procured most of their sugar from Dutch merchants or directly from England. Dutch traders sold chests and barrels of white sugar to the Plymouth Colony as early as 1627, and in 1634 John Winthrop noted that “[o]ur neighbors of Plymouth and we had oft trade with the Dutch” for sugar among other things.²³⁴

English customs records provide an invaluable quantitative source for the use of sugar in New England before 1650, although they record only shipments from England. The fragmentary nature of the surviving customs records and their extensive inconsistencies limit their usefulness, but we can get some sense of which commodities the settlers thought worth bringing with them. Customs officials recorded impressive amounts of refined white sugar going to Massachusetts Bay in the 1630s and 1640s, along with “groceries,” a general term which would have included sugar.²³⁵ In 1634, the *Elizabeth and Dorcas* shipped “[4] Rundletts of [4 hundred weight] sugar” to the colony. In

²³³ Howard S. Russell, *Indian New England Before the Mayflower* (Hanover, NH: University Press of New England, 1980), 86-90; Robert H. Keller, “America’s Native Sweet: Chippewa Treaties and the Right to Harvest Maple Sugar,” *American Indian Quarterly* 13 (1989): 120.

²³⁴ William T. Davis, ed., *Bradford’s History of Plymouth Plantation, 1606-1634* (New York: Charles Scribner’s Sons, 1910), 234; Hosmer, *Winthrop’s Journal*, 1:130-131.

²³⁵ It is likely, for example, that sugar was one of the “grocerye wares” sent on the *Recovery* in 1634. London Port Book Entry for the *Recovery*, March 1634, *Winthrop Papers*, 3:152.

1636 the *Philip* brought five hundredweight of sugar, and in the same year the *George* brought dried fruit, 56 lbs. of pepper, 56 lbs. of “West Indies ginger,” and 1/2 hundredweight of sugar.²³⁶ An analysis of the London port books for the year 1640 reveals that such deliveries of sugar were more the norm than the exception for boats bound for New England. Of the nine ships departing from London for Massachusetts Bay in 1640 whose records survive, at least five of them were laden with sugar, usually one or two hundred pounds; one ship, the *William and George*, brought fourteen hundred pounds.²³⁷

Governor Winthrop kept close track of the traffic of merchant ships to and from the new colony, noting their arrivals and what they had for sale in his journal. The Atlantic islands (Sao Tome, Madeira, and the Canaries), North Africa, and Brazil were the likely places of origin for sugar during this period; English possessions in the West Indies only produced small amounts of sugar before 1645. But in 1639, one of the first mentions of trade with the Caribbean islands, Winthrop noted that a “small bark” arrived from the West Indies carrying indigo and sugar, which the captain sold for fourteen hundred pounds (he then proceeded to buy New England commodities and returned to the West Indies). In 1642 a ship from Madeira unloaded its cargo of wine and sugar in Boston, again in exchange for pipe staves and other New England products. In 1643 another ship arrived from the Atlantic islands, Faial in the Azores, carrying wine, sugar, and cotton, making these three commodities “very plentiful, and cheap, in the country.” Three more ships from Madeira, presumably carrying the same commodities, arrived soon afterwards. In 1644 the *Hopewell* brought wine, pitch, sugar, and ginger from the Canary Islands. In 1645, another ship arrived bringing wine,

²³⁶ London Port Book Entries for the *Elizabeth and Dorcas*, 1634, the *Philip*, 1636, and the *George*, 1636, *Winthrop Papers*, 3:161-162, 272, 310. Spices, such as pepper and ginger, and dried fruit, such as figs, currants, and raisins, were also commonly imported during this period.

²³⁷ The fragments of the port books that survive are transcribed in Norman C. P. Tyack, “English Exports to New England, 1632-1640: Some Records in the Port Books,” *New England Historical and Genealogical Register* 135 (1981): 213-238.

sugar, salt, and tobacco, from the Canaries and Barbados.²³⁸ There was clearly a ready market for tropical groceries in Massachusetts Bay.

Other evidence for widespread sugar consumption in early New England comes from the letters of the settlers themselves, who sought out sugar even when living in the most spartan conditions. In Ipswich, Mary Dudley quickly used up the sugar her brother had sent her in February of 1636. In June, only a few months later, she wrote to her mother in Boston, asking her to send more sugar, apparently considering it a pantry staple.²³⁹ Her brother, John Winthrop Jr., traveled to Saybrook, Connecticut, in the same year, in an attempt to establish a colony there. Subsisting precariously in the wilderness, he was dependent on basic provisions from Massachusetts for survival. His father managed to send him a few domestic animals, peas, and beef – the sort of basic supplies one would expect for a group of pioneers – but also “2 small sugar loafes.”²⁴⁰ In 1644 William Pynchon, founder of the frontier village of Springfield along the Connecticut River, sent provisions to Stephen Day, who was exploring possible areas for mining in the unknown interior. Pynchon had limited resources in his remote settlement and apologized that “whereas you write for butter and cheese it is not to be had in all our plantation...and as for porke and bacon I have none.” Yet even in these frontier conditions, with basic foodstuffs scarce, Pynchon maintained a store of tropical groceries with some to spare, including ginger and “4 loafes” of sugar, which he delivered to Day.²⁴¹

The promise and peril of this taste for sugar was apparent to some contemporary observers. In his personal history of New England, settler Edward Johnson asserted that by 1642 the colonists

²³⁸ Hosmer, *Winthrop's Journal*, 1:89, 310; 2:93, 154, 227.

²³⁹ Mary Dudley to John Winthrop Jr., February 1636, *Winthrop Papers*, 3:228; Mary Dudley to Margaret Winthrop, June 1636, *Winthrop Papers*, 3:263.

²⁴⁰ John Winthrop Jr. to John Winthrop, May 16 1636, *Winthrop Papers*, 3:260; John Winthrop to John Winthrop Jr., June 23 1636, *Winthrop Papers*, 3:275-276.

²⁴¹ William Pynchon to Stephen Day, September 8 1644, *Winthrop Papers*, 4:495.

had established a self-sufficient food supply. From his observations it is clear that tropical groceries were commonly available and eagerly consumed at the time, “so that this great Wilderness hath not onely equalized England in food, but goes beyond it in some places for the plenty of wine and sugar...” This taste for sugar and other consumer goods was voracious and potentially destabilizing even in the socially cohesive and economically stable puritan communities; “[the] ordinary man hath his choice [of bread], if gay cloathing, and a liquerish tooth after sack, sugar, and plums lick not away his bread too fast, all which are ordinary among those that were not able to bring their owne persons over at their first coming...”²⁴² It would be appetite, rather than blasphemy, that would undermine the Puritan dream of an existence of splendid isolation from the corrupt outside world. The pitfalls of prosperity, which the Puritans had hoped to escape in the wilderness, had followed them to the new land.

Futile Flight from the “Fleshpotts of Egipt”

The puritan settlers of Massachusetts Bay quickly developed a dynamic mercantile sector, yet at the same time they professed belief in the importance of a moral or “godly” economy that was not dictated by market mechanisms. Scholars often point to this successful pursuit of trade almost from the beginning of settlement as evidence against true commitment to a moral economy.²⁴³ The fact that New Englanders embraced trade, however, does not mean that they endorsed consumerism or excessive wealth. Instead, wealth, as puritans understood it, was to be used for the community.

This distinction is quite important in understanding the settlers’ economic behavior. In England, not only puritans but many diverse religious leaders of the time condemned usury, high prices, high wages, and conspicuous consumption, and fundamentally opposed the idea that

²⁴² Edward Johnson, *Wonder-Working Providence of Sions Saviour in New-England* (Delmar, NY: Scholars’ Facsimiles and Reprints, 1974), 173-174.

²⁴³ For example, Innes, *Creating the Commonwealth*, 189.

economic exchanges should be subject to the laws of supply and demand rather than moral law. Puritans, however, made this issue a particular concern. In Massachusetts Bay, free to create their own social system, puritans were able to enforce moral restrictions on economic behavior through social pressure, legislation, and the courts. These concerned both forbidding economic exploitation on the part of the producer or seller, and also limiting excessive consumption on the part of the buyer. “Impersonal economic exchange” was seen as “deviant.”²⁴⁴ What defined exploitation and what qualified as excessive depended on the case, but generally meant seeking profits or possessions beyond the basic human needs of sustenance, shelter, and security (this last, of course, being the most difficult to define). Thus the contributions of New England, and particularly of Massachusetts, to the development from the mid-seventeenth century onwards to a dynamic, exploitative Atlantic economy based on surplus and trade, is difficult to explain. As we shall see, dependence on sugar was a factor in the decisions of economic actors from rural farmers to urban merchants, and its consumption stealthily undermined puritan ideals.

Early New Englanders saw work as an end in itself, not as a means to profit. Through work, for oneself, for one’s neighbor, and for the community, people fulfilled God’s purpose for themselves. Though this emphasis on labor and personal responsibility arguably created the cultural basis for capitalism, at this point work was carefully directed at what Stephen Innes terms “socially beneficial productivity” – not personal wealth and certainly not consumption. Actors in this system of “communal capitalism” directed resources towards the strength and stability of the community and actively discouraged the idle enjoyment of luxuries. Indeed, Puritan leaders instructed their communities to be “dead-hearted” to physical pleasures and practice “worldly asceticism” in the

²⁴⁴ Mark Valeri, “Puritans in the Marketplace,” in *The World of John Winthrop: Essays on England and New England, 1588-1649*, ed. Francis J. Bremer and Lynn A. Botelho (Boston: Massachusetts Historical Society, 2005). A common belief was that high wages were a sort of price gouging and that wage labor was not or should not be a permanent condition.

economic sphere.²⁴⁵ The dominant world-view was that expounded by John Winthrop, reacting to the poor harvest of 1642, which by the spring of 1643 had led to a scarcity of grain after years of plenty. He asserted that this scarcity was due to “our ingratitude and covetousness” in the years of good harvests, and lambasted those farmers who sought to sell the little corn they did have at market rates rather than share it. For, he concluded, a surplus of food beyond self-sufficiency was in contradiction to God’s plan for humankind; “so many enemies doth the Lord arm against our daily bread, that we might know we are to eat it in the sweat of our brows.”²⁴⁶ Though the settlers and their leaders unquestionably investigated many avenues to economic prosperity, from agriculture to fishing to mining and other industries, their motivation was not wealth or lifestyle but security and stability.²⁴⁷ Production, or most fundamentally, labor itself, was the economic ideal of these Christians; consumption had little, and sometimes negative, value.²⁴⁸ The farm labor of caring for animals, planting and harvesting grains and vegetables, gathering fuel, water, and fodder, as well as cooking, dairying, and other types of household production and industry, was immense.²⁴⁹ This was not a fate to be overcome, but the virtuous way to live.

With this philosophy in mind, the people who settled New England produced a society with a relatively simple material culture, shaped both by economic realities, the priority they put on spiritual life, and their particular theology, which posited an integral connection between the soul and the body. Though counseled to avoid the extremes of asceticism, English Reformed Protestants were taught to pursue “plainness” in dress, manner, and appetites as a way of expressing inward

²⁴⁵ Innes, *Creating the Commonwealth*, 115-125.

²⁴⁶ Hosmer, *Winthrop’s Journal*, 2:91-92.

²⁴⁷ Newell, *From Dependency to Independence*, chap. 1.

²⁴⁸ Innes, *Creating the Commonwealth*, 76-77.

²⁴⁹ Russell, *A Long Deep Furrow*, 30-46.

grace and purity.²⁵⁰ For the settlers, the very act of migration meant that families had to divest themselves of most of their possessions; the “wilderness” that was their new home made the fulfilling of even the most basic material needs difficult. The colony’s leaders saw this situation as fortuitous. As one historian puts it, puritans feared consumption for “the special dangers it posed to righteous living.”²⁵¹ Before setting sail, the settlers of Massachusetts Bay likely read Plymouth settler Edward Winslow’s admonition that “a proud heart, a dainty tooth, a beggars purse, and an idle hand, be here intolerable...”²⁵² Not just scarcity but its opposite, excess consumption, threatened the proper equilibrium of economy and society, as in England “[w]ee are grown to yt excesse & intemperaunce in all excesse of riot as no meane estate almost will suffice to keepe saile wth his equalls & hee yt fayles in it must [live] in scorne and contempt...it is almost impossible for a good upright man to maintayne his chardge & live cofortably in any of ym.”²⁵³

While one might see the conquest and settlement of a new land as intrinsically exploitative and profit-driven, an examination of the writings of prominent settlers and their supporters shows a very different view. John White argued that it was overpopulation and lack of land, not opportunity, that produced greed and materialism, for “a large place best assures sufficiency,” and this security ensured righteous, simple living; “the taking in of large Countreys presents a naturall remedy against covetousnesse, fraud, and violence...” Indeed, the hardships brought on by war and overcrowding in the Old World were a blessing from God to compel people to migrate to a wilderness, where they

²⁵⁰ Martha L. Finch, *Dissenting Bodies: Corporealities in Early New England* (New York: Columbia University Press, 2010), introduction, esp. 2-4, 13. For an analysis of how a discourse of humanism, which celebrated certain aspects of consumption, coexisted with puritanism in the early seventeenth century, see Mark Valeri, *Heavenly Merchandize*, 19-22.

²⁵¹ DeJohn Anderson, *New England’s Generation*, 169. See also, for example, John Endecott’s letter to John Winthrop in 1641, at the onset of the economic crisis brought on by slowed migration from England; rather than request relief from supporters in England, Rev. Endecott suggested, the settlers should do without, for “how unprofitable the monies we have had have been layd out, as namelie in wines and liquours, and English provisions of dyett and unnecessarie braverie in apparell; all which tends to the scandal of religion and povertie...” John Endecott to John Winthrop, February 1641, *Winthrop Papers*, 4:314.

²⁵² Winslow, “Good News From New England,” 115.

²⁵³ Higginson, *New-England’s Plantation*, 41-42.

would be forced to live more fully the values of “frugality, industry, and justice, which had been disused and forgotten through long continued peace and plenty.” White went on to note that some might make the following argument against New England as a site for a colony: “[New England] wants means of wealth that might invite men to desire it: for there is nothing to be expected in New-England but competency to live on at the best, and that must be purchased with hard labour...[a]n unanswerable argument,” White readily admits, “to such as make the advancement of their estates, the scope of their undertaking;” but “[w]e know nothing sorts better with Piety than Competency,” for “the overflowing of riches [is] enemy to labour, sobriety, justice, love, and magnanimity...there is more cause to feare wealth than poverty in that soyle.”²⁵⁴

Though advocates of migration frequently praised the fertility and promise of New England’s land, no one denied that hardships awaited the first generation of settlers, and many embraced such struggles as the underpinning of a godly society. Forth Winthrop, John Winthrop’s son, writing in 1629, asserted that “[w]e must learn with Paull to want as well as to abound; if we have foode and rayment...we ought to be contented, the difference in quality may a little displease us but it cannot hurt us...It may be God will by this meanes bringe us to repent of our former Intemperance...Soe he carried the Israelites into the wilderness and made them forget the fleshpotts of Egipt...”²⁵⁵

As the first settlers experienced the hardships of survival in a strange country, they reinforced through letters home the message that the colony at Massachusetts Bay was not a source of material gain, for “if any come hither to plant for worldly ends that can live well at home, he commits an error, of which he will soon repent him.”²⁵⁶ Though glowing in his description of New

²⁵⁴ John White, *Planters Plea*, 4-5, 7-8, 31-33.

²⁵⁵ Forth Winthrop, “Reasons to be Considered, and Objections With Answers,” *Winthrop Papers*, 2:144.

²⁵⁶ Thomas Dudley to the Countess of Lincoln, in Emerson, *Letters From New England*, 75.

England, “as goodly a land as mine eyes ever beheld,” with “peace, plenty, and health in a comfortable measure,” the Reverend Thomas Welde, who migrated in 1632, noted that “with industry and self-denial men may subsist here...”²⁵⁷ Looking back at the success of the colony at Massachusetts Bay in 1647, Samuel Symonds, a prominent Ipswich resident, concluded that one of the purposes of the settlement of New England was to “exercise the graces of the richer sort in a more mixt condiccion, they shall have the liberty of good government in their hands yet with the abatment of their outward estates.”²⁵⁸ Massachusetts Bay was not a destination for those who desired profit and luxury, “being a rude and unsubdued wilderness yet with labor yields sufficient sustenance for men of moderate minds.”²⁵⁹ One cannot characterize as “capitalist” (never mind “consumer”) a colony led by a man who, in laying out his argument for leaving the safety and prosperity of middle-class life in England, stated, “[W]hen we be in our graves yt wilbe all one to have live[d] in plenty or poverty or whether we had died in a bed of downe or one locke of strawe only this is the advantage of a meane condition that yt is at more freedome to dye the lesse comfort any have in the things of this world the more liberty and desire he may have to lay upp treasure in heaven.”²⁶⁰ Indeed, the devout, at least, made a show of downplaying material goods, as with James Cudworth, who wrote to his former church in England about his situation in Scituate, saying his house, the “best” in the village, “though a mean one, it contents us well.”²⁶¹ The Massachusetts Bay colony seemed an ideal place to pursue spiritual independence from worldly pleasures.

Government records of the first few years of the colony abound with attempts to restrict wages and prices to ensure the access of all to goods and labor, and express a clear suspicion of

²⁵⁷ Thomas Welde to his Former Parishioners at Tarling, June/July 1632, in Emerson, *Letters From New England*, 96.

²⁵⁸ Samuel Symonds to John Winthrop, Jan. 6 1647, *Winthrop Papers*, 5:126.

²⁵⁹ Richard Mather to William Rathband and Mr. T., June 25 1636, in Emerson, *Letters From New England*, 205.

²⁶⁰ John Winthrop, “General Observations for the Plantation of New England,” (draft), *Winthrop Papers*, 2:113.

²⁶¹ James Cudworth to Dr. John Stoughton, Dec. 1634, in Emerson, *Letters From New England*, 142.

profit. Though the existence of these laws suggests that some individuals were exhibiting profit-seeking behavior, the general culture condemned them. Even after wage and price restrictions were technically repealed in 1635, the General Court retained the overarching right to punish those who “may take liberty to oppresse & wronge their neighbors, by taking excessive wages for worke, or unreasonable prizes for such necessary merchandizes or other comodities as shall passe from man to man...”²⁶² John White expressed the feelings of at least some in the colony when writing to John Winthrop from Dorchester in 1636, urging the governor to embrace a proposal to restrict commerce, give the government control over disbursement of imported “necessaries,” and discourage “Shopkeepers” who would “live by the sweate of other mens brows, producing nothing themselves by their owne endeavours.”²⁶³ In the same year, the General Court attempted to deter entrepreneurs from profiting through trade and retailing by heavily taxing fruit, spice, sugar, wine, strong water, and tobacco. This law was not necessarily meant to limit consumption of these goods – such tropical groceries were the consumer commodities that Puritans considered “necessaries” – but to discourage the spread of shopkeeping as an occupation and to encourage people to buy what they must directly from ships. Tellingly, the tax was repealed for sugar, spice, and fruit in 1637, likely because the people wanted to maximize their access to these foods.²⁶⁴

The leaders of the colony employed social pressure to enforce limits on consumption. Thomas Dudley, father-in-law of the sweet-toothed Mary Dudley, found himself in 1631 defending his “wainscoting and adorning his house,” forced to fall back on the claim that it was “for the warmth of the house,” as such decoration was unquestionably sinful.²⁶⁵ The colonists’ weakness for

²⁶² Shurtleff, *Mass. Bay Recs.*, 1:160.

²⁶³ John White to John Winthrop, Nov. 16 1636, *Winthrop Papers*, 3:321-323. In the same letter White urges Winthrop to support the development of the local fishing industry, clearly in the interest of subsistence, not profit.

²⁶⁴ Shurtleff, *Mass. Bay Recs.*, 1:186, 209.

²⁶⁵ Hosmer, *Winthrop's Journal*, 1:77.

textiles finer than they could produce themselves was similarly problematic. In 1634 the General Court forbade ornate, costly, or fashionable clothing as a threat to competency and piety, referring first to its expense as “prejudicial to the common good,” and only second to its immodesty.²⁶⁶ This asceticism was a struggle for some settlers, Puritan though they were; Mary Downing, a close relative of the Winthrops, castigated herself for such a worldly temptation, asking God to “give me a heart to be content with my portion.”²⁶⁷

Consumerism, particularly in regard to clothing, continued to threaten the moral economy and the very foundation of New England society; in 1638 the General Court met with the “elders of the churches,” in which all were in agreement about the gravity of the situation, but problematically “divers of the elders’ wives, etc., were in some measure partners in this general disorder.”²⁶⁸ In 1639 this struggle continued, as the General Court used stronger language to forbid lace and costly garments in general as “superfluities tending to little use or benefit,” even “evill,” including “imoderate great breches, knots of ryban, broad shoulder bands, & ralyes, silk rases, double ruffles, & cuffes...” Offenders were guilty of ignoring the “publike weale,” and the churches were instructed to punish offenders.²⁶⁹ Costly clothing was an obvious threat, given its potential for distraction and its status as an import, both of which jeopardized the piety and autonomy of the settlement. The potential of sugar dependency to upend the Christian commonwealth, in contrast, was not immediately recognized.

Puritan views on consumption expose the inconsistencies and tensions between leaders and laypeople, between the warring religious factions that were a constant presence from the beginning

²⁶⁶ Shurtleff, *Mass. Bay Recs.*, 1:126; similar legislation includes the outlawing of lace in 1636, 1:183; Hosmer, *Winthrop’s Journal*, 1:134.

²⁶⁷ Mary Downing to Emanuel Downing, Nov. 27 1635, in Emerson, *Letters From New England*, 180.

²⁶⁸ Hosmer, *Winthrop’s Journal*, 1:279.

²⁶⁹ Shurtleff, *Mass. Bay Recs.*, 1:274-275. Sumptuary laws were repeatedly enacted through the mid-seventeenth century; see, for example, 3:243, 4:41.

of the colony, between church members and unchurched, and within each person, as biological urges and material structures confronted spiritual idealism.²⁷⁰ Though its particular nature and extent may be debated, what one historian has termed a “culture of discipline” arose among the puritan community in England and was carried to New England, a “purification” in body and mind, which sought to eradicate indulgence of personal desires: “avarice and oppression on the part of the propertied; envy, sloth, and sensuality on the part of the poor.” This new culture abhorred bodily pleasures such as the “immiserating vices” of drunkenness and fornication, which were both directly displeasing to God and inhibited people’s ability to become the self-sufficient producers that formed the foundation of a godly society.²⁷¹ John Winthrop chronicled his constant struggle with what he saw as the greatest threat to the life of the spirit to which he and his flock were dedicated: “earthly things.” “I am thoroughly persuaded,” he wrote a decade before planning the Great Migration, “that the love of the worlde even in a smale measure will coole, if not kill, the life of sinceritye in Religion...” He prayed that he “may no otherwise love, use, or delight in any the most pleasant, profitable, etc, earthly comforts of this life..” Indeed any material “comfort” would only “animate and arme the fleshe against the spirit,” resulting in “the encrease of our sorrowe.”²⁷²

Conclusion

In her classic study of early seventeenth-century New England, *New England’s Generation*, Virginia DeJohn Anderson concludes that “only a few Boston or Salem merchants wrestled with the temptations that affluence afforded; no sugar, tobacco, or other profitable cash crop appeared that

²⁷⁰ For a discussion of the contradictions inherent in puritan social, intellectual, and spiritual life, see Bruce C. Daniels, *Puritans at Play: Leisure and Recreation in Colonial New England* (New York: St. Martin’s Press, 1995), chap. 1. Ken Albala argues that the puritans emphasized “simplicity and abstinence” in diet, rooted in an abhorrence of gluttony as the original sin; it remains to be seen how sugar and sweetness challenged this ideology in practice. Ken Albala, “Historical Background to Food and Christianity,” in *Food and Faith in Christian Culture*, ed. Ken Albala and Trudy Eden (New York: Columbia University Press, 2011), 14.

²⁷¹ William Hunt, *The Puritan Moment: The Coming of Revolution in an English County* (Cambridge: Harvard University Press, 1983), 79-80, 142, chap. six.

²⁷² *Winthrop Papers*, 1:212.

might similarly challenge the spiritual commitment of the mass of rural dwellers throughout the region.”²⁷³ This understanding of the early New England economy dominates the historiography. Scholars assert that consumption was relatively homogenous among most of the population, consisting mostly of practical agricultural implements and domestic tools and basic furnishings; that wealth was usually invested in land; and that the only exception to this was Boston, where luxuries such as elegant clothing and furnishings were somewhat more common among the wealthy. A Puritan value system that condemned material indulgence, and a conservative economic strategy of acquiring land as stable investment, limited consumption. To an impressive extent, the settlers of Massachusetts Bay succeeded in instituting an autonomous moral economy based on material simplicity and control of the flesh. Indeed, consumer culture in terms of durable goods remained remarkably simple over the course of the seventeenth century despite economic growth.²⁷⁴

Food was another matter. Though New Englanders were not driven by hunger or financial calculation to import calories, they craved tropical groceries, especially sugar products, and made economic decisions around their desire to obtain them. In their hostility to outside influences and their overt rejection of capitalistic practices, New England villagers seemed unlikely partners for the plantation masters of the West Indies; yet in the decades to come the region would prove to be essential to the sugar trade as a source of raw materials, a provider of shipping and financial services, and a local consumer market for sugar products. Sugar would constitute the first consumer revolution in America. And the dependency on sugar, and increasingly molasses and rum, would erode the spiritual fortress envisioned by the first settlers. The desire for sugar was a crack in the walls of the city on a hill, forcing the gates wider and wider until the rupture could not be ignored.

²⁷³ DeJohn Anderson, *New England's Generation*, 164-168, 176.

²⁷⁴ See DeJohn Anderson, *New England's Generation*, 161-173; Newell, *From Dependency to Independence*, 47-50.

Chapter Three

“Our New England Friends”: Twin Colonies and the Birth of the North American Sugar Economy, 1630-1660

“Their condition had been much worse but for the friendship and bounty of New England...these colonies cannot in peace prosper, or in war subsist, without a correspondence with them.”

– Governor William Lord Willoughby to the Privy Council, Dec. 16 1667²⁷⁵

In 1636, Massachusetts Bay colonist Mary Winthrop Dudley was begging sugar from her relatives a bit at a time, stretching it over months in her isolated frontier village of Ipswich with its limited access to imports. Only thirty years later, the Winthrop family was still exchanging sugar as a gesture of love and support, but in a remarkably short time they had seized control of the production and distribution of the essential commodity. In 1664, Mary’s brother Samuel Winthrop, a New Englander turned West Indian sugar planter, sent another sister “a barrell of brown sugr, such as I make.”²⁷⁶ The trickle of sugar available to eager colonial consumers had swollen to a river flowing north, as some enterprising New Englanders traveled southwards to plant and invest in sugar, while others expanded the intercoastal trade among the English colonies.

Samuel, son of John Winthrop, the devout founder of Massachusetts, was himself deeply pious, concerned foremost with faith and family.²⁷⁷ He was also one of those Atlantic entrepreneurs in who was able to “clyme to a high degree, of Wealth and opulencie, in this Sweet Negotiation of Sugar.”²⁷⁸ An ocean away from the “well-ordered commonwealth” of New England, where settlers cooperated as equals to build a “peaceable and comfortable civil society,” thousands labored in the

²⁷⁵ Calendar of State Papers, Colonial Series, America and West Indies, 1661-1668, ed. William Noel Sainsbury (London: Longman & Co., 1880), 526.

²⁷⁶ Samuel Winthrop to John Winthrop Jr., Sept. 1664, “Letters of Samuel Winthrop,” *Massachusetts Historical Society Collections* (Boston: MHS, 1882), 5th ser., 8:253.

²⁷⁷ Samuel’s religious devotion is a constant theme in his correspondence. “Letters of Samuel Winthrop,” 8:234-265.

²⁷⁸ Richard Ligon, *A True & Exact History of the Island of Barbados* (London: Humphrey Moseley, 1657), 108.

“perpetual Noise and Hurry” of the Barbadian sugar factories, with a “Labour so constant, that the Servants night and day stand in the great Boyling Houses...while others, as Stoakers, Broil as it were alive, in managing the Fires; and one part is constantly at the Mill, to supply it with Canes, night and day...”²⁷⁹ Yet these were not scenes from two disparate societies, as historians have so often presented them. Rather, the two regions comprised one economic zone, as New Englanders enmeshed themselves in the development of the West Indies, most remarkably in the transformation of Barbados into an island dedicated to industrially organized, slave-powered sugar production. For Mary, Samuel, and the Winthrop family, as for all of the settlers of Massachusetts, an integral part of founding a society in the New World was producing, exchanging, and consuming sugar.

The 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 did not generate as much profit nor cultivate 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 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.²⁸⁰ Although this is an

²⁷⁹ Edward Johnson, “Wonder-working Providence of Sions Saviour in New England,” and John Allin, “A Brief History of the Church of Christ in Dedham,” in *Puritans in the New World: A Critical Anthology*, ed. David D. Hall (Princeton: Princeton University Press, 2004), 335, 54; Thomas Tryon, *The Merchant, Citizen, and Country-man’s Instructor, Or, a Necessary Companion for All People* (London: E. Harris, 1701), 201.

²⁸⁰ 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: University of North Carolina Press, 1972); Carl and Roberta Bridenbaugh, *No Peace Beyond the Line: The English in the Caribbean, 1624-1690* (New York: Oxford University Press, 1972); and Gary A. Puckrein, *Little England: Plantation Society and Anglo-Barbadian Politics, 1627-1700* (New York: New York University Press, 1984). Russell Menard argues that the sugar “boom” in the 1640s built on a cotton “boom” in the 1630s, when

important qualification of the place of sugar in West Indian imperialism, 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; by 1701, sugar made up an impressive 57% of the value of colonial products imported into England.²⁸¹

England's conquest and settlement of North America occurred in tandem with its seizure of several islands in the Caribbean. The colonies of Massachusetts Bay and Barbados, in particular, developed together; Massachusetts was founded with the the port of Salem in 1628, and the first settlers arrived on Barbados in 1627. The English had conducted trading and looting expeditions to the Spanish West Indies since the mid-sixteenth century, but it was not until the 1620s that English colonizing efforts began with any real success. With the end of the twenty-year Anglo-Spanish War (1585-1604), the English, French, and Dutch were able to make enroach on the weakened Spanish trade routes and colonies. In the first half of the seventeenth century, power shifted dramatically in the region, from Spanish supremacy to what Richard S. Dunn has termed a "Dutch lake," with Holland dominating trade routes and England establishing settlements in St. Christopher, Barbados, Nevis, Antigua, and Montserrat and in 1655, Jamaica, seized from the Spanish.²⁸² Barbados was the most successful of these colonies, helped by its fertile land and its location to the east of the other Antilles, which made it the first stop for ships coming from Europe and Africa.

Barbados pioneered industrialized sugar monoculture in the region; the island fully transitioned to this model by 1650, an example that numerous other islands would follow over the

Barbadian planters were renowned for their high-quality cotton. Russell R. Menard, *Sweet Negotiations: Sugar, Slavery, and Plantation Agriculture on Early Barbados* (Charlottesville: University of Virginia Press, 2006), 23.

²⁸¹ Larry Gragg, *Englishmen Transplanted: The English Colonization of Barbados, 1627-1660* (Oxford: Oxford University Press, 2003), 106-107.

²⁸² Dunn, *Sugar and Slaves*, 16. The French took St. Christopher (which they shared with the English), Guadeloupe, and Martinique, while the Dutch had only minor land holdings in Curacao, St. Martin (shared with the French), St. Eustatius, and Saba, concentrating instead on control of trade.

next hundred years.²⁸³ But before the explosion of sugar in the 1640s, agricultural enterprises in Barbados and across the English islands were modest. Farming was diversified, holdings were small, and the economy in some ways resembled that of early New England. The warm climate allowed for cultivation of tobacco and cotton, and thus Barbados had greater potential than did the northern colonies for cash crops; but at the time New England's forests, animals, and fisheries seemed to offer even more possibilities for commercial exploitation. Though culturally distinct in that the founders of Massachusetts had a more defined social philosophy, in the first two decades of settlement the two regions did not appear to have wildly different economic destinies.

In fact, the first Winthrop to journey to the New World went to Barbados, not to Massachusetts Bay. John Winthrop's son Henry was among the original colonists that arrived on Barbados in 1627. He found it a promising place to build a life, writing home that "I doe intend god willing to stayer here one this Iland called the Barbathes..."²⁸⁴ Henry's farm failed and he would not stay on the island, as it turned out, returning to England in 1629; but many others remained and flourished. Under the Earl of Carlisle and his appointed governor, Henry Hawley, settlers were granted land of varying amounts, so that in 1638 the island's diverse landscape accommodated 764 farmers, from small plots of ten acres to huge plantations of a thousand acres or more.²⁸⁵ Based on poll tax records, Richard Dunn finds that the population of Barbados in 1639 was roughly 8,700, about the same size as Massachusetts and Virginia. Unlike the farmers of Massachusetts, however, most of these Barbadians were young, single men, like Henry Winthrop, working as indentured

²⁸³ Menard calls Barbados a "cultural hearth," noting that "[s]ugar did not revolutionize Barbados; rather Barbados revolutionized the sugar industry..." by creating an industrial model of export crop production that would spread across the world. Menard, *Sweet Negotiations*, 5-6.

²⁸⁴ See Forth Winthrop's letter to his brother John Winthrop Jr. in December of 1626, which alludes to Henry's "Journey to the Indes," and Henry's letter after his arrival, August 22 1627, *Winthrop Papers* (The Massachusetts Historical Society, 1929), 1:338, 356.

²⁸⁵ Dunn, *Sugar and Slaves*, 49-51; John J. McCusker, *Rum and the American Revolution: The Rum Trade and the Balance of Payments of the Thirteen Continental Colonies* (New York: Garland Publishing, 1989), 1: chap. 4.

servants or small farmers, balancing subsistence crops with production for export.²⁸⁶ This would change dramatically over the next two decades. Between 1640 and 1660, the island would become a settled society of families with a ballooning slave population; it would put almost all of its resources into sugar cultivation; and its economy would become deeply dependent on that of New England.

In the years between 1640 and 1650 Barbadian planters began cultivating sugar. The crop did more than thrive: it quickly became the almost exclusive focus of the planters' attention. Menard's analysis of Barbados deed books finds that sugar went from being unknown as a means of exchange on the island in 1643 to being used universally in transactions involving commodities in 1649; by 1667 almost all of the arable land on Barbados was being used for sugar. The plant proved to be immensely profitable. By the mid-1660s sugar and its by-products, molasses and rum, were more than ninety percent of the island's exports by value, and Barbados's sugar crop was the most valuable crop in the world.²⁸⁷

As the decade wore on, Barbadians improved their methods and output, experimenting with partnerships to raise enough capital to buy land and build sugar mills, thereby creating large, vertically integrated plantations. Because of the immense manpower needs of sugar, there was a limit to the size of a manageable plantation, but at the same time the need to support an expensive mill to process the cane meant that small tracts of land were not economical. Within a couple of decades, about two or three hundred big planters with about two hundred acres each had emerged to dominate the island.²⁸⁸ In contrast to the economic system set up by the Portuguese in Brazil, which was rooted in a paternalistic form of sharecropping, in Barbados planters saw themselves as

²⁸⁶ Dunn, *Sugar and Slaves*, 55-59.

²⁸⁷ Menard, *Sweet Negotiations*, 18, 72; David Eltis, "New Estimates of Exports from Barbados and Jamaica, 1665-1701," *The William and Mary Quarterly* 52 (1995): 631-648; Bridenbaugh, *No Peace Beyond the Line*, chap. 3; Richard Ligon, *History*, 85.

²⁸⁸ Dunn, *Sugar and Slaves*, 61-67, though Menard shows that small tenant farmers were still fairly common through most of the seventeenth century. Menard, *Sweet Negotiations*, 124-125.

businessmen and operated their fields and mills directly. By the 1650s almost all of the island's trees had been cut down, and most acreage had been converted to sugar. The island had become dependent on imports, mostly from the North American colonies, for food, timber, and other supplies.²⁸⁹ The complex integrated system of the sugar plantation and factory mill required substantial energy, another input that had to be supplied from the outside. Planters primarily used horses and cattle to power their roller mills that crushed the cane, and relied on shipments of fresh work animals, also from the North American colonies.²⁹⁰

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.²⁹¹ 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.²⁹² Spanish and Portuguese possessions in the New World did produce 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.²⁹³

Sugar and Slavery

Sugar's massive labor requirements, along with the punishing nature of that labor, was the catalyst for the rapid growth of slavery in the Atlantic world. Long before slavery came to dominate

²⁸⁹ Charles F. Carroll, *The Timber Economy of Puritan New England* (Providence: Brown University Press, 1973), 80-84.

²⁹⁰ Menard, *Sweet Negotiations*, 72-73.

²⁹¹ For the Brazilian sugar industry, see Bridenbaugh, *No Peace Beyond the Line*, chap. 3.

²⁹² Dunn, *Sugar and Slaves*, 18-21, 48, 117.

²⁹³ McCusker, *Rum*, 106.

Barbados, centuries of Mediterranean and Atlantic sugar production had shown how profitable slave-produced sugar could be. In the sixteenth century, the Portuguese enslaved thousands of Africans, both in the Atlantic sugar islands of Madeira and Sao Tome and in Brazil.²⁹⁴ In turn, slavery would come to be an integral part of sugar production in the West Indies. Certainly contemporary observers believed the continuous flow of slaves into the sugar plantations to be absolutely crucial to sugar production. As one West Indian planter explained, “[O]ne of the great Burdens of our Lives is the going to buy Negroes. But we must have them; we cannot be without them...[The planter] must have more Negroes, or his Works must stand, and he must be ruin’d at once.”²⁹⁵

Slavery had existed on Barbados from the first days of settlement – among 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 began investing heavily in slaves.²⁹⁶ 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 of them were kidnapped, 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

²⁹⁴ Wendy Warren, *New England Bound: Slavery and Colonization in Early America* (New York: W.W. Norton, 2016), 28.

²⁹⁵ Edward Littleton, *The Groans of the Plantations* (London: M. Clark, 1689) 6, 20.

²⁹⁶ Gragg, *Englishmen Transplanted*, 119.

Barbados once sugar had taken hold. Slavery allowed for significantly higher levels of sugar production, consumption, and wealth, than would otherwise have been possible.²⁹⁷ 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;" thirteen thousand in 1650; and by 1660, they constituted a majority of the population.²⁹⁸

Industrial Sugar

Foreshadowing critics of industrial conditions in England and the United States two centuries later, a visitor to Barbados in 1661 concluded his description of sugar production on the island with the observation that "[w]e do not need to mention the unclean conditions involved in the making of sugar because those who are fond of sweets would then lose their desire."²⁹⁹ Because sugar growing and processing was such a complex business, the sugar plantations of the seventeenth-century Caribbean were in many ways some of the first industrially organized enterprises of the Western world. Servants and slaves did the planting by hand, digging holes or trenches for cuttings of cane and placing them either upright or end to end. October through December was considered the optimal time to plant, as this rainy season promoted growth. The cuttings would sprout, and when they were one or two feet high, they were weeded and fertilized with cow manure. After about sixteen months, the cane was ready for harvesting. Workers cut the stalks with curved knives, or bills. The field would go on produce a second crop of "ratoon" cane, inferior in quantity but grown with a minimum of effort.

²⁹⁷ David W. Galenson, *Traders, Planters, and Slaves: Market Behavior in Early English America* (Cambridge: Cambridge University Press, 1986), 7-13, 153.

²⁹⁸ Dunn, *Sugar and Slaves*, 67-74, 226-228; Menard, *Sweet Negotiations*, 31-47; George Downing to John Winthrop Jr., Aug. 1645, *Winthrop Papers* 5:44.

²⁹⁹ Alexander Gunkel and Jerome S. Handler, eds., "A Swiss Medical Doctor's Description of Barbados in 1661: The Account of Felix Christian Spoeri," *The Journal of the Barbados Museum and Historical Society* 33 (May 1969): 8.

After harvesting, sugarcane must be processed immediately for maximum yield and flavor, so mill and boiling room stood ready at all times to receive the harvest. Slaves cut the raw cane into stalks, which they then fed through a three-roller mill, powered mostly by horses and cattle, and then increasingly by wind and water as the century wore on. The mill crushed the cane and extracted the liquid cane juice, which was piped quickly into the boiling room before it fermented, where it was boiled until the key moment that the liquid mostly evaporated, or “struck,” leaving a dark, moist sugar known as muscovado (“menos acabado,” or “less finished,” in Portuguese). The time-sensitive nature of these processes resulted in grueling work conditions, as shifts of slaves labored unceasingly in the noise of the mill and the heat of the boiling room. Each patch of sugarcane takes about a year and half to reach maturity, and its labor-intensive processing was costly, so sophisticated planning and management of land, labor, and machinery was the hallmark of industrialized sugar. Discipline, organization, and highly regimented time management, all of which we think of as integral aspects of the industrial factory, were fundamental to sugar plantations, rural and agricultural as they were.³⁰⁰

Once the sugar was in muscovado form, it was purified further. Different sugar regions across the centuries produced a wide variety of semi-refined and refined sugars, but in the seventeenth century there were two basic processes to create sugar in saleable form. The first method produced a brown sugar, marketed as muscovado. In this method, the still moist sugar was taken from the boiling house to the hot, stuffy curing house, packed into pots, and left to drain its molasses into drip pans. After about a month, the drained sugar was removed from the pot, where it had hardened into a cone shape. After cutting off the top and bottom of the cone, where the sugar was inferior, the middle of the cone was set in the sun to dry further and then packed in barrels or hogsheads. Additional refining was often done at the place of import. The other commonly used method of finishing sugar on the plantation was known as claying, and it produced a whiter sugar.

³⁰⁰ Sidney W. Mintz, *Sweetness and Power: The Place of Sugar in Modern History* (New York: Penguin Books, 1985), 46-52.

With this method, clay was used to seal the top of each drying pot. The water from the clay moved through the pot and dissolved the molasses, a process which took about four months. At the end of claying the planter would be left with about three-fourths white clayed sugar to one-fourth coarser sugar, as well as a considerable amount of molasses.³⁰¹

Indeed, enormous quantities of molasses were produced in the end stages of sugar processing – as much as one hundred gallons for every hogshead of muscovado. This waste product would become a staple food for North American colonists, and it was the base for “Rumbullion, or Kill Divill,” which was “made of Suggar cones distilled...a hot hellish and terrible liquor.”³⁰² Rum, the alcohol produced by distilling sugar or sugar by-products, was essentially unknown before sugar production began on Barbados in the seventeenth century.

Distilling at different stages of sugar processing produced various types of rum. Though rum was originally distilled from pure cane juice, this method quickly all but disappeared as it was more profitable to produce sugar from cane juice than alcohol. Instead, the vast quantities of molasses produced in sugar processing, and the lighter molasses known as treacle produced in further sugar refining, became the base of rum. To make the liquor, workers poured molasses and inferior sugars into a vat, let the mixture ferment for a week, then heated it, vaporized it, and recondensed it. Barbados planters soon found an eager market for this new spirit in New England and the other Continental colonies.³⁰³

The “little princes” of Barbados, whose “fortunes...are not only preserv’d, but made by the powerfull operation of this plant” enjoyed unusual economic freedom in the 1640s and 1650s, as

³⁰¹ McCusker, *Rum*, 1: chaps. 2 and 3; Dunn, *Sugar and Slaves*, 191-196; Bridenbaugh, *No Peace Beyond the Line*, 88-91.

³⁰² As described in one of the earliest references to rum production on Barbados, “A Briefe Description of the Ilande of Barbados,” in *Colonising Expeditions to the West Indies and Guiana, 1623-1667*, ed. V.T. Harlow (London: The Hakluyt Society, 1925), 46.

³⁰³ John J. McCusker, *Rum*, 1: 56-59; Dunn, *Sugar and Slaves*, 196-197.

political instability in England limited imperial interference with sugar production and trade.³⁰⁴

Before the 1660s, merchants directed the economy of Barbados and the collection, transport, marketing, and sale of sugar throughout the Atlantic. All sorts of people in England, New England, Holland, and Barbados, took on the role of merchant at various times, including investors, ship captains, and planters themselves. Indeed, slipping back and forth between these roles was common and these groups and interests heavily overlapped.³⁰⁵

In addition, the high capital cost and complex production process of sugar differentiated it from other tropical commodities such as tobacco and cotton.³⁰⁶ The necessity of processing the sugar immediately after harvesting meant that a planter needed a mill, boiling house, drying house, and other facilities, as well as the people and animals to work them, and such facilities made little economic sense without a large tract of land. One observer estimated that a prospective planter would need at least two thousand pounds to get started, “which was counted no great beginning neither.”³⁰⁷ Small yeoman farming of sugar proved unworkable, and thus Barbados developed an economy that leaned on Atlantic wealth. As David Eltis observes, the “sheer and rather disconcerting effectiveness in narrow production terms of an early capitalist system in a subtropical environment” made sugar different.³⁰⁸ The capital-intensive nature of sugar production meant that the island was dominated by a relatively small number of elite families, all of whom were either New Englanders themselves, had New England connections, or relied on New England for supplies and

³⁰⁴ As a visitor in 1654 characterized them. Jerome S. Handler, “Father Antoine Biet’s Visit to Barbados in 1654,” *The Journal of the Barbados Museum and Historical Society* 32 (1965-66): 69; Richard Ligon, *History*, 95; Dunn, *Sugar and Slaves*, 79-80.

³⁰⁵ Dunn, *Sugar and Slaves*, 209; Russell Menard, *Sweet Negotiations*, 103; K.G. Davies, “The Origins of the Commission System in the West India Trade,” *Transactions of the Royal Historical Society* 2 (1952): 93.

³⁰⁶ Robert 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): 1-41.

³⁰⁷ Tryon, *The Merchant, Citizen and Country-man’s Instructor*, 201.

³⁰⁸ Eltis, “New Estimates,” 648.

shipping. The material characteristics of sugar, the political turmoil in England, and especially the continual migration between the English colonies in the early years of English colonial settlement, all contributed to the importance of merchant families with ties to both New England and Barbados.

Sugar and Imperial Policy

With the end of the English Civil War in 1649, Parliament reasserted its authority over colonial trade. England's Navigation Acts of 1651, 1660, and 1663 were attempts by the successive English governments to control colonial trade, both to collect revenue and to further the economic development of the mother country. In 1651, building on earlier colonial policy, Parliament laid out what was to be the legal framework for colonial trade over the next century or so. Only English-owned ships, with a primarily English crew, were allowed the privilege of importing goods from America, Asia, or Africa into England or any of its territories. These regulations limited sugar exports from the English West Indies to English ships, as well as imposing customs duties on sugar to be paid at the place of import (either England or English colonial port), which starting in 1651 was 1s. 6d. per hundredweight on muscovado and 5s. on clayed sugar.³⁰⁹ In addition, in 1663 the Barbados Assembly agreed to impose its own 4.5% tax (the "four and a half" duty) on all of its exports to pay imperial governing expenses.

This mercantilist principle was extended under Charles II in 1660, with the specification that ships engaged in colonial trade must be owned by an Englishman, captained by an Englishman, and worked by a crew that was at least three-fourths English. In addition, certain valuable commodities, including sugar, were "enumerated," meaning that they could only be shipped directly to England or an English possession (even if their eventual destination was a foreign port) where they were subject

³⁰⁹ Dunn, *Sugar and Slaves*, 206; Menard, *Sweet Negotiations*, 58-59. Throughout this dissertation I use the shorthand of "s." to denote English shillings and "d." to denote English pence.

to customs duties before being re-exported elsewhere. These taxes and restrictions raised costs for planters, though the exclusion of foreign sugar from England and English colonial ports gave them a monopoly in the English market. The framers of these Acts, however, did not anticipate that New England merchants and ship captains would quickly move to compete with the mother country's ships. English colonists and their vessels had English status and were allowed all the English privileges of trade, yet because customs were collected consistently only in England, New England merchants could trade freely with other English colonies without paying taxes.

During the last decades of the seventeenth century, England continued to increase customs regulations, taxes, and enforcement in the colonies. These measures were met with resistance in New England, resulting in widespread flouting of the Navigation Acts. Unregulated trade between New England and the rest of the Atlantic World flourished, benefitting from a combination of ambiguous policy measures, quibbling among customs enforcers, and the antagonism of colonial merchants, captains, and consumers towards taxes. It was not until 1696, with the final Navigation Act, that regulations were more consistently enforced. This Act embodied the acceptance on the part of the English government that the colonials were adamantly resistant to customs regulation and would evade it at any opportunity. The Act took enforcement of customs law out of the hands of the local courts and established imperial tribunals in their stead; all customs officials were brought under English control; colonial legislatures were forbidden to negate any aspect of the Act; and penalties for evasion of customs law were much stiffer. This insistent interference in New England's economy, an economy based from its earliest days on Atlantic trade and commerce, especially with the West Indies, would eventually contribute to the American Revolution.³¹⁰

³¹⁰ Thomas C. Barrow, *Trade and Empire: The British Customs Service in Colonial America, 1660-1775* (Cambridge, MA: Harvard University Press, 1967); Charles M. Andrews, *The Colonial Period of American History: England's Commercial and Colonial Policy*, (New Haven: Yale University Press, 1964), vol. 4; McCusker, Rum, 167-168.

New England Trade and West Indies Sugar Production

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.³¹¹ 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 potential export industries, such as wheat, in 1641, and pipe staves, in 1646, and by investing heavily in trade themselves.³¹² 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."³¹³ 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. In fact, between 1678 and 1684, more ships (for which we have records) arrived in Nevis, St. Christopher, and Montserrat from Boston (77 ships) than from London (64 ships)!

By the 1680s over half of ships entering and leaving Boston were engaged in trade with the West Indies.³¹⁴ 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

³¹¹ Bernard Bailyn, *New England Merchants in the Seventeenth Century* (Cambridge, MA: Harvard University Press, 1955), 83-86.

³¹² Nathaniel B. Shurtleff, *Records of the Governor and Company of the Massachusetts Bay in New England* (Boston: William White, 1853), 1:337, 2:169.

³¹³ "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: New York Historical Society, 1870), 18.

³¹⁴ Dunn, *Sugar and Slaves*, 210, 336. Somewhat more ships came from English ports overall (139) than from all New England ports (107).

supplies to feed the industrial sugar economy.³¹⁵ 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...”³¹⁶ 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.³¹⁷ The Barbadian climate and sugar monoculture limited food production; planters depended New England’s salt beef and pork, and their slaves survived on New England’s refuse fish.³¹⁸ As a visitor to Barbados noted in 1654, “there is no nation which feeds its slaves as badly as the English.”³¹⁹ 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

³¹⁵ Edward Randolph, *Edward Randolph; Including his Letters and Official Papers...* (Boston: John Wilson & Son, 1898), 2:249.

³¹⁶ Major John Scott, “The Description of Barbados,” (1677) in *Some Early Barbadian History*, ed. P.F. Campbell (Barbados: Caribbean Graphics, 1993), 246.

³¹⁷ “Notes Relating to America,” in *Calendar of State Papers, Colonial Series, American and West Indies, 1661-1668*, ed. William Noel Sainsbury (London: Longman & Co., 1880), 532; “A Description of the Province of New Albion, 1648,” in *Tracts and Other Papers, Relating Principally to the Origin, Settlement, and Progress of the Colonies in North America...*, ed. Peter Force (Gloucester, MA: Peter Smith, 1963), 2:5; Vincent T. Harlow, *A History of Barbados: 1625-1685* (New York: Negro Universities Press, 1926), 290.

³¹⁸ Dunn, *Sugar and Slaves*, 210, 275-6; the imperial report cited above noted that of all the fish New Englanders traded, they sent “the worst to Barbadoes.”

³¹⁹ Handler, “Father Biet’s Visit,” 66.

by the sea wett in the voyage,” with four hundred pounds of it compromised.³²⁰ 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 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.³²¹ 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.

Not only New England supplies, but also New England demand nurtured the nascent sugar industry in the West Indies.³²² Few historians have examined the New England’s importance as a consumer 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

³²⁰ *A Volume Relating to the Early History of Boston Containing the Aspinwall Notarial Records from 1644 to 1651* (Boston: Municipal Printing Office, 1903), 140.

³²¹ Daniel 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 the next chapter.

³²² Historians have emphasized the role of the Dutch, and more recently, English merchant investors. Dunn, *Sugar and Slaves*, 59-67, 201; Menard, *Sweet Negotiations*, 49-61.

finds that between 1699 and 1701, 9% 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.³²³

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 England, in combination with the other North American colonies, were likely buying the majority of Barbados's exports by volume, in lower value molasses and rum. For 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 that "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."³²⁴

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.³²⁵ It is challenging to find a "typical" year from the late seventeenth

³²³ David Eltis, "New Estimates," 644-645 and Tables I-V.

³²⁴ David Eltis, "New Estimates," 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 price and weight were variable, making comparisons between different sets of records difficult. See also A.P. Thornton, "Some Statistics of West Indian Produce, 1660-1685," *Caribbean Historical Review* 4 (1954): 251-80.

³²⁵ John 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 Shammass reports similar findings; Shammass, "Changes in English and Anglo-American Consumption from 1550 to 1800," in *Consumption and the World of Goods*, ed. John Brewer and Roy Porter (London: Routledge, 1993), 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

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 close to half (43%) of Barbadian sugar products, to England's 57% (by value). New Englanders alone took 21%, 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 overwhelming 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. Combined with its role as a supplier of production inputs and raw materials, this demand establishes New England as an essential contributor to Barbados's sugar economy.

Twin Colonies

John Hull, Massachusetts goldsmith, mintmaster, and merchant, made only a few entries in his diary for the year 1659. One of the events deemed important enough to record was the day that "we received intelligence of the great fyre in Barbados...lost wherin about two hundred dwelling houses 85 storehouses were Consumed and & great stores together with them. Sundry in New England had a share in that Loss."³²⁶ The local impact of a destructive event on a faraway island highlights the way sugar had bound together the fortunes of New England and Barbados by mid-century. The close relationships between the settlers of Massachusetts Bay and the families who consolidated economic power in Barbados from the 1640s onwards indicate that New Englanders invested people and money in sugar production and trade as a way of shoring up Massachusetts's

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.

³²⁶ John Hull Papers, 1624-1685, Octavo Volume, American Antiquarian Society, Worcester, MA.

economic stability, social cohesion, and not incidentally, the colony's sugar supply. In this way they maintained their independence from England within a community of like-minded relatives and friends. Historians have explained this trade relationship on New Englanders' need for credit in England to buy manufactures, which the carrying trade in sugar could provide. But this oversimplistic characterization of New Englanders' motivations and economic behavior neglects their role as sugar product consumers. The building materials, animals, and food that flowed in one direction, and the sugar, molasses, and rum that flowed in the other, constituted a new, and likely deliberately exclusive, economic entity along the North American coast.³²⁷

Barbadian and Massachusetts settlers shared an English culture, a religious orientation, and most of all a constant interchange of people. Though their initial settlements differed in character, by mid-century the rough bachelor homesteads of early Barbados had evolved into settlements of families organized into parishes.³²⁸ Just as New Englanders were both commercially oriented and sincerely pious, Barbadians were concerned with spiritual matters despite their market economy. "Puritans" of various sorts dominated in Barbados (though debates over doctrine raged as they did in New England), coexisting with vocal Anglicans and Quakers. As devotional statements in 1650s Barbados wills show, the settlers of Barbados, like New Englanders, varied somewhat in their understanding of salvation and resurrection, but were devout Christians, if more tolerant of diversity.³²⁹ These commonalities made movement between the two regions easier.

³²⁷ John Winthrop Jr. attempted to strengthen this self-contained economic zone by securing a supply of cotton in Barbados for home manufacture of cloth in New England, but the turn to sugar monoculture cut short his plans. This venture complemented other attempts at import substitution, as detailed in the previous chapter.

³²⁸ Dunn, *Sugar and Slaves*, 76-77; Ligon, *History*, 116; Gragg, *Englishmen Transplanted*, 9-10.

³²⁹ Gragg, *Englishmen Transplanted*, 73-85; Babette M. Levy, *Early Puritanism in the Southern and Island Colonies* (Worcester, MA: American Antiquarian Society, 1960), 278-307; Larry D. Gragg, "A Puritan in the West Indies: The Career of Samuel Winthrop," *The William and Mary Quarterly* 50 (1993): 783-785.

Families instrumental in the founding and settling of English colonies in the New World, such as the Vassals and the Winthrops, focused on developing both areas from the beginning of serious colonization efforts in the 1620s.³³⁰ The movement of settlers back and forth between the two regions was an expected aspect of colonization, with migrants finding family and friends in both places. In fact, Barbados and New England may have had the highest exchange of people (as well as commodities) within the English colonies in the seventeenth century. This exchange was particularly intense in the 1640s. In the first tenuous decades of settlement of Massachusetts Bay, it seemed possible that Barbados, not Massachusetts, would become the focus of puritan settlement in the New World; with supplies dwindling, Massachusetts leaders were well aware of “the forwardnes of divers amongst us to remove to the West Indies bec[ause] they cannot here maintayne their families.”³³¹ The shift to sugar around the same time provided an opportunity to New Englanders who could scrape together some capital, and a significant number moved to Barbados temporarily or permanently.³³²

Other New England migrants to Barbados were likely destitute, as was Massachusetts man James Carr, who in 1646 “bound himself a Covenant servant unto John Bayes of Barbados and Anne his wife for 2 yeares after his arrivall at Barbados” in exchange for room, board, and nine pounds at the end of his service.³³³ At the same time, as opportunities in Barbados became more limited for those without capital, those farmers and freed servants who were squeezed out by the sugar boom looked to New England, where the economy was quickly rebounding, and migration

³³⁰ S.D. Smith, *Slavery, Family, and Gentry Capitalism in the British Atlantic: The World of the Lascelles, 1648-1834* (Cambridge: Cambridge University Press, 2006), 21-23.

³³¹ John Endecott to John Winthrop, Feb. 1641, *Winthrop Papers* 4:314.

³³² James Truslow Adams, *The Founding of New England* (Boston: Little, Brown, 1949), 23.

³³³ *Aspinwall Notarial Records*, 39.

began to flow northward as well.³³⁴ According to an imperial report, well over a thousand people left Barbados for New England between 1643 and 1647.³³⁵

This pattern continued through the seventeenth century. In 1679, New England was the second most frequent destination of people leaving Barbados, after England. Boston in particular was the most popular destination of any city or even colony for people leaving the island.³³⁶ Even people who did not relocate permanently between New England and Barbados often cemented their ties to the other colony through visits. Barbadian planter families with New England connections often made trips to New England and sent their children there for education or to live. New Englanders frequently visited relatives and made business voyages to Barbados. It is difficult to find a seventeenth-century Massachusetts family of any means without a Barbados connection. And even New England's poor, though they were not necessarily able to trade or travel themselves, were often involved in producing for the Barbados market, as well as becoming accustomed to consuming plenty of Barbadian sugar, molasses, and rum.

In 1649, the ship *Begining* sailed “with the first faire wind” from Boston under the command of its Boston owner, Henry Parkes. Stopping in Rhode Island, it stocked its hold with “12 Cattle” and other New England exports under the eye of its primary investor, merchant William Withington, and “strong staunch & sufficiently victualled tackled & apparelled with sailes,” manned by “eleven men & a boy,” it set out on a lengthy journey for Barbados, Guinea, back to Barbados, Antigua, and then back to Boston.³³⁷ These cattle were essential to West Indian sugar production; as one visitor to the region explained, the “main impediment and stop of all, is the Losse of our

³³⁴ Dunn, *Sugar and Slaves*, 55-59.

³³⁵ “Some Observations on the Island of Barbadoes,” in *Calendar of State Papers*, 529.

³³⁶ Smith, *Slavery*, 19; Menard, *Sweet Negotiations*, 107.

³³⁷ *Aspinwall Notarial Records*, 220.

Cattle...and amongst them, there are such diseases, as I have known in one Plantation, thirty that have died in two daies...if...the Cattle cannot be recruited in a reasonable time, the work is at a stand, and by that means, the Canes grow over ripe, and will in a very short time have their juice dried up, and will not be worth the grinding.”³³⁸ Few customs records survive from the tumultuous years between 1630 and 1660, but scattered documents across England, New England, and Barbados detail the rise of the sugar trade and the integral role of New England in financing and supplying ships like the *Beginning*. There were at least twenty trading voyages between New England and the West Indies even in the initial decade of settlement between 1630 and 1640. In 1639, for example, John Winthrop reported that a ship’s captain arrived in Boston carrying indigo and sugar; he sold his cargo, “wherewith he furnished himself with commodities, and departed again for the West Indies.”³³⁹

The early New England merchants were embedded in their local communities, and many types of people took part in trade at some point in their lives.³⁴⁰ By 1640, after the fur trade proved unprofitable in southern New England, merchants turned to fish, food, and wood product exports to the Atlantic wine islands. Describing one such voyage in 1643, John Winthrop noted that the captain had gone first to Fayal, where he had sold pipe staves and fish for wine and sugar; then he had stopped in the West Indies, where he had sold some of the wine for cotton and tobacco; and then returned to Boston, where his success “did much encourage the merchants, and make wine and

³³⁸ Richard Ligon, *History*, 56.

³³⁹ James Kendall Hosmer, *Winthrop’s Journal: History of New England* (New York: Charles Scribner’s Sons, 1908), 1:310; Larry D. Gragg, “An Ambiguous Response to the Market: The Early New England-Barbados Trade,” *Historical Journal of Massachusetts* (Summer 1989): 177.

³⁴⁰ James E. McWilliams, “Butter, Milk, and a ‘Spare Ribb’: Women’s Work and the Transatlantic Economic Transition in Seventeenth-Century Massachusetts,” *The New England Quarterly* 82 (March 2009):16; James E. McWilliams, *Building the Bay Colony: Local Economy and Culture in Early Massachusetts* (Charlottesville: University of Virginia Press, 2007).

sugar and cotton very plentiful, and cheap...”³⁴¹ In 1643 five New England ships made such Atlantic trading voyages, with one stopping at Barbados, and the rest of the decade saw an increasing focus on trade with the West Indies, with sugar as the major tropical commodity. Indeed, in 1648 there was a corn shortage in Massachusetts because such a large share of the crop had been funneled into the West Indies and greater Atlantic trade.³⁴² Richard Vines, a New Englander recently settled on Barbados, wrote to John Winthrop in 1647 “desiring to keep correspondency with you who have alwayes respected me,” and letting him know that New England minister James Parker had safely arrived on the island and settled on a plantation, but also to vouch for the shipmaster who carried the letter, John Mainford, who hoped to buy Massachusetts “provisions for the belly, which at present is very scarce...men are so intent upon planting sugar that they had rather buye foode at very deare rates than produce it by labour...”³⁴³

Such demand for foodstuffs financed the voyages of Boston ships like the *Adventure*, which in 1650 set off for Barbados carrying “6 hhs mackrell. 1 hhd beefe. 23 barrell beefe. 22 barrell mackrel. & 40 keggs sturgeon.”³⁴⁴ Of the forty-nine identified ship captains sailing in and out of Bridgetown in Barbados in the 1640s and 1650s, eighteen were New Englanders.³⁴⁵ More importantly, many more New Englanders were merchants or investors in the Barbados trade, owning these ships or their cargoes. Of 145 identified people involved more widely in the New England-Barbados trade between 1645 and 1660, most lived in New England or Barbados; only a tenth were from the mother country. New Englanders dominated at 86 out of the 145, followed by

³⁴¹ Hosmer, *Winthrop's Journal*, 2:92-93. Note that New Englanders were importing and consuming sugar before West Indies production expanded supply and lowered the price.

³⁴² Hosmer, *Winthrop's Journal*, 2:341.

³⁴³ Richard Vines to John Winthrop, July 19 1647, *Winthrop Papers*, 5:172.

³⁴⁴ *Aspinwall Notarial Records*, 423.

³⁴⁵ Larry D. Gragg, “Shipmasters in Early Barbados,” *The Mariner's Mirror* 77 (May 1991): 106. These ship captains rarely owned a stake in their voyages, however, and acted as the employees of merchants.

Barbadians (many of whom probably had kin in New England) at 33.³⁴⁶ Family and personal relationships, bolstered by the physical movement of people around the Atlantic shores, were an essential part of this trade. Indeed, writing again in 1648, Richard Vines casually referred to the community of “our New-England men here” in a letter to John Winthrop.³⁴⁷

Developers of the Twin Colonies

In 1663, part of one of the largest estates on Barbados changed hands, following the death of its owner, John Parris. The resulting inventory of the estate, worth over four thousand pounds, reveals the intensive outlay of capital necessary to buy the people, animals, and equipment for making sugar. Along with his brother, Thomas, John Parris owned:

“[o]ne hundred and thirty Negroes, or thereabouts, Nine Horses, Mares and Colts, Six Assnegroes [donkeys], fifty sheep, seven Goats, eight Neate Beasts, twenty Hoggs, Two Windmills, Twelve Coppers hung, Four Stills and Worms, two Brass Coolers, together with Scummers, Basins, and all other utensils, Implements, and Instruments belonging to the Boiling and Curing Houses, and all Sugar Potts, Padds for the Horses and Assnegroes, Windmill Sails, three Grindstones, Iron and Smith’s Tools, Axes, Cromes, Sledges, Shovels, Sugar-Sacks, Kettles, Potts, Bills, Hoes, Sea coals, Shingles, Boards, Musquetts...”³⁴⁸

The story of how John and Thomas Parris created the wealth to build such an extensive sugar plantation, and of the life choices that they and their children made, illustrate the intertwined fortunes of New England and Barbados.³⁴⁹

John Parris, in particular, embodies the movement of people, money, goods, and beliefs between Massachusetts and Barbados. His initial investments were in trade, and he first appears in the historical record as a merchant. In 1642, John Winthrop noted in his journal that:

“[t]here arrived at Boston a small ship from the Madeiras with wine and sugar, etc., which were presently sold for pipe staves, and other commodities of the country, which were returned to the Madeiras; but the merchant himself, one Mr. Parish, staid diverse months

³⁴⁶ Gragg, “Ambiguous Response,” 182.

³⁴⁷ Richard Vines to John Winthrop, April 29 1648, *Winthrop Papers* 5:219-220.

³⁴⁸ “The Lucas Manuscript,” *Journal of the Barbados Museum and Historical Society* 23 (May 1956): 111-126.

³⁴⁹ For family relationships and a summary of John Parris’s holdings in Barbados, see John Parris’s will in Henry F. Waters, *Genealogical Gleanings in England* (Boston: New-England Historic Genealogical Society, 1888), 1 (2):143-144.

after...When he went away, he blessed God for bringing him hither, professing that he would not lose what he had gotten in New England for all the wealth in the world. He went away in a pinnace built here intending a speedy return.”³⁵⁰

Later developments indicate that this apparent conversion to puritanism was probably sincere.

Perhaps both because of his religious leanings and his interest in trade, John found Massachusetts an attractive place to make a home, settling in Charlestown in 1644.³⁵¹ He surely had both personal and business dealings with his brother Thomas’s nephew John Hull, the mintmaster who recorded the Barbados fire. One of Hull’s pet projects was the purchase of a large tract of land – five square miles – in 1658 in Rhode Island for the commercial production of horses for export to Barbados, and Parris may have facilitated this trade.³⁵² For the next decade, John Parris would continue to consider himself a New Englander even while traveling frequently between Massachusetts and Barbados and financing multiple trading ventures to the island.³⁵³ He focused his investments on two commodities: sugar and the slaves to produce it. He financed four slaving voyages in 1649-1650 alone. In 1649, Boston’s notary certified that “the Shipp called the ffortune...together with her Cargo belongeth to John Parrish of Charlestowne in New England merchant & is now bound for the coast of Ginney, thence to Barbados & so for New England.”³⁵⁴ In 1650, he funded another “Negro voyage,” reserving ownership of all slaves procured and sold, but granting his captain the special privilege of bringing “four Negroes freight free,” of course “provided he there buy them with his owne goods.”³⁵⁵

³⁵⁰ Hosmer, *Winthrop’s Journal*, 2:89.

³⁵¹ Ralph J. Crandall and Ralph J. Coffman, “From Emigrants to Rulers: The Charlestown Oligarchy in the Great Migration,” *The New England Historical and Genealogical Register* 131 (April 1977): 132.

³⁵² This venture is detailed in Romani, “The Pettaquamscut Purchase.”

³⁵³ *Winthrop Papers*, 5:71.

³⁵⁴ *Aspinwall Notarial Records*, 411.

³⁵⁵ *Aspinwall Notarial Records*, 300-301. For more of John Parris’s numerous trading ventures to Barbados, see *Aspinwall Notarial Records* 290-296, 309-312, and Recopied Deed Record Books (RB) 3/3, 535-537, Barbados Archives, Black Rock, Barbados.

But as much as John Parris embodied the archetypical New England merchant, financing the movement of commodities, he was also a Barbadian sugar planter. He first bought land on Barbados in 1646, enjoying its “profitts benefits and advantages” and eventually developing three large sugar plantations and becoming one of the largest planters on the island with 400 acres.³⁵⁶ His brother Thomas had been one of the first settlers on Barbados in 1628.³⁵⁷ Thomas returned to England for several decades, but eventually went back to Barbados in the 1660s and became a sugar planter himself.³⁵⁸

The records show that John and Thomas Parris were hard-dealing financiers, negotiating favorable rates with shipmasters and other merchants and aggressively seeking out economic opportunity. They were masters of hundreds of slaves and they were industrial sugar producers. They were worldly travelers who voyaged throughout the Atlantic. They were also likely devout Reformed Protestants. As John Winthrop noted, John “blessed God” for the spiritual growth he had experienced during his first trip to New England. Thomas’s will similarly reveals passionate nonconformist beliefs. Thomas was a friend of the noted puritan minister John Oxenbridge, who attested that Thomas had “made the match” between himself and John’s widow, Susanna.³⁵⁹ Both the friendship between Thomas and the Rev. Oxenbridge, who lived in Barbados before moving with Susanna to New England to serve as the minister of the First Church of Boston, and the marriage between John’s widow and the minister, as well as the later Salem ministry of Thomas’s son, Samuel, also a planter and merchant, indicate that the Parris family was deeply devout. Such

³⁵⁶ *Suffolk Deeds* (Boston: Rockwell and Churchill, 1880), 1:119; RB 3/2, 778-9, and RB3/3, 465-6 and 756, Barbados Archives.

³⁵⁷ “Papers Relating to the Early History of Barbados,” *Timebri* 1891 (5): 58-59; *Some Memoirs of the First Settlement of the Island of Barbados...* (Barbados: William Beeby, 1741), 80.

³⁵⁸ John died in 1660 and Thomas died in 1673. Wills of Thomas Parris and John Parris, RB 6/8, 519, and RB 6/14, 453, Barbados Archives.

³⁵⁹ Henry F. Waters, *Genealogical Gleanings in England* (Baltimore: Genealogical Publishing Company, 1969), 1:420-422.

connections demonstrate the uselessness of maintaining the separate historical categories of “puritan,” “New England merchant,” and “West Indies sugar planter.”

The Winthrops, puritan “first family” and founders of the Massachusetts Bay colony, were also intimately associated with the development of the West Indies. Two of John Winthrop’s sons, Adam and Stephen, were merchants with extensive dealings in the Atlantic trade. Adam was a founder of the Atlantic timber trade, harvesting New England’s wood for the Atlantic islands and the Caribbean.³⁶⁰ Stephen was one of the first merchants to collect New England agricultural products and ship them to the Canaries and other Atlantic islands.³⁶¹ We have already seen how two of John’s other sons, Henry and Samuel, settled in the West Indies and became planters, raising tobacco and sugar. Henry migrated to Massachusetts after producing one of Barbados’s first tobacco crops and died young. Samuel, much more successful, was raised in Massachusetts from the age of four, and began his career as a merchant in the Canary Islands. Migrating to the West Indies with the intent to settle, he lived Barbados and then moved to Antigua in 1649.³⁶²

The Winthrops operated in a world of migration, with the constant movement of relatives, friends, commodities, and money between New England and the West Indies. In May of 1647, for example, John Winthrop wrote to his son John Jr. about his own investments in trade, noting the “very good receitts” his ships had had in the West Indies. In the same month, John received a letter from John Jr.’s brother Samuel, in which Samuel announced his arrival in Barbados, his intent to settle there, and his assumption that his friends and relatives “I hope wilbe willing to make use of me as Soone as another, especially our New England merchants.”³⁶³ Still in Barbados in 1648,

³⁶⁰ Margaret Ellen Newell, *From Dependency to Independence: Economic Revolution in Colonial New England* (Ithaca: Cornell University Press, 1998), 60; Carroll, *Timber Economy*, 86.

³⁶¹ For Stephen’s business dealings, see Gragg, “Puritan in the West Indies,” 769.

³⁶² For Samuel Winthrop’s travels and investments, see “Letters of Samuel Winthrop,” *Massachusetts Historical Society Collections* (Boston: MHS, 1882), 5th ser. 8:234-265.

³⁶³ John Winthrop to John Winthrop Jr., and Samuel Winthrop to John Winthrop, May 1647, *Winthrop Papers* 5:161-163.

Samuel wrote again of his dependence on personal contacts, repeating his hope that “our New England Freinds will be as willing to imploy me there [in Barbados] in their busines as soone as others.”³⁶⁴ As was typical of Massachusetts transplants, Samuel was religious, and remained close financially and emotionally to his family in Massachusetts. He sent his children to be educated in New England, “demeing that place more fit for it than this,” and continued to identify with the colony, repeatedly stating his intent to someday return.³⁶⁵

Other prominent families followed the same pattern of settlement and investment as the Winthrops. Like John Winthrop, William Vassall was a devout Reformed Protestant, a founder of the Massachusetts Bay Company, and part of the first group of settlers of Massachusetts Bay in 1630. In 1648 he moved to Barbados and settled into a life as a sugar planter, while retaining his land in New England and his extensive contacts and investments in the New England-West Indies trade.³⁶⁶ There were many other prominent Boston merchants turned Barbadian planters. Nathaniel Maverick, son of pioneering Boston merchant Samuel Maverick, who was one of the first to trade with the West Indies, died a wealthy sugar planter on Barbados in 1670.³⁶⁷ John Turner financed voyages to the West Indies in the 1640s before moving to Barbados about 1650; there he grew sugar and continued to engage in trade, while his cousin, also named John Turner, traded out of Salem.³⁶⁸ All of these men moved from primarily buying and retailing sugar to primarily producing it, though their web of family relationships meant they were involved in all aspects of the sugar market.

³⁶⁴ Samuel Winthrop to John Winthrop Jr., Sept. 1648, *Winthrop Papers* 5:254.

³⁶⁵ Samuel Winthrop to John Winthrop Jr., Sept. 8 1657, “Letters of Samuel Winthrop,” 244.

³⁶⁶ Will of William Vassall, RB 6/14 501, Barbados Archives; Smith, *Slavery*, 22-23.

³⁶⁷ G. Andrews Moriarty, “Barbadian Notes,” *The New England Historical and Genealogical Register* 67 (1913): 366.

³⁶⁸ G. Andrews Moriarty, “The Turners of New England and Barbados,” *The Journal of the Barbados Museum and Historical Society* 10 (Nov. 1942): 7-10.

Tellingly, they usually listed their occupations on government documents as “merchant,” even while producing thousands of pounds of sugar a year on their plantations.

Perhaps even more significantly, countless other New Englanders with more modest resources planted, financed, shipped, marketed, bought, and sold sugar, molasses, and rum in the first decades of West Indies sugar production. Some invested in one voyage, others in many. Some specialized in the procurement of New England’s raw materials for export. Theodore Atkinson, for example, emigrated to Boston as a servant in 1634, but by the 1640s had set himself up as a small commercial middleman.³⁶⁹ He owned one sixteenth of the ship *Tryall* in the 1640s, and he provided the cargo of fish bound for Barbados aboard the *Remember* in 1650.³⁷⁰ In 1660 Atkinson helped prominent merchant Robert Gibbs put together a voyage to Barbados, supplying him with a cargo of pipe staves and boards and arranging the “hire of the ketch *Beaver* to Barbados.”³⁷¹ Abraham Palmer, a farmer, owned only land, animals, and basic furnishings at the time of his death. He was also an international investor in wood products and sometime merchant; in 1652, he took his timber to Barbados himself.³⁷²

The return on these exports and investments was often made in sugar; sugar so reliably held its value that it was used as currency across the Atlantic world. In 1650 John Thompson, master of the ship *Guift*, agreed to pay William Paine of Ipswich seventeen pounds’ worth of “good merchantable Muscavados Sugar” within ten days of the ship’s arrival at Barbados.³⁷³ Most likely Paine had commissioned Thompson to sell some New England produce for him; he would have

³⁶⁹ Darrett B. Rutman, *Winthrop’s Boston: Portrait of a Puritan Town, 1630-1649* (Chapel Hill: The University of North Carolina Press, 1965), 247.

³⁷⁰ *Aspinwall Notarial Records*, 15-16, 287.

³⁷¹ Robert Gibbs Business Records, 1659-1708, Box 2, Folder 12, American Antiquarian Society, Worcester, MA.

³⁷² Robert H. Rodgers, ed., *Middlesex County in the Colony of the Massachusetts Bay in New England, Records of Probate and Administration, October 1649-December 1660* (Boston: The New England Historic Genealogical Society, 1999), 240-241.

³⁷³ *Aspinwall Notarial Records*, 340.

received about 500 pounds of coarse brown sugar, for which he would find a ready market in Massachusetts.

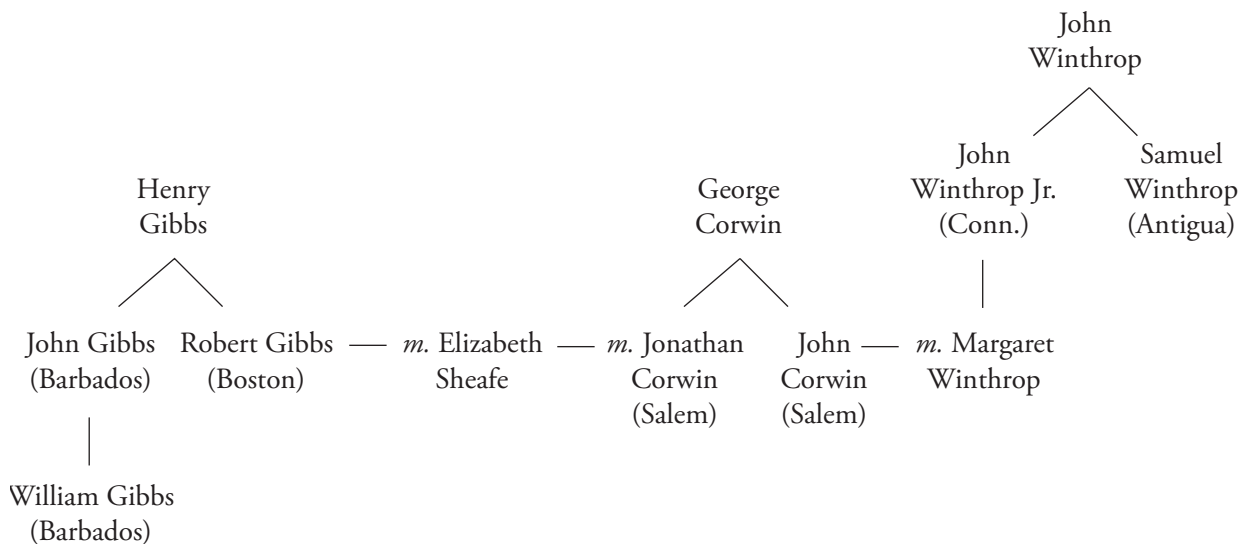
A few families stand out for their involvement in the ties between the regions. Some of Samuel Winthrop's most important "New England Friends" were the Corwin and Gibbs families. Samuel's niece, Margaret Winthrop, daughter of John Winthrop Jr., married John Corwin, son of Salem merchant and shopkeeper George Corwin and brother of Jonathan Corwin, who would enter the family mercantile business in the 1650s. George Corwin was investing in voyages to Barbados by 1652 and supplied a wide area of Essex County with tropical commodities.³⁷⁴ He almost certainly bought and sold Samuel Winthrop's sugar; in his letters, Samuel Winthrop refers twice to "Couzin Curwin," probably George or John or possibly Jonathan.³⁷⁵ In 1675 Jonathan Corwin married Elizabeth Sheafe Gibbs, widow of Robert Gibbs. Robert Gibbs was a prominent merchant, shopkeeper, and sugar importer in Boston. Gibbs's brother John and his nephew William were merchants in Barbados. In his account books, Jonathan Corwin makes several references in the 1660s to "my brother John Gibbs of Barbados," probably meaning his wife's deceased ex-husband's brother.³⁷⁶ Thus the marriage of Jonathan Corwin and Elizabeth Gibbs united three mercantile families, the Winthrops, Corwins, and Gibbises, with branches both in Massachusetts and the West Indies and fortunes staked on the personal and trade relationships between the two colonies.

³⁷⁴ *Suffolk Deeds* 1:251.

³⁷⁵ Feb. 2 and 23, 1671, Samuel Winthrop to John Winthrop Jr., "Letters of Samuel Winthrop."

³⁷⁶ J. Willard Gibbs, *Memoir of the Gibbs Family of Warwickshire, England, and United States of America* (Philadelphia: Lewis & Greene, 1879), 13-14.

Figure 1: The Corwin, Gibbs, and Winthrop Families in New England and the West Indies



These bonds facilitated the importation of sugar products into New England and enabled sugar product consumption in the region to rise quickly in the 1650s, as the Corwin and Gibbs men pursued a source of sugar products to place on their store shelves and their planter contacts sought a market. In 1666, for example, William Gibbs supplied his Uncle Robert’s ship the *Elinor & Christian* with sugar, molasses, and rum. William paid Robert for the freight and marketing of the goods; Robert served as his agent in Massachusetts, distributing the sugar products.³⁷⁷ John Gibbs and Jonathan Corwin also made an arrangement for a portion of a similar cargo in 1672, consisting of twelve casks of rum. In his careful account of the venture, Corwin tabulated the amount that Gibbs owed him for “freight,” “porteridge,” “wharfage,” “lighterage,” “cooperidge,” “Storehouse roome,” and “Commission of saide goods for Sales.” Together with his previous balance, Corwin calculated that “my brother John Gibbs” owed him £47.11.6. Corwin then went on to detail his sales of the rum to three bulk buyers, John Paine, Thomas Bredon, and John DeCoitt. Corwin made sure that

³⁷⁷ Robert Gibbs Business Records, Box 2, Folder 13.

the rum sold for a total of £47.11.6, and so Gibbs's debt to Corwin was paid.³⁷⁸ Such accounts reveal both the interdependence of producers in Barbados and wholesalers and retailers in New England (both Robert Gibbs and Jonathan Corwin had shops that sold sugar products to a wide variety of rural and urban customers) and the importance of family relationships in securing the trust necessary for such accounts.

Jonathan Corwin's investments in supplying the West Indies with New England goods – and supplying even rural areas of New England with West Indies goods – were wide-ranging. In a common arrangement for the time, he managed the Cape Porpoise River Falls sawmill on the Piscataqua River in Wells, Maine, in partnership with a Wells sawyer named Edward Littlefield. Jonathan's brother-in-law, Eleazar Hathorne, husband of Jonathan's sister Abigail, traveled to Wells to serve as local manager. Corwin's role was to arrange both for the export of the mill's wood products and for the import of tropical and other goods to pay mill workers and suppliers, without which the local settlers would have had little motivation to labor for the mill.

³⁷⁸ Curwen Family Papers, MSS 45, Jonathan Curwen Papers, Series IIA, Vol. 8, Phillips Library, Peabody, MA.

Figure 2: Page from Jonathan Corwin's Account Book

Invoice of two hogsd and feices of Sugar: two hogread
 one feices of Rum flower hogsd of Mollafes and one Small
 bagg of Cotton wool; Laden on Board the Pink Dolphin Jack
 Read Commander bound for Salem; being for the Paper Accompt
 of Riggs of m^r Jonathan Corwin; to Carl W. Charges is D^t: 8: 8-

1 -	# 1: hogsd Sugar of ^{la} meal: 1014: att: 10: 6 ⁶⁻² $\frac{1}{2}$ fl	-	-	05 = 06: 06
2 -	# a feice Sugar of ^{la} meal - 780: at: 9 ⁸ $\frac{1}{2}$ fl	-	-	03 = 10: 03
3 -	# a hogsd Ditto - of ^{la} meal - 1081 - att - 11 ⁸ $\frac{1}{2}$ fl	-	-	05 = 18: 11
	# the Sugar Casko at 30 ⁶ $\frac{1}{2}$ fl fun	-	-	01 = 00: 00
	# the 18: Duty of the Sugar	-	-	01 = 18: 00
	# the 4 ¹ / ₂ $\frac{1}{2}$ fl C Duty at: 12: 6 ⁸ $\frac{1}{2}$ fl	-	-	00 = 16: 00
1: to: 4 -	# 4: hogsd of Mollafes at: 7: 10 ⁶ $\frac{1}{2}$ fl fun	-	-	07 = 10: 00
	# the Duty of Ditto att 4 ¹ / ₂ $\frac{1}{2}$ fl	-	-	00 = 06: 09
1 -	# a: hogsd Rum ^{la} - 93 ¹ / ₂ $\frac{1}{2}$ fl			
2 -	# a hogsd Ditto - ^{la} - 93 ¹ / ₂ $\frac{1}{2}$ fl	241: gall: att: 9 ⁸ $\frac{1}{2}$ fl	-	09 = 00: 09
3 -	# a feice Ditto - ^{la} - 54			
	# the Casko at 40 ⁶ $\frac{1}{2}$ fl fun	-	-	01 = 06: 08
	# the Duty at 4 ¹ / ₂ $\frac{1}{2}$ fl fun	-	-	00 = 08: 04
	# Storage of the Goods	-	-	00 = 10: 00
	# 1: bagg Cotton wool: 146: at 4 ⁸ $\frac{1}{2}$ fl. & 7 ⁸ / ₂ in the hundred			02 = 09: 06
	# the ¹ / ₂ penny Duty: 6: the 4 ¹ / ₂ $\frac{1}{2}$ fl Duty - 3: 4			00 = 09: 04
	# the bagg for the wool and Heaving - 4 ⁸ $\frac{1}{2}$ fl			00 = 04: 00
	# Commission at 5 $\frac{1}{2}$ fl C			02 = 00: 06
	Errors Excepted of William Andrews			£ 42 = 15: 06

Barbados the: 27 April 1687 -

Source: Curwen Family Papers, MSS 45, Jonathan Curwen Papers, Folder 7 (Ships' Papers), Phillips Library, Peabody, MA.

Hathorne's accounts with Littlefield and with the village residents reveal the essential relationship: Corwin provided "Salem" goods – really tropical imports – and the villagers provided work at the sawmill and logs and farm products for export. Hathorne's list of the mill's debts over three months in 1679 includes "goods from Salem" (the biggest expense) and several entries for "Rumb to workmen." Maintaining the dam for the mill alone during this period cost Corwin a total of two and a half gallons of rum paid to the men repairing it. Littlefield's personal account with Corwin from 1681 shows him buying shoes, cloth, and thirteen gallons of molasses "as mony," a reference to the high value of sugar products in the local economy. He paid for these goods with sawn boards.

Accounts reveal how other settlers allotted some of their time to the mills in order to gain access to sugar products. Local settler Thomas Avery worked five days at the mill in December of 1679, earning two purchases of molasses, two of rum, some linen, and three pennies' worth of tobacco. John Bugg bought salt, nails, cotton, rum, and molasses, and paid for them with "worke done at the mills" and "helping goods ashore." Logger John Barrott bought mostly rum and sugar, paying by "the Loggers ginirall account." Thomas Coffins bought tobacco, rum, powder, and sugar; he probably worked in another mill, that of sawyer Joseph Storer, for he paid with a note from Storer promising "merchantable boards."³⁷⁹

These boards ended up on ships like the *America*, which sailed down the Piscataqua in 1684 bound for the West Indies and arrived in Nevis with "8000 foot of deal boards. 4,000 hhds. staves. 1000 pipe staves. 14 hhds. fish. 4 bls. mackerell. 4 bls. of beef. 3 bls. of tar. 1 hhd. bread. 1 bl. lamp:oil. 35 bushells of corn and quintalls of fish. 1 firkin of butter. 9 pair of shoes."³⁸⁰ Doubtless

³⁷⁹ Curwen Family Papers, MSS 45, Jonathan Curwen Papers, Series IIA, Box 1, Folder 8, Phillips Library, Peabody, MA. Littlefield's account also shows debt for Indian corn and pork; these are probably products he bought locally on Corwin's account.

³⁸⁰ Thornton, "Some Statistics," 271.

the *America* reloaded with sugar products to be delivered to Boston, Salem, or even back up the Piscataqua, for distribution throughout the New England countryside. This dynamic world of consumption and commerce was one face of late-seventeenth-century New England. I turn now to a seemingly unconnected development, the spiritual hysteria that consumed the Massachusetts Bay colony in 1692, a crisis driven in large part by fears and anxieties of the merchants and investors of the Winthrop, Corwin, and Parris families.

Figure 3: Page from Eleazar Hathorne's Account Book

1679 (23) John Barrett, is, D. S. Callow To: H. D.

Octob: 24	To 1 qrt Rumb, 12	---	---	---	---	100: 01: 00
Novemb: 3	To several particulars, as in wast booke,	---	---	---	---	100: 12: 11 1/2
6	To 1/2 pt Rumb, 3	7 th day: To several particulars,	---	---	---	100: 09: 03
8	To for murr paid Capt: James Dondleton.	---	---	---	---	100: 12: 10
22	To 6 lb Ham & Silke e 1 1/2 pt Rumb	---	---	---	---	100: 03: 09
25	To 2 Sugar, 4; 26 th day: 1/2 pt Rumb, 3	---	---	---	---	100: 00: 07
January 5	To 1/2 lb Salt, 25	---	---	---	---	100: 01: 09
	To murr in posting: Novemb: 5	1 1/2 pint of Rumb	---	---	---	100: 00: 00
						02: 00: 05 1/2

Ditto Pr. By the Loggers generall acct. 101: 04: 00.
By their noack

Left to ballance this 17th January -
1679: and out from me fifteen shilling
& five pence to be paid Hathorne or
his order, in merchantable board, all
mony paid, sometime in April next
with my hand.

John Barrett

Source: Curwen Family Papers, MSS 45, Jonathan Curwen Papers, Series IIA, Box 1, Folder 8, Phillips Library, Peabody, MA.

The Salem Witch Trials

On the morning of March 1, 1692, Jonathan Corwin turned his attention from his ships and mills to his responsibilities as a leading legal and spiritual authority of the colony. In his role as “assistant,” or magistrate, he traveled to the outskirts of Salem to undertake a most serious task: the interrogation of three accused witches. Along with his brother-in-law John Hathorne (John

was the brother of Eleazar, Corwin's mill manager), Corwin questioned the women. Two of the accused, Sarah Good and Sarah Osburne, were villagers, though their antisocial behavior placed them on the fringes of society. The third, Tituba, was a slave from Barbados.

Corwin turned to the first woman brought in for questioning. "Sarah Good what evil spirit have you familiarity with?" he began. "None," came the answer. "Have you made no contract with the devil?" Corwin insisted. "Why do you hurt these children?" Though surly and at times confused, Sarah Good maintained her innocence even under duress; insisting "I do not hurt them I scorn it...I am falsely accused." Sarah Osburne similarly resisted her questioners, maintaining that "I never saw the devill in my life." Corwin then turned to Tituba, Samuel Parris's slave, whom the minister had brought with him when he migrated from Barbados to the Bay colony. Suddenly the interrogation took an unusual turn, as the investigators got the answers they were looking for and some that they hadn't anticipated; for Tituba not only quickly admitted that she was a witch, but described an evil conspiracy at work.

Initially, Tituba denied any wrongdoing, asserting that "I have done nothing." But after only five questions, likely because of her subjugated status and under probable threat of a beating, she reassessed her situation and abruptly reversed her story. A devil, a "thing like a man," she suddenly announced, had appeared to her and told her to serve him. This man was from Boston, and he had four women with him, two of whom were (unsurprisingly) Good and Osburne, but the other two of whom were strangers. The man and the strange women were dressed like the puritan elite, in a coat and black and white silk. Perhaps based on the man's respectable appearance, at first she had "beleive him God," but then she realized his evil intentions. This secret society of witches had offered her a yellow bird and "fine" and "pretty" "things" if she would join them, and threatened to hurt her if she refused. The witches "Stoped [her] Eares" at prayer time and ordered her to kill children. Several other unnatural creatures appeared with them, including an imp "all over hairy, all

the fface hayry & a long nose.” Soon the man showed her a book that nine people, some from Boston and some from Salem, had signed in a depraved pact. In short, Tituba described a cabal of evildoers and monsters posing as Christians, tempting potential recruits with material goods. These witches had successfully penetrated their isolated village from the outside and were bent on torturing its inhabitants. They were not motivated by personal enmity, as was usually assumed to be the case with accused witches in small villages. Rather they embodied an abstract and unfathomable evil.³⁸¹

Tituba confessed to witchcraft on March 1, 1692. “Soon after,” noted an eyewitness account of the events, “these afflicted persons complained of other persons afflicting them in their fits, and the number of the afflicted and accused began to increase. And the success of Tituba’s confession encouraged those in Authority to examine others that were suspected...and thus was the matter driven on.”³⁸² Without Tituba’s story, it is possible that the initial suspicions of witchcraft would have faded away and no one would have been executed. Even with her confession, numerous other arrests, vigorous questioning and intense psychological pressure, and a growing group of the accused confined in brutal conditions in jail, the judges could not extract any more confessions until a teenage girl broke down on April 19, more than six weeks after Tituba’s accusations had sparked a manhunt.

Strikingly, many New Englanders who figured most prominently in migration and trade between Massachusetts and Barbados were deeply involved in the persecution of the at least one hundred and fifty people accused of witchcraft in Massachusetts in 1692. The Parris and Corwin

³⁸¹ “Examinations of Sarah Good, Sarah Osburn, & Tituba, as Recorded by Ezekiel Cheever,” and “Two Examinations of Tituba, as Recorded by Jonathan Corwin,” in *Records of the Salem Witch-Hunt*, ed. Bernard Rosenthal (Cambridge: Cambridge University Press, 2009), 126-136. Almost as soon as the Trials had ended, a mythology arose casting Tituba as the precipitator of the witch trials through her alleged activities of teaching magic rituals and telling stories of the occult to a circle of impressionable young girls. There is no evidence that these activities occurred. See Bernard Rosenthal, “Tituba,” *OAH Magazine of History* 17 (Jul. 2003): 48-50.

³⁸² John Hale, “A Modest Inquiry into the Nature of Witchcraft,” in *Narratives of the Witchcraft Cases, 1648-1706*, ed. George Lincoln Burr (New York: Charles Scribner’s Sons, 1914), 415.

families played a particularly significant role in the infamous Salem Witch Trials. It was Samuel Parris, Thomas's son, who first discovered the Devil in his own home, and his Barbadian slave who first described a satanic plot against the Bay colony. (Tituba's origins were likely in South America, but she had been enslaved for much of her life on Barbados; Samuel Parris purchased her on the island in the 1670s.) The Corwin family contributed extensively to the persecutions; Jonathan Corwin was one of the two initial investigators of witchcraft in Salem and later was one of the nine judges on the Court of Oyer and Terminer that condemned nineteen people to die. His nephew George Corwin, son of John Corwin and Margaret Winthrop, was Salem's sheriff and executioner.³⁸³ Many other members of Jonathan Corwin's overlapping circle of relatives and business associates, including John Hathorne and Wait Still Winthrop, were also responsible for the executions. Indeed, Corwin was related through commerce, credit, and marriage to five of the nine other Witch Trial judges, a judicial panel that one historian describes as comprised of the "superrich" of the Bay colony.³⁸⁴ What motivated Massachusetts Bay's most worldly and successful merchants to turn from their work with ships, slaves, and sugar to an invisible battle between good and evil?

The story begins with Samuel Parris, Thomas Parris's son. Raised on Barbados, Samuel was sent to Massachusetts in the early 1670s to attend Harvard College and study for the ministry. But after his father's death in 1673, Samuel returned to Barbados to take over the family plantation, "one hundred and seventy acres or thereabouts together with all the Christian servants slaves cattle sheep stock buildings mills copper stills utensils."³⁸⁵ He also worked as a merchant and a selling agent for other planters on the island. In the late 1670s, after a devastating hurricane, he sold much of the

³⁸³ Elaine G. Breslaw, *Tituba, Reluctant Witch of Salem: Devilish Indians and Puritan Fantasies* (New York: New York University Press, 1996); George Rea Curwen, "Notice of the Curwen House and of its Occupants," *Essex Institute Historical Collections* 2 (1860): 228.

³⁸⁴ Emerson W. Baker, *A Storm of Witchcraft: The Salem Trials and the American Experience* (Oxford: Oxford University Press, 2015), chap. 6.

³⁸⁵ RB 6/8, 519, 521 and RB 3/11, 203-204, Barbados Archives.

plantation, though he retained ownership of one tract of land in St. Peter's Parish. He moved back to Boston in 1680, continuing to ply his trade as a merchant and shopkeeper. He rented property on a wharf, appears to have invested in shipping, and ran a shop. But despite his efforts, and with the humiliating awareness that many others with his sort of experience and connections had flourished, his mercantile business failed. In 1683 and 1684 his landlord and a shipowner sued him for lack of payment.³⁸⁶

Another merchant, writing a few years after the Trials, summed up in patronizing terms the motivation behind Parris's subsequent decision to pursue a spiritual vocation: "He was a Gentleman of Liberal Education, and not meeting with any great Encouragement, or Advantage in Merchandizing, to which for some time he Apply'd himself, betook himself to the work of the Ministry."³⁸⁷ In 1689, he gained the ministry of the church of Salem Village, a position which offered a secure income and elevated social status along with a pulpit from which he could preach his brand of fervent puritanism. But, like everyone else in Massachusetts Bay, the now Reverend Parris could not rid himself of worldly influences. Even while championing an exclusive church that demonized external influences, Parris continued to collect rent on lands in Barbados. Tituba, his Barbadian slave, played on his deepest insecurities, and those of the magistrates, when she blamed outside infiltrators for threatening the sanctity of the colony's churches and communities. Tituba's manipulation of her interrogators' anxieties over the colony's socioeconomic dependence on Atlantic trade transformed what could have been contained as a village scandal into a colony-wide witch hunt.³⁸⁸ The idea that Tituba's Barbadian background exposed her to satanic practices, an

³⁸⁶ Larry Gragg, *A Quest for Security: The Life of Samuel Parris, 1653-1720* (New York: Greenwood Press, 1990), 15-17, 30-35.

³⁸⁷ Robert Calef, "More Wonders of the Invisible World," in *Narratives of the Witchcraft Cases, 1684-1706*, ed. George L. Burr (New York: Charles Scribner's Sons, 1914), 341.

³⁸⁸ Benjamin C. Ray, "Satan's War Against the Covenant in Salem Village, 1692," *The New England Quarterly* 80 (Mar. 2007): 83.

assumption shared by her interrogators and contemporary observers, further reveals the uneasy association that early New Englanders made between the West Indies and foreign, corrupting influences.³⁸⁹ An astute observer of puritan culture, and acquainted all too well with the full scope and power of the New England-Barbados sugar economy, Tituba helped guide her masters into what would eventually be exposed as a tragic and humiliating delusion.

Historians have struggled to explain the unprecedented level of witch persecution that arose in Massachusetts in the spring of 1692. The initially compelling argument that rural villagers' resentment of Salem's commercial wealth underlay the hysteria has lost popularity in recent decades. Certainly the entanglements of the Parris family (among so many others) in trade, sugar production, and puritanism demonstrate the inconsistencies of this interpretation. The neat explanation that "traditional" farmers accused "capitalist" townspeople has been discredited.³⁹⁰ Instead, scholars now tend to favor psychological analysis of the judges' motives in disregarding a tradition of judicial restraint and relying on spectral evidence, behaviors which were recognized as inexplicable lapses in judgement by many within months and by most within a few years. It seems that sincere religious fervor was an important factor in the persecutions – the belief, sparked by theological disputes within Salem Village and championed by Samuel Parris, that the Devil was attacking the entire New England church in an all-out assault. Yet this appropriate attention to participants' deeply held

³⁸⁹ This assumption is revealed by Corwin's interrogation and by an account of earlier questioning of Tituba by Samuel Parris, in which she stated that "her Mistress in her own Country was a Witch." Rosenthal, "Two Examinations," 133; Hale, "A Modest Inquiry," 414.

³⁹⁰ This argument was first made by Paul Boyer and Stephen Nissenbaum in their classic *Salem Possessed: The Social Origins of Witchcraft* (Cambridge: Harvard University Press, 1974). Richard Latner, among others, rebuts the theory that the Witch Trials were based on economic interest. He establishes that there was no connection between a person's commercial orientation and his or her role in the Trials; but he does not explore a more complex role for economic factors. Richard Latner, "Salem Witchcraft, Factionalism, and Social Change Reconsidered: Were Salem's Witch-Hunters Modernization's Failures?" *The William and Mary Quarterly* 65 (Jul. 2008): 423-448. For a historiographical review of recent approaches, see Benjamin C. Ray, "The Salem Witch Mania: Recent Scholarship and American History Textbooks," *Journal of the American Academy of Religion* 78 (March 2010): 40-64. Besides the connections discussed here, there were, of course, other social forces at play, including government instability, local political hostilities, and devastating frontier warfare. See also Emerson Baker's *A Storm of Witchcraft*; he argues convincingly that the convergence of multiple factors was necessary for the eruption of such an unusual episode of hysteria and violence.

religious convictions does not preclude the possibility that anxiety over the reliance of New England villages on foreign markets was a factor in the accusations, a phenomenon that had existed for decades but was becoming increasingly impossible to reconcile with the vision of the Bay Colony's founders. The final decades of the seventeenth century saw both the moderation of religious practice as expressed in the Halfway Covenant, and a general shift away from religious utopianism to commercialism as the colony's driving force.

Samuel Parris was an "extremist leader" of puritan "conservative religion."³⁹¹ Though hardly a brilliant theologian, he was well-educated in Christian doctrine and an impassioned zealot. Yet Parris had spent most of his life dedicated to sugar production and trade. It was only after failing to prosper in commerce that he turned his career to the ministry. In a typical sermon of September 1692, reflecting on the events of the past few months, he took what had begun as minor witchcraft accusations against marginalized women and portrayed them as a spiritual catastrophe. "Yea, & in our Land," he warned, "how many, what Multitudes, of Witches and Wizards has the Devil instigated with utmost violence to attempt the overthrow of Religion?" He went on to expound on his favorite theme, that of the rigid division of the world into pro- and anti-religious forces locked in eternal battle. "Here are but 2 parties in the World," he thundered, and "Every one is on one side or the other."³⁹² His obsession with maintaining the purity of the Church, and his particular rage at corrupting outside influences, was likely connected to the fact that he himself, despite exposure to commercial opportunities, had struggled to succeed in the cosmopolitan world of trade. If his mercantile activities had brought him greater wealth, he would not have become an angry minister in a rural village, locked in a bitter battle with his congregants not only over doctrine but over the

³⁹¹ Ray, "Mania," 56.

³⁹² James F. Cooper, Jr., and Kenneth P. Minkema, "The Sermon Notebook of Samuel Parris, 1689-1694," *Publications of the Colonial Society of Massachusetts* 66 (1993): 201-203.

amount of firewood and salary due to him.³⁹³ Fear of the power and impersonality of the Atlantic market manifested itself within individuals rather than between distinct groups. In this case, such fears caused a former sugar planter to seek to “purify and awaken” a small New England village, with an enthusiastic response.³⁹⁴

Such internal tension was felt as much by New England’s winners as by its losers in the game of commerce. The mercantile elite too was torn by contradictory life purposes. No one embodied commercialism more fully than Witch Trial judge Jonathan Corwin, who devoted his life to building his family’s mercantile empire. An examination of his voluminous business ledgers, with thousands of carefully kept accounts necessitating constant attention to the Atlantic market, reveals a man whose world revolved around counting, buying, and selling commodities, a world where everything had a price. It seems incredible that this merchant could have condemned so many to die based on spectral evidence provided by hysterical teenage girls. Yet it is this very paradox that explains the great sense of purpose and urgency that drove the trials. By finding and condemning witches, Corwin proved to himself and the community that he was still a committed Christian; that he was on the right “one side,” though in truth his life defied such easy categorization.

There was no one set of economic interests that separated the accusers of 1692 into one camp and the accused into another. Attempts at such analysis have proved futile, because in fact *everyone* shared the same basic interest in access to cheap, plentiful consumer goods; and *everyone* experienced some level of inner turmoil at this desire, which undercut the very premise of their Christian commonwealth.

³⁹³ Parris’s intense concern with his compensation as minister, as well as his extensive attempts to make a living commercially before entering the ministry, imply that wealth and probably prestige were important to him.

³⁹⁴ Richard Latner, “‘Here Are No Newtters’: Witchcraft and Religious Discord in Salem Village and Andover,” *The New England Quarterly* 79 (March 2006): 102.

This tension had existed from the founding of the Bay colony, and indeed had almost destabilized it during its vulnerable period of establishment in the 1630s. The new colony's clerical leadership had censured fully one-sixth of the adult males of Boston for antinomianism, a spiritual philosophy identified with import merchants and their suspected toleration of free market practices and conspicuous consumption.³⁹⁵ To John Winthrop, Nathaniel Ward, and other members of their faction, antinomianism was a horrifying proto-capitalism disguised as piety. Clergy and their dissenters had become locked in a passionate debate over subtle distinctions in belief, even while battling hunger and sickness in a new land.

The leadership won that doctrinal battle, but could not erase the underlying philosophical challenge to spiritual purity, which would continually resurface throughout the century before erupting in the Witch Trials. In 1668, the Dorchester preacher William Stoughton – whose own brother John had “died at Barbados” as a young man – delivered an election day sermon titled “New-England’s True Interest,” which reminded his congregation of their solemn mission, that the “the Lords promises, and expectations of great things, have singled out New-England...above any Nation or people in the world...the very world...common ordinary Professors...the faithful precious suffering Saints of God in all other places, that have heard of the Lord’s Providences towards us, do expect and promise great things from us...” Whether those “great things” were temporal or spiritual may have been a source of anxiety for Stoughton, who by some measures could be accounted a rapacious capitalist. Turning down several ministerial posts, he became in the middle decades of the seventeenth century a speculator and one of the largest landowners in Massachusetts. He was as well deeply enmeshed in local and imperial politics, and his financial interests aroused suspicions about his loyalty to the Massachusetts government. All this was forgotten, however,

³⁹⁵ Mark Valeri, *Heavenly Merchandize: How Religion Shaped Commerce in Early America* (Princeton: Princeton University Press, 2010), 42.

during the months that he served as the relentless Chief Justice of the Court of Oyer and Terminer, during which he proved to be a great champion of spectral evidence (over the concerns of other ministers), pressuring the Court to deliver convictions.³⁹⁶

By that time the antinomian controversy of the 1630s had long since subsided. Conflict instead arose out of the unease of individuals, some powerful, some not, about the conflict within their own hearts. Stoughton, among many others, conceived of this struggle as an existential war in which New England was destined to play a vital part. “[T]he Controversie comes now to be stated more openly,” he had warned on that spring day in 1668. “The field is large whereinto the Forces on both sides are drawing...He that gathereth not with Christ, scattereth abroad; we must decide for whom we are, and choose our side, there will be no other Remedy...to be called Poor New-England, this may seem to be a Reproach but in truth is not...but to be called False and lying New-England, this shall be a blot and a reproach never to be wiped away.”³⁹⁷ Stoughton’s own “true interests” over the course of the century were (and remain) difficult to discern, ambitious as he was in religious, political, and economic spheres; but the strain of balancing his various aspirations – and those of the colony – helps to explain his ruthlessness and rigidity during the Witch Trials.

The Trials represented a last convulsion of apprehension over the transition from a spiritually-driven society to one grounded in commercial activities, most prominently the trade in sugar products. The terror that foreign corrupting forces would infiltrate the New England church community was personified in Salem Village’s own minister, his household, and his economic and

³⁹⁶ *Records of the First Church at Dorchester in New England, 1636-1674* (Boston: George H. Ellis, 1891), 151; William Stoughton, “New-England’s True Interest,” in *Election Day Sermons: Massachusetts*, ed. Sacvan Bercovitch (New York: AMS Press, 1984), 17; Francis J. Bremer, *The Puritan Experiment: New England Society from Bradford to Edwards* (New York: St. Martin’s Press, 1976), 166; Stephen Foster, *The Long Argument: English Puritanism and the Shaping of New England Culture, 1570-1700* (Chapel Hill: University of North Carolina Press, 1991), 255-266. For Stoughton’s extensive speculation in land see Theodore B. Lewis, “Land Speculation and the Dudley Council of 1686,” *The William and Mary Quarterly* 31 (1974): 255-272.

³⁹⁷ Stoughton, “New-England’s True Interest,” 23-24.

personal ties to the West Indies, as well as expressed more abstractly through the market dependence of everyone in the colony.³⁹⁸ As we will see in the next chapter, by the 1690s the cultural and economic dependence of New Englanders on these sugar products was extensive, and the growing consumption of rum, in particular, generated alarm. Thus it makes little sense to draw a distinction between “religious” and “economic” motivations for the persecutions, just as the West Indies and New England should not be considered as separate economic zones, nor is it appropriate to construct discrete historical occupational categories such as “merchant,” “planter,” or even “farmer.”

Conclusion

In 1664, sugar merchant Giles Sylvester voiced a complaint that would become increasingly common over the next century, as New England became more and more embedded in the Atlantic economy. Concerned about the English Royal Africa Company’s monopoly on trade with West Africa, Sylvester warned his friend John Winthrop Jr., whose family was also heavily invested in West Indian sugar, that the “Ryall Company, labor to ingross the whole trade of Barbados to themselves; if so...then what will become of poor New England, and their trade?”³⁹⁹ Giles Sylvester and his brothers, Constant and Nathaniel, led yet another family that followed the familiar pattern of engagement in all branches of the sugar trade, with a brother each in London, Barbados, and Shelter

³⁹⁸ Altin Gavranovic touches on this cultural anxiety in his analysis of social ostracism in American history, arguing that “representations of deviants reveal a deep cultural preoccupation with failure and inadequacy.” Gavranovic also makes the important point that while many writers have associated social movements with anxiety over “capitalism,” such connections are of limited value without analysis grounded in specific economic behaviors. Gavranovic and I both see the Witch Trials as an expression of discomfort with the seventeenth-century Massachusetts economy, but in different ways. Gavranovic examines “the growing individualization of moral success and failure;” my emphasis, in contrast, is on the powerlessness induced by consumption. Altin Gavranovic, “Through the Looking Glass Darkly: Episodes from the History of Deviance,” Ph.D. diss., Harvard University, 2012, 8, 29, 99. See also the analysis in Michael G. Hall, *The Last American Puritan: The Life of Increase Mather, 1639-1723* (Middletown, CT: Wesleyan University Press, 1988), 87.

³⁹⁹ Giles Sylvester to John Winthrop Jr., June 28 1664, *Massachusetts Historical Society Proceedings* (Boston: MHS, 1889) 2nd ser. 4:280.

Island off Connecticut.⁴⁰⁰ Giles's recognition of the desire of the mother country to control and monopolize colonial trade, especially of sugar products, reflected the economic rivalry that contributed to the American Revolution. That conflict was rooted in part in the personal and economic involvement in all aspects of sugar production, trade, and consumption by the majority of New Englanders from the earliest years of the twin colonies.

⁴⁰⁰ For the most recent account of the Sylvesters, see Katherine Howlett Hayes, *Slavery Before Race: Europeans, Africans, and Indians at Long Island's Sylvester Manor Plantation, 1651-1884* (New York: NYU Press, 2013).

Chapter Four

“To Procure Our Necessaries”: Sugar Products in the Early New England Economy, 1640-1680

“The Massachusetts Colony...is one of the smallest and poorest tracts of land and produces least of any of the other collonys for exportation...but...they build many ships and other vessels...and make Boston the store of all the plantation comodities.”

– Sir Edmund Andros, 1690⁴⁰¹

Young adventurer John Upham staked his future on the Massachusetts sugar market when he sailed from Barbados to the Bay colony in the mid-seventeenth century. We don't know whether he meant to stay in New England permanently or return to the West Indies, but it is likely that he was related to Malden village's Upham family, one of whom would serve as a witness for the evaluation of his estate. For “John Uphame of Barbades...dyed att sea coming to new Ingland in the eight moneth 1652...” and never realized whatever plans he had for his voyage. At the time of his death, he had only seven possessions to his name, most of which were worth less than a pound; his total estate was appraised at under eight pounds. He had pinned his hopes and invested all of his money on a “Chest with on hundrede wayght of suger in itt,” valued at three pounds.⁴⁰² This commodity, as he knew, could support him for a time after his arrival.

⁴⁰¹ This sentiment of wonder at the success of Boston merchants, expressed by beleaguered governor Edmund Andros in 1690, is usually interpreted as an observation about New England's robust export and shipping industries. A close reading of the text, however, suggests that Andros was commenting as well on Boston's role as a distributor of export commodities from around the Atlantic, including from the West Indies up the North American coast. "*Answer of Sir Edmund Andros to His Instructions*" (Order, The National Archives, UK, Kew, CO 5/855 1690/07/01).

⁴⁰² Robert H. Rodgers, ed., *Middlesex County in the Colony of the Massachusetts Bay in New England, Records of Probate and Administration, October 1649-December 1660* (Boston: The New England Historic Genealogical Society, 1999), 99. My research leads me to believe that this John Upham was probably related to the family of the John Upham who in 1635 migrated to Massachusetts Bay, in yet another example of the close relationships between the settlers of Massachusetts and Barbados. Evidence for this conclusion includes the witnessing of the probate by Nathaniel Upham of Malden, son of the Massachusetts John Upham, and the formal adoption in 1660 of a “fatherless” child (also named John) in 1660 who had arrived from Barbados “eight years since,” precisely when the ship arrived in New England that was carrying the deceased Barbados John Upham's possessions. This child might have been the son of the deceased John Upham of Barbados, and perhaps the nephew or other relative of the Massachusetts John Upham. For more on the Massachusetts Uphams, see Albert G. Upham, *Family History* (Concord, MA: 1845), 15; F.K. Upham, *Genealogy*

As it turned out, his sugar would enrich someone else. Whichever one of his relatives inherited the chest and its contents, it would still end up, as he had probably planned, on the tables of Massachusetts consumers, likely first the extended Upham family and then their friends and neighbors, some of whom were probably also their creditors. At a price of six to seven pence a pound (and perhaps less if the chest was of any value) his sugar must have been of an inferior brown variety, with some of the molasses still oozing through the crystals. Its lower quality would have rendered it all the more accessible to those colonists of modest means. New Englanders allocated their resources to ensure they could afford a store of sugar in their larders, and they enthusiastically accepted the commodity as payment as part of the complex system of credit that was the foundation of the Massachusetts Bay economy. In this way, sugar products were at the forefront of New England's "industrious revolution," as Jan de Vries terms the early modern intensification of household labor in order to purchase consumer goods on the market.⁴⁰³

The sudden shift to sugar production on Barbados in the 1640s, and the great wealth that grew out of it, depended on slavery. Arriving on the island 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."⁴⁰⁴ Slavery's scope and impact on human life is well documented and has been the subject of extensive scholarship. We know how slavery operated; but

and Family History of the Uphams (1887); New England Historical and Genealogical Register 33 (Jan. 1879) 41; New England Historical and Genealogical Register 7 (1853) 14. My monetary assessment of the chest of sugar is based on the imperial 112 pound "hundredweight" (though both the "short" and "long" hundredweight were also in use at the time) and my experience in analyzing sugar prices from seventeenth-century Massachusetts Bay account books.

⁴⁰³ Jan De Vries, "Between Purchasing Power and the World of Goods: Understanding the Household Economy in Early Modern Europe," in *Consumption and the World of Goods*, ed. John Brewer and Roy Porter (New York: Routledge, 1993), 107; and see my discussion of the concept in the introduction.

⁴⁰⁴ Sir George Downing to John Winthrop Jr., Aug. 26 1645, *Winthrop Papers* (Boston: The Massachusetts Historical Society, 1947), 5:43.

why were Barbadian slaves were able to “earne” so much for their masters and for all those connected to the Atlantic market – that is, almost everyone – so quickly? 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.⁴⁰⁵ This chapter explores the way in which consumers fostered slave societies in the seventeenth century: by furnishing the market for sugar plantations’ products.

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 documented in the previous chapter, 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

⁴⁰⁵ Wendy Warren, *New England Bound: Slavery and Colonization in Early America* (New York: Liveright, 2016), 81.

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 accompanied them, as their rhetoric suggests? From his observations of New Englanders in the 1660s, traveler John Josselyn noted that “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...”⁴⁰⁶ 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.

The fact that sugar products were flowing into New England markets from the very beginning of English sugar production in the Caribbean, and the 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.⁴⁰⁷ 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

⁴⁰⁶ Paul J. Lindholdt, ed., *John Josselyn, Colonial Traveler: A Critical Edition of Two Voyages to New-England* (Hanover, NH: University Press of New England, 1988), 128.

⁴⁰⁷ As quoted 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.

quality of life, as Sarah McMahan notes in her examination of widow's allowances in the Massachusetts probate record.⁴⁰⁸ 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 within 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...”⁴⁰⁹ 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.

However, it would be a mistake to assume that the popularity of sugar products in New England was a mere outgrowth of decreasing prices. One of the reasons that it is important to

⁴⁰⁸ Sarah F. McMahan, “A Comfortable Subsistence: The Changing Composition of Diet in Rural New England, 1620-1840,” *The William and Mary Quarterly* 42 (Jan. 1985): 26-27.

⁴⁰⁹ Lindholt, *John Josselyn*, 15.

recognize the role of New Englanders in colonizing Barbados and 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 contemporary commentator noted "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."⁴¹⁰ From 1650 to 1700, retail sugar prices in London fell fifty 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.⁴¹¹

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. As shown in chapters one and two, English demand for sugar long predated high production and low prices. Barbadians themselves were importing sugar before its settlers learned

⁴¹⁰ John Davies, *History of the Caribby-Islands* (London: J.M., 1666), 196.

⁴¹¹ Russell R. Menard, "Plantation Empire: How Sugar and Tobacco Planters Built Their Industries and Raised an Empire," *Agricultural History* 81 (July 2007): 317; Russell R. Menard, *Sweet Negotiations: Sugar, Slavery, and Plantation Agriculture on Early Barbados* (Charlottesville: University of Virginia Press, 2006); Charles M. Andrews, *The Colonial Period of American History: England's Commercial and Colonial Policy*, (New Haven: Yale University Press, 1964), 4:88.

how to grow it. When Barbadian settler Thomas Verney wrote to his parents asking them to send him essential supplies in 1639, he included a request for “ten pound of suger,” a commodity to which he and his fellow planters were already habituated.⁴¹² 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, 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 due to the Dutch invasion of the region.⁴¹³ Nor were high prices in themselves what motivated the initial move to planting sugar in Barbados; between 1640 and 1643, when the switch to sugar occurred, sugar prices actually fell by a third.⁴¹⁴

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 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 through 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

⁴¹² Thomas Verney to Edmund Verney, Feb. 10 1639, in *Letters and Papers of the Verney Family*, ed. John Bruce (London: Camden Society, 1853), 196.

⁴¹³ Robert 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: Oxford University Press, 2003), 98-99.

⁴¹⁴ William A. Green, “Supply vs. Demand in the Barbadian Sugar Revolution,” *Journal of Interdisciplinary History* 18 (Winter 1988): 403-418.

of English colonists to 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.

The Extent of Sugar Consumption in Early New England

By 1650 the 3,000 families of Massachusetts Bay – about 15,000 people – had begun to produce foodstuffs and other raw materials for export.⁴¹⁵ The need to afford imports, 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 interests of colonial consumers.⁴¹⁶

Historians have exclusively focused on English manufactures as the central component of this consumption. But sugar products were also significant. A close examination of merchants'

⁴¹⁵ David Cressy, *Coming Over: Migration and Communication Between England and New England in the Seventeenth Century* (Cambridge: Cambridge University Press, 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: Cambridge University Press, 1991), chap. 4.

⁴¹⁶ See Margaret Ellen Newell, *From Dependency to Independence: Economic Revolution in Colonial New England* (Ithaca: Cornell University Press, 1998), chaps. 4 and 5, for an analysis of the early commercial orientation of Massachusetts Bay.

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 suddenly became items of mass consumption for a large sector of the population. This chapter traces distribution and consumption patterns of imported sugar products in New England between 1640 and 1670, explaining why and how New England's importation of Barbados's sugar products came to be so high by the end of the century.⁴¹⁷ I argue that 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 primary puritan material indulgences. Rather than condemned as a crippling dependency or worldly luxury, sugar was accepted as a "necessary."

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 "[t]he year by year trend in the consumption of sugar products by Americans is not known."⁴¹⁸ The only comprehensive study of New England diet in the seventeenth century, Sarah McMahon's "A Comfortable Subsistence," makes no analysis of tropical commodities.⁴¹⁹ 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"

⁴¹⁷ See my analysis of David Eltis's statistics on North American sugar product imports at the end of the seventeenth century in chapter three of this dissertation.

⁴¹⁸ Carole Shammas, *The Pre-Industrial Consumer in England and America* (Los Angeles: Figueroa Press, 1990, 2008), 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.

⁴¹⁹ McMahon, "A Comfortable Subsistence," 26-27; as she notes, her study is of "basic rather than total diet."

for by-products of island sugar production. I locate the beginnings of this market in the dealings of merchants, retailers, and customers, tracing a change in economic engagement away from localism and towards interaction with and dependence on the Caribbean.⁴²⁰

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 onwards. 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 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, but often people

⁴²⁰ Typical 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 21 gallons a year. John J. McCusker, *Rum and the American Revolution* (New York: Garland, 1989), 1:468. He further notes that the "British colonists in North America had a nearly insatiable appetite for molasses." John J. 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: Cambridge University Press, 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.

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 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).⁴²¹ 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

⁴²¹ Rodgers, *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 can't 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 about 1000-1200 pounds of sugar. According to these calculations, Long's three butts of sugar would hold 3000-3600 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 and the American Revolution*, 2:784, and John J. McCusker, *Essays in the Economic History of the Atlantic World* (London: Routledge, 1997), especially 38, 804.

sugar valued at £40.⁴²² William Clarke was a Salem vintner, 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 £26.⁴²³ 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 chose to put his additional capital into sugar intended for local sale: £50 worth of sugar of varying quality: one barrel of white 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.⁴²⁴ Ralph Mousall was a prominent resident of Charlestown, but his primary work was as a carpenter, not a merchant. In 1657 he possessed a hogshead (about 300 pounds) of sugar worth £10. The wholesale supply of sugar in Massachusetts Bay was made up of 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.⁴²⁵

⁴²² Rodgers, *Middlesex County Records of Probate*, 121-126. (The record indicates that the sugar was valued at roughly 6d. a pound.)

⁴²³ *The Probate Records of Essex County, Massachusetts* (Salem, MA: Essex Institute, 1916), 1:65; Robert Charles Anderson, *The Great Migration Begins: Immigrants to New England 1620-1633* (Boston: New England Historic Genealogical Society, 1995), 1:382.

⁴²⁴ Rodgers, *Middlesex County Records of Probate*, 1-2, 26, 360.

⁴²⁵ Rodgers, *Middlesex County Records of Probate*, 287; Richard Frothingham, *The History of Charlestown, Massachusetts* (Charlestown: Charles P. Emmons, 1845), 78-79.

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 enshrined 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.⁴²⁶

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 sugar.⁴²⁷ Gunsmith William Plasse had 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 to his name 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

⁴²⁶ *The Probate Records of Essex County*, 1:34-36.

⁴²⁷ *The Probate Records of Essex County*, 1:58.

included 4s. 9d. on sugar (almost as much as the caretaker, Wickes, spent on meat, and far more than he expended on bread, eggs, or any other item).⁴²⁸

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 within 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.⁴²⁹ Francis Parrot, farmer and town clerk of rural Rowley, died in 1655 leaving a hogshead of sugar “of uncertain value.”⁴³⁰ 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 twenty-four sugar loaves worth £8 8s., presumably for personal use given his lavish lifestyle.⁴³¹ 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 the wealthy pastor of the Cambridge church, Thomas Shepard.⁴³²

Sugar appears just as frequently in inventories of humble estates, in varying, 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 of sugar.⁴³³ Farmer Hugh Laskin left a “pott” containing about 280 pounds of sugar, valued at £9 6s. when he died in 1659,

⁴²⁸ *The 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.

⁴²⁹ *The Probate Records of Essex County*, 1: 195-198.

⁴³⁰ *The Probate Records of Essex County*, 1: 244-245.

⁴³¹ Rodgers, Middlesex County Records of Probate, 115.

⁴³² Rodgers, Middlesex County Records of Probate, 6, 426.

⁴³³ *The Probate Records of Essex County*, 1: 203-204.

though his total estate, assessed at only fifty-eight pounds, 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.”⁴³⁴

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 1659.⁴³⁵ 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 sixteen pounds of “suger in petter mud’s hands” promised to him and valued at 11 shillings.⁴³⁶ 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 ten shillings.⁴³⁷

Account Book Evidence

Probate records alone offer only compelling hints that sugar was an integral component of the culture and economy of mid-seventeenth century Massachusetts Bay. The small amounts of sugar that sometimes appear in the estates of modest farmers and artisans are the exception, rather

⁴³⁴ The Probate Records of Essex County, 1: 280-281.

⁴³⁵ George F. Dow, ed, *Records and Files of the Quarterly Courts of Essex County, Massachusetts* (Salem, MA: Essex Institute, 1911), 1:66, 97, 105, 119, 296, 375, 388, 428, 2:165; *Probate Records of Essex County*, 1: 284.

⁴³⁶ Rodgers, Middlesex County Records of Probate, 110.

⁴³⁷ Rodgers, *Middlesex County Records of Probate*, 318.

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.⁴³⁸ Abraham Warren, for example, didn't 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 that because of the survival of a Massachusetts Bay shopkeeper's account book from the 1650s, we can establish that he did in fact buy sugar as early as 1653.⁴³⁹

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 in the rudimentary shops of Massachusetts Bay. Joseph Weld, for example, had forty pounds of sugar in his Roxbury shop as early as 1647, which he was selling for ten shillings a pound.⁴⁴⁰ The merchants of mid-seventeenth-century Massachusetts Bay were often small

⁴³⁸ Jan 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.

⁴³⁹ Curwen Family Papers, MSS 45, George Corwin Account Book 1652-1655, Series I, Volume I, Phillips Library, Peabody, MA.

⁴⁴⁰ “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: Dover, 1988), 242-243.

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.⁴⁴¹

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 Corwin 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 families, Gibbs had relatives in Barbados, and he worked closely with these connections to develop the economies of the two colonies.⁴⁴²

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.⁴⁴³ To complicate matters, third parties were often drawn

⁴⁴¹ For 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: University of Virginia Press, 2007).

⁴⁴² Phyllis Hunter, *Purchasing Identity in the Atlantic World: Massachusetts Merchants, 1670-1780* (Ithaca: Cornell University Press, 2001), 41-43; John Goff, *The Salem Witch House: A Touchstone to Antiquity* (Charleston: The History Press, 2009), 28-39; J. Willard Gibbs, *Memoir of the Gibbs Family of Warwickshire, England, and United States of America* (Philadelphia: Lewis & Greene, 1879).

⁴⁴³ Winifred 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.

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, 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 within 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.⁴⁴⁴

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% of people paid Corwin in meat or

⁴⁴⁴ W.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: Sweet & Maxwell, 1956); and Larry Kreiser, “Early American Accounting,” *Journal of Accountancy* (July 1976): 79.

livestock; 47% in grain; 28% in dairy; and 19% in raw products for beer-making or finished beer.⁴⁴⁵ 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 bought sugar (molasses and rum appear to have been as yet unavailable) infrequently but consistently. 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, as 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 clients 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 buying sugar from other shopkeepers as well 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.⁴⁴⁶

As indicated by the probate record, some of the merchant shopkeeper's clients bought large amounts of sugar at a time with the intention of reselling it to the broader community, either in the

⁴⁴⁵ See James E. McWilliams's excellent analysis of Corwin's account books (he is one of the only scholars to interpret these records). McWilliams does not look at tropical commodities, however. McWilliams, *Building the Bay Colony*, 75-79.

⁴⁴⁶ George Corwin Account Book vol. 1, 1652-1655.

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, 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.⁴⁴⁷ In addition, taverns were a place where “popular” or “traditional” English culture, which embraced “immediate gratification,” thrived and challenged puritan idealism.⁴⁴⁸

Thus 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 which put sweetness within daily reach of consumers.⁴⁴⁹ One of George Corwin’s earliest and most frequent clients 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, he bought large amounts of sugar from Corwin on five separate occasions, once about thirty pounds, once about sixty pounds, and once half a hogshead.⁴⁵⁰ William Clarke, the Salem innkeeper who passed away in

⁴⁴⁷ David W. Conroy, *In Public Houses: Drink and the Revolution of Authority in Colonial Massachusetts* (Chapel Hill: University of North Carolina Press, 1995), 12-18, 31, 41-47.

⁴⁴⁸ Richard P. Gildrie, “Taverns and Popular Culture in Essex County, Massachusetts, 1678-1686,” *Essex Institute Historical Collections* 124 (July 1988): 158-185.

⁴⁴⁹ Lindholdt, *John Josselyn*, 131.

⁴⁵⁰ Henry Fitzgilbert Waters, *The Gedney and Clarke Families of Salem, Mass.* (Salem, MA: The Salem Press, 1880), 4-7; Dow, *Records and Files of the Quarterly Courts of Essex County*, 3:18, 80; George Corwin Account Book vol. 1, 1652-1655 (sugar estimates are based on the average price of 8d. a pound).

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 between his family and that of the Reverend John White. He was one of the early organizers and leaders of the Massachusetts Bay Company in England and continued to assist 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 officially licensed, and Pynchon was one of them,

probably the only one trading 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.⁴⁵¹

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. In about 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.⁴⁵² 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.⁴⁵³ 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. In 1650, western settler Nathaniel Browne had run up such an outstanding bill for imported foodstuffs, including raisins, thirty pounds of sugar, vinegar,

⁴⁵¹ Bernard Bailyn, *New England Merchants in the Seventeenth Century* (New York: Harper & Row, 1955), 53-54.

⁴⁵² Ruth A. McIntyre, *William Pynchon: Merchant and Colonizer* (Springfield, MA: Connecticut Valley Historical Museum, 1961); Bailyn, *New England Merchants*, 30.

⁴⁵³ 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: Princeton University Press, 1983), especially chap. 4.

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.⁴⁵⁴

John Pynchon's accounts and his 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 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.⁴⁵⁵ 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.⁴⁵⁶

⁴⁵⁴ Joseph H. Smith, ed., *Colonial Justice in Massachusetts, 1639-1702: The Pynchon Court Record* (Cambridge, MA: Harvard University Press, 1961), 222.

⁴⁵⁵ Carl Bridenbaugh, ed., *The Pynchon Papers: Letters of John Pynchon, 1654-1700* (Boston: The Colonial Society of Massachusetts, 1982), 1:7.

⁴⁵⁶ Bridenbaugh, *The Pynchon Papers*, 1:20.

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 individual customer averaged more sugar purchases than did Corwin's, though this may in part reflect the greater market 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 for 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. 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.⁴⁵⁷ 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 within a year in the 1650s, with each cluster made up of 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 up before supplies ran out, but that they

⁴⁵⁷ John Pynchon, *Account Books and Other Records, 1651-1697*, vol. 1, microfilm.

preferred to buy it in several smaller amounts rather than in one large purchase, perhaps because their resources were limited.⁴⁵⁸

Figure 4: Page from John Pynchon's Account Book, 1666, account with William Branch.

Date	Description	Amount
Sept 1st	Indian Corn	00 02 06
	To 6 th of sugar	00 04 00
	To 6 th sugar at 8 th	00 04 00
Decemb 24 th 1666	Recd of Conca 5. 12. 0	13 12 06
	Refd - 8. 00. 6	
	To Balance	08 00 06
	To 1/2 hve of m ^o for Apr 1667	03 00 00
	To 1/2 hve of m ^o for May 1667	00 00 06
Jan 15 th 1666	Refd due to mae	00 10 06
Feb 5 th	To 5 th sugar at 8 th	00 02 00
Feb 12 th	To 21 st sugar at 8 th	00 14 04
March 30 67	To 3 rd sugar at 8 th	00 15 03
May 13 67	To 4 th sugar at 8 th	00 02 00
Jun 10 67	To 1 st pair of shoes	00 07 06
Jun 15 67	To 1 st pair of shoes	00 04 06
July 16 67	To 10 lb cotton wool at 12 th	01 05 09
Oct 6 67	To 8 th sugar	00 14 00
Nov 21 67	To 10 lb cotton wool at 12 th	00 12 00
Jan 21 67	To 1 st Bag of 6 th sugar at 8 th	00 04 00

Source: John Pynchon, Account Books and Other Records, 1651-1697, microfilm.

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

⁴⁵⁸ Pynchon, Account Books, vol. 1.

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 keeping 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.⁴⁵⁹ 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.”⁴⁶⁰ Similarly, Thomas Macy paid a debt in 1653 with one hogshhead of sugar and four cows.⁴⁶¹

This type of transaction was common, but the most striking example 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 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’

⁴⁵⁹ This 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, *Winthrop Papers* 5:349-350, 372.

⁴⁶⁰ Rodgers, Middlesex County Records of Probate, 181.

⁴⁶¹ Dow, *Records and Files of the Quarterly Courts of Essex County*, 1:296.

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.⁴⁶² Regardless of their financial position, families of Harvard students rarely were able to 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 necessities of the Colledge."⁴⁶³ The Steward indeed used much of the food sent in payment to "Supply the necessities" of the students' diet, thus limiting the amount of provisions he needed to buy on the market. Beer, beef, mutton, or pork, and bread, pottage, or porridge, made from the malt, meat, 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.⁴⁶⁴

But this limited diet was made greatly more stimulating by sugar, clearly deemed a "necessity" if one considers its acceptance as a payment; it was one of the top six commodities that students used as payment in the 1650s, along with wheat, rye, corn, beef, and pork.⁴⁶⁵ Between 1650 and 1656, sixteen students paid their tuition or room and board in sugar, many of them multiple

⁴⁶² Samuel Eliot Morison, *Harvard College in the Seventeenth Century* (Cambridge, MA: Harvard University Press, 1936), 74-76, 106-107.

⁴⁶³ "College Laws and Customs," *Publications of the Colonial Society of Massachusetts* 31 (1935): 332.

⁴⁶⁴ Morison, *Harvard College*, 90-97.

⁴⁶⁵ 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.

times. Sugar averaged about 9d. a pound in 1650s Massachusetts Bay, and a year's Harvard tuition cost thirty-five to forty-three pounds of sugar.⁴⁶⁶

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."⁴⁶⁷ 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."⁴⁶⁸ 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.⁴⁶⁹ 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.⁴⁷⁰ 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

⁴⁶⁶ Morison, "Introduction," 16-17.

⁴⁶⁷ Morison, *Harvard College*, 97.

⁴⁶⁸ "Steward's Book," 21.

⁴⁶⁹ "College Laws and Customs," 330-331.

⁴⁷⁰ "Steward's Book," 225-238.

Figure 5: Harvard College Tuition Payments in Sugar, 1650-1656

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.	£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 2s.
Samuel Seabury	83 lbs.	£2 15s. 8d.
John Alline	47 lbs.	£1 3s. 6d.

Source: “Chesholme’s Steward’s Book,” *Publications of the Colonial Society of Massachusetts* 31 (1935): 21-276. 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 used the “long” hundredweight of 112 pounds to calculate amounts, as this was the most common hundredweight used for sugar in the seventeenth century.

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.⁴⁷¹ 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.

Changing Patterns of Sugar and Sugar Product Consumption: Molasses and Rum

As argued in previous chapters, sugar was a popular commodity in sixteenth- and seventeenth-century England, sought by rich and poor in a variety of forms, from humble penny lumps to highly processed confections. The settlers of Massachusetts Bay maintained this habit. But 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 which would intensify Atlantic economic growth.

For 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 that "theire 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,

⁴⁷¹ See, for example, accounts with merchant John Glover, "Steward's Book," 51-52.

which are vendable in noe part of the world but New England and Virginea.”⁴⁷² 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.⁴⁷³

Thus the markets that developed in New England for molasses would have far-reaching implications for the development of sugar and slavery in the West Indies, as well as for the political trajectory of the North American colonies. By 1733 the Molasses Act, aimed at creating a captive North American market for the English islands’ molasses in the form of rum, put the economic interests of North American English colonists (particularly New Englanders) at odds with those of England, since the colonists depended on French and Dutch molasses as a raw material for the New England rum industry as well as for other forms of molasses consumption. The rampant defiance of English law that followed in the form of molasses smuggling, as well as the increasing awareness of the incompatible economic interests of mother country and colony, helped set the stage for the American Revolution.

⁴⁷² Letter to John Winthrop Jr., Feb. 1, 1674, *Proceedings of the Massachusetts Historical Society* (Boston: MHS, 1891-2): 2nd series, 7:16-17. The writer notes that he sold his New England horses in Barbados for 3000 pounds of sugar each.

⁴⁷³ Gilman M. Ostrander, “The Colonial Molasses Trade,” 77-84.

Merchant Peleg Sanford followed the pattern of many traders, maintaining his primary residence in New England but living for a time in Barbados and maintaining close personal and business relationships with relatives there. Though he operated out of Rhode Island, not Massachusetts Bay, his surviving letterbook is an invaluable source for understanding the sugar trade in the 1660s, as production on 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 mallasses: wch is most vendable heare..."⁴⁷⁴ Twice within a few months he wrote to his brother William on Barbados, entreating him that "Rume at present is not be had...thearefore pray...Send what I formerly sent Fore..."⁴⁷⁵ 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 mallaces 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..."⁴⁷⁶ Molasses, which had a strong flavor and couldn't 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.⁴⁷⁷

George Corwin's accounts with Essex County households reflect this transition to ever greater consumption of sweet foods as West Indian sugar production took off. Starting in about

⁴⁷⁴ Peleg Sanford, *The Letter-Book of Peleg Sanford, 1666-1668* (Providence: Rhode Island Historical Society, 1928), 34.

⁴⁷⁵ Sanford, *Letter-Book*, 41, 51.

⁴⁷⁶ Sanford, *Letter-book*, 70.

⁴⁷⁷ William 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.

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 in fact 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 separate occasions, a total of seven pounds of sugar. This was not an isolated pattern; his purchases continued similarly through the rest of the year.⁴⁷⁸

Rum and molasses first show up in Corwin's accounts in about 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: 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

⁴⁷⁸ George Corwin Account Book, vol. 1, 1652-1655, and vol. 3, 1657-1662; *The Probate Records of Essex County*, 2:196-198.

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.⁴⁷⁹

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.⁴⁸⁰ 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 year-long 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, paying 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.⁴⁸¹

⁴⁷⁹ George Corwin Account Book, vol. 5, 1663-1666; for example, see the accounts of Anthony Needham and John Waters.

⁴⁸⁰ See Margaret Newell's work tracing the residences of Gibbs's customers. Newell, *From Dependency to Independence*, 100.

⁴⁸¹ Robert Gibbs Business Records, 1659-1708, Account Book, American Antiquarian Society, Worcester, MA.

Gibbs's account book also gives us a clue as to how processed sugar foods reached New England consumers. Most women would have prepared sweet foods at home with the sugar and molasses they bought, but Gibbs records two extended relationships with women, Goody Cook and Goody Gavate, who bought sugar and molasses and then sold him back gingerbread and various types of cakes, either for his own personal consumption or, more likely, to sell at his store.

English settlers brought their tradition of sugar foods as medicines with them as well. Sugar, conserves, and other sweets were in common use on board ship and in the early days of settlement. John Josselyn noted that sugar pills, too, were "common medicines amongst the poorer sort."⁴⁸² The nineteenth-century practice of giving molasses to children as a "gentle physic" probably dated back to the arrival of the commodity in New England in the seventeenth century.⁴⁸³ Apothecaries, doctors, and surgeons also served as confectioners and sugar bakers in seventeenth-century New England, as the economy could not support such specialized food trades. Essex country doctor William Woodcock bought sugar at least twenty times, and molasses at least four times, from George Corwin in the early 1660s, probably to process and distribute to clients in the Salem area.⁴⁸⁴ Dr. Woodcock did not leave any record of his concoctions, but a medical contemporary of his, Dr. John Barton of Salem and Marblehead, did. His rare record of medical accounts from the 1660s and 1670s shows extensive purchases of sugar and sales of "treacle," "syropes," "confection," and "conserve."⁴⁸⁵ Thus medical tradesmen, as well as merchants, wealthy families and institutions, and shopkeepers, distributed sugar to the households of early Massachusetts Bay.

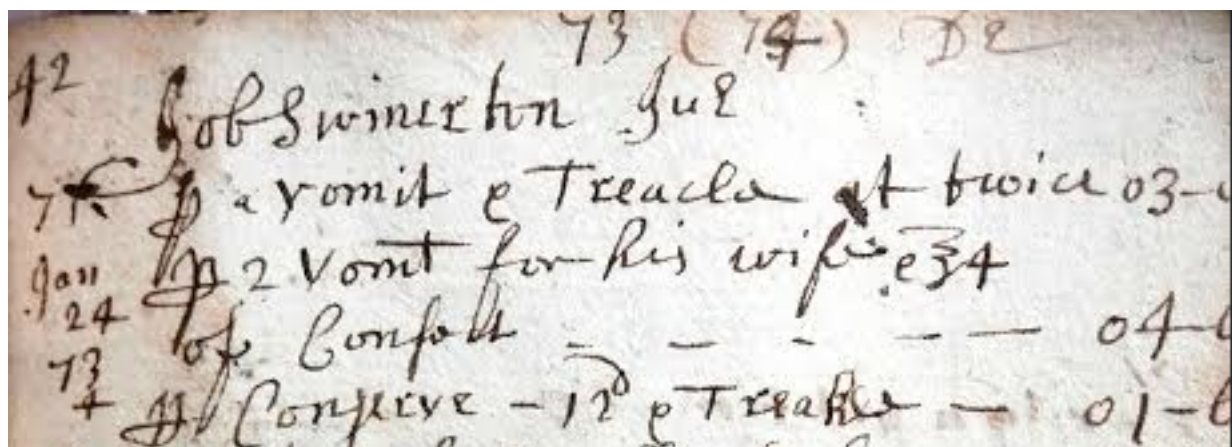
⁴⁸² Lindholdt, *John Josselyn*, 127.

⁴⁸³ Lydia Maria Child, *The American Frugal Housewife* (Boston: Carter, Hendee, 1835), 29.

⁴⁸⁴ The Probate Records of Essex County, 2:163-164.

⁴⁸⁵ John Barton Account Book, 1662-1676, American Antiquarian Society, Worcester, MA. John Barton trained as a doctor in England and served as shipboard doctor at least once in exchange for passage to Massachusetts. Dow, *Records and Files of the Quarterly Court of Essex County*, 7:302-306.

Figure 6: Page from John Barton's Account Book



Source: John Barton Account Book, 1662-1676, American Antiquarian Society, Worcester, MA.

A rare farmer's account book from the mid-seventeenth century, Stonington, Connecticut yeoman Thomas Minor's diary, also 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-oriented character of Minor's rural village.⁴⁸⁶ Such analyses have completely overlooked the farmer's consumerism. 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 of 1679 he noted that "I delivered to Jonathan perker 30 bushells of oats to be payd 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

⁴⁸⁶ See 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.

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.

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 yeomen sent their agricultural surplus to fuel the sugar industry in the West Indies in part in order to pay for their own consumption of sugar products. In an especially revealing purchase, one day in 1665 Minor “came whome with the sugar I am to pay mr noyce 5-11-8 the whole rate is 72-18-9.” Mr. Noyce 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 Noyce had negotiated an agreement in which six 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.⁴⁸⁷

Thomas Minor and his minister were part of the masses of New Englanders who increasingly associated sugar products with an adequate quality of life. By the early eighteenth

⁴⁸⁷ Sidney H. Miner and George D. Stanton Jr., eds., *The Diary of Thomas Minor, Stonington, Connecticut, 1653 to 1684* (Ann Arbor: Edwards Brothers, Inc., 1976), especially 67, 70, 102, 141-142, 166.

century, substantial amounts of sugar and molasses were considered an essential component of the diet of any “middling” family. In reaction to a period of rising prices, in 1728 *The New-England Weekly Journal* published several commentaries enumerating the needs of a respectable family, attempting to distinguish necessities from luxuries and demonstrate how Bostonians could meet their needs in a frugal manner. First the publisher of the magazine set up the debate by publishing a sample diet that included only bread, milk, roots, salt, vinegar, and beer. Then the magazine published two critiques, proclaiming such austerity to be “Fallacy and Amusement,” and laying out a diet more in keeping with realistic expectations. For a family of eight, one writer estimated an allowance of 1/4 pound of sugar a day and seven gallons of molasses a year; the second writer, if assuming the same prices, estimated a bit more than 1/4 pound of sugar a day, and some amount of molasses, “used in the Family, not only in Brewing [beer], but on other Occasions.” Notably, coffee, tea, and chocolate were categorized as items that should be considered by each family as to whether they would fit into that family’s budget, but unlike sugar and molasses, were not considered essentials.⁴⁸⁸

Molasses remains in the modern imagination a foundational ingredient in colonial cuisine, a rustic, traditional element of diet. In fact, it was a tropical import unknown before the seventeenth century, and New Englanders’ rapid cultural adaptation to it contributed to the region’s dependence on the West Indies and the continued strength of the sugar industry. One of its greatest uses was in the manufacture of rum, but seventeenth-century New Englanders also embraced molasses in cooking, in pickling, as a medicine, diluted with water as a simple beverage, and importantly as a base for beer.

⁴⁸⁸ *The New-England Weekly Journal*, November 5, December 2, and December 5, 1728, reprinted in Bridenbaugh, “The High Cost of Living in Boston,” 802-811.

The attempts by England to control the trade of its North American colonies by limiting and taxing certain imports show the importance of consumer choice in shaping political change. In a 1763 petition to England appealing for non-renewal of the Molasses Act, the colonist-formed “Society for Encouraging Trade and Commerce” submitted evidence in support of allowing the free flow of tropical commodities into North America. The dependence of the general population on sugar, molasses, and rum, including and perhaps especially the poor, was so great that limiting access to these consumer goods through taxes would seriously depress the Atlantic economy, the writers argued. “Rum, Sugar, and Molasses are become so necessary by being universally used among the Lumbermen, Tradesmen, and all Sorts of Labourers, that Advancing the Price of those Articles” would bankrupt employers in the trade, shipping, and supply industries (prompting merchants to turn to manufacturing instead, the writers warned pointedly). Further, even if higher prices were acceptable to the people, demand was so great that the English islands were no longer able to meet it at any price, and without French and Dutch sugar, even England would soon feel the “unhappy effects” of sugar scarcity.⁴⁸⁹ Given the incredible human, financial, and political stakes in New England’s taste for molasses and rum, an exploration of how this demand evolved is warranted.

Sugar Products in Seventeenth-Century New England Food Culture

English migrants to the New World brought with them a robust tradition of drinking as a source of calories and fluids, a drug, and an integral part of social life; alcohol held a symbolic importance, rooted in English culture, marking trust and interdependence in relationships between master and servant, buyer and seller, church and congregation.⁴⁹⁰ The role of alcohol, especially beer,

⁴⁸⁹ “The State of the Trade 1763,” *Colonial Society of Massachusetts, Transactions* (Boston: 1917), 19:387-390.

⁴⁹⁰ Conroy, *In Public Houses*, 22-25. For the history of English alcohol consumption, see Wolfgang Schivelbush, *Tastes of Paradise: A Social History of Spices, Stimulants, and Intoxicants* (New York: Pantheon Books, 1992), 22-3, 48; Sarah Meacham, *Every Home a Distillery: Alcohol, Gender and Technology in the Colonial Chesapeake* (Baltimore: Johns Hopkins University Press, 2009), chap. 1; H.S. Corran, *A History of Brewing* (North Pomfret, VT: David and Charles, 1975), 35; J. C. Drummond and Anne Wilbraham, *The Englishman’s Food: Two Centuries of English Diet* (London: Pimlico, 1991), 112-115; Jay Allen

in the New England economy was extensive. “As indispensable as breathing,” everyone consumed it daily.⁴⁹¹ Massachusetts Bay colonists began brewing beer immediately upon arrival. James McWilliams finds that between 1635 and 1660, at least half of households in Essex County were brewing their own beer for household consumption. This beer, produced by the women in the family, was also used in local barter and served by them in village “ordinaries,” or household beer shops. Beginning in the 1670s, beer-making was increasingly professionalized in brewhouses and commercial home brewing declined, though families continued to brew it for personal use.⁴⁹² Beer was thus a fundamental element of New England’s household economy and an important local industry, and the raw materials required to manufacture it were of great economic significance.

For beer in New England was not the same beverage that it had been in the mother country. From early medieval times, the English had converted barley into malt by wetting it, thus converting its starch into sugar, then drying it and mixing it with hot water in a process known as “mashing.” Brewers would take the resulting sugary liquid, called “wort,” and add yeast, which converted the sugar to alcohol, typically reaching about six percent of the liquid. After cleansing the mixture of excess yeast, the brewer ended up with traditional English ale.⁴⁹³ But the scarcity of barley and other English grains forced the settlers of New England to use other foods to produce the sugary base for beer. Though colonists could and did try both to grow barley and to import malt, through mid-

Anderson, *A Solid Sufficiency: An Ethnography of Yeoman Foodways in Stuart England* (PhD diss., University of Pennsylvania, 1971), 90.

⁴⁹¹ Gregg Smith, *Beer in America: The Early Years, 1587-1840* (Siris Books: 1998), 11.

⁴⁹² James E. McWilliams, “Brewing Beer in Massachusetts Bay, 1640-1690,” *The New England Quarterly* 71 (1998): 543-546.

⁴⁹³ Corran, *A History of Brewing*, 11-13, 24, 50.

century supplies were unreliable and limited, so they quickly turned to brewing beer from corn and other native plants.⁴⁹⁴

The sudden emergence of the sugar industry in the West Indies, however, provided a new base or additive for beer and beer-like beverages: imported molasses. The colonists both used molasses as a replacement for malt, which was often unavailable, and in addition to malt or other plants to increase the sugar and therefore the alcohol content of the beer. Depending on the amount of molasses used, what other bases or additives were incorporated, and how long the beer fermented, alcohol content varied widely. During the seventeenth century, New England, and indeed all of the North American colonies, became dependent on molasses and coarse sugars for potency and taste in many types of beer and other drinks across the spectrum, from simple sweet beverages to “small” beer to traditional English-style beer. Though lower in prestige than beer made from pure barley malt, molasses-based beer became the most common colonial beverage, particularly at home.⁴⁹⁵

“Beer,” stated one early-nineteenth-century American cookbook author, “is a good family drink.” She was referring not to English-style beer served in taverns, but rather to the category of “small” beers of various strengths which used molasses in addition to, or in place of, barley or other malt. Though a variety of local ingredients could be added, spruce and pumpkin being among the most popular, “[t]he rule is about the same for all beer. Boil the ingredients two or three hours, pour in a half-pint of molasses to a pailful, while the beer is scalding hot.”⁴⁹⁶ These small beers have often been represented over the last few centuries as quintessential native brews; but their use of molasses

⁴⁹⁴ Smith, *Beer in America*, 26-27.

⁴⁹⁵ McMahon, “A Comfortable Subsistence,” 42; McWilliams, “Brewing Beer,” 546, 562; Ostrander, “The Colonial Molasses Trade,” 82; Alice Morse Earle, *Customs and Fashions in Old New England* (New York: Charles Scribner’s Sons, 1893), 173, 179.

⁴⁹⁶ Child, *The American Frugal Housewife*, 86.

as the sugary source of alcohol made them, despite their homegrown appearance, a cousin of tropical rum. (In fact, a common drink in Barbados during this period was made similarly from fermented potatoes and molasses.)⁴⁹⁷ John Josselyn described the typical beer-making process in frontier Maine in the 1660s: “[W]e made our Beer of Molosses, Water, Bran, chips of Sassafras Root, and a little Wormwood, well boiled...”⁴⁹⁸ William Penn, in a 1685 promotional tract, explained that, though malt was becoming more widely available, during the founding of Pennsylvania “[o]ur Beer was mostly made of Molosses, which...makes very tollerable drink...”⁴⁹⁹

This trajectory was similar in all of the early North American colonies. Molasses was the most common base for beer and other beverages at first; it then predominated mostly in home brewing when commercial breweries were able to secure a reliable source of malt.⁵⁰⁰ The 1728 newspaper article mentioned above makes it clear that molasses remained essential in home brewing, as reflected in eighteenth-century home-brewing recipes, which continued to include molasses as one of the most common ingredients. George Washington’s beer recipe from 1737, for example, was ten percent molasses; his beer contained only bran hops, molasses, water, and yeast.⁵⁰¹

During the seventeenth century, the integration of molasses into North American beer production was a crucial support for the sugar plantations of the West Indies. The relative affordability and availability of molasses and coarse sugars compared with barley malt led commercial brewers as well as home brewers to depend on it for their beer production. William

⁴⁹⁷ Frederick H. Smith, *Caribbean Rum: A Social and Economic History* (Gainesville: University Press of Florida, 2005), 7.

⁴⁹⁸ John Josselyn, *New-England’s Rarities Discovered in Birds, Beasts, Fishes, Serpents, and Plants of that Country* (Boston: William Veazie, 1865), 90.

⁴⁹⁹ William Penn, *A Further Account of the Province of Pennsylvania and its Improvements...* (London, 1685), 11.

⁵⁰⁰ John Paul Arnold and Frank Penman, *A History of the Brewing Industry and Brewing Science in America* (Chicago: 1933), 36.

⁵⁰¹ Stanley Baron, *Brewed in America: A History of Beer and Ale in the United States* (Boston: Little, Brown, 1962), 96-99.

Clarke, the 1640s Salem tavernkeeper, likely served sugary beverages at his establishment. Thirty years later, Richard Waters, also of Salem, had in 1677 brewing supplies including “4 Barrills of Molasses” and thirty-six bushels of malt; his commercial operation produced both traditional English beer and molasses-based beverages.⁵⁰² Paul White, who in addition to operating a tavern in Newbury engaged in trade and had investments in Barbados, probably used his extensive stores of sugar and molasses in his brewing and sales in the 1660s and 1670s. He was also distilling liquor and selling “strong waters” in Newbury as early as 1653. He may have been experimenting with distilling sugar and molasses into hard liquor; certainly he was using them in some way in the beverages he retailed.⁵⁰³

In addition to using sugar products in the brewing process, tavernkeepers and households alike often simply mixed sugar, molasses, or rum with beer or other liquid; the most basic molasses beverage was plain water sweetened with molasses. Combining molasses or sugar with beer or alcohol was a common practice, probably as the sweet flavor it imparted made poor-quality or non-traditional beer more palatable (though many seem to relish its flavor even over traditional beer).⁵⁰⁴ From there New Englanders invented various popular concoctions mixing sugar, molasses, and rum, most famously known as “flip.” Rum diluted with molasses was called “blackstrap;” another drink, “whistle-belly-vengeance,” was beer, molasses, and bread-crumbs, served hot.⁵⁰⁵

⁵⁰² Dow, *Records and Files of the Quarterly Courts of Essex County*, 6:383.

⁵⁰³ The Probate Records of Essex County, 3:329; Susan M. Harvey, *Slavery in Massachusetts: A Descendent of Early Settlers Investigates the Connections in Newburyport, Massachusetts* (master’s thesis, Fitchburg State University, 2011), 61; John J. Currier, ‘Ould Newbury’: Historical and Biographical Sketches (Boston: Damrell and Upham, 1896), 177.

⁵⁰⁴ See, for example, the “Sugar and Beare” that colonist Bettorice Berry drank at home. *Records and Files of the Quarterly Courts of Essex County*, 6:297.

⁵⁰⁵ Richard J. Hooker, *Food and Drink in America: A History* (Indianapolis: Bobbs-Merrill, 1981), 35; *Records and Files of the Quarterly Courts of Essex County*, 7:99.

As West Indies molasses became ever more readily available, commercial brewers and tavernkeepers increasingly endeavored to increase profits by mixing or brewing beer with molasses without revealing this cost-cutting measure to customers. The fact that adding imported molasses or sugar made beer production cheaper, and that the practice was widespread enough to warrant legislation, shows just how inexpensive and ubiquitous these imports were. So pervasive was the use of molasses and other cheap sugars in commercial brewing in the seventeenth century that lawmakers acted to ensure that brewers and tavernkeepers did not attempt to pass molasses-based beers off as traditional English beers. In 1667, the General Court declared that because so “many keepers of inns and ordinaries...take liberty to make and sell drinck brued of or mixed with molasses, course sugars...” such practices would warrant a £5 fine.⁵⁰⁶ It is doubtful that this attempt to force conformity to English tradition was much respected by an industry deeply enmeshed in the Atlantic economy.

Drawing on traditional English sugar culture, New Englanders also incorporated sugar products into their meals. “Treacle,” the syrupy molasses traditionally used as the all-purpose medicine theriac, was for sale in Roxbury as early as 1638.⁵⁰⁷ The rise of sugar cultivation in the West Indies ensured the availability of all types of sweeteners, including fine refined white sugar, coarse brown sugar, and liquid molasses, by the late 1650s. Josselyn described seventeenth-century New Englanders favoring “a most excellent Summer dish” of “bill berries” mixed with milk, sugar, and spice, as well as a custard made of native grain, milk, and sugar.⁵⁰⁸

⁵⁰⁶ Nathaniel B. Shurtleff, *Records of the Governor and Company of the Massachusetts Bay in New England* (Boston: W. White, 1854), 4 (2):344.

⁵⁰⁷ Thomas Dudley to John Winthrop, Dec. 11 1638, *Winthrop Papers* 4:86.

⁵⁰⁸ Josselyn, *New-England's Rarities*, 113, 144.

The availability of molasses extended the experience of sweetness from small servings of sugary jams and candies to a flavor that might pervade much of the meal, and its low price made it a common foodstuff in all households. In addition to preparing sweet foods such as puddings and brown bread, New Englanders used molasses to sugar savory dishes such as beans.⁵⁰⁹ Though no cookbooks were written in New England during the early colonial period, looking at the ways New Englanders used molasses in later centuries gives us additional clues as to how they incorporated it into their diet in the seventeenth century. Amelia Simmons's *American Cookery*, one of the first American cookbooks, drew heavily on sugar and molasses for an extensive array of puddings, pies, and conserves.⁵¹⁰ As an economical sweetener whose strong flavor had come to be not merely tolerated but prized, molasses was everywhere in eighteenth- and nineteenth-century cuisine, especially in the traditional English sauces, puddings, pies, and cakes which New Englanders Americanized with corn and pumpkin. "Two great spoonfuls of molasses," directed one nineteenth-century cookbook, made "Indian cake, or bannock...[a] sweet and cheap food," and the author assumed that molasses was the sweetener of choice for bread pudding, gingerbread, and pumpkin pie. So too continued the tradition of combining sweet and savory flavors, as with a recipe for a basic sauce for all types of foods that contained water, flour, butter, and was "sweetened to your taste either with molasses or sugar, according to your ideas of economy..."⁵¹¹ Other evidence from the eighteenth century supports this dependence on molasses and sugar in the colonial kitchen. Based on government documents, one historian estimates that even at the peak of New England's rum industry in the 1790s, the majority of molasses imports were used as food.⁵¹²

⁵⁰⁹ Hooker, *Food and Drink in America*, 33.

⁵¹⁰ Amelia Simmons, *American Cookery* (Hartford: Hudson & Goodwin, 1796).

⁵¹¹ Child, *The American Frugal Housewife*, 75, 65, 70, 76, 67, 61.

⁵¹² Ostrander, "The Colonial Molasses Trade," 82.

Scholars rarely make the connection between sugar and alcohol consumption, though they are both chemical dependencies that affect blood sugar.⁵¹³ The demand for the West Indies' sugar, molasses, and rum is best studied as one market reflecting the historic strength of biological cravings. Scholars have given rum more attention than sugar in part because of the more evident changes in behavior that its consumption produces. The name "rum" comes from the English word "rumbullion," meaning "a great tumult."⁵¹⁴ 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.⁵¹⁵ Salem sawyer William Smith's numerous rum purchases from Corwin in 1663 foreshadowed his two citations for inebriation in 1665 and 1666.⁵¹⁶

⁵¹³ For some analysis of the links between sugar and alcohol dependence, see Berton Roueche, *The Neutral Spirit: A Portrait of Alcohol* (Boston: Little, Brown, 1960), 110-117, and Henry Hobhouse, *Seeds of Change: Five Plants that Transformed Mankind* (London: Sidgwick & Jackson, 1985), 47.

⁵¹⁴ Smith, *Caribbean Rum*, 16.

⁵¹⁵ George Corwin Account Book, vol. 5, 1663-1666; *Records and Files of the Quarterly Courts of Essex County*, 3:182, 4:274.

⁵¹⁶ George Corwin Account Book, vol. 5, 1663-1666; *Records and Files of the Quarterly Court of Essex County*, 3:269, 383.

Figure 7: Page from George Corwin's Account Book, 1664 account with William Smith



Source: Curwen Family Papers, MSS 45, George Corwin Account Book 1663-1666, Series I, Volume 5, Phillips Library, Peabody, MA.

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 onwards, usually in pints or quarts but occasionally in gallons.⁵¹⁷ 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 1657.⁵¹⁸

⁵¹⁷ William Richard Cutter, *New England Families: Genealogical and Memorial* (New York: Lewis Historical Publishing Company, 1913), 1:10; George Corwin Account Book, vol. 5, 1663-1666.

⁵¹⁸ George Corwin Account Book, vol. 5, 1663-1666; Walter Goodwin Davis, *Massachusetts and Maine Families in the Ancestry of Walter Goodwin Davis* (Baltimore: Genealogical Publishing Co., 1996), 248-249.

These examples illustrate two developments in the history of Atlantic sugar. First, beginning in the late 1650s, consumers suddenly began to favor 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 within a few years. The growth of an addiction that could be fed only by the sugar plantations of the West Indies 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 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 on their possessions 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 1650.⁵¹⁹ 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.⁵²⁰

⁵¹⁹ Smith, *Caribbean Rum*, 10-15; Mark Edward Lender and James Kirby Martin, *Drinking in America: A History* (New York: Macmillan, 1982), 6-7.

⁵²⁰ McCusker, *Rum and the American Revolution*, 1:55-58.

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.⁵²¹ Though individuals did produce some strong spirits early on, from Emanuel Downing’s efforts to make spirits out of rye in 1648 to farmers’ experiments with the “freeze distillation” of cider, colonists did not begin distilling on a large scale until merchants flooded the wharves with molasses in the second half of the seventeenth century.⁵²² Thus New Englanders’ dependence on tropical imports began with finished rum, in addition to molasses and sugar. 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.⁵²³

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. These strong waters, principally brandy (distilled wine) but also forms of whiskey (distilled grain alcohol) were in common use from the beginning of settlement, principally as a “physic” considered essential for health.⁵²⁴

⁵²¹ Richard Pares, *Yankees and Creoles: The Trade Between North America and the West Indies Before the American Revolution* (Cambridge: Harvard University Press, 1956).

⁵²² McCusker places the beginnings of the New England rum industry in the 1660s. McCusker, *Rum and the American Revolution*, 1:59. In 1648, Emanuel Downing wrote to John Winthrop Jr., “I have wrought in stilling these 3 moneths. the water I mak is desired more and rather than the best spirits they bring from London.” Emanuel Downing to John Winthrop Jr., Dec. 17, 1648, *Winthrop Papers* 5: 289; see also 5:230, 261, 290-291.

⁵²³ Smith, *Caribbean Rum*, 28-29.

⁵²⁴ Kristen 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.

The “loathsome” English “vice of Drunkenness,” however, had in the words of John Winthrop long been a “dishonor with the sin shame and ruine of our nation,” one that Massachusetts leaders were determined to eradicate as they built a new model society.⁵²⁵ The extensive legislation pertaining to alcohol in the first few decades of the colony aimed to balance alcohol’s entrenched role in diet with the enforcement of puritan social norms such as honesty and dignified conduct. Echoing Winthrop, the Massachusetts General Court condemned “the swinish sinne of drunkennes,” which had proved to be “the dishonor of God, the discredit of the gospell, to the shame of the country,” and repeatedly acted to limit the manufacture and sale of liquor and punish intoxication. Yet alcohol consumption remained legal and widespread; it was so culturally ingrained, and so habit-forming, that almost everyone continued to indulge.

Lawmakers sought to control but not reduce beer consumption, merely regulating its quality and price and confining tavern operation to trustworthy families. As for stronger spirits, leaders believed that the potential problem lay not in the liquor itself but in the character of the consumer, and they sought to restrict it, not eliminate it. In 1661, the Court forbid both domestic distilling and the retail of small amounts of strong drink, allowing its sale only to those “masters of families of good report” who could afford to buy at least a quarter of a cask at a time.⁵²⁶ Legislators saw no inconsistency in presenting the assembly of elders in Cambridge with twelve gallons of sack and six gallons of wine “as a small testimony of the Court’s respect;” indeed, the very ability to imbibe without excess was considered a mark of respectability.⁵²⁷

⁵²⁵ John Winthrop, “For Preventing Drunkenness,” *Winthrop Papers* 1:371-374.

⁵²⁶ Shurtleff, *Records of Massachusetts*, 4 (2): 37-38.

⁵²⁷ Shurtleff, *Records of Massachusetts*, 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; James K. Hosmer, ed.,

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 themselves are indications of the high level of alcohol consumption in Massachusetts even before rum became available. 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 threatened the entire society they had worked so hard to build. The Rev. Increase Mather wrote in 1687 that

“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.”⁵²⁸

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.”⁵²⁹ The ministry saw rum as precipitating a social and spiritual crisis, despite the fact that alcohol consumption had been widespread from the establishment of the colony.

Because the ramifications of its abuse 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

Winthrop's Journal "History of New England" 1630-1649 (New York: Charles Scribner, 1908), 1:325; see also Dean Albertson, “Puritan Liquor in the Planting of New England,” *The New England Quarterly* 23 (Dec. 1950): 477-490, and Conroy, *In Public Houses*, 49-56.

⁵²⁸ Increase Mather, *A Sermon, Occasioned by the Execution of a Man Found Guilty of Murder* (Boston: R.P., 1687), 25.

⁵²⁹ Cotton Mather, *Sober Considerations on a Growing Flood of Iniquity* (Boston, 1708), 3, 11.

Innes calls “slavery to sinful and impoverishing addictions.”⁵³⁰ Cotton Mather’s denunciation of excess of appetite for drink as the “Swinish Pleasure of a little Sensuality,” leading 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 that

“I founde plainly 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.”⁵³¹

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.

Indeed, a rare notebook belonging to John Winthrop’s own 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, he noted three recipes for foods and two medicinal recipes to be taken by mouth; all were sweet. “French bisket,” he noted, should be “strewed over with beaten loave sugar;” “Princes bisket” would have been 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.⁵³²

⁵³⁰ Stephen 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: Oxford University Press, 2011), 118-119, 121-122, 124, 131. Innes describes the “Protestant dilemma,” the ideology that lauded hard work and prosperity but condemned acquisitiveness and material pleasures.

⁵³¹ Cotton Mather, *Sober Considerations*, 9; John Winthrop, “Experiencia,” *Winthrop Papers* (1929) 1:197.

⁵³² Jose 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

The names of these recipes suggest that they were treats rather than everyday foods, but they serve as additional 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 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.⁵³³ Ken Albala similarly describes puritans as “abstemious,” emphasizing their “gastronomic simplicity.”⁵³⁴ But as we have seen, this typical account of New England foodways overlooks 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’ demonization of rum likely stemmed at least in part from 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. in 1674 expressing the opinion that dependence on trade with Barbados, despite its financial rewards, had sapped New England’s strength:

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: Alfred Mudge, 1895), 1:295-296; *A Report of the Record Commissioners of the City of Boston* (Boston: Rockwell and Churchill, 1883), 8:232.

⁵³³ David Hackett Fischer, *Albion's Seed: Four British Folkways in America* (New York: Oxford University Press, 1989), 134-139.

⁵³⁴ Ken 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: University of California Press, 2014), 35.

“How advantagius it would prove to New England, if they ware denied 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; alsoe that greate part of our people will be improved in raiseing manufactures, haveing good wooll, flax, and hempe...”⁵³⁵

This unease with the direction taken by New England consumer culture was likely widespread.

Prominent merchant John Hull similarly expressed that

“[B]est good to make us fall Close to all sorts off manufacture and forbear 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...”⁵³⁶

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’ fear of rum: that ingrained addictions, perhaps tolerable in themselves, became threatening when they bound the fortunes of the colony to the larger world. These concerns were well-founded; the Atlantic sugar industry, rather than the vision of the puritan founders, had come to guide the economic development of Massachusetts Bay.

⁵³⁵ Letter to John Winthrop Jr., Feb. 1, 1674, *Proceedings of the Massachusetts Historical Society* (Boston: MHS, 1891-2): 2nd series, 7:16-17.

⁵³⁶ John Hull Letterbook, vol. 2, 411, Folio 3, MSS John Hull Papers, 1624-1685, American Antiquarian Society, Worcester, MA.

Chapter Five

“They Liked and Desired More”: Indians, Sugar, and Dispossession in the Atlantic World

A gruesome scene unfolded on a July day in 1676, in the murky waters of a swamp near Narragansett Bay in southern New England. Gruesome even for the events of that year, which had seen the slaughter of thousands of women and children, the starvation and enslavement of thousands of others, the burning of villages and towns, and the mutilating of animals, which wandered the devastated landscape on three legs or with their entrails trailing along the ground. The Wampanoags and their allies, the Nipmucks, Wabanakis, and Narragansetts, were locked in an anguished struggle with English settlers over a fundamental question: were the Indians of New England sovereign nations who would control their own territory, economy, and relations with the English settlers and their faraway king? Or were the Indians subordinate to the English, dependent upon them for protection and subsistence, subject to their laws, and bound to satiate the settlers' appetite for land? On this summer day English forces and their allies, the Mohegans, fell upon Narragansett villagers hidden in a swamp, killed most of them, and captured a Narragansett warrior. The Mohegans advocated for torturing the prisoner; and the English, “that they might have an ocular demonstration of the savage barbarous cruelty of the heathen,” acquiesced. The Mohegans proceeded to cut off his fingers and toes, “yet did not the unhappy victim ever relent, or shew any signs of anguish,” in an impressive display of strength. His words were even more defiant. “[F]or being asked by his tormenters how he liked the war? he replied he liked it very well, and found it as sweet as the Englishmen did their sugar.”⁵³⁷

The prisoner's analogy has several implications. His association of his adversaries with a particular foodstuff – sugar – is a testament to just how entrenched sugar consumption was not only

⁵³⁷ William Hubbard, *Narrative of the Indian Wars in New-England* (1677; Norwich, CT: John Trumbull, 1802), 173.

in seventeenth-century England but also within its American colonies. It is remarkable that sugar, of all commodities, should have served as a symbol of the English invasion that had transformed the Narragansett world. Though sugar consumption was an anchor of English material culture, so were livestock, fences, and iron tools, to name just a few that related directly to foodways. Why would an Indian captive, choosing his words carefully in his struggle for an honorable death, identify his captors with sugar?

For one, the metaphor was meant as an insult, hurled as an expression of bravery and defiance. The captive was articulating the deep cultural divisions between the native inhabitants of New England and the colonists. He was denigrating what he saw as a culture of physical indulgence and dependence on goods brought from faraway shores. In contrast, before the arrival of the English, the region's Indians had built a largely autonomous material culture that deplored bodily weakness. Yet at the same time, the Narragansett was acknowledging the material and cultural power of sugar, and by extension the strength of his English conquerors. Alien as their culture might be, they appeared to possess a spiritual force that his people did not.

This power fascinated the Indians. They sought to capture it for themselves, and over the seventeenth century they became eager consumers of sugar and its products, molasses and rum. But this new dependency would only increase the Indians' vulnerability to English domination. King Philip's War devastated New England in 1675 and 1676, killing over ten percent of the region's people and threatening the very existence of the Massachusetts, Connecticut, Plymouth, and Rhode Island colonies. It was a final attempt on the part of a coalition of Indian groups at a passionate rejection of the English way of life. After it failed, the Indians of New England lost their economic and political autonomy, increasingly adopting English foodways and serving as a laboring underclass.

As the Narragansett captive well knew, despite his implication that sugar was a food identified only with the colonists, New England's Indians had been familiar with sugar for decades,

and they found it as compelling as the English did. The most revered leader of his tribe, the famous Narragansett sachem Canonicus, had forty years earlier, between 1637 and 1639, in the midst of another tumultuous war, extracted sugar from his English allies on at least five separate occasions. The recently exiled dissident Roger Williams, enjoying his sudden diplomatic importance as hostilities exploded between the Pequot Indians living near his new colony of Providence and the government of the Massachusetts Bay colony that had expelled him the year before, was in constant communication with both Bay colony leaders and the Narragansett sachems whose friendship the English desperately needed to defeat the Pequots. In May of 1637, with the fledgling English settlements in Connecticut in danger of attack, Williams met with Canonicus to plead for information on Pequot movements and war strategies. Finding Canonicus “very sour” because of the devastation wreaked by the recent English-borne smallpox epidemic, Williams “sweetened his spirit” by arguing that the disease was a punishment from God visited on Indians and English alike (though any observer could see that the English possessed some form of protection against the recent plague). Following this conversation, Narragansett warriors agreed to give detailed advice on how to wage war on the Pequots, exposing their hiding places, noting their weak points, and offering guides (as well as requesting that women and children be left alone).

Canonicus and his men received no payment in return for their continued allegiance and vital intelligence. However, Williams wrote to Henry Vane and John Winthrop, the governors of Massachusetts Bay, of one Pequot request: “[I]f any thing be sent to the princes, I find that Canonicus would gladly accept a box of eight or ten pounds of sugar, and indeed he told me that he would thank Mr. Governour for a box full.” Two weeks later, Williams conveyed another offer of Narragansett assistance, which this time seemed conditional on several “gratuities or tokens”: for Canonicus, more sugar; for others, powder, a set of English clothes, and a coat. That following winter of 1637–1638, Canonicus fell gravely ill, and Williams, finding him at the “pits brinck,” sent

him “mine owne” sugar “in the depth of winter and his sicknes.” In February, the sachem sent word to Massachusetts Bay that once again “he would be thanckfull to Mr Govr for some Sugar...” And a year later, in 1639, as tensions between the Narragansetts and the English increased, Canonicus sent John Winthrop his “love and respect” along with gifts of wampum and a basket; in return, wrote Williams, who was still serving as messenger, he “begs of you a litle Sugar.”⁵³⁸

The Indian encounter with English sugar dates back earlier still, to 1623. The first New England settlement, Plymouth, had weathered several years of sickness, hunger, cold, and fear of Indian attack, despite the colony’s treaty with the Wampanoag sachem Massasoit. Now “news came to Plimoth, that Massassowat was like to die...” Seeing an opportunity to demonstrate their friendship and hopefully their power, the English sent Edward Winslow, “fitted...with some cordials,” to visit the sick chief and offer medical care. Finding him near death, unable or unwilling to take food or water, Winslow forced open his mouth and fed him “a confection of many comfortable conserves.” Though it had been two days since he had been able to eat or drink anything, Massasoit managed to swallow the sugary fruit, and Winslow gave him more of the “confection,” “which he swallowed with more readiness.” Then Winslow mixed the conserves with water and Massasoit drank it, which “wrought a great alteration in him in the eyes of all that beheld him...”

Massasoit’s will to eat having returned, Winslow proceeded to give him broth and stayed for hours with the sachem, until it was clear he would recover. At their parting, Massasoit declared that “Now I see the English are my friends and love me, and whilst I live I will never forget this kindness

⁵³⁸ The Pequot attacks were a response to English destruction of Indian cornfields and villages the summer before. See Kate Grandjean, “New World Tempests: Environment, Scarcity, and the Coming of the Pequot War,” *The William and Mary Quarterly* 68 (2011): 75-100. Roger Williams to Governor Henry Vane and Deputy Governor John Winthrop, May 1, 1637 and May 13, 1637; Roger Williams to Governor John Winthrop 28 February 1637/38; Roger Williams to Governor John Winthrop, May 9, 1639; Glenn W. LaFantasie, *The Correspondence of Roger Williams* (Providence: Brown University Press, 1988) 1: 74, 79, 145, 198.

they have shewed me.”⁵³⁹ The Plymouth settlers had long sought to bestow upon Massasoit a gift of great value that would “bind him the faster unto them.” Presents of clothes and textiles had been “kindly accepted,” but had not won his allegiance.⁵⁴⁰ With this healing, performed by means of a mysterious and delectable substance, Massasoit was at last indebted to them.

These three events, spread across the seventeenth century, highlight the psychic and biological power of sugar as it was experienced and understood by New England’s Indians navigating the complex terrain of imperial politics. Venerated for its power to invigorate body and mind, sugar was a symbol of all that divided the two cultures but also of what united them. Its infiltration into Indian foodways should be seen as a part of the wave of global sugar production that intensified from the first millennium onwards, surging from East to West and back again, flowing around obstacles and swelling to a deluge upon the removal of such impediments. Yet historians have neglected the cultural and economic importance of sugar in the conquest of North America.⁵⁴¹ This is partly due to the challenges of studying an early modern non-durable good, as both written records and archaeological evidence are scanty. But also to blame are the tendencies of scholars to lump together both Indian peoples and their preferred trade goods, without separating out distinct groups and commodities for analysis.⁵⁴² In seventeenth-century New England, the

⁵³⁹ Edward Winslow, “Good News From New England,” in Wisecup, ed., *Good News From New England*, 81-84.

⁵⁴⁰ Harvey Wish, ed., *Of Plymouth Plantation by William Bradford* (New York: Capricorn Books, 1962), 77.

⁵⁴¹ Any exploration of sugar and sweeteners in Indian foodways and relations with settlers is curiously absent from the historiography. See, for example, James Axtell, *Natives and Newcomers: The Cultural Origins of North America* (New York: Oxford University Press, 2001), 112, and Peter A. Thomas, “Cultural Change on the Southern New England Frontier, 1630-1665,” in *Cultures in Contact: The Impact of European Contacts on Native American Cultural Institutions, A.D. 1000-1800*, ed. William W. Fitzhugh (Washington, DC: Smithsonian Institution Press, 1985). Michael LaCombe, in his study of the meanings and impact of food and foodways on early contact between Indians and English, includes an extensive discussion of how the English, the Narragansetts, and the Mohegans used food as a political tool and cultural expression, yet doesn’t mention either Canonicus’s demands for sugar or Massasoit’s miraculous healing through an English gift of preserves. Michael A. LaCombe, *Political Gastronomy: Food and Authority in the English Atlantic World* (Philadelphia: University of Pennsylvania Press, 2012). A recent monograph that takes several pages to analyze Winslow’s curing of Massasoit does not examine the significance of the use of sugar. Matt Cohen, *The Networked Wilderness: Communicating in Early New England* (Minneapolis: University of Minnesota Press, 2010), 72-81.

⁵⁴² The conclusions of studies of relatively remote regions in the seventeenth century, such as the midwestern Great Lakes region, where sugar did not penetrate, should not be extended to include coastal Indian groups, though they are

shipping center of the English colonies, Indians were in constant personal contact with both numerous factions of English settlers and a wide variety of imported commodities.

These Indians were, in the words of one scholar, “intimately involved in a power struggle that spanned the Atlantic.”⁵⁴³ The early puritan settlement of New England took place in a context of imperial rivalry, mainly between the Dutch and the English, and shifting relationships between the autonomous native groups of the region, the Abenaki, Pennacooks, Pequots, Narragansetts, Mohegans, Niantics, Massachusetts, Nipmucks, Pocumtucks, and Wampanoag-Nauset (Pokanoket), as well as native peoples further west. In examining the role of material culture in imperial Atlantic history, I am interested not only in the agency of individual groups but also in the way particular commodities shape human behavior.⁵⁴⁴ The two decades between 1640 and 1660 saw the emergence of a sugar production zone extending from New England to the West Indies. These years were also a turning point in what has been termed the “Anglo-Indian” economy, as Indians’ status as

often referenced in precisely that manner. See for example Dean L. Anderson, “Documentary and Archeological Perspectives on European Trade Goods in the Western Great Lakes Region” (PhD diss., Michigan State University, 1992).

⁵⁴³ Jenny Pulsipher, *Subjects Unto the Same King: Indians, English, and the Contest for Authority in Colonial New England* (Philadelphia: University of Pennsylvania Press, 2005), 6.

⁵⁴⁴ Much of the historiography has centered on determining the extent of Indian groups’ agency in negotiating with European settlers. Richard White’s classic *The Middle Ground: Indians, Empires, and Republics in the Great Lakes Region, 1650-1815* (Cambridge: Cambridge University Press, 1991) argued that Indians were able to maintain some power in determining trade and political arrangements; see also Kathleen DuVal, *The Native Ground: Indians and Colonists in the Heart of the Continent* (Philadelphia: University of Pennsylvania Press, 2006). Historians often make their arguments about the native-colonial economy within a framework of cultural vs. material explanations for economic behavior, as Richard White does explicitly in chapter three of *The Middle Ground*. But because material aspects of human behavior exist in a cultural context, this framework has tended to skew historical research and theory away from material factors. White, for example, claims that “long before they were a material necessity, European goods became a cultural necessity,” as though the two motivations could be neatly disentangled; White, *The Middle Ground*, 101. For a recent analysis of how assumptions about the course of Indian history and the language used to describe it can limit analysis, see James H. Merrell, “Second Thoughts on Colonial Historians and American Indians,” *The William and Mary Quarterly* 69 (July 2012): 451-512.

producers and trade partners began to slowly erode, and they were increasingly transitioned to a role as laborers and consumers.⁵⁴⁵

Despite devastating mortality from disease and the unsettling violence of the 1637 Pequot War, before 1660 New England's Indians dominated the political economy of the region. They retained control over much of the land and its produce, and the English settler population had not yet expanded to include a land-hungry second generation. The colonists' subsequent demographic explosion and imperial ambitions, as well as the near extinction of fur-bearing animals and the devaluation of wampum, partly explain the subordination of the Indians of New England over the second half of the seventeenth century. Also important, however, was the Indians' changing consumer culture. Before 1660, the flow of European commodities into the New England colonies was limited, and thus too was Indians' possession of these goods. After 1660 imports increased dramatically.⁵⁴⁶

For Indians, conflicts rooted in control over the access to certain European commodities drove much of their political behavior. All native groups, from small to large, came to "depend" on these goods and on the larger tribal entities that ensured their supply, and this dependence explains much of the transfer of geographic, and thus political and economic, control over New England from Indians to settlers over a very short span of time. The transfer of power to English colonists was linked to the development of trade networks throughout the Atlantic in the seventeenth century. The insertion of Caribbean sugar products into Indian economy and culture altered the balance of economic and thus political power in New England. As Indian autonomy diminished,

⁵⁴⁵ See Joshua Micah Marshall, "'A Melancholy People': Anglo-Indian Relations in Early Warwick, Rhode Island, 1642-1675," in *New England Encounters: Indians and Euroamericans 1600-1850*, ed. Alden T. Vaughan (Boston: Northeastern University Press, 1999), for the role of Indians in the Atlantic economy.

⁵⁴⁶ George Colpitts, *North America's Indian Trade in European Commerce and Imagination, 1580-1850* (Leiden: Brill, 2014), 8.

tensions rose, and the resulting explosion of King Philip's War permanently relegated Indians to a consumer role.

The rapid changes in the political economy of the region over the seventeenth century were a result of the struggles of Europeans and natives to further their control over global trade and to strengthen their position in the Atlantic economy. Thus understanding why and how native groups embraced certain goods is essential to an analysis of the political changes over the seventeenth century. Scholars of Indian material culture and trade have focused exclusively on manufactured goods. Many assume that increasing reliance on European foodstuffs in southern New England at the beginning of the eighteenth century was due to the loss of land for subsistence, without examining how the attraction itself to English foods might be a causal factor. This chapter explores Indians' changing diet and food economy, and how those changes may have affected politics and power dynamics..

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Within southern New England, Indian groups were linked together by a shared culture and language. Political organization and economic practices, however, varied from region to region. Nor were these societies static; rather they experienced waves of various levels of centralization and stratification.⁵⁴⁷ The first European explorers and settlers struggled to understand the political organization of the natives they encountered, often mistakenly grouping them into large "tribes" analogous to the nation-states from which they themselves had come. This characterization endures in the American imagination today. Historians now know, however, that Indians in what would become New England likely lived in small "autonomous village-bands" often united by

⁵⁴⁷ Kathleen Bragdon finds three distinct patterns of socio-political organization and land use, associated with the three environmental zones of New England: coastal, riverine, and uplands. Kathleen Bragdon, *Native People of Southern New England, 1500-1650* (Norman: University of Oklahoma Press, 1996).

“confederacies” of language, culture, and alliance.⁵⁴⁸ Though their culture was dependent on group networks of exchange and friendship, choices, including those surrounding changes in consumption, trade, and land transfer, were often made at the individual or family level.⁵⁴⁹

By the time the English began to settle in the New England in the early seventeenth century, the local Indian villages were already familiar with newcomers and their commodities through a century of European fishing and trading voyages up and down the coast. Trade between Europeans and Indians along the Gulf of Maine coast had begun as early as the 1520s. Such direct contact was rare as far south as Massachusetts Bay before 1600, but an extensive group of northern Indian middlemen appeared in the region by the end of the sixteenth century, facilitating the distribution of European goods to the Bay area’s Indian tribes.⁵⁵⁰ These included copper kettles, iron axes, knives, swords, textiles, and foodstuffs.⁵⁵¹ By the 1620s, dozens of English ships were making seasonal fishing voyages to the Maine and Massachusetts coast every year, and there were at least ten temporary fishing stations along the coast, from Monhegan Island to Cape Ann.⁵⁵²

European and Indian traders brought exposure to microbes as well as trade goods. An epidemic of European disease in 1616 left the New England Indian population devastated, though impacting some groups far more than others. The demographic effects of disease, together with the stress imposed on food supplies by the Little Ice Age and the pull of new European technologies, may have reshaped Indian social and political organization. What had probably been loose

⁵⁴⁸ Neal Salisbury, *Manitou and Providence: Indians, Europeans, and the Making of New England, 1500-1643* (New York: Oxford University Press, 1982), 78; Gloria L. Main, *Peoples of a Spacious Land: Families and Cultures in Colonial New England* (Cambridge: Harvard University Press, 2001), 8-9.

⁵⁴⁹ See Salisbury, *Manitou and Providence*, chap. 4.

⁵⁵⁰ Bruce J. Bourque and Ruth H. Whitehead, “Trade and Alliances in the Contact Period,” in *American Beginnings: Exploration, Culture, and Cartography in the Land of Norumbega*, ed. Emerson W. Baker (Lincoln: University of Nebraska Press, 1994), 131-147.

⁵⁵¹ Laurier Turgeon, “The Tale of the Kettle: Odyssey of an Intercultural Object,” *Ethnohistory* 44 (1997): 8-9.

⁵⁵² Faith Harrington, “‘Wee Tooke Great Store of Cod-Fish’: Fishing Ships and First Settlements on the Coast of New England, 1600-1630,” in Baker, *American Beginnings*, 191-216.

affiliations of bands became what Europeans called “tribes,” powerful alliances of villages with strong leaders. Trade wealth reinforced centralization of power and military strength.⁵⁵³ Tribes began to specialize in different types of production for trade, and those with the best access to Europeans drew their power from those relationships. They tolerated the fledging English settlements in order to secure European goods (though access to and adoption of European goods varied in type and quantity).⁵⁵⁴ Trade brought relationships and interdependence. The willingness of the Indians during the first fifty years of settlement to supply the basic foods of survival, the furs that motivated the engagement of European economic powers, and finally, land, was essential to the colonization of the region.⁵⁵⁵

Some scholars see the introduction of the European market, initially for furs, as a “cultural malignancy” that eventually destroyed Indian economic, political, and social life.⁵⁵⁶ Historians disagree about the extent to which Indians became materially dependent on Europeans. Thus Richard White can argue that “the fur trade involved relatively little disruption of native subsistence systems...by the end of the French period there was not, as yet, material dependence,” while James Merrell can assert that before contact “few, if any, villages relied on outsiders for goods essential to daily life...exchange eroded this traditional independence and entangled natives in a web of commercial relations few of them understood and none controlled...before long...they were growing accustomed – and even addicted to them...”⁵⁵⁷ The scholarly consensus is that though the

⁵⁵³ Karen Ordahl Kupperman, *Indians and English: Facing Off in Early America* (Ithaca: Cornell University Press, 2000), 34–39. Some scholars emphasize that this concentration of power in Indian social organization was already in process at the time of English settlement, and that the newcomers only intensified, rather than instigated, this trend.

⁵⁵⁴ Kupperman, *Indians and English*, 14.

⁵⁵⁵ For the importance of trade in the politics of early New England (though he mentions only manufactured goods), see Thomas, “Cultural Change.”

⁵⁵⁶ For example, Bernard Bailyn, *The Barbarous Years: The Conflict of Civilizations, 1600-1675* (New York: Knopf, 2012), 30.

⁵⁵⁷ White, *The Middle Ground*, 132, 140; James H. Merrell, “The Indians’ New World: The Catawba Experience,” *The William and Mary Quarterly* 41 (Oct. 1984): 551.

pace at which Indians became dependent on European goods varied from group to group, there was a clear, if at times erratic, progression towards dependency. What remains understudied is why and how this dependency arose, and why Indians put more resources into acquiring some products than others.

The complexity of Indian trade and consumption can be best understood by considering the socio-political aspects of consumption. Certain goods became essential to creating and preserving bonds between individuals, families, and groups, so that maintaining access to these goods was integral to cultural stability. An intrinsic element of the Indian pursuit of European goods was their integration into an existing Indian material culture. The result was social and political dependence on trade as much as technological dependence.⁵⁵⁸ This “ideological value” of European trade goods helps explain Indians’ eagerness for goods that had relatively little value for Europeans, their intensification of trade even while continuing to use effective native technologies, and their continuing pursuit of European goods even when the negative consequences of this trade became clear. Such variables serve as a caution against interpreting trade as a purely rational, utilitarian, or material phenomenon.⁵⁵⁹ A case study of the trade in sugar products, and the Indians’ motives for acquiring them, can enrich our understanding of Indians as political and economic actors.

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⁵⁵⁸ For a discussion of the role of European trade goods in Indian culture, see Kupperman, *Indians and English*, chap. 6.

⁵⁵⁹ Christopher L. Miller and George R. Hamell, “A New Perspective on Indian-White Contact: Cultural Symbols and Colonial Trade,” *Journal of American History* 73 (1986): 311-28; Turgeon, “The Tale of the Kettle;” Peter Allen Thomas, “In the Maelstrom of Change: The Indian Trade and Cultural Process in the Middle Connecticut River Valley, 1635-1665” (PhD diss., University of Massachusetts Amherst, 1979); Nancy Lurie, “Indian Cultural Adjustment to European Civilization,” in *Seventeenth-Century America: Essays in Colonial History*, ed. James Morton Smith (Chapel Hill: The University of North Carolina Press, 2014). A good review of the literature is found in Bruce M. White, “Encounters with Spirits: Ojibwa and Dakota Theories about the French and Their Merchandise,” in *American Encounters: Natives and Newcomers From European Contact to Indian Removal, 1500-1850*, ed. Peter C. Mancall and James H. Merrell (New York: Routledge, 2007), 216-245. White argues that any theory of consumption which attempts to separate the material use of a good from its cultural significance is problematic, as the two functions are intertwined. For a discussion of hybridity in Indian-English colonial culture, see Joyce Chaplin, *Subject Matter: Technology, the Body, and Science on the Anglo-American Frontier, 1500-1676* (Cambridge: Harvard University Press, 2001), chap. 6. For a greater emphasis on rationalism, see Bruce G. Trigger, “Early Native North American Responses to European Contact: Romantic versus Rationalist Interpretations,” *The Journal of American History* 77 (March 1991): 1195-1215.

The Narragansett sachem Canonicus, coming of age at the end of the sixteenth century and continuing as a powerful leader well into the seventeenth, encountered multiple varieties of sweetness over his lifetime. Before the arrival of European traders and colonists, New England Indian exposure to sweetness was limited by climate, flora and fauna, and technology. Their only sources of sugar were maple trees, which flourished only in the north, and the starches present in vegetables, fruits and grains (honeybees and sugar cane were not native to the continent). The tribes of northern New England, especially, must have been familiar with maple sap. It is possible that it was only after the introduction of European iron kettles, however, that they were able to consume the more concentrated sweetness of maple sugar, or even syrup, in place of the milder sweetness of sap. Maple syrup and sugar were not merely indulgences for northern native peoples; maple products became in the later colonial period a significant source of calories and contained important nutrients. Just as early modern Europeans used sugar to preserve enormous quantities of fruit, enriching their diet as well as adding calories, Indians who had access to maple sap and European technologies to process it benefited nutritionally.⁵⁶⁰

Thomas Lechford, observing New England's Indians between 1638 and 1641, observed that "[t]hey will not taste sweet things, nor alter their habit willingly."⁵⁶¹ But this assertion likely reflected the English craving for sweetness and the incomprehensibility of a diet which did not yet reflect this craving as deeply, rather than an Indian dislike of sweet foods. There is no evidence that southeastern New England Indians such as the Narragansetts harvested maple sugar, or that they traded for it during this early period when even northern tribes may not have been reducing and

⁵⁶⁰ Howard S. Russell, *Indian New England Before the Mayflower* (Hanover, NH: University Press of New England, 1980), 86-90; Roy L. Butterfield, "The Great Days of Maple Sugar," *New York History* 39 (1958): 151-164; Robert H. Keller, "America's Native Sweet: Chippewa Treaties and the Right to Harvest Maple Sugar," *American Indian Quarterly* 13 (1989): 120.

⁵⁶¹ Thomas Lechford, *Plain Dealing: Or, News from New England* (1642; Boston, 1867), 119.

crystallizing sap.⁵⁶² Mildly sweet foods, however, were a cornerstone of their diet, and sweetness was highly regarded. The Narragansetts and their neighbors ate large quantities of chestnuts and parched corn, both of which taste very sweet; indeed, Edward Johnson observed that Canonicus feasted the English with boiled chestnuts “which are very sweet, as if they were mixt with Sugar...”⁵⁶³ A Dutch observer in New Netherland described another Indian practice of harvesting young corn to “suck out the sap, which is as sweet as if it were sugar-cane.”⁵⁶⁴ John Winthrop Jr. also noted this practice of eating young green corn with a “very sweete tast,” and observed that at least one variety of Indian corn “is full of sweete Juice like the Sugar Cane, and a Syrrap as sweete as Sugar Syrrap may be made of it...” Indians used this sweet corn juice to make sweet foods indistinguishable from those made with sugar.⁵⁶⁵

Sweetness too appears as a robust concept in Roger Williams’s ethnographic and linguistic study of the Narragansetts published in 1643. He noted two distinct ways of saying “it is sweet” in Narragansett language, as well as a phrase for “it is sweeter.” And he offered only one other translation of a term concerning taste – sour, the opposite for sweet. It is difficult to say whether this focus on words to describe sweet flavors, to the exclusion of other tastes, reflected Williams’ ideas or native preferences. Most likely it was both. (Though puritans were fond of using the word “sweet” metaphorically, Williams clearly intended the literal meaning of the word here, as his translations were part of his chapter on “Eating and Entertainment.”) He also noted native foods akin to “Grapes or Raysins,” and “Figs, or some strange sweet meat;” whether or not these

⁵⁶² Keith Stavely and Kathleen Fitzgerald, *America’s Founding Food: The Story of New England Cooking* (Chapel Hill: The University of North Carolina Press, 2004), 213-214.

⁵⁶³ M.K. Bennett, “The Food Economy of the New England Indians, 1605-1675,” *Journal of Political Economy* 63 (1955): 384; Russell, *Indian New England*, 76-79; Edward Johnson, *Wonder-working Providence of Sions Saviour in New England* (London, 1654), 109.

⁵⁶⁴ “Letter of Isaack de Rasieres to Samuel Blommaert, 1628,” in *Narratives of New Netherland, 1609-1664*, ed. J. Franklin Jameson (New York: Charles Scribner, 1909), 107.

⁵⁶⁵ Fulmer Mood, “John Winthrop Jr. on Indian Corn,” *The New England Quarterly* 10 (1937): 126, 131.

translations accurately named the fruits or pastes in question, they must have been sweet to taste. Wild berries, also, were abundant in Narragansett country, “divers sorts sweete like Currants,” and Canonicus’s people gathered them to make strawberry bread and a dish like “plum or spice cake,” both made of cornmeal mixed with fresh or dried berries.⁵⁶⁶

Nor was Indian exposure to sweetness necessarily limited to native plants before the arrival of the English. European explorers and traders had been stopping up and down the coast for more than a hundred years before the founding of Plymouth in Wampanoag country in 1620. There is no way to know how often sugar made its way northward from the Spanish and Portuguese plantations in the Americas in the sixteenth century, but given the ubiquity of sugar in the early modern European diet, and the common inclusion of it in shipboard provisions, as a medicine as well as a foodstuff, it is likely that coastal Indians in contact with Atlantic voyagers sampled it during this period.

Certainly the accounts of explorers and traders in the beginning of the seventeenth century reveal an Atlantic teeming with ships laden with “Sugar, Marmelade, Suckets, and such like.”⁵⁶⁷ Adventurers writing of their meetings with Indians often alluded to giving them “trifles” or “victuals” without bothering to elaborate; but we do have one record that mentions sugar specifically. Describing an encounter with Indians along the coast of Maine in 1605, writer James Rosier explains that his captain first gave the Indians a shirt, knives, a comb, and a mirror, “whereat they laughed and tooke gladly...” He then offered them aqua vitae, which after tasting they roundly rejected, though accepting other drinks. Sugar, however, received the warmest reception, for “we

⁵⁶⁶ Roger Williams, *A Key into the Language of America*, ed. John J. Teunissen and Evelyn J. Hinz (Detroit: Wayne State University Press, 1973), 102-103, 168-169.

⁵⁶⁷ See, for example, John Smith’s description of his voyages. John Smith, “The Generall Historie of Virginia, New England, and The Summer Iles,” in *Forerunners and Competitors of the Pilgrims and Puritans*, ed. Charles Levermore (New York: The New England Society of Brooklyn, 1912), 695, 696, 703.

gave them Sugar Candy, which after they had tasted they liked and desired more...⁵⁶⁸ In an exchange presaging Canonicus's appeals to the governors of Massachusetts Bay thirty years later, sugar was the only gift described in this encounter that immediately sparked an appetite for more.

Indeed, it is highly likely that even before the English began supplying Canonicus with sugar, the Narragansett leader encountered Brazilian sugar brought by the Dutch to their colony of New Netherland. In the early seventeenth century the Dutch remained a strong presence in southern New England and competed fiercely for the Indian trade.⁵⁶⁹ Dutch traders were selling sugar to the Plymouth and Massachusetts Bay colonies in the 1620s and 1630s, and they likely would have offered it in trade to Indians as well.⁵⁷⁰ But whenever and wherever the Indians of New England did first taste sugar, whether through trade with the English, Dutch, or other European powers, they quickly acquired a taste for this amplification of the sweet flavor they had long extracted from their own native plants.

The Narragansetts, led in the first half of the seventeenth century by Canonicus and his nephew, Miantonomi, were one of the most powerful and populous tribes in New England at the time of the English settlement, figuring prominently in Atlantic markets. The tribe was situated in what is now Rhode Island, in a good position to trade with both English and Dutch settlers, as well as with inland tribes with access to furs. Their coastal position gave them control over prime shell lands, which they exploited for the manufacture of wampum. Wampum, which Indians had long venerated as ceremonial good, was transformed into a valuable commodity from the 1620s onwards,

⁵⁶⁸ James Rosier, "A True Relation of the Most Prosperous Voyage Made This Present Yeare 1605..." in *Sailors Narratives of Voyages Along the New England Coast, 1524-1624*, ed. George Parker Winship (New York: Burt Franklin, 1968), 117.

⁵⁶⁹ Lynn Ceci, *The Effect of European Contact and Trade on the Settlement Pattern of Indians in Coastal New York, 1524-1665* (New York: Garland, 1990), chap. 4.

⁵⁷⁰ William T. Davis, ed., *Bradford's History of Plymouth Plantation, 1606-1634* (New York: Charles Scribner's Sons, 1910), 234; Hosmer, *Winthrop's Journal*, 1:130-131.

as the Dutch and then the English began using it as a currency to encourage Indian groups to specialize in the production of furs.⁵⁷¹ Especially on the coast, tribes responded to the opportunity to trade for European goods by competing for control over that trade, particularly through monopolizing the production of and access to wampum.⁵⁷²

Indian motivations for the adopting a currency and the focusing increasingly on production for the European market, however, were complex. Indian demand did not manifest itself in the same way that European demand did, though similar human proclivities for certain goods were evident. In the sixteenth and early seventeenth centuries, New England's Indians related to trade, commodities, and the material world so differently from Europeans that historians face an enormous challenge in understanding the political economy of the era. For Indians, the material and spiritual world were interwoven, and resources were inherently communal. Exchange was not an economic activity. Rather, it was a social action, undertaken in order to strengthen and define relationships, increase interdependence, and assure that all were provided for. The idea that a person would enrich himself and not feel obligated to give in return, or that wealth and commodities were impersonal and did not convey obligation upon the recipient, was as abhorrent as it was inconceivable. Trade meant kinship, the establishing of a spiritual relationship.

This deep-rooted culture of the “gift economy,” and its clash with European ambitions, appears over and over in narratives of contact. Native peoples also placed greater emphasis on immediate consumption of goods. Many “utilitarian” European goods, including hoes, kettles, and guns, ended up in graves; their meaning as gifts for the dead overrode their function and their value

⁵⁷¹ Christopher L. Pastore, *Between Land and Sea: The Atlantic Coast and the Transformation of New England* (Cambridge: Harvard University Press, 2014), 15.

⁵⁷² Lynn Ceci, “Native Wampum as a Peripheral Resource in the Seventeenth-Century World-System,” in *The Pequots in Southern New England*, ed. Laurence M. Hauptman and James D. Wherry (Norman: University of Oklahoma Press, 1990), 55-61.

for trade. Similarly, traditional Indian prestige goods, such as pearls, copper, feathers, and shells, were not intended for individual consumption, but rather were symbolically stockpiled, exchanged as gifts, and ritualized to create and reinforce social relationships and power dynamics. Thus early Indian demand for European imports may be explained more by the political and social pressure to reciprocate in exchanges with other native groups than by technological dependence on such commodities.⁵⁷³

Central to the Indian gift economy was the concept of debt. Unlike the ideal “gift” in a market economy, which theoretically is given freely without obliging the recipient to pay anything in return, goods in a gift economy are given precisely to oblige the recipient to reciprocate, if not in kind, then in social obligation, such as support, loyalty, or deference.⁵⁷⁴ Sometimes the gift meant that the giver was superior, and the recipient in his debt; sometimes it meant that the giver was inferior, and offering the gift as tribute; and sometimes gifts were exchanged between equals. When Indians asked for “gifts,” whether during negotiations with European political emissaries, or in the form of credit from a trader, they understood themselves as being bound to the giver in mutual support. This sometimes translated effectively in the political sphere, as European leaders also had some concept of the diplomatic offering; but it would prove disastrous for the Indians in the realm of trade, as Europeans had a very different conception of debt.

⁵⁷³ Neal Salisbury, “The Indians’ Old World: Native Americans and the Coming of Europeans,” *The William and Mary Quarterly* 53 (1996): 435-458; Lisa Brooks, *The Common Pot: The Recovery of Native Space in the Northeast* (Minneapolis: University of Minnesota Press, 2008), chap. 1; Bragdon, *Native People of Southern New England*, chap. 4. Colpitts, *North America’s Indian Trade*, 26-31, 44-58, reviews the various scholarly interpretations of Indian economic behavior, and discusses the essentially social and redistributive nature of Indian trade. Recent monographs analyzing the nature of the Indian “gift economy” include Alexandra Harmon, *Rich Indians: Native People and the Problem of Wealth in American History* (Chapel Hill: University of North Carolina Press, 2010), chap. 1, and Seth Mallios, *The Deadly Politics of Giving: Exchange and Violence at Ajacan, Roanoke, and Jamestown* (Tuscaloosa: University of Alabama Press, 2006). Of course, seventeenth-century European cultures were not purely capitalist, either, and also relied on notions of reciprocity; see David Murray, *Indian Giving: Economies of Power in Indian-White Exchanges* (Amherst: University of Massachusetts Press, 2000), chap. 1; Neal Salisbury, “Social Relationships on a Moving Frontier: Natives and Settlers in Southern New England, 1638-1675,” *Man in the Northeast* 33 (1987): 92.

⁵⁷⁴ For discussion of the concept of the “gift economy” as it relates specifically to Algonquian Indians, see Mallios, *Deadly Politics*.

Likely part of the initial appeal of sugar for Indians was as a “prestige good” whose worth was far greater than its utility would suggest. Such goods were often valued in Indian societies not for any practical benefit but precisely because they could not be produced locally and could be acquired only through trade with the unknown, and thus were associated both with mysterious spiritual creative forces and with the political power required to obtain them. Indian leaders drew their power partly from their control over access to and distribution of trade goods; these goods lent prestige to the sachems, and in turn connection with power only reinforced the allure of imports. The fusing of the material, spiritual, and political in Indian cultures endowed trade commodities with a great appeal and significance. When Indian chiefs sought to extract European goods from explorers and settlers, they were attempting to incorporate the Atlantic economy into their own political sphere.⁵⁷⁵

Canonicus drew his power in part from managing the distribution and display of imports, as did competing seventeenth-century New England sachems. The Narragansetts, like other New England tribes, centered their spiritual lives around belief in Manitou, the powerful force that pervaded the earth and permeated all things. Even more than premodern Europeans, they experienced the physical and spiritual as one force. They described English technologies as being imbued with Manitou, their way of expressing the material and social attributes of these new goods.⁵⁷⁶ Roger Williams noted the “generalle Custome” among the Narragansetts “at the apprehension of any Excellency...Wisdome, Valour, strength, Activity &c. they cry out Manitto A God; and therefore when they talk amongst themselves of the English ships, and great buildings, of the plowing of their Fields, and especially of Bookes and Letters, they will end thus: Manittowock

⁵⁷⁵ I am drawing on Daniel Richter’s analysis here. Daniel K. Richter, *Trade, Land, Power: The Struggle for Eastern America* (Philadelphia: University of Pennsylvania Press, 2013), chaps. 1 and 3, 63.

⁵⁷⁶ William Simmons, *Cautantowwit’s House: An Indian Burial Ground on the Island of Conanicut in Narragansett Bay* (Providence: Brown University Press, 1970), 51.

They are Gods.”⁵⁷⁷ When Indians encountered sugar, a comestible English substance endowed with English Manitou and discernible physical effects, they likely incorporated it into their traditional religious practices.

In the 1630s, Canonicus used his position as an essential ally of the English to procure “gifts” of sugar as a way of reinforcing his power. When he ate it, he felt the stimulating biological and spiritual strength of sugar directly; through his possession and distribution of it, he enhanced his status among his own people. His culture’s emphasis on the innate spirituality of the material world made him and his people particularly susceptible to sugar’s appeal. Although the English did not consciously view sugar as a spiritual substance – both because of their tendency to distinguish the physical from the transcendent, and because of their gradual habituation to sugar as a commonplace – they implicitly recognized its psychological power. Like Canonicus, the English used sugar to cement bonds, understanding that the potency of its opiate effects made it a particularly well-received gift. John Winthrop Jr. sent sugar to his sister, Mary, in the same year that his father bestowed sugar upon Canonicus; in later decades, the Pynchons and the Winthrops, New England’s ruling dynasties, delivered gifts of sugar and conserves to each other up and down the Connecticut River.

Canonicus’s insistence on “gifts” of sugar from his English contacts had other motivations as well. The Narragansetts saw themselves as equals of the English power center at Massachusetts Bay, a stance that becomes apparent when reviewing their negotiations with the English during the Pequot War. Even when viewed through the distorted glass of English narrative, Narragansett objectives are clear. John Winthrop’s summary of the Bay colony’s treaty with the Narragansetts in 1636 mentions the “firm peace” between the two nations, with the English bound to seek

⁵⁷⁷ Williams, *A Key Into the Language of America*, 191.

Narragansett input on diplomatic relations with the Pequots and with a stated aim “[t]o continue to the posterity of two parties.” Though the language of this negotiation between equals appears to contrast with Williams’s language in conveying Canonicus’s requests for sugar – “beg,” “request,” and “thanckfull” – which cast the sachem as a supplicant, and may have been interpreted as a sign of submission by the English, mutual requests for and acceptance of gifts were in fact signs of an interaction between equals in Algonquian culture. Though acceptance of a gift conveyed obligation to the other party, it also solidified a bond.

The Narragansetts and the English had inaugurated their relationship by playing on the significance of gifts, employing them as belligerent challenges. In 1621, when Canonicus first encountered English settlers near his territory, he sent a “gift” of arrows wrapped in a rattlesnake skin to the Plymouth colony. This calculated action exposed the power dynamics of gift-giving and differing understandings of such exchanges. The English kept the arrows, seeing no weakness in doing so, and sent a “gift” in return of bullets. But Canonicus “would not once touch the powder and shot, nor suffer it to stay in his house or his Country,” eventually sending it back to Plymouth. His refusal to accept it signaled reluctance to establish a relationship with, and thus some sort of obligation to, the still-alien intruders, whether that relationship might be one of enmity or peace.⁵⁷⁸ But the strangers were there to stay, and in one of the Narragansetts’ first contacts with the Massachusetts Bay colony, Canonicus’s son formally exchanged gifts with John Winthrop, presenting him with an animal skin and accepting a pewter pot in return.⁵⁷⁹ When signing the 1636 treaty, the Narragansetts declared that “they would now make [the English] a firm peace, and two

⁵⁷⁸ Wish, *Of Plymouth Plantation*, 82; Edward Winslow, *Good Newes from New England: or A True Relation of things very remarkable at the plantation of Plimoth in New England* (London: I.D. for William Bladen and John Bellamie, 1624), 2-4.

⁵⁷⁹ John Winthrop, *The History of New England from 1630 to 1649*, ed. James Savage, (Boston: Phelps and Farnham, 1825), 1:58.

months hence they would send [the English] a present.”⁵⁸⁰ The English may have interpreted the present as tribute, when likely the gesture meant precisely the opposite to the Narragansetts: that by accepting the gift, the English were now obligated to them, or in their debt. Canonicus’s requests over the next two years reflected his view that not only was he willing to give to the English, but that the English owed him something as well.⁵⁸¹ English narratives hint that the Narragansetts viewed the exchange of commodities as a political act rather than any sort of market exchange, and that they did not necessarily value English goods for their use.

In the aftermath of the Pequot War, tensions mounted as the Narragansetts realized that the English were operating under a very different set of cultural assumptions. The settlers had come offering goods, said Miantonomi, but the Indians “must give no more wampum to the English, for they are no Sachems, nor none of their children shall be in their place if they die; and they have no tribute given them; there is but one king in England, who is over them all, and if you would send him 100,000 fathom of wampum, he would not give you a knife for it, nor thank you.”⁵⁸² His words convey his aversion to the idea of trade as purely mercenary activity open to all, rather than a way to signal respect and mutual obligation within a carefully defined relationship. Thus Canonicus likely demanded sugar as a powerful symbol of friendship between his tribe and Massachusetts Bay, or even as tribute owed him by the colony. This cultural clash of expectations would not end well for the Indians, who would find themselves eventually in a state of material dependence. Perhaps they understood better than the English the link between consumption and the loss of political autonomy.

⁵⁸⁰ Winthrop, *History*, 1:198-199.

⁵⁸¹ Paul A. Robinson, “Lost Opportunities: Miantonomi and the English in Seventeenth-Century Narragansett Country,” in *Northeastern Indian Lives, 1632-1816*, ed. Robert S. Grumet (Amherst: University of Massachusetts Press, 1996), 19.

⁵⁸² Lion Gardener, “Relation of the Pequot War,” in *History of the Pequot War: The Contemporary Accounts of Mason, Underhill, Vincent, and Gardener*, ed. Charles Orr (Cleveland: The Helman-Taylor Company, 1897), 141.

Sugar's opiate effects and aesthetic properties earned it a central role in early modern English medicine, and a belief in its healing powers spread quickly among the Indians. Canonicus was an old man in his sixties by the 1630s, failing in strength.⁵⁸³ Sugar by that time had come to have the same compelling effect on him as it had over countless Englishmen before him. He had surely heard of the miraculous healing of Massasoit, brought back from the brink of death by a sugary confection that awoke in him a desire to swallow, eat, and live. Indians often asked the English to share their medicines, partly because they made the reasonable assumption that the English knew more about the diseases that they had brought with them than the Indians did.⁵⁸⁴ In 1633 a plague devastated the Narragansetts, along with the Pocumtucks, Mohegans, and Pequots.⁵⁸⁵ That the Indians "died most miserably" of this plague and other illnesses that swept through their villages, while leaving the English largely unscathed, surely enhanced the reputation of English medicines.⁵⁸⁶ Roger Williams observed the Indians' lack of successful treatments for English diseases, noting that "they have not (but what sometimes they get from the English) a raisin or currant or any physic, Fruit, or spice, or any Comfort..."⁵⁸⁷ Sugary fruits, conserves, and "physic," or medical concoctions, made up the bulk of the English pharmacy. Observing their stimulating biological effects and their popularity among the plague-resistant English, Indians likewise incorporated sugar into their belief system, categorizing it to as a reservoir of Manitou, with the ability to heal and restore power to its consumers. One of the reasons that Canonicus "begged" sugar from his English rival, Governor Winthrop, was to save his own life and to restore the health of his people.

⁵⁸³ Robinson, "Lost Opportunities," 17-18.

⁵⁸⁴ Chaplin, *Subject Matter*, 184-185.

⁵⁸⁵ Brenda J. Baker, "Pilgrim's Progress and Praying Indians: The Biocultural Consequences of Contact in New England," in *In the Wake of Contact: Biological Responses to Contact*, ed. Clark Larsen and George R. Milner (New York: John Wiley, 1994), 36.

⁵⁸⁶ Wish, *Of Plymouth Plantation*, 176.

⁵⁸⁷ Williams, *A Key Into the Language of America*, 242.

By mid-century, when the conversion of Barbados to sugarcane production dramatically expanded the supply of sugar products to New England, evidence indicates that the region's Indians as well as its English settlers had become greater consumers of sugar. As we have seen, sachems used their diplomatic relationships to secure sugar products. But as the English population surged and Indians and settlers increasingly lived and traveled near each other, Indian access to sugar widened, and native people sought out sugar and molasses as an energizing, flavorful, and therapeutic source of sustenance. According to contemporary observer John Josselyn, a visitor and travel writer from England, by the 1660s the use of sugar products among the Indians was commonplace, resulting in a blending of native and English foodways. Sugar consumption increased not only in New England's greatest population centers, such as Boston and Providence, but also in frontier areas that had some access to Atlantic trade. Josselyn's observations come from Scarborough, in what is now Maine, then an area of scattered and isolated settlements. Cheap molasses had recently begun flooding into the region from Barbados, and it came to rival grain as a base for beer. Josselyn described how "in that part of the country where I abode, we made our Beer of Molosses, Water, Bran, chips of Sassafras root, and a little Wormwood," and recounted distributing this "Drink made of two Gallons of Molosses wort" to ailing local Indians. Josselyn also described the emergence of a hybrid food culture, including a method of cooking native spruce with sugar to make it palatable, a practice common among Indians and English alike. "The Indians and English use them much," he explained, "boiling them with Sugar for Sauce to eat with their Meat..."⁵⁸⁸ Much of this sugar and molasses was distributed through government truck-houses, set up throughout the border regions between Indian country and English settlements. As we will see,

⁵⁸⁸ John Josselyn, *New England's Rarities* (1672; Boston: William Veazie, 1865), 121, 90.

the Massachusetts government employed a deliberate political strategy of encouraging Indian dependence on tropical imports.

One of the main sources of evidence for changes in Indian consumption patterns in the seventeenth century is the archeological record, principally gravesites and trash heaps. Such sites provide an invaluable account of to which European goods Indians had access, which they preferred, and how they incorporated new commodities into native culture. But these findings are limited to durable commodities that survive the centuries, the European weapons, spoons, kettles, hoes, bells, beads, and sometimes textiles that then are assumed to comprise the full complement of Indian consumer goods. Foodstuffs, particularly those such as sugar, that are not harvested locally, do not contain inedible waste, do not require specialized processing equipment, and tend to be traded and distributed in small amounts, leave a far lighter imprint. Nevertheless, gravesites do provide one window into changing dietary patterns: human teeth. Archaeologists working in a Narragansett burial ground in Rhode Island, only a few miles from Roger Williams's trading post, find that Indian dental decay between 1650 and 1670 was "exceptionally high," a dramatic departure from the archaeological findings for previous centuries. They speculate that that rising consumption of European flour and sugar were responsible for this change, though noting the lack of historical scholarship on the subject.⁵⁸⁹

⁵⁸⁹ Mark A. Kelley, T. Gail Barrett, and Sandra D. Saunders, "Diet, Dental Disease, and Transition in Northeastern Native Americans," *Man in the Northeast* 33 (1987): 121; Paul A. Robinson, Marc A. Kelley, and Patricia E. Rubertone, "Preliminary Biocultural Interpretations from a Seventeenth-Century Narragansett Indian Cemetery in Rhode Island," in *Cultures in Contact: The Impact of European Contacts on Native American Cultural Institutions, A.D. 1000-1800*, ed. William W. Fitzhugh (Washington, DC: Smithsonian Institution Press, 1985), 119, 125. Studies of other Indian groups during the centuries before and after contact with European settlers also show an increase in dental decay, both in the centuries immediately preceding contact and once settlement was thoroughly established. Clark Larsen, Rebecca Shavit, and Mark C. Griffin, "Dental Caries Evidence for Dietary Change: An Archaeological Context," in *Advances in Dental Anthropology*, ed. Mark A. Kelley and Clark Larsen (New York: John Wiley, 1991): 179-202. The increase wear on teeth enamel before 1600 was probably caused first by an increasing reliance on maize cultivation. The rise in dental decay in seventeenth-century New England, however, is unlikely to be caused purely by greater reliance on agriculture, since if anything Indian harvests were disrupted during this period.

What has received more attention (though not as much as might be expected) is the impact of European alcohol on Indian populations in seventeenth-century New England. Sugar and alcohol were altogether different commodities than guns, cloth, and kettles. Like sugar, alcohol induced biological cravings, only much more powerfully and with mind-altering results. Like sugar, alcohol was not a durable good; the demand for both was highly elastic, as supplies were quickly exhausted and always needed to be replaced. And where the histories of sugar and alcohol really collide, of course, is in the birth of rum, the liquor distilled from sugar waste products, first manufactured on Barbados for shipment to the American colonies, and then increasingly produced in New England itself from Caribbean molasses. Though the English (and especially the French) also sold Indians brandy and wine, rum was far and away the preferred inebriant for the Indian trade, and contemporary observers were appalled at its ruinous effects on Indian societies.

John Josselyn summed up the impact of rum on New England's Indians in his observation that "their drink they fetch[ed] from the spring, and were not acquainted with other, untill the French and English traded with that cursed liquor called Rum, Rum-bullion, or kill-Devil, which is stronger than spirit of wine, and is drawn from the dross of Sugar and Sugar-Canes, this they love dearly, and will part with all they have to their bare skins for it..."⁵⁹⁰ Struggling to characterize the depth of Indian demand for rum, observers described "the infection of swearing and drinking" and lamented that the Indians "would pawne their wits, to purchase the acquaintance of it."⁵⁹¹ Massachusetts outlawed the Indian alcohol trade for most of the seventeenth century, and thus Indian rum purchases were not recorded in account books. These laws were largely ineffectual, however; despite complaints from both Indian and English leaders, colonists commonly traded

⁵⁹⁰ Paul J. Lindholt, *John Josselyn, Colonial Traveler: A Critical Edition of Two Voyages to New-England* (Hanover: University Press of New England, 1988), 99.

⁵⁹¹ Alden T. Vaughan, ed., *New England's Prospect* (1634; Amherst: University of Massachusetts Press, 1977), 79; Thomas Morton, *New English Canaan* (1637; New York: Burt Franklin, 1967), 174.

alcohol with Indians for goods or labor.⁵⁹² Historians have not fully explored the extent of Indians' craving for alcohol in seventeenth-century New England, but it clearly contributed to social disruption, debt, and land cessions, and, as elsewhere, intensified the spread of poverty and dependence.⁵⁹³

Historians have tended to see alcohol, particularly rum, as the only elastic, addictive, non-durable European commodity that influenced the Indian political economy.⁵⁹⁴ But sugar and molasses were important consumer goods in their own right, and could induce dependency while possessing the advantage of legality and respectability. Indeed colonial governments not only condoned its trade, but encouraged Indians to develop a sugar habit. Sugar became a both a symbol of domination by a hated conqueror, and a means of cross-cultural communication. As the seventeenth century wore on, both Indians and English increasingly developed a physical and psychological dependency on the tropical commodity.

* * * * *

In 1681, the Massachusetts General Court granted six young fatherless English children one thousand acres of land, "in any free place beyond Nashaway River." This impressive bequest was a response to the petition of their mother, Mary, who with her husband, Simon Willard, had operated Indian trading houses, or "truck-houses," in east-central Massachusetts, between the Concord and Connecticut Rivers, from the 1640s through the 1670s, in Nipmuck country. When Willard died in

⁵⁹² David J. Silverman, *Faith and Boundaries: Colonists, Christianity, and Community among the Wampanoag Indians of Martha's Vineyard, 1600-1871* (Cambridge: Cambridge University Press, 2005), 193.

⁵⁹³ James Axtell, *The European and the Indian: Essays in the Ethnohistory of Colonial North America* (New York: Oxford University Press, 1981), 259; Peter C. Mancall, "The Bewitching Tyranny of Custom: The Social Costs of Indian Drinking in Colonial America," in *American Encounters: Natives and Newcomers from European Contact to Indian Removal, 1500-1850* (New York: Routledge, 2007), 270-289; James Merrell argues that "[L]iquor...proved impossible to resist and extraordinarily destructive," "The Indians' New World," 549; Richard White connects the English introduction of rum to the Great Lakes region to the erosion of Indian agency, noting that "Indians pawned their clothes and wampum to get it," and that "rum served as a lubricant" in drawing Indians into the market economy. White, *Middle Ground*, 264, 334.

⁵⁹⁴ For example, Mancall, *Deadly Medicine*, 43.

1676, Nipmuck Indians were “*above five hundred pounds* in his debt” for English “goods that he had taken up and paid away to the Indians, for which they remain to this day indebted...”⁵⁹⁵ Since there was little possibility that the tribe could come up with this enormous sum, the Court simply granted Willard’s children part of Nipmuck territory. It was a pattern that would repeat itself over and over in the middle decades of the seventeenth century, as settlers used their legal concepts of credit and debt to justify the seizure of Indian lands.⁵⁹⁶

The English colonists brought with them an agricultural system that integrated livestock raising, intensive cultivation of European grains, and the production of raw materials, such as a timber, for export. Each settler family in seventeenth-century western Massachusetts required about sixty acres of a mixed variety of types of land to sustain itself, and settlers were increasing through births and migration all the time.⁵⁹⁷ This voracity meant that land was the most coveted commodity in the settler-Indian economy. Through warfare and trade, the English came to control most of New England in the first century of settlement, revolutionizing the area’s government, economy, and ecosystems.

“Towns have they none,” observed John Josselyn of the Indians, “being alwayes removing from one place to another for conveniency of food...”⁵⁹⁸ Land use and political relationships to land varied among Indian groups in New England. All, however, both appeared different from those of English settlers, particularly in their lack of domesticated animals and permanent structures, and yet

⁵⁹⁵ Nathaniel B. Shurtleff, ed., *Records of the Governor and Company of the Massachusetts Bay in New England* (Boston: William White, 1853), 5:310; Mary’s petition quoted in Joseph Willard, *Willard Memoir, or Life and Times of Simon Willard* (Boston: Philips, Sampson & Co., 1858), 334-335; for more on the Nipmucks, see Dennis A. Connole, *The Indians of the Nipmuck Country in Southern New England, 1630-1750* (Jefferson: McFarland, 2001).

⁵⁹⁶ James Warren Springer, “American Indians and the Law of Real Property in Colonial New England,” *The American Journal of Legal History* 30 (1986): 46-47.

⁵⁹⁷ Peter A. Thomas, “Contrastive Subsistence Strategies and Land Use as Factors for Understanding Indian-White Relations in New England,” *Ethnohistory* 23 (1976): 1-18.

⁵⁹⁸ Lindholt, *John Josselyn*, 91.

were similar to the English in terms of types of foods produced and the amount of land needed to produce them. Groups near the coast practiced what one scholar has called “conditional” sedentism. These groups neither built permanent villages nor lived nomadically. Instead bands of several hundred people treated one small tidal region as their home, frequently moving around it in various social configurations – usually small villages made up of a few families – to take advantage of the bounty of its ecosystem. These coastal groups farmed, but crops made up only one element of their diet.

Inland communities along rivers may have been more concentrated and permanent, particularly in the Connecticut River Valley, probably because of reliance on agriculture rather than gathering. Further inland, groups may have had still different ways of organizing themselves and relating to the land. In the two centuries before contact with European explorers, the Indians in certain coastal areas of New England may have been undergoing a period of increasingly hierarchical societies and competition over land use. Crucially, all Indian groups required as much or perhaps more land as the English settlers to maintain their semi-nomadic subsistence activities and therefore their populations. Loss of land would mean either starvation or a new reliance on European food supplies.⁵⁹⁹

Divergent political cultures and relationships to land, in addition to differing conceptions of trade and wealth, resulted in misunderstanding and conflict over land ownership between Indians

⁵⁹⁹ There is little scholarly consensus on the extent to which the Indians of greater New England depended on agriculture and maintained permanent villages at the time of colonization in the early seventeenth century. Also, disease, trade, war, and land sales affected land use dramatically and erratically for different Indian groups across the seventeenth century, so that it is difficult to summarize the impact of English settlement on Indian subsistence in general terms. This chapter focuses on specific tribes, times, and places. For a review of scholarship on Indian subsistence patterns in New England, see Elizabeth S. Chilton, “‘towns they have none’: Diverse Subsistence and Settlement Strategies in Native New England,” in *Northeast Subsistence-Settlement Change, A.D. 700-1300*, ed. John P. Hart and Christina B. Rieth (Albany: New York State Museum Bulletin 496, 2002); Kathleen Bragdon, *Native Peoples of Southern New England*, chaps. 1 and 2; Thomas, “Contrastive Subsistence Strategies,” 5, 15; William A. Starna, “The Pequots in the Early Seventeenth Century,” in Hauptman and Wherry, *The Pequots in Southern New England*; and William Cronon, *Changes in the Land: Indians, Colonists, and the Ecology of Early New England* (New York: Hill and Wang, 1983), chap. 3.

and settlers in New England. The English understood Indian sachems' control over land to be absolute, and so their land sales to be legitimate; they assumed such land sales to be permanent; and they saw the individual's right over his land to be unlimited, with the liberty to undertake fencing, livestock raising, and cultivation regardless of how these changes affected other groups' use of the land. Indians, in contrast, had a fluid conception of land use, seeing land rights as an open-ended negotiation and part of a relationship between individuals and peoples, with a fundamental commitment to mutual use that would ensure the sustenance of all. Thus for Indians, land treaties represented an ongoing discussion of how to share land, not transactions that determined final and exclusive rights to land. A major source of conflict was the damage done by unfenced English animals, cows, horses, and pigs, which destroyed Indian fields and storage pits, threatening their survival and forcing them to abandon native methods of land use.⁶⁰⁰ The agricultural peoples of southern New England, in particular, depended on a flexible relationship to land; lacking animals and wheeled transport, they practiced a form of horticulture based on field rotation rather than fertilizer. Thus they needed to move their villages around every few years within their territory.⁶⁰¹

When the power structure of a tribe was particularly decentralized, the problems of political economy between Indians and settlers were even more acute. Inland, in the Connecticut River Valley, the Pynchon family established trade with the Nipmucks and the Pocumtucks in 1636. These interior tribes supplied the Pynchons and their settlers with furs, corn, and land for settlement, in exchange for wampum and English commodities.⁶⁰² Though technically under the jurisdiction of Massachusetts Bay, the Pynchons' control over production and trade from the interior to the coast

⁶⁰⁰ Daniel R. Mandell, *King Philip's War: Colonial Expansion, Native Resistance, and the End of Indian Sovereignty* (Baltimore: The Johns Hopkins University Press, 2010), 3, 27-29; Brooks, *The Common Pot*, chap. 1, 67-69; Cronon, *Changes in the Land*, chap. 4.

⁶⁰¹ Dean R. Snow, *The Archaeology of New England* (New York: Academic Press, 1980), 47.

⁶⁰² Salisbury, "Social Relationships," 91.

in the Connecticut River Valley made them an independently wealthy and powerful force in the region, akin to the Connecticut and Massachusetts governments and the more powerful Indian tribes. Pynchon channeled his trade goods, imported up the river, through client traders to the Indian villages. But by the late 1650s, as intertribal warfare increased and the beaver and otter populations were decimated, the Nipmucks found it impossible to produce regular payments of corn and furs. The pressure on the fur trade also fractured the relationship between the Pocumtucks and the Nipmucks and their neighbors to the West, the Mohawks. Mohawk attacks limited the subsistence activities of these central Massachusetts tribes, forcing them to labor for in the growing English towns for “victuals and clothes.”⁶⁰³ Increasingly indebted to the English traders, members of the tribe sold most of their land, further limiting subsistence.

The Nipmucks were a particularly loosely organized “tribe,” and their case illustrates the importance of individual decision-making in the political economy of the seventeenth century. No tribal leader decided the future of the group or negotiated treaties; rather, individuals initiated economic relationships with English traders that soon became unsustainable.⁶⁰⁴ Some of these individuals probably “sold” land they had no rights over, squeezing other Nipmuck villages into smaller and smaller areas. Similarly, some Pocumtuck Indians sold land along the Connecticut River to John Pynchon over which they had no jurisdiction. Other tribe members quickly came to resent English settlement in the area, particularly the village of Deerfield, which was built on the most fertile Pocumtuck lands. These land encroachments were a major factor in escalating King Philip’s

⁶⁰³ Daniel Gookin, *Historical Collections of the Indians in New England* (Boston: Apollo Press, 1792), 22.

⁶⁰⁴ Peter A. Thomas, “Bridging the Cultural Gap: Indian/White Relations,” in *Early Settlement in the Connecticut Valley*, ed. John W. Ifkovic and Martin Kaufman (Deerfield: Institute for Massachusetts Studies, 1984), 9-10,17-19.

War, which was a local conflict between the Wampanoags and the Plymouth colony before the Nipmucks, the Pocumtucks, and Massachusetts Bay got involved.⁶⁰⁵

In this way, Indian attitudes towards land use and their relatively decentralized political structures put them at a disadvantage in negotiating land sales with English settlers. And the English used other methods, too, to pressure sachems and individuals to sell land or to justify seizing it outright. Colonial governments would often threaten war and impose fines on Indian tribes and individuals for political actions or alleged crimes, and if the Indians did not cooperate or could not pay, they would be forced to forfeit land. Sometimes buyers would lubricate land transactions with alcohol. After 1660, the complexity of competing land claims increased, as the colonial governments and royal agents from England engaged in different and competing land negotiations with the Indians. And some areas may have held little value for local tribes, either because of nearby warfare or because of a short-term decrease in population. Yet all of these factors do not explain the total subordination of the area's natives and their loss of almost all of southern New England by 1700. Why did individual Indians sell or cede land, whether they had the authority to do so or not, when it became increasingly clear that such cessions barred Indians from traditional activities on the land and threatened their communities' power and subsistence?⁶⁰⁶

A major factor in dispossession was the native tendency to invest too heavily in English goods despite structural factors that left Indians at a considerable trade disadvantage. This incremental reduction in self-sufficiency was probably more important, though much less apparent, than the century's dramatic English military victories. Rising dependency on imported commodities resulted in turn in increasing conflicts, as land cessions forced Indians into smaller and smaller

⁶⁰⁵ Mandell, *King Philip's War*, 65-66, 72-73; David Jaffee, *People of the Wachusett: Greater New England in History and Memory, 1630-1860* (Ithaca: Cornell University Press, 1999), 64.

⁶⁰⁶ Mandell, *King Philip's War*, 27-31; Brooks, *Common Pot*, chap. 2.

territories. Individual sachems would often sell land to settle personal debts for trade goods, despite opposition from their own tribe. As discussed above, material goods had immense social significance, and once European goods had become enmeshed in native culture, individual Indians could not simply decide to reject them.

Records of this process survive for the region along the Connecticut River. When pelts became harder to obtain because of overhunting and warfare, the Nipmucks and the Pocumtucks found themselves turning to land as their only marketable commodity. The extension of credit only made these groups more vulnerable.⁶⁰⁷ The Indian balance of trade worsened after 1660, when the money supply in the colonies expanded and wampum depreciated, leaving the coastal tribes who specialized in wampum with little currency to pay for English goods.⁶⁰⁸ Indians could still produce some valued trade goods, including corn and Indian crafts such as baskets, and likely individual Indian households regularly traded such commodities for small amounts of English cloth, tools, and foodstuffs. But the larger scale trade was conducted through sachems, who exchanged extensive areas of land for English goods. Massasoit and his son Wamsutta sold large tracts of Wampanoag country in 1649, 1652, 1653, and 1661, for cloth, iron tools, clothing and English money.⁶⁰⁹

In 1659, Charlestown resident John Smith petitioned the General Court for confirmation of his seizure of land in Sudbury from the Indian Jethro Simonds, who, “having nothing to pay to satisfy the said debt...but land,” was powerless to stop the proceedings.⁶¹⁰ Though particulars varied, a general cycle emerged in which Indians accumulated debts from the purchase of English goods (and, as noted above, sometimes from fines for flouting English political and social norms) and were

⁶⁰⁷ Thomas, “In the Maelstrom of Change,” 317-328; Jaffee, *People of the Wachusett*, 56-57.

⁶⁰⁸ Joseph A. Conforti, *Saints and Strangers: New England in British North America* (Baltimore: The Johns Hopkins University Press, 2006), 110.

⁶⁰⁹ Copies of Four Original Deeds of Dartmouth, Warren, Bridgewater and Attleborough, reprinted in Milton A. Travers, *The Wampanoag Indian Federation of the Algonquin Nation* (New Bedford: Reynolds-De Walt, 1957), 218-222.

⁶¹⁰ Petition of John Smith, Oct. 28 1659, Massachusetts Archives Collection 30:82, Massachusetts Archives, Boston, MA.

forced to sell land to pay them off in order to avoid indentured servitude for themselves and for their children. The more land they sold, the more difficult it was to subsist independently (particularly using crop rotation agriculture and semi-nomadic gathering) and so the more dependent on English trade and the more vulnerable to debt they became. Native villages came to rely on the English for their basic needs, locked in a cycle of store debt and indentured servitude, which itself quickly eroded what aspects of native culture remained. The further Indians fell into debt for purchases of English food and clothing, the more time they had to put into laboring for money and credit, and the less self-sufficient they became.⁶¹¹

Along with increasing pressure to cede land and a shrinking subsistence base, other land use factors led to the weakening of traditional Indian foodways. Both commercialization of commodities like wampum and corn and the rising tide of violence and war led Indians especially in southern New England to become more sedentary and build permanent fortified villages. The restricted mobility that resulted also shrank their access to varied foods.⁶¹² Such was the impoverishment of some Indian families that the food itself sometimes distributed as part of small land purchases might have been motivation for sale, such as the “Silver and Rum and vittels Enouf” that John Peabody paid Indians John English and John Umpee in 1701 for title to land in Essex County.⁶¹³

As time passed, it became terribly clear that “debt” for the English did not carry with it obligations on the part of the creditor, as it did in the Indian gift economy. Instead, Indian debtors lost land and freedom to the English, facing fines, imprisonment, and most commonly, forced

⁶¹¹ See William Simmons’s excellent review of changes in land ownership among the coastal New England tribes. William S. Simmons, *Spirit of the New England Tribes: Indian History and Folklore, 1620-1984* (Hanover: University Press of New England, 1986), chap. 2. For discussion of legal harassment of Indians and the imposition of fines, see Joshua Micah Marshall, “‘A Melancholy People’: Anglo-Indian Relations in Early Warwick, Rhode Island, 1642-1675,” in Vaughan, *New England Encounters*; Silverman, *Faith and Boundaries*, chap. 6; Margaret Ellen Newell, “The Changing Nature of Indian Slavery in New England, 1670-1720,” in *Reinterpreting New England Indians and the Colonial Experience*, ed. Colin G. Calloway and Neal Salisbury (Boston: The Colonial Society of Massachusetts, 2003), 118.

⁶¹² Cronon, *Changes in the Land*, 101-102.

⁶¹³ Sidney Perley, *The Indian Land Titles of Essex County, Massachusetts* (Salem: Essex Book and Print Club, 1912), 117.

servitude if they were unable to pay for trade goods routinely advanced to them. By 1700, the Indian economy had fallen into such shambles that the leaders of the Mashpee Indians of Cape Cod petitioned the General Court for mercy. They humbled themselves to describe a situation in which “to our Shame Thro Ignorance of the Law, weaknes, and foolishnes...severall of our children have run in to the English meny Debts, and being able, nor perhaps careful to pay att the time appointed, ourselves & our poor children, are frequently made servants...” In a desperate attempt to thwart this pattern – and apparently unable to persuade their own tribespeople not to seek English goods on credit – the petitioners asked the Court to prohibit the extension of credit to Indians.⁶¹⁴ But the general progression from consumption of English goods, to debt, to debt peonage, was unstoppable.

This high rate of debt peonage, beginning at the end of the seventeenth century, was itself another factor in developing Indians’ dependence on sugar products. New England governments pursued a policy of “judicial enslavement” that coerced thousands of Indians into a perpetual servitude, essentially slavery, in English households.⁶¹⁵ Contemporary observers realized that the most effective way of compelling Indians to adopt English material culture was to disperse them as servants in English homes. Daniel Gookin, the Superintendent of the Indians in Massachusetts from the 1650s through the 1680s, made indentured servitude his primary recommendation for “Civilizing the Indians,” though he noted that colonists of “authority and wisdom” had to use compulsion to convince Indian families to give up their children to English households, “for they are generally so indulgent to their children, that they are not easily persuaded to put them forth to the English.”⁶¹⁶

David Silverman estimates that by the mid-eighteenth century most Indian families had at least one

⁶¹⁴ May 24, 1700, Petition of the Mashpee Indians, Massachusetts Archives Collection 30: 456.

⁶¹⁵ Margaret Ellen Newell, *Bretbren by Nature: New England Indians, Colonists, and the Origins of American Slavery* (Ithaca: Cornell University Press, 2015), 11.

⁶¹⁶ Daniel Gookin, *Historical Collections of the Indians in New England* (1674; Towtaid: 1970), 125.

member who had spent years living with and working for an English family, often as a child.⁶¹⁷

Growing up in English households, Indians lost their knowledge of traditional hunting, gathering, and cultivation methods, and became even more habituated to and reliant on English foodways.

The more land they lost, and the more subsistence activities they had to abandon, the more food itself became the commodity for which Indians went into debt. Colonial leaders were well aware of the connection between Indian consumption of imported goods and English power over Indian communities. In 1694 the Massachusetts General Court outlawed private trade with Indians, citing their “dependance upon the English for clothing and other necessaries,” and channeled all trade to government-supervised truck-houses, in order to ensure Indian access to cheap European goods without danger of corruption or extortion by private dealers.⁶¹⁸ In 1699 the Massachusetts General Court created a network of government supply stations between the Merrimac and Penobscot rivers, declaring that

“[w]hereas the Indians in the eastern parts of this province, some time since in hostility and rebellion, having submitted themselves, and recognized their subjection and obedience to the crown of England, have now dependence upon this government for supplies of cloathing and other necessaries...that they may be furnished with the same at such easy rates and prices as may oblige them to adhere firmly to the English interest...”⁶¹⁹

What were these “necessaries” that would “oblige them to adhere firmly to the English interest?” Records are scanty, but the Court elaborated on which goods were essential to truck-house inventory in 1728, when it “resolved that the Treasurer be directed to purchase A suitable quantity of European and West India Goods (as Rum, Sugar & Molasses) fit for supplying the Western Indians...” In this outlay, for a government trading post on the Connecticut River, sugar

⁶¹⁷ Silverman, *Faith and Boundaries*, 212.

⁶¹⁸ An Act for Regulating of Trade with the Indians, 1694, Massachusetts Archives Collection, 30:346.

⁶¹⁹ An Act for Giving Necessary Supplies to the Eastern Indians, and for Regulating of Trade with Them, Massachusetts Archives Collection, 30: 445; see also the establishment of a truck-house at Casco Bay in 1700, Massachusetts Archives Collection, 30:461.

products are the only goods emphasized by name.⁶²⁰ Government subsidization of imported commodities for native communities (for the truck-houses were never meant to make a profit, nor did they), played an important role in reducing hostilities between colonists and Indians. Exploiting a dependence on sugar products, among other “necessaries,” proved a cheaper strategic alternative to warfare.⁶²¹

* * * * *

Mary Coffin Starbuck was unusually active in the politics and economy of Nantucket for a woman of the late seventeenth century, a “wise discreet woman,” an “Oracle” “who the Islanders esteemed as a Judge among them, for little of Moment was done there without her...”⁶²² In about 1660, when she was still in her teens, Mary had migrated to Nantucket with her family to establish its first English settlement. She soon married Nathaniel Starbuck and went on to become the island’s matriarch. Despite her gender, she witnessed many documents verifying the settlers’ land claims, and she was one of Nantucket’s earliest merchants, importing goods from the mainland for sale to both English settlers and the local Indians.⁶²³ Her surviving account book details these transactions and provides uniquely thorough evidence of the role of sugar products and changing foodways in binding Indians to the English through trade and debt.

The Indians of Nantucket were culturally and politically allied to the Wampanoags of southern Massachusetts and Plymouth. Yet in the seventeenth century their geographic isolation shielded them from disease and political strife, giving them a demographic strength that allowed

⁶²⁰ *The Acts and Resolves, Public and Private, of the Province of the Massachusetts Bay*, vol. 9 (Boston: Wright and Potter, 1903), 330-331.

⁶²¹ Ronald Macfarlane, “The Massachusetts Bay Truck-Houses in Diplomacy with the Indians,” *The New England Quarterly* 11 (March 1938): 65.

⁶²² “Journal of Thomas Story,” as quoted in Alexander Starbuck, *The History of Nantucket: County, Island and Town* (Boston: C.E. Goodspeed, 1924), 525; John Richardson, *An Account of the Life of that Ancient Servant of Jesus Christ, John Richardson...* (London: Luke Hinde, 1758), 88.

⁶²³ Starbuck, *History of Nantucket*, 21, 133.

them to maintain a considerable degree of autonomy from English settlers and mainland sachems alike. The rich marine environment and the native islanders' enthusiastic embrace of domestic animals further allowed not only for continued self-sufficiency but for the production of a food surplus, even with the growth of colonial settlements. Native food sources remained abundant well into the eighteenth century, and Indians continued to dominate the island. Pressure on Indian subsistence began to increase by the 1690s, as the English settlers limited native grazing rights through regulations and fines, starving Indian livestock and forcing Indians to divert some of their productive capacity into servitude to pay the charges. Yet despite their decreasing herds, the Indians of Nantucket should have had the economic resources to subsist independently into the eighteenth century, as well as the political strength to maintain some independence, due to the relative remoteness of the island's English settlements from the rest of the Massachusetts Bay colony.⁶²⁴

Instead, the Indian population became enmeshed in credit relationships with colonial shopkeepers on the island, who purposefully advanced consumer goods to their Indian trade partners, both in order to secure a source of native-produced feathers, grain, and fish with which to supply their own creditors on the mainland, and increasingly to coerce Indians into the brutal labor of whaling. A system emerged on the island of "communal labor control" or debt peonage, in which Indians accumulated so much debt that they were obliged to devote much of their labor to supplying shopkeepers with marketable produce and serving as crew on whaling voyages.⁶²⁵

⁶²⁴ Edward Byers, *The Nation of Nantucket: Society and Politics in an Early American Commercial Center, 1660-1820* (Boston: Northeastern University Press, 1987), 95, 99.

⁶²⁵ Kathleen J. Bragdon, "Native Economy on Eighteenth-Century Martha's Vineyard and Nantucket," *Papers of the Seventeenth Algonquian Conference* 17 (Ottawa: Carleton University, 1986), 31; Daniel Vickers, "The First Whalers of Nantucket," in *After King Philip's War: Presence and Persistence in Indian New England*, ed. Colin G. Galloway (Hanover: University Press of New England, 1997), 99-101, 103. Bragdon asserts that Indians had "little dependence...on purchased foodstuffs," and Vickers states that "foodstuffs were almost never purchased;" my own research shows that these findings are correct *except* for molasses, which Bragdon and Vickers overlook.

Historians of Nantucket assert that almost all Indian purchases in the island's English stores in the late seventeenth and early eighteenth centuries were of textiles or European tools and technologies, but they do not explain why these commodities were so compelling that native producers channeled their labor to acquire them. Though these scholars argue for agency on the part of Indians – despite their differing understanding of the nature of credit, by the late seventeenth century the Indians clearly understood the dangers of becoming indebted to the English – they struggle to explain the Indians' choice to take on debt.⁶²⁶ The only commodity analyzed as to its effect on Indian consumers is, predictably, alcohol. And it is likely that alcohol played a factor in chipping away at Indian autonomy on Nantucket, though the evidence is scanty, as it is for all of New England. Certainly the perception that Indian alcohol abuse explained socio-economic disorder was widespread at the time. In 1676 Thomas Macy wrote to the governor of New York about the “great Abuse and Disorder” occasioned by the longtime practice of captains and traders supplying Indians with “strong Liquor” in exchange for fish or fishing labor.⁶²⁷ Concern over the issue led the Massachusetts legislature to pass a law in 1718 “for preventing Abuse to the Indians,” because “a great wrong and injury happens to said Indians, natives of this country, by reason of their being drawn in by small gifts, or small debts, when they are in drink and out of capacity to trade, to sign unreasonable bills or bonds, for debts, which are soon sued, and great charge brought upon them, when they have no way to pay the same but by servitude.”⁶²⁸ But the hundreds of Indians that frequented Mary Starbuck's store were not inebriated every time they visited to make a purchase, nor were they seeking alcohol.

⁶²⁶ See Bragdon, “Native Economy,” and Vickers, “First Whalemens;” also Byers, *The Nation of Nantucket*, 60.

⁶²⁷ Franklin B. Hough, *Papers Relating to the Island of Nantucket* (Albany: Albany Institute, 1856), 100.

⁶²⁸ *The Perpetual Laws of the Commonwealth of Massachusetts* (Boston: I. Thomas and E.T. Andrews, 1801), 172.

The “coercion” of credit, at least in this case, was reliant on an emerging Indian consumer culture rooted in changing foodways. My examination of the Starbuck account book finds that in the over one hundred Indian accounts before 1710, almost all contain purchases of molasses, many with several purchases a year of bottles, quarts, and gallons.⁶²⁹ It is easy to miss the significance of these purchases, for the Indians were not dependent on colonists for their subsistence; on the contrary, they were providing English traders with surplus grain and fish. But it is precisely the fact that Indians chose to accumulate debt for a foodstuff that they did not need for sustenance that suggests that we should take a closer look. It is significant that molasses was the *only* food that Indians bought from their English neighbors, which highlights their particular attraction to it. The growing dependence of Indians on this sugar product was magnified by its nature as a consumable, which made demand for it highly elastic. While much has been written about the elasticity and depth of the Indian demand for alcohol, the same demand for sugar products has received little attention.

The deliberate market strategy that English settlers employed of extending credit to Indians only worked because Indian demand existed for these goods *before* tribes had need of them, as the case of the isolated political economy of Nantucket illustrates. Though differing cultures of credit, land use, and legal systems, and the increasing English awareness of and willingness to exploit these differences to seize land and levy fines, partly explain the quick subjection of New England’s Indians, this explanation is incomplete. Indians were consumers, and sometimes they risked their economic autonomy to buy goods that had little to do with subsistence. Simply considering how much land Indians had or how much grain they bought or what traditional foodways were or were not preserved leaves out important dimensions of consumer choice. The use of credit as a measure of control was important; but another fundamental question concerns the choice to go into debt.

⁶²⁹ Mary Starbuck Account Book, Account Books Collection, AB 475, Nantucket Historical Association, Nantucket, MA.

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By the end of the summer of 1676, King Philip's War was over, Indian resistance subdued, and Philip, the Wampanoag leader who led the revolt, dead. Thousands of Indians had perished through violence or starvation. Of the survivors, as many as a thousand were packed into slave ships bound for the West Indies.⁶³⁰ In what must have been the ultimate humiliation, their conquerors had sentenced them to labor on the sugar plantations for the rest of their likely very short lives, enabling their English conquerors to ever expand their consumption of sugar products. How many of these captives were actually unloaded on the sugar islands is unclear. Some went to the Caribbean, others to Fayal or other Atlantic islands. Barbados, for one, eventually passed legislation in 1676 banning the further import of New England Indians, fearing that such a defiant group might rouse an already restless slave population.⁶³¹ The previous summer, as Indians fought for control of New England's resources, Barbadian planters had discovered a slave conspiracy on the island to "fire the Sugar-Canes," and to "Cut their Masters the Planters Throats," in a desperate attempt to overthrow the sugar regime.⁶³² In that year, both Indians and slaves fought back against their subordinate position in the Atlantic economy, of which sugar was a both the foundation and the symbol.

Not only in the wake of King Philip's War, but throughout the seventeenth century, New England's leaders, together with their countrymen in the Caribbean, considered Indian captives taken in war to be "gaynefull pilladge" which, when sold to the sugar islands, could bring in a valuable source of income as well as serving to depopulate native villages. Writing to John Winthrop, Jr., in 1648, Bermudian William Berkeley recounted his involvement in a recent effort plant "some

⁶³⁰ Mandell, *King Philip's War*, 130.

⁶³¹ Jill Lepore, *In the Name of War: King Philip's War and the Origins of American Identity* (New York: Vintage Books, 1998), 167-170.

⁶³² *Great Neves from the Barbadoes...* (London: L. Curtis, 1676), 10.

acres of Shuger Caines intending to sett upp a shiger worke,” and requesting that Winthrop “procure any Indianes to goe over with mee,” so that he could “sett uppon the works.”⁶³³ There is no way of knowing how many New England Indians were seized and shipped to the Caribbean during these early years of sugar production, but it was a common enough practice in 1650 for the Pequots to “often complain...that some of the English thretne to send them away to the Sugar Country.”⁶³⁴ Not only war but debt to English traders produced potential slaves; in some areas of New England, Indian debtors could be sold to other English colonies if they could not pay their creditors.⁶³⁵ Though sale to southern plantations specifically for debt was a penalty that was rarely carried out, the threat of such enslavement was one of the factors that compelled Indians to forfeit land to the colonists. Though some colonies enacted laws prohibiting the sale of Indians outside the colonies, these were largely ignored.⁶³⁶

Since the Indian slave trade to the Caribbean had been carried on for decades, it was natural that four days after the death of Philip in August of 1676, some two dozen leaders of Rhode Island agreed to “procure a boate to transport the sayd Indians where they may be sold.” The sale was made and the profits returned by January.⁶³⁷ In the same year, John “Fitz-John” Winthrop III entrusted his Indian captives to Captain Nathaniel Eldred of Barbados, instructing him to exchange the Indians for “two or thre good sugar loafes,” rum, and molasses, to be in turn sold back in New England.⁶³⁸ John Winthrop and his fellow pioneers had not been able to produce their own sugar in

⁶³³ Emanuel Downing to John Winthrop, August 1645; William Berkeley to John Winthrop Jr., June 25 1648, *Winthrop Papers* (Boston: The Massachusetts Historical Society, 1947), 5:38, 232.

⁶³⁴ *Winthrop Papers* 6:63; for Indian slavery during this period, see Newell, *Brethren by Nature*, chap. 5.

⁶³⁵ Though several English colonies outlawed Indian enslavement, these laws were generally ignored. Newell, “The Changing Nature of Indian Slavery,” 111, 129.

⁶³⁶ Newell, *Brethren by Nature*, 14-15.

⁶³⁷ *Proceedings of the Rhode Island Historical Society 1892-1893* (Providence: RIHS, 1893), 1:237-238.

⁶³⁸ *Collections of the Massachusetts Historical Society*, ser. 5, vol. 8 (Boston, 1883), 282-283.

the inhospitable climate of New England, but his grandson had found a way nonetheless to transform natives into sugar products.

Economic relationships between colonists and Indians played a key role in the politics of seventeenth-century New England, shaped the course of settlement, and thus affected the entire Atlantic world. Just as sugar drew the English colonists into trade and empire, so did it influence the behavior of the Indians. Dependence on sugar, molasses, and rum was a shared aspect of Indian and English culture. Sugar products were not the only such universally desired commodities, but Indians integrated them deeply into their foodways, thus binding themselves to the slave societies of the Caribbean. Indians also became producers of sugar and essential supports in developing New England's prominence in the commerce of the English Atlantic – by their production of raw materials that fed the Atlantic economy and their cession of land for further production; through the infusion of capital into the New England economy brought in by their sale into foreign slavery throughout the Atlantic; by the value that their wage labor added to the region's economy and the ability of households to participate in investment and trade with the rest of the Atlantic world; and by their labor itself on the sugar plantations of the West Indies. Perhaps of all the Atlantic peoples, North American Indians were best positioned to reject involvement in the seventeenth-century sugar economy. Yet like their conquerors, they were inexorably drawn to sugar.

Bibliography

Manuscript Collections

Curwen Family Papers, Phillips Library, Peabody, MA.

Notebook of Jose Winthrop, 1683, New England Historic Genealogical Society, Boston, MA.

Recopied Deed Record Books, Barbados Archives, Black Rock, Barbados.

Robert Gibbs Business Records, 1659-1708, American Antiquarian Society, Worcester, MA.

John Barton Account Book, 1662-1676, American Antiquarian Society, Worcester, MA.

John Hull Papers, 1624-1685, American Antiquarian Society, Worcester, MA.

John Pynchon Account Books and Other Records, 1651-1697, vol. 1, Microfilm.

Mary Starbuck Account Book, Nantucket Historical Association, Nantucket, MA.

Massachusetts Archives Collection, Massachusetts Archives, Boston, MA.

Will Record Books, Barbados Archives, Black Rock, Barbados.

Published Primary Sources

“The Account Book of William Wray.” *The Antiquary* 32 (1896).

The Acts and Resolves, Public and Private, of the Province of the Massachusetts Bay, vol. 9 (Boston: Wright and Potter, 1903).

Allin, John. “A Brief History of the Church of Christ in Dedham.” In *Puritans in the New World: A Critical Anthology*, ed. David D. Hall. Princeton: Princeton University Press, 2004.

“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*, edited by George F. Dow. New York: Dover, 1988.

Boorde, Andrew. “A Compendyous Regyment or a Dyetary of Health.” In *Andrew Boorde’s Introduction and Dyetary*, edited by Frederick James Furnivall. London: Early English Text Society, 1870.

Bridenbaugh, Carl, ed. *The Pynchon Papers: Letters of John Pynchon, 1654-1700*. Boston: The Colonial Society of Massachusetts, 1982.

“A Briefe Description of the Ilande of Barbados.” In *Colonising Expeditions to the West Indies and Guiana, 1623-1667*, ed. V.T. Harlow. London: The Hakluyt Society, 1925.

Bruce, John, ed., *Letters and Papers of the Verney Family*. London: Camden Society, 1853.

Calef, Robert. “More Wonders of the Invisible World.” In *Narratives of the Witchcraft Cases, 1684-1706*, edited by George L. Burr. New York: Charles Scribner’s Sons, 1914.

“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: New York Historical Society, 1870.

“Chesholme’s Steward’s Book.” *Publications of the Colonial Society of Massachusetts* 31 (1935): 21-276.

Child, Lydia Maria. *The American Frugal Housewife*. Boston: Carter, Hendee, 1835.

“*A Closet for Ladies and Gentlemen, or, the Art of Preserving, Conserving, and Candyng.*” London: Arthur Johnson, 1611.

Cooper, James F. and Kenneth P. Minkema. “The Sermon Notebook of Samuel Parris, 1689-1694.” *Publications of the Colonial Society of Massachusetts* 66 (1993).

Copies of Four Original Deeds of Dartmouth, Warren, Bridgewater and Attleborough. Reprinted in *The Wampanoag Indian Federation of the Algonquin Nation*, Milton A. Travers. New Bedford: Reynolds-De Walt, 1957, 218-222.

Davies, John. *History of the Caribby-Islands*. London: J.M., 1666.

Davis, William T., ed. *Bradford’s History of Plymouth Plantation, 1606-1634*. New York: Charles Scribner’s Sons, 1910.

Dawson, Thomas. *The Good Huswife’s Jewell*. London: John Wolfe, 1587.

Dawson, Thomas. *The Good Huswifes Jewell*. London: E.A. for Edward White, 1610.

Dow, George F. ed. *Records and Files of the Quarterly Courts of Essex County, Massachusetts*. Salem, MA: Essex Institute, 1911.

Elyot, Thomas. *The Castel of Helth*. New York: Scholars’ Facsimiles and Reprints, 1936; repr., 1541.

Emerson, Everett, ed. *Letters from New England: The Massachusetts Bay Colony, 1629-1638*. Amherst: University of Massachusetts Press, 1976.

Force, Peter, ed. *Tracts and Other Papers, Relating Principally to the Origin, Settlement, and Progress of the Colonies in North America*. Gloucester, MA: Peter Smith, 1963.

Gardener, Lion. “Relation of the Pequot War.” In *History of the Pequot War: The Contemporary Accounts of Mason, Underhill, Vincent, and Gardener*, edited by Charles Orr. Cleveland: The Helman-Taylor Company, 1897.

The Good Hous-Wives Treasurie. London: Edward Allde, 1588.

- Gookin, Daniel. *Historical Collections of the Indians in New England*. 1674; Boston: Apollo Press, 1792.
- Great Newes from the Barbadoes...* London: L. Curtis, 1676.
- Griffiths, R.G. "An Inventory of the Goods and Chattels of Thomas Cowcher, Mercer, of Worcester." *Transactions of the Worcestershire Archaeological Society* 14 (1937): 45-60.
- Gunkel, Alexander and Jerome S. Handler, eds. "A Swiss Medical Doctor's Description of Barbados in 1661: The Account of Felix Christian Spoeri." *The Journal of the Barbados Museum and Historical Society* 33 (May 1969): 3-8.
- Hale, John. "A Modest Inquiry into the Nature of Witchcraft." In Burr, *Narratives of the Witchcraft Cases*.
- Handler, Jerome S. "Father Antoine Biet's Visit to Barbados in 1654." *The Journal of the Barbados Museum and Historical Society* 32 (1965-66): 56-69.
- Hanford, James Holly, ed., "Wine, Beere, Ale, and Tobacco: A Seventeenth Century Interlude." *Studies in Philology* 7 (Jan. 1915; repr., London: John Grove, 1629).
- Harrison, Mona C. "The Probate Inventory of an Early Seventeenth Century Northampton Mercer and Linen Draper." *Northamptonshire Past & Present* 6 (1982-83): 313-317.
- Harrison, William. *The Description of England*. Ithaca: Cornell University Press, 1968.
- Hart, James. *Klinike, or the Diet of the Diseased*. London: John Beale, 1633.
- Hentzner, Paul. *Paul Hentzner's Travels in England, During the Reign of Queen Elizabeth*, translated by R. Bentley, edited by Horace Walpole. London: Edward Jeffery, 1797.
- Hiatt, Constance B. and Sharon Butler, eds. *Curye on Inghysch: English Culinary Manuscripts of the Fourteenth Century*. New York: Oxford University Press, 1985.
- Higginson, Frances. *New England's Plantation, with the Sea Journal and Other Writings*. Salem, MA: Essex Book and Print Club, 1908).
- Hinton, R.W.K. *The Port Books of Boston, 1601-1640*. Hereford: Hereford Times, 1956.
- Hess, Karen, ed. *Martha Washington's Booke of Cookery*. New York: Columbia University Press.
- Hosmer, J.K., ed. *Wintthrop's Journal, 'History of New England,' 1630-1649*. New York: Barnes and Noble, 1966.
- Hough, Franklin B. *Papers Relating to the Island of Nantucket*. Albany: Albany Institute, 1856.
- Hubbard, William. *Narrative of the Indian Wars in New-England*. 1677; Norwich, CT: John Trumbull, 1802.

- Jameson, J. Franklin, ed. *Johnson's Wonder-Working Providence, 1628-1651*. 1654; New York: Barnes and Noble, 1959.
- Jameson, J. Franklin, ed. *Narratives of New Netherland, 1609-1664*. New York: Charles Scribner, 1909.
- Johnson, Edward. *Wonder-Working Providence of Sions Saviour in New-England*. Delmar, NY: Scholars' Facsimiles and Reprints, 1974.
- Josselyn, John. *An Account of Two Voyages to New-England*. Boston: William Veazie, 1865.
- Josselyn, John. *New-England's Rarities Discovered in Birds, Beasts, Fishes, Serpents, and Plants of that Country*. Boston: William Veazie, 1865.
- Kastan, David Scott, ed. *King Henry IV, Part One*. London: Thomson Learning, 2002.
- LaFantasie, Glenn W. *The Correspondence of Roger Williams*. Providence: Brown University Press, 1988.
- Lechford, Thomas. *Plain Dealing: Or, News from New England*. 1642; Boston, 1867.
- Ligon, Richard. *A True & Exact History of the Island of Barbados*. London: Humphrey Moseley, 1657.
- Lindholt, Paul J., ed. *John Josselyn, Colonial Traveler: A Critical Edition of Two Voyages to New-England*. Hanover: University Press of New England, 1988.
- "The Lucas Manuscript." *Journal of the Barbados Museum and Historical Society* 23 (May 1956): 111-126.
- Littleton, Edward. *The Groans of the Plantations*. London: M. Clark, 1689.
- Markham, Gervase. *The English Housewife* (London: Nicholas Okes for John Harison, 1631).
- Markham, Gervase. *The English Housewife*. Edited by Michael R. Best. Kingston: McGill-Queen's University Press, 1986.
- Massachusetts Historical Society Collections*. Boston: John Wilson, 1865. 4th ser., vol. 7.
- Massachusetts Historical Society Collections*. Boston: MHS, 1882. 5th ser., vol. 8.
- Massachusetts Historical Society Proceedings*. Boston: MHS, 1889. 2nd ser., vol. 4.
- Massachusetts Historical Society Proceedings*. Boston: MHS, 1891-2. 2nd ser., vol. 7.
- Mather, Cotton. *Sober Considerations on a Growing Flood of Iniquity*. Boston, 1708.
- Mather, Increase. *A Sermon, Occasioned by the Execution of a Man Found Guilty of Murder*. Boston: R.P., 1687.
- Mather, Richard. "Journal of Richard Mather, 1635." *Dorchester Antiquarian and Historical Society Collections*. Boston: David Clapp, 1850.

McGrath, Patrick, ed. "Merchandise Imported into Bristol, December 1612-December 1613" and "George Lane's Inventory, 1613" In *Merchants and Merchandise in Seventeenth-Century Bristol*. (Bristol: J.W. Arrowsmith, 1955).

Middleton, Thomas. *A Chaste Maid in Cheapside*. Menston: Scolar Press Limited, 1969; repr., London: Francis Constable, 1630.

Miner, Sidney H. and George D. Stanton Jr., eds., *The Diary of Thomas Minor, Stonington, Connecticut, 1653 to 1684*. Ann Arbor: Edwards Brothers, Inc., 1976.

Moffett, Thomas. *Health's Improvement: or Rule, Comprizing and Discovering the Nature, Method, and Manner of Preparing all Sorts of Foods Used in this Nation*. 1655; London: T. Osborne, 1746.

Mood, Fulmer. "John Winthrop, Jr., on Indian Corn." *New England Quarterly* 10, no. 1 (1937): 121-133.

Morgan, Edmund S. "Provisions for the Great Migration." *The New England Quarterly* 12 (March 1939): 98-99.

Morton, Thomas. *New English Canaan*. 1637; New York: Burt Franklin, 1967.

Moryson, Fynes. *An Itinerary Containing his Ten Yeeres Travell...1617*; Glasgow: J. MacLehose, 1907).

Murrell, John. *Murrels Two Books of Cookerie and Carving*. London: M. Flesher, 1638.

New-England Weekly Journal, November 5, December 2, and December 5, 1728. Reprinted in Bridenbaugh, "The High Cost of Living in Boston," 802-811.

Newbury, Thomas. *Dives Pragmaticus*. London: Alexander Lacy, 1563.

"Papers Relating to the Early History of Barbados," *Timebri* 1891 (5).

Parkinson, John. *Theatrum Botanicum*. London: Tho. Cotes, 1640.

Partridge, John. *The Treasure of Commodious Conceites and Hidden Secrets*. London: Eliot's Court Press, 1627.

Partridge, John. *The Widowes Treasure*. London: 1631.

Penn, William. *A Further Account of the Province of Pennsylvania and its Improvements...London*, 1685.

Perley, Sidney. *The Indian Land Titles of Essex County, Massachusetts*. Salem: Essex Book and Print Club, 1912.

The Perpetual Laws of the Commonwealth of Massachusetts. Boston: I. Thomas and E.T. Andrews, 1801.

Plat, Hugh. *Delights for Ladies*. London: H. Lownes and R. Young, 1628.

- Plat, Hugh. *Divers Chimicall Conclusions Concerning the Art of Distillation*. London: Herb Lovers Book Club, 1941; repr., 1594.
- Plat, Hugh. *The Jewell House of Art and Nature*. London: Peter Short, 1594.
- The Probate Records of Essex County, Massachusetts*. Salem, MA: Essex Institute, 1916.
- Proceedings of the Rhode Island Historical Society 1892-1893*. Providence: RIHS, 1893.
- Raine, James, ed. *Wills and Inventories from the Registry of the Archdeaconry of Richmond*. London: J.B. Nichols, 1853.
- Randolph, Edward. *Edward Randolph; Including his Letters and Official Papers...* Boston: John Wilson & Son, 1898.
- Records of the First Church at Dorchester in New England, 1636-1674*. Boston: George H. Ellis, 1891.
- A Report of the Record Commissioners of the City of Boston*. Boston: Rockwell and Churchill, 1883.
- Richardson, John. *An Account of the Life of that Ancient Servant of Jesus Christ, John Richardson...* London: Luke Hinde, 1758.
- Rodgers, Robert H., ed. *Middlesex County in the Colony of the Massachusetts Bay in New England, Records of Probate and Administration, October 1649-December 1660*. Boston: The New England Historic Genealogical Society, 1999.
- Rosenthal, Bernard, ed. *Records of the Salem Witch-Hunt*. Cambridge: Cambridge University Press, 2009.
- Rosier, James. "A True Relation of the Most Prosperous Voyage Made This Present Yeare 1605..." In *Sailors Narratives of Voyages Along the New England Coast, 1524-1624*, edited by George Parker Winship. New York: Burt Franklin, 1968.
- Sainsbury, William Noel, ed. *Calendar of State Papers, Colonial Series, America and West Indies, 1661-1668*. London: Longman & Co., 1880.
- Sainsbury, W. Noel, ed. *Calendar of State Papers, Colonial Series, America and West Indies, 1669-1674*. TannerRitchie Publishing.
- Sanford, Peleg. *The Letter-Book of Peleg Sanford, 1666-1668*. Providence: Rhode Island Historical Society, 1928.
- Scott, Major John. "The Description of Barbados," (1677). In *Some Early Barbadian History*, ed. P.F. Campbell. Barbados: Caribbean Graphics, 1993.
- Shurtleff, Nathaniel B. *Records of the Governor and Company of the Massachusetts Bay in New England*. Boston: William White, 1853.

- Simmons, Amelia. *American Cookery*. Hartford: Hudson & Goodwin, 1796.
- Smith, John. "Advertisements for the Unexperienced Planters of New England, or Any Where." In *Works of Captain John Smith, 1608-1631*, edited by Edward Arber. Birmingham, 1884.
- Smith, John. "The Generall Historie of Virginia, New England, and The Summer Iles." In *Forerunners and Competitors of the Pilgrims and Puritans*, edited by Charles Levermore. New York: The New England Society of Brooklyn, 1912.
- Smith, Joseph H., ed. *Colonial Justice in Massachusetts, 1639-1702: The Pynchon Court Record*. Cambridge, MA: Harvard University Press, 1961.
- Some Memoirs of the First Settlement of the Island of Barbados...* Barbados: William Beeby, 1741.
- "The State of the Trade 1763." *Colonial Society of Massachusetts, Transactions*. Boston: 1917.
- Stoughton, William. "New-England's True Interest." In *Election Day Sermons: Massachusetts*, ed. Sacvan Bercovitch. New York: AMS Press, 1984.
- Suffolk Deeds*. Boston: Rockwell and Churchill, 1880.
- Thomas, Robert B. *The Farmer's Almanack*. Boston: John West, 1804.
- Tryon, Thomas. *The Merchant, Citizen, and Country-man's Instructor, Or, a Necessary Companion for All People*. London: E. Harris, 1701.
- Tyack, Norman C. P. "English Exports to New England, 1632-1640: Some Records in the Port Books." *New England Historical and Genealogical Register* 135 (1981): 213-238.
- Vaisey, D. G. "A Charlbury Mercer's Shop, 1623." *Oxoniensia* 31 (1966): 107-116.
- Vaughan, Alden T., ed. *New England's Prospect*. 1634; Amherst: University of Massachusetts Press, 1977.
- Vaughan, William. *The Naturall and Artificial Directions for Health Derived from the Best Philosophers, as Well Moderne, as Auncient*. London: Richard Bradocke, 1600.
- Venner, Tobias. *Via Recta Ad Vitam Longam*. London: T.S. Snodham, 1622.
- A Volume Relating to the Early History of Boston Containing the Aspinwall Notarial Records from 1644 to 1651*. Boston: Municipal Printing Office, 1903.
- Willard, Joseph. *Willard Memoir, or Life and Times of Simon Willard*. Boston: Philips, Sampson & Co., 1858.
- Williams, Roger. *A Key into the Language of America*. Edited by John J. Teunissen and Evelyn J. Hinz. Detroit: Wayne State University Press, 1973.

- White, John. *John White's Planters Plea 1630*. Rockport, MA: Sandy Bay Historical Society, 1930.
- Winslow, Edward. "Good News From New England." In "*Good News From New England*" by Edward Winslow, ed. Kelly Wisecup. Amherst: University of Massachusetts Press, 2014.
- Wintthrop Papers*. Boston: The Massachusetts Historical Society, 1929-47.
- Wish, Harvey, ed. *Of Plymouth Plantation by William Bradford*. New York: Capricorn Books, 1962.
- Wood, William. *Wood's New-England's Prospect*. Boston: John Wilson and Son, 1865.
- Woodward, Donald, ed. *The Farming and Memorandum Books of Henry Best of Elmswell, 1642*. London: Oxford University Press, 1984.

Secondary Works

- Adams, James Truslow. *The Founding of New England*. Boston: Little, Brown, 1949.
- Albala, Ken. *Food in Early Modern Europe*. Westport, CT: Greenwood Press, 2003.
- Albala, Ken. "Historical Background to Food and Christianity." in *Food and Faith in Christian Culture*, ed. Ken Albala and Trudy Eden. New York: Columbia University Press, 2011.
- Albala, Ken. "Premodern Europe," in *Food in Time and Place: The American Historical Association Companion to Food History*, edited by Paul Freedman, Joyce E. Chaplin, and Ken Albala. Berkeley: University of California Press, 2014.
- Albertson, Dean. "Puritan Liquor in the Planting of New England." *The New England Quarterly* 23 (Dec. 1950): 477-490.
- Anderson, Dean L. "Documentary and Archeological Perspectives on European Trade Goods in the Western Great Lakes Region." PhD diss., Michigan State University, 1992.
- Anderson, Jay Allen. "A Solid Sufficiency: An Ethnography of Yeoman Foodways in Stuart England." PhD diss., University of Pennsylvania, 1971.
- Anderson, Robert Charles. *The Great Migration Begins: Immigrants to New England 1620-1633*. Boston: New England Historic Genealogical Society, 1995.
- Anderson, Virginia DeJohn. *Creatures of Empire: How Domestic Animals Transformed Early America*. New York: Oxford University Press, 2004.
- Anderson, Virginia DeJohn. *New England's Generation: The Great Migration and the Formation of Society and Culture in the Seventeenth Century*. New York: Cambridge University Press, 1991.

Anderson, Virginia DeJohn. "Thomas Minor's World: Agrarian Life in Seventeenth-Century New England." *Agricultural History* 82 (Fall 2008): 496-518.

Andrews, Charles M. *The Colonial Period of American History: England's Commercial and Colonial Policy*. New Haven: Yale University Press, 1964.

Appleby, Joyce. "Ideology and Theory: The Tension Between Political and Economic Liberalism in Seventeenth-Century England." *The American Historical Review* 81 (1976): 499-515.

Appleby, Joyce. *The Relentless Revolution: A History of Capitalism*. New York: W.W. Norton, 2010.

Archer, Richard. *Fissures in the Rock: New England in the Seventeenth Century*. Hanover, NH: University Press of New England, 2001.

Arnold, John Paul and Frank Penman. *A History of the Brewing Industry and Brewing Science in America*. Chicago: G. L. Peterson, 1933.

Auslander, Leora. "Beyond Words." *The American Historical Review* 110 (2005): 1015-1045.

Austen, Ralph A. and Woodruff D. Smith. "Private Tooth Decay as Public Economic Virtue: The Slave-Sugar Triangle, Consumerism, and European Industrialization." *Social Science History* 14, no. 1 (April 1990): 95-115.

Avena, Nicole M., Pedro Rata, and Bartley G. Hoebel. "Evidence for Sugar Addiction: Behavioral and Neurochemical Effects of Intermittent, Excessive Sugar Intake." *Neuroscience & Biobehavioral Reviews* 32 (2008): 20-39.

Axtell, James. *The European and the Indian: Essays in the Ethnohistory of Colonial North America*. New York: Oxford University Press, 1981.

Axtell, James. *Natives and Newcomers: The Cultural Origins of North America*. New York: Oxford University Press, 2001.

Bailyn, Bernard. *The Barbarous Years: The Conflict of Civilizations, 1600-1675*. New York: Knopf, 2012.

Bailyn, Bernard. *New England Merchants in the Seventeenth Century*. New York: Harper & Row, 1955.

Baker, Brenda J. "Pilgrim's Progress and Praying Indians: The Biocultural Consequences of Contact in New England." In *In the Wake of Contact: Biological Responses to Contact*, edited by Clark Larsen and George R. Milner. New York: John Wiley, 1994.

Baker, Emerson W. *A Storm of Witchcraft: The Salem Trials and the American Experience*. Oxford: Oxford University Press, 2015.

Baker, James W. "Seventeenth-Century English Yeoman Foodways at Plimoth Plantation." In "Foodways in the Northeast," edited by Peter Benes, *The Dublin Seminar for New England Folklife, Annual Proceedings*. Boston: Boston University 1982.

- Baron, Stanley. *Brewed in America: A History of Beer and Ale in the United States*. Boston: Little, Brown, 1962.
- Barrow, Thomas C. *Trade and Empire: The British Customs Service in Colonial America, 1660-1775*. Cambridge, MA: Harvard University Press, 1967.
- Batie, Robert C. "Why Sugar? Economic Cycles and the Changing of Staples on the English and French Antilles, 1624-54." *Journal of Caribbean History* 8 (1976): 1-41.
- Baudrillard, Jean. "La Genese Ideologique des Besoins." *Cahiers Internationaux de Sociologie* 47 (1969): 45-68.
- Baxter, W.T. "Accounting in Colonial America." In *Studies in the History of Accounting*, edited by A.C. Littleton and B.S. Yamey. London: Sweet & Maxwell, 1956.
- Baxter, W.T. "Credit, Bills, and Bookkeeping in a Simple Economy." *The Accounting Review* 21 (April 1946): 154-166.
- Baxter, W.T. "Observations on Money, Barter, and Bookkeeping." *Accounting Historians Journal* 31 (June 2004): 129-139.
- Bennett, M.K. "The Food Economy of the New England Indians, 1605-1675." *Journal of Political Economy* 63 (1955).
- Berg, Maxine. *Luxury and Pleasure in Eighteenth-Century Britain*. Oxford: Oxford University Press, 2005.
- Berger, R.M. "The Development of the Retail Trade in Provincial England, 1550-1700." *Journal of Economic History* 40, no. 1 (March 1980): 123-128.
- Berger, Ronald M. *The Most Necessary Luxuries: The Mercers' Company of Coventry, 1550-1680*. University Park, PA: The Pennsylvania State University Press, 1993.
- Berridge, Kent C., et. al. "The Tempted Brain Eats: Pleasure and Desire Circuits in Obesity and Eating Disorders." *Brain Research* 1350 (2010): 43-64.
- Bidwell, Percy W. and John I. Falconer. *History of Agriculture in the Northern United States, 1620-1860*. Clifton, NJ: Augustus M. Kelley, 1973.
- Blackburn, Robin. *The Making of New World Slavery: From the Baroque to the Modern, 1492-1800*. New York: Verso, 1997.
- Bourdieu, Pierre. *Distinction: A Social Critique of the Judgment of Taste*. Cambridge: Harvard University Press, 1984.
- Bourque, Bruce J. and Ruth H. Whitehead. "Trade and Alliances in the Contact Period." In *American Beginnings: Exploration, Culture, and Cartography in the Land of Norumbega*, edited by Emerson W. Baker. Lincoln: University of Nebraska Press, 1994.

- Boyer, Paul and Stephen Nissenbaum. *Salem Possessed: The Social Origins of Witchcraft*. Cambridge: Harvard University Press, 1974.
- Bowen, Joanne V. "A Study of Seasonality and Subsistence." PhD diss., Brown University, 1990.
- Bragdon, Kathleen J. "Native Economy on Eighteenth-Century Martha's Vineyard and Nantucket." *Papers of the Seventeenth Algonquian Conference* 17 (Ottawa: Carleton University, 1986).
- Bragdon, Kathleen. *Native People of Southern New England, 1500-1650*. Norman: University of Oklahoma Press, 1996.
- Braudel, Fernand. *The Structures of Everyday Life: The Limits of the Possible*. New York: Harper & Row, 1981.
- Brears, Peter. "Seventeenth-Century Britain." In *A Taste Of History: 10,000 Years of Food in Britain*, edited by Peter Brears, Maggie Black, Gill Corbishley, Jane Renfrew, and Jennifer Stead. London: British Museum Press, 1993.
- Breen, T.H. *Puritans and Adventurers: Change and Persistence in Early America*. New York: Oxford University Press, 1980.
- Bremer, Francis J. *John Winthrop: America's Forgotten Founding Father*. New York: Oxford University Press, 2003.
- Bremer, Francis J. *The Puritan Experiment: New England Society from Bradford to Edwards*. New York: St. Martin's Press, 1976.
- Breslaw, Elaine G. *Tituba, Reluctant Witch of Salem: Devilish Indians and Puritan Fantasies*. New York: New York University Press, 1996.
- Breugel, Martin. "A Bourgeois Good? Sugar, Norms of Consumption, and the Labouring Classes in Nineteenth-Century France." In *Food, Drink, and Identity: Cooking, Eating and Drinking in Europe Since the Middle Ages*, edited by Peter Scholliers. New York: Berg, 2001.
- Bridenbaugh, Carl. "The High Cost of Living in Boston, 1728." *The New England Quarterly* 5 (1932): 800-811.
- Bridenbaugh, Carl and Roberta. *No Peace Beyond the Line: The English in the Caribbean, 1624-1690*. New York: Oxford University Press, 1972.
- Bridenbaugh, Carl. *Vexed and Troubled Englishmen, 1590-1642*. New York: Oxford University Press, 1967.
- Brooks, Lisa. *The Common Pot: The Recovery of Native Space in the Northeast*. Minneapolis: University of Minnesota Press, 2008.
- Buckner, Timothy. "The Slave Trade's Apex in the Eighteenth Century." In Falola and Roberts, *The Atlantic World*.

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

Bushman, Richard M. "Markets and Composite Farms in Early America." In *Colonial America: Essays in Politics and Social Development*, edited by Stanley N. Katz, John M. Murrin, and Douglas Greenberg. New York: McGraw-Hill, 2001.

Butterfield, Roy L. "The Great Days of Maple Sugar." *New York History* 39 (1958): 151-164.

Byers, Edward. *The Nation of Nantucket: Society and Politics in an Early American Commercial Center, 1660-1820*. Boston: Northeastern University Press, 1987.

Campbell, Colin. "Consuming Goods and the Good of Consuming." *Critical Review* 8 (1994): 503-520.

Campbell, Colin. *The Romantic Ethic and the Spirit of Modern Consumerism*. Oxford: B. Blackwell, 1987.

Campbell, Colin. "Understanding Traditional and Modern Patterns of Consumption in Eighteenth-Century England: A Character-Action Approach." In *Consumption and the World of Goods*, edited by John Brewer and Roy Porter. New York: Routledge, 1993.

Carroll, Charles F. *The Timber Economy of Puritan New England*. Providence: Brown University Press, 1973.

Ceci, Lynn. *The Effect of European Contact and Trade on the Settlement Pattern of Indians in Coastal New York, 1524-1665*. New York: Garland, 1990.

Ceci, Lynn. "Native Wampum as a Peripheral Resource in the Seventeenth-Century World-System." In *The Pequots in Southern New England*, edited by Laurence M. Hauptman and James D. Wherry. Norman: University of Oklahoma Press, 1990.

Cevasco, Carla. "Hunger Knowledges and Cultures in New England's Borderlands, 1675-1770." *Early American Studies* 16 (2018): 255-281.

Chaplin, Joyce E. *Subject Matter: Technology, the Body, and Science on the Anglo-American Frontier, 1500-1676*. Cambridge: Harvard University Press, 2001).

Chilton, Elizabeth S. "'towns they have none': Diverse Subsistence and Settlement Strategies in Native New England." In *Northeast Subsistence-Settlement Change, A.D. 700-1300*, edited by John P. Hart and Christina B. Rieth. Albany: New York State Museum Bulletin 496, 2002.

Clark, Christopher. *The Roots of Rural Capitalism: Western Massachusetts, 1780-1860*. Ithaca: Cornell University Press, 1990.

Cohen, Matt. *The Networked Wilderness: Communicating in Early New England*. Minneapolis: University of Minnesota Press, 2010.

- Coleman, D.C. *The Economy of England, 1450-1750*. London: Oxford University Press, 1977).
- “College Laws and Customs.” *Publications of the Colonial Society of Massachusetts* 31 (1935).
- Colpitts, George. *North America’s Indian Trade in European Commerce and Imagination, 1580-1850*. Leiden: Brill, 2014.
- Conforti, Joseph A. *Saints and Strangers: New England in British North America*. Baltimore: The Johns Hopkins University Press, 2006.
- Connole, Dennis A. *The Indians of the Nipmuck Country in Southern New England, 1630-1750*. Jefferson: McFarland, 2001.
- Conroy, David W. *In Public Houses: Drink and the Revolution of Authority in Colonial Massachusetts*. Chapel Hill: University of North Carolina Press, 1995.
- Corran, H.S. *A History of Brewing*. North Pomfret, VT: David and Charles, 1975.
- Cowan, Brian. “New Worlds, New Tastes: Food Fashions after the Renaissance.” In *Food: The History of Taste*, edited by Paul Freedman. Berkeley: University of California Press, 2007.
- Cowan, Brian. *The Social Life of Coffee: The Emergence of the British Coffeehouse*. New Haven: Yale University Press, 2005.
- Crandall, Ralph J., and Ralph J. Coffman. “From Emigrants to Rulers: The Charlestown Oligarchy in the Great Migration.” *The New England Historical and Genealogical Register* 131 (April 1977): 132.
- Cressy, David. *Birth, Marriage, and Death: Ritual, Religion, and the Life-Cycle in Tudor and Stuart England*. New York: Oxford University Press, 1997.
- Cressy, David. *Coming Over: Migration and Communication Between England and New England in the Seventeenth Century*. New York: Cambridge University Press, 1987.
- Cronon, William. *Changes in the Land: Indians, Colonists, and the Ecology of Early New England*. New York: Hill and Wang, 1983.
- Crosby, Alfred W. *Ecological Imperialism: The Biological Expansion of Europe, 900-1900*. Cambridge: Cambridge University Press, 1986.
- Culquhoun, Kate. *Taste: The Story of Britain Through Its Cooking*. New York: Bloomsbury, 2007.
- Carrier, John J. *‘Ould Newbury’: Historical and Biographical Sketches*. Boston: Damrell and Upham, 1896.
- Curwen, George Rea. “Notice of the Curwen House and of its Occupants.” *Essex Institute Historical Collections* 2 (1860): 228.
- Cutter, William Richard. *New England Families: Genealogical and Memorial*. New York: Lewis Historical Publishing Company, 1913.

- Dalby, Andrew. *Dangerous Tastes: The Story of Spices*. Berkeley: University of California Press, 2000.
- Daniels, Bruce C. *Puritans at Play: Leisure and Recreation in Colonial New England*. New York: St. Martin's Press, 1995.
- David, Elizabeth. *English Bread and Yeast Cookery*. New York: Penguin Books, 1980.
- Davies, K.G. "The Origins of the Commission System in the West India Trade." *Transactions of the Royal Historical Society* 2 (1952): 89-107.
- Davis, Walter Goodwin. *Massachusetts and Maine Families in the Ancestry of Walter Goodwin Davis*. Baltimore: Genealogical Publishing Co., 1996.
- Dawson, Mark. *Plenti and Grase: Food and Drink in a Sixteenth-Century Household*. Totnes: Prospect Books, 2009.
- De Vries, Jan. "Between Purchasing Power and the World of Goods: Understanding the Household Economy in Early Modern Europe." In Brewer and Porter, *Consumption and the World of Goods*.
- De Vries, Jan. *The Economy of Europe in an Age of Crisis: 1600-1750*. New York: Cambridge University Press, 1976.
- De Vries, Jan. "The Industrial Revolution and the Industrious Revolution." *The Journal of Economic History* 54 (1994): 249-270.
- De Vries, Jan. *The Industrious Revolution: Consumer Behavior and the Household Economy, 1650 to the Present*. Cambridge: Cambridge University Press, 2008.
- Desor, J.A., Owen Maller, and Lawrence S. Greene. "Preference for Sweet in Humans: Infants, Children, and Adults." In *Taste and Development: The Genesis of Sweet Preference*, edited by James M. Weiffenbach. U.S. Department of Health, Education, and Welfare, Public Health Service, National Institutes of Health. Washington, D.C.: U.S. Government Printing Office, 1977.
- Dow, George F. *Every Day Life in the Massachusetts Bay Colony*. New York: Dover Publications, 1988.
- Deerr, Noel. *The History of Sugar*. London: Chapman and Hall, 1950.
- Donahue, Brian. *The Great Meadow: Farmers and the Land in Colonial Concord*. New Haven: Yale University Press, 2004.
- Drummond, J.C. and Anne Wilbraham. *The Englishman's Food: A History of Five Centuries of English Diet*. London: Pimlico, 1991.
- Duffy, Valerie B. and Linda M. Bartoshuk. "Sensory Factors in Feeding." In *Why We Eat What We Eat*, edited by Elizabeth D. Capaldi. Washington, D.C.: American Psychological Association, 1996.

- Dunn, Richard S. *Sugar and Slaves: The Rise of the Planter Class in the English West Indies, 1624-1713*. Chapel Hill: University of North Carolina Press, 1972.
- DuVal, Kathleen. *The Native Ground: Indians and Colonists in the Heart of the Continent*. Philadelphia: University of Pennsylvania Press, 2006.
- Earle, Alice Morse. *Customs and Fashions in Old New England*. New York: Charles Scribner's Sons, 1893.
- "Early Settlers of Essex and Old Norfolk." *New England Historical and Genealogical Register* (Oct. 1853) 7:359.
- Eden, Trudy. *The Early American Table: Food and Society in the New World*. DeKalb: Northern Illinois University Press, 2008.
- Ellis, Ellen Deborah. *An Introduction to the History of Sugar as a Commodity*. Philadelphia: The John Winston Co., 1905.
- Eltis, David. "New Estimates of Exports from Barbados and Jamaica, 1665-1701." *The William and Mary Quarterly* 52 (1995): 631-648.
- Falk, John L. "Sweet Abuse and the Addiction Model." in Weiffenbach, *Taste and Development*.
- Fernandez-Armesto, Felipe, and Benjamin Sacks. "The Global Exchange of Food and Drugs." In *The Oxford Handbook of the History of Consumption*, edited by Frank Trentmann. New York: Oxford University Press, 2012.
- Finch, Martha L. *Dissenting Bodies: Corporealities in Early New England*. New York: Columbia University Press, 2010.
- Fischer, David Hackett. *Albion's Seed: Four British Folkways in America*. New York: Oxford University Press, 1989.
- Foster, Stephen. *The Long Argument: English Puritanism and the Shaping of New England Culture, 1570-1700*. Chapel Hill: University of North Carolina Press, 1991.
- Freedman, Paul. *Out of the East: Spices and the Medieval Imagination*. New Haven: Yale University Press, 2008.
- Frothingham, Richard. *The History of Charlestown, Massachusetts*. Charlestown: Charles P. Emmons, 1845.
- Galenson, David W. *Traders, Planters, and Slaves: Market Behavior in Early English America*. Cambridge: Cambridge University Press, 1986.
- Galloway, J.H. "The Mediterranean Sugar Industry." *Geographical Review* 67 (1977): 177-92.

Games, Alison. "Migrations and Frontiers." In *The Atlantic World, 1450-2000*, edited by Toyin Falola and Kevin D. Roberts. Bloomington: Indiana University Press, 2008.

Games, Alison. *Migration and the Origins of the English Atlantic World*. Cambridge: Harvard University Press, 1999.

Garton, Eric. *Tudor Nantwich: A Study of Life in Nantwich in the Sixteenth Century*. Cheshire: Cheshire County Council, 1983.

Gavranovic, Altin. "Through the Looking Glass Darkly: Episodes from the History of Deviance." Ph.D. diss., Harvard University, 2012.

Gibbs, J. Willard. *Memoir of the Gibbs Family of Warwickshire, England, and United States of America*. Philadelphia: Lewis & Greene, 1879.

Gildrie, Richard P. "Taverns and Popular Culture in Essex County, Massachusetts, 1678-1686." *Essex Institute Historical Collections* 124 (July 1988): 158-185.

Goff, John. *The Salem Witch House: A Touchstone to Antiquity*. Charleston: The History Press, 2009.

Goodman, Jordan. "Excitantia, Or, How Enlightenment Europe Took to Soft Drugs." In *Consuming Habits: Global and Historical Perspectives on How Cultures Define Drugs*, edited by Jordan Goodman, Paul E. Lovejoy, and Andrew Sherratt. New York: Routledge, 2007.

Gragg, Larry D. "An Ambiguous Response to the Market: The Early New England-Barbados Trade." *Historical Journal of Massachusetts* (Summer 1989): 177-199.

Gragg, Larry. *Englishmen Transplanted: The English Colonization of Barbados, 1627-1660*. Oxford: Oxford University Press, 2003.

Gragg, Larry. *A Quest for Security: The Life of Samuel Parris, 1653-1720*. New York: Greenwood Press, 1990.

Gragg, Larry D. "Shipmasters in Early Barbados." *The Mariner's Mirror* 77 (May 1991): 105-111.

Gragg, Larry D. "A Puritan in the West Indies: The Career of Samuel Winthrop." *The William and Mary Quarterly* 50 (1993): 768-786.

Grandjean, Katherine A. "New World Tempests: Environment, Scarcity, and the Coming of the Pequot War." *The William and Mary Quarterly* 68 (January 2011): 75-100.

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

Greven, Philip. *Four Generations: Population, Land, and Family in Colonial Andover, Massachusetts*. Ithaca: Cornell University Press, 1970.

- Hall, Michael G. *The Last American Puritan: The Life of Increase Mather, 1639-1723*. Middletown, CT: Wesleyan University Press, 1988.
- Harlow, Vincent T. *A History of Barbados: 1625-1685*. New York: Negro Universities Press, 1926.
- Harmon, Alexandra. *Rich Indians: Native People and the Problem of Wealth in American History*. Chapel Hill: University of North Carolina Press, 2010.
- Harrington, Faith. "‘Wee Tooke Great Store of Cod-Fish’: Fishing Ships and First Settlements on the Coast of New England, 1600-1630." In Baker, *American Beginnings*.
- Harris, Marvin. *Good to Eat: Riddles of Food and Culture*. New York: Simon and Schuster, 1985.
- Harvey, Susan M. *Slavery in Massachusetts: A Descendent of Early Settlers Investigates the Connections in Newburyport, Massachusetts*. master’s thesis, Fitchburg State University, 2011.
- Hayes, Katherine Howlett. *Slavery Before Race: Europeans, Africans, and Indians at Long Island’s Sylvester Manor Plantation, 1651-1884*. New York: NYU Press, 2013.
- Hensley, Paul B. "Time, Work, and Social Context in New England." *The New England Quarterly* 65 (Dec. 1992): 531-559.
- Higman, B.W. "The Sugar Revolution." *The Economic History Review* 53 (2000): 213-236.
- Hladik, Claude Marcel. "Primate Models for Taste and Food Preferences." In *Food Preferences and Taste: Continuity and Change*, edited by Helen Macbeth. Providence: Berghahn Books, 1997.
- Hobhouse, Henry. *Seeds of Change: Five Plants that Transformed Mankind*. London: Sidgwick & Jackson, 1985.
- Holt, Douglas. "Does Cultural Capital Structure American Consumption?" *Journal of Consumer Research* (1988): 1-25.
- Hooker, Richard J. *Food and Drink in America: A History*. Indianapolis: Bobbs-Merrill, 1981.
- Hunt, William. *The Puritan Moment: The Coming of Revolution in an English County*. Cambridge: Harvard University Press, 1983.
- Hunter, Phyllis. *Purchasing Identity in the Atlantic World: Massachusetts Merchants, 1670-1780*. Ithaca: Cornell University Press, 2001.
- Inland, J.R. et. al. "Refined Food Addiction: A Classic Substance Use Disorder." *Medical Hypotheses* 72 (2009): 518-526.
- Innes, Stephen. *Creating the Commonwealth: The Economic Culture of Puritan New England*. New York: W.W. Norton, 1995.

- Innes, Stephen. *Labor in a New Land: Economy and Society in Seventeenth-Century Springfield*. Princeton: Princeton University Press, 1983.
- Innes, Stephen. "Thrift and Prosperity." In *Thrift and Thriving in America: Capitalism and Moral Order from the Puritans to the Present*, edited by Joshua J. Yates and James Davison Hunter. New York: Oxford University Press, 2011.
- Israel, Jonathan I. *Dutch Primacy in World Trade, 1585-1740*. Oxford: Clarendon, 1989.
- Jaffee, David. *People of the Wachuset: Greater New England in History and Memory, 1630-1860*. Ithaca: Cornell University Press, 1999.
- Jamieson, Ross W. "The Essence of Commodification: Caffeine Dependencies in the Early Modern World." *Journal of Social History* 35 (2001): 269-294.
- Jankowiak, William and Daniel Bradburd. *Drugs, Labor, and Colonial Expansion*. Tucson: The University of Arizona Press, 2003.
- Jupp, Peter C. and Clare Gittings, eds. *Death in England: An Illustrated History*. Manchester, UK: Manchester University Press, 1999.
- Keller, Robert H. "America's Native Sweet: Chippewa Treaties and the Right to Harvest Maple Sugar." *American Indian Quarterly* 13 (1989): 117-135.
- Kelley, Mark A., T. Gail Barrett, and Sandra D. Saunders. "Diet, Dental Disease, and Transition in Northeastern Native Americans." *Man in the Northeast* 33 (1987).
- Kimball, Eric. "An Essential Link in a Vast Chain: New England and the West Indies, 1700-1775." PhD diss., University of Pittsburgh, 2009.
- Korsmeyer, Carolyn. *Making Sense of Taste: Food & Philosophy*. Ithaca: Cornell University Press, 1999.
- Kreiser, Larry. "Early American Accounting." *Journal of Accountancy* (July 1976): 77-80.
- Kronld, Michael. *Sweet Invention: A History of Dessert*. Chicago: Chicago Review Press, 2011.
- Kulikoff, Allan. *The Agrarian Origins of American Capitalism*. Charlottesville: University Press of Virginia, 1992.
- Kupperman, Karen Ordahl. "Climate and Mastery of the Wilderness in Seventeenth Century New England." In *Seventeenth-Century New England*, edited by David D. Hall and David Grayson Allen. Boston: Colonial Society of Massachusetts, 1984.
- Kupperman, Karen Ordahl. *Indians and English: Facing Off in Early America*. Ithaca: Cornell University Press, 2000.
- Kupperman, Karen Ordahl. *Providence Island, 1630-1641: The Other Puritan Colony*. Cambridge: Cambridge University Press, 1993.

Labarge, Margaret Wade. *A Baronial Household of the Thirteenth Century*. Totowa, NJ: Barnes and Noble, 1980.

LaCombe, Michael A. *Political Gastronomy: Food and Authority in the English Atlantic World*. Philadelphia: University of Pennsylvania Press, 2012.

Larsen, Clark, Rebecca Shavit, and Mark C. Griffin. "Dental Caries Evidence for Dietary Change: An Archaeological Context." In *Advances in Dental Anthropology*, edited by Mark A. Kelley and Clark Larsen. New York: John Wiley, 1991.

Latner, Richard. "'Here Are No Newtters': Witchcraft and Religious Discord in Salem Village and Andover." *The New England Quarterly* 79 (March 2006): 92-122.

Latner, Richard. "Salem Witchcraft, Factionalism, and Social Change Reconsidered: Were Salem's Witch-Hunters Modernization's Failures?" *The William and Mary Quarterly* 65 (Jul. 2008): 423-448.

Lauriou, Bruno. "Medieval Cooking." In *Food: A Culinary History from Antiquity to the Present*, edited by Jean-Louis Flandrin, Massimo Montinari, and Albert Sonnenfeld. New York: Columbia University Press, 1999.

Leighton, Ann. *Early American Gardens "For Meate or Medicine."* Boston: Houghton Mifflin, 1970.

Lender, Mark Edward and James Kirby Martin. *Drinking in America: A History*. New York: Macmillan, 1982.

Lepore, Jill. *In the Name of War: King Philip's War and the Origins of American Identity*. New York: Vintage Books, 1998.

Levy, Babette M. *Early Puritanism in the Southern and Island Colonies*. Worcester, MA: American Antiquarian Society, 1960.

Lewis, Theodore B. "Land Speculation and the Dudley Council of 1686." *The William and Mary Quarterly* 31 (1974): 255-272.

Lindman, Janet Moore and Michele Lise Tarter, eds. *A Centre of Wonders: The Body in Early America*. Ithaca: Cornell University Press, 2001.

Lipsitt, Lewis P. "Taste in Human Neonates: Its Effect on Sucking and Heart Rate." In Weiffenbach, *Taste and Development*.

Livingston, James. *Against Thrift: Why Consumer Culture is Good for the Economy, the Environment, and Your Soul*. New York: Basic Books, 2011.

Lloyd, Paul S. *Food and Identity in England, 11540-1640: Eating to Impress*. New York: Bloomsbury, 2015.

Lockridge, Kenneth. *A New England Town: The First Hundred Years*. New York: W.W. Norton, 1970.

- Lurie, Nancy. "Indian Cultural Adjustment to European Civilization." In *Seventeenth-Century America: Essays in Colonial History*, edited by James Morton Smith. Chapel Hill: The University of North Carolina Press, 2014.
- Logue, A.W. *The Psychology of Eating and Drinking*. New York: Brunner-Routledge, 2004.
- Macbeth, Helen and Sue Lawdry. "Food Preferences and Taste: An Introduction." In Macbeth, *Food Preferences*.
- Macfarlane, Ronald. "The Massachusetts Bay Truck-Houses in Diplomacy with the Indians." *The New England Quarterly* 11 (March 1938): 48-65.
- Main, Gloria L. 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.
- Main, Gloria. *Peoples of a Spacious Land: Families and Cultures in Colonial New England*. Cambridge: Harvard University Press, 2001.
- Main, Gloria L. and Jackson T. Main. "The Red Queen in New England?" *The William and Mary Quarterly* 56 (1999): 121-150.
- Mallios, Seth. *The Deadly Politics of Giving: Exchange and Violence at Ajacan, Roanoke, and Jamestown*. Tuscaloosa: University of Alabama Press, 2006.
- Mancall, Peter C. "The Bewitching Tyranny of Custom?: The Social Costs of Indian Drinking in Colonial America," In *American Encounters: Natives and Newcomers From European Contact to Indian Removal, 1500-1850*, edited by Peter C. Mancall and James H. Merrell. New York: Routledge, 2007.
- Mancall, David. *Deadly Medicine: Indians and Alcohol in Early America*. Ithaca: Cornell University Press, 1995.
- Mandell, Daniel R. *King Philip's War: Colonial Expansion, Native Resistance, and the End of Indian Sovereignty*. Baltimore: The Johns Hopkins University Press, 2010.
- Marshall, Joshua Micah. "'A Melancholy People': Anglo-Indian Relations in Early Warwick, Rhode Island, 1642-1675." In *New England Encounters: Indians and Euroamericans 1600-1850*, edited by Alden T. Vaughan. Boston: Northeastern University Press, 1999.
- McCants, Anne E.C. "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.
- McCants, Anne. "Meeting Needs and Suppressing Desires: Consumer Choice Models and Historical Data." *The Journal of Interdisciplinary History* 26 (1995): 191-207.
- McCants, Anne E.C. "Poor Consumers as Global Consumers: The Diffusion of Tea and Coffee Drinking in the Eighteenth Century." *Economic History Review* 61 (2008): 172-200.

- McCusker, John J. "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*, edited by John J. McCusker and Kenneth Morgan. Cambridge: Cambridge University Press, 2000.
- McCusker, John J. *Essays in the Economic History of the Atlantic World*. London: Routledge, 1997.
- McCusker, John J. *Rum and the American Revolution: The Rum Trade and the Balance of Payments of the Thirteen Continental Colonies*. New York: Garland, 1989.
- McCusker, John J. "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.
- McIntyre, Ruth A. *William Pynchon: Merchant and Colonizer*. Springfield, MA: Connecticut Valley Historical Museum, 1961.
- McKendrick, Neil. "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*, edited by Neil McKendrick. London: Europa Publications, 1974.
- McMahon, Sarah F. "A Comfortable Subsistence: The Changing Composition of Diet in Rural New England." *The William and Mary Quarterly* 42 (1985): 26-65.
- McMahon, Sarah F. "Provisions Laid Up for the Family: Toward a History of Diet in New England, 1650-1850." *Historical Methods* 14 (1981): 4-21.
- McWilliams, James E. "Brewing Beer in Massachusetts Bay, 1640-1690." *The New England Quarterly* 71 (1998): 543-569.
- McWilliams, James E. *Building the Bay Colony: Local Economy and Culture in Early Massachusetts*. Charlottesville: University of Virginia Press, 2007.
- McWilliams, James E. "Butter, Milk, and a 'Spare Ribb': Women's Work and the Transatlantic Economic Transition in Seventeenth-Century Massachusetts." *The New England Quarterly* 82 (March 2009): 5-24.
- McWilliams, James. *A Revolution in Eating: How the Quest for Food Shaped America*. New York: Columbia University Press, 2005.
- McWilliams, James E. "'To Forward Well-Flavored Productions': The Kitchen Garden in Early New England." *The New England Quarterly* 77 (2004): 25-50.
- Meacham, Sarah. *Every Home a Distillery: Alcohol, Gender and Technology in the Colonial Chesapeake*. Baltimore: Johns Hopkins University Press, 2009.
- Menard, Russell R. "Plantation Empire: How Sugar and Tobacco Planters Built Their Industries and Raised an Empire." *Agricultural History* 81, no. 3 (2007): 309-332.

- Menard, Russell R. *Sweet Negotiations: Sugar, Slavery, and Plantation Agriculture in Early Barbados*. Charlottesville: University of Virginia Press, 2006.
- Merleaux, April. *Sugar and Civilization: American Empire and the Cultural Politics of Sweetness*. Chapel Hill: University of North Carolina Press, 2015.
- Merrell, James H. "The Indians' New World: The Catawba Experience." *The William and Mary Quarterly* 41 (Oct. 1984): 537-565.
- Merrell, James H. "Second Thoughts on Colonial Historians and American Indians." *The William and Mary Quarterly* 69 (July 2012): 451-512.
- Merrill, Michael. Putting 'Capitalism' in Its Place: A Review of Recent Literature." *The William and Mary Quarterly* 52 (1995): 315-326.
- Miller, Christopher L. and George R. Hamell. "A New Perspective on Indian-White Contact: Cultural Symbols and Colonial Trade." *Journal of American History* 73 (1986): 311-28.
- Miller, Perry. *The New England Mind: From Colony to Province*. Boston: Beacon Press, 1961.
- Miller, Perry. *The New England Mind: The Seventeenth Century*. Boston: Beacon Press, 1961.
- Millican, Percy, ed. *The Register of the Freemen of Norwich, 1548-1713*. Norwich: Jaorrolld & Sons, 1934.
- Mintz, Sidney W. "The Changing Roles of Food in the Study of Consumption." In Brewer and Porter, *Consumption and the World of Goods*.
- Mintz, Sidney. "Sweetness and Meaning." In *The Taste Culture Reader: Experiencing Food and Drink*, edited by Carolyn Korsmeyer. New York: Berg, 2005.
- Mintz, Sidney. *Sweetness and Power: The Place of Sugar in Modern History*. New York: Penguin Books, 1985.
- Mintz, Sidney. *Tasting Food, Tasting Freedom: Excursions into Eating, Culture, and the Past*. Boston: Beacon Press, 1996.
- Moore, W.J. "Dental Caries in Britain from Roman Times to the Nineteenth Century." In *Food, Diet and Economic Change Past and Present*, edited by Catherine Geissler and Derek J. Oddy. London: Leicester University Press, 1993.
- Moriarty, G. Andrews. "Barbadian Notes." *The New England Historical and Genealogical Register* 67 (1913).
- Moriarty, G. Andrews. "The Turners of New England and Barbados." *The Journal of the Barbados Museum and Historical Society* 10 (Nov. 1942): 7-10.
- Morison, Samuel Eliot. *Harvard College in the Seventeenth Century*. Cambridge, MA: Harvard University Press, 1936.

Muldrew, Craig. *Food, Energy, and the Creation of Industriousness: Work and Material Culture in Agrarian England, 1550-1780*. Cambridge: Cambridge University Press, 2011.

Munro, John. "Oriental Spices and Their Costs in Medieval Cuisine: Luxuries or Necessities?" Lecture, University College, Toronto, 1988.

Murray, David. *Indian Giving: Economies of Power in Indian-White Exchanges*. Amherst: University of Massachusetts Press, 2000.

Newell, Margaret Ellen. *Brethren by Nature: New England Indians, Colonists, and the Origins of American Slavery*. Ithaca: Cornell University Press, 2015.

Newell, Margaret Ellen. "The Changing Nature of Indian Slavery in New England, 1670-1720." In *Reinterpreting New England Indians and the Colonial Experience*, edited by Colin G. Calloway and Neal Salisbury. Boston: The Colonial Society of Massachusetts, 2003.

Newell, Margaret Ellen. *From Dependency to Independence: Economic Revolution in Colonial New England*. Ithaca: Cornell University Press, 1998.

Norton, Marcy. *Sacred Gifts, Profane Pleasures: A History of Tobacco and Chocolate in the Atlantic World*. Ithaca: Cornell University Press, 2008.

Ostrander, Gilman M. "The Colonial Molasses Trade." *Agricultural History* 30 (April 1956): 77-84.

Ouellette, Susan M. "All Hands Enjoined to Spin: Textile Production in Seventeenth Century Massachusetts." PhD diss., University of Massachusetts, 1996.

Outram, Alan K. "Hunter-Gatherers and the First Farmers: The Evolution of Taste in Prehistory." In Freedman, *Food: The History of Taste*.

Parasecoli, Fabio. "Food and Popular Culture." In *Food in Time and Place: The American Historical Association Companion to Food History*, edited by Paul Freedman, Joyce E. Chaplin, and Ken Albala. Berkeley: University of California Press, 2014.

Pares, Richard. *Yankees and Creoles: The Trade Between North America and the West Indies Before the American Revolution*. Cambridge: Harvard University Press, 1956.

Pastore, Christopher L. *Between Land and Sea: The Atlantic Coast and the Transformation of New England*. Cambridge: Harvard University Press, 2014.

Peterson, Richard A. "Understanding Audience Segmentation: From Elite and Mass to Omnivore and Univore." *Poetics* 21 (1992): 243-258.

Pomeranz, Kenneth. "Political Economy and Ecology on the Eve of Industrialization: Europe, China, and the Global Conjecture," *The American Historical Review* 107 (2002): 425-446.

Prescott, John. *Taste Matters: Why We Like the Foods We Do*. London: Reaktion Books, 2012.

- Prieur, Annick and Mike Savage. "Emerging Forms of Cultural Capital." *European Societies* 15 (2013): 246-267.
- Puckrein, Gary A. *Little England: Plantation Society and Anglo-Barbadian Politics, 1627-1700*. New York: New York University Press, 1984.
- Pulsipher, Jenny. *Subjects Unto the Same King: Indians, English, and the Contest for Authority in Colonial New England*. Philadelphia: University of Pennsylvania Press, 2005.
- Ray, Benjamin C. "'The Salem Witch Mania': Recent Scholarship and American History Textbooks." *Journal of the American Academy of Religion* 78 (March 2010): 40-64.
- Ray, Benjamin C. "Satan's War Against the Covenant in Salem Village, 1692." *The New England Quarterly* 80 (Mar. 2007): 69-85.
- Richardson, Tim. *Sweets: A History of Candy*. New York: Bloomsbury, 2002.
- Richter, Daniel K. *Trade, Land, Power: The Struggle for Eastern America*. Philadelphia: University of Pennsylvania Press, 2013.
- Roberts, Oliver Ayer. *History of the Military Company of the Massachusetts*. Boston: Alfred Mudge, 1895.
- Robinson, Paul A. "Lost Opportunities: Miantonomi and the English in Seventeenth-Century Narragansett Country." In *Northeastern Indian Lives, 1632-1816*, edited by Robert S. Grumet. Amherst: University of Massachusetts Press, 1996.
- Robinson, Paul A., Marc A. Kelley, and Patricia E. Rubertone. "Preliminary Biocultural Interpretations from a Seventeenth-Century Narragansett Indian Cemetery in Rhode Island." In *Cultures in Contact: The Impact of European Contacts on Native American Cultural Institutions, A.D. 1000-1800*, edited by William W. Fitzhugh. Washington, DC: Smithsonian Institution Press, 1985.
- Rogers, James E. Thorold. *A History of Agriculture and Prices in England*. Oxford: Clarendon Press, 1887.
- Romani, Daniel A. "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, *The Dublin Seminar for New England Folklife, Annual Proceedings*. Boston: Boston University 1993.
- Rosenstein, Diana and Harriet Oster. "Differential Facial Responses to Four Basic Tastes in Newborns." In *What the Face Reveals: Basic and Applied Studies of Spontaneous Facial Expression Using the Facial Action Coding System*, edited by Paul Ekman and Erika L. Rosenberg. New York: Oxford University Press, 2005.
- Rosenthal, Bernard. "Tituba." *OAH Magazine of History* 17 (Jul. 2003): 48-50.

Rothenberg, Winifred. "Farm Account Books: Problems and Possibilities." *Agricultural History* 58 (April 1984): 106-112.

Rothenberg, Winifred B. *From Market-Places to a Market Economy: The Transformation of Rural Massachusetts, 1750-1850*. Chicago: University of Chicago Press, 1992.

Roueche, Berton. *The Neutral Spirit: A Portrait of Alcohol*. Boston: Little, Brown, 1960.

Rozin, Paul. "Evolution and Adaption in the Understanding of Behavior, Culture, and Mind." *American Behavioral Scientist* 43 (2000): 970-986.

Russell, Howard S. *Indian New England Before the Mayflower*. Hanover, NH: University Press of New England, 1980.

Russell, Howard S. *A Long Deep Furrow: Three Centuries of Farming in New England*. Hanover, New Hampshire: University Press of New England, 1976.

Rutman, Darrett B. "Governor Winthrop's Garden Crop: The Significance of Agriculture in the Early Commerce of Massachusetts Bay." *The William and Mary Quarterly* 20 (1963): 396-415.

Rutman, Darrett B. *Husbandmen of Plymouth: Farms and Villages in the Old Country*. Boston: Beacon Press, 1967.

Rutman, Darrett B. *Winthrop's Boston: Portrait of a Puritan Town, 1630-1649*. Chapel Hill: The University of North Carolina Press, 1965.

Saad, Gad. *The Consuming Instinct: What Juicy Burgers, Ferraris, Pornography, and Gift Giving Reveal About Human Nature*. New York: Prometheus Books, 2011.

Salisbury, Neal. "The Indians' Old World: Native Americans and the Coming of Europeans." *The William and Mary Quarterly* 53 (1996): 435-458.

Salisbury, Neal. *Manitou and Providence: Indians, Europeans, and the Making of New England, 1500-1643*. New York: Oxford University Press, 1982.

Salisbury, Neal. "Social Relationships on a Moving Frontier: Natives and Settlers in Southern New England, 1638-1675." *Man in the Northeast* 33 (1987).

Schivelbush, Wolfgang. *Tastes of Paradise: A Social History of Spices, Stimulants, and Intoxicants*. New York: Pantheon Books, 1992.

Schultz, Sally M. and Joan Hollister. "Single-Entry Accounting in Early America: The Accounts of the Hasbrouck Family." *The Accounting Historians Journal* 31 (June 2004): 141-174.

Schwartz, Stuart B. *Sugar Plantations in the Formation of Brazilian Society, 1550-1835*. Cambridge: Cambridge University Press, 2004.

Schumpeter, Elizabeth Boody. *English Overseas Trade Statistics, 1697-1808*. London: Clarendon Press, 1960.

Scitovsky, Tibor. *The Joyless Economy: An Inquiry into Human Satisfaction and Consumer Dissatisfaction*. New York: Oxford University Press, 1976.

Shammas, Carole. "Changes in English and Anglo-American Consumption from 1550 to 1800." In Brewer and Porter, *Consumption and the World of Goods*.

Shammas, Carole. "Explaining Past Changes in Consumption and Consumer Behavior." *Historical Methods* 22 (1989): 61-67.

Shammas, Carole. "Food Expenditures and Economic Well-Being in Early Modern England." *The Journal of Economic History* 43, no. 1 (March 1983): 89-100.

Shammas, Carole. *The Pre-Industrial Consumer in England and America*. Los Angeles: Figueroa Press, 1990.

Shammas, Carole. "The Revolutionary Impact of European Demand for Tropical Goods." In McCusker and Morgan, *The Early Modern Atlantic Economy*.

Sheridan, Richard. *Sugar and Slavery: An Economic History of the British West Indies, 1623-1775*. Jamaica: Canoe Press, 1974.

Silverman, David J. *Faith and Boundaries: Colonists, Christianity, and Community among the Wampanoag Indians of Martha's Vineyard, 1600-1871*. Cambridge: Cambridge University Press, 2005.

Sim, Alison. *Food and Feast in Tudor England*. Thrupp: Sutton, 1997.

Simmons, William. *Cautantowit's House: An Indian Burial Ground on the Island of Conanicut in Narragansett Bay*. Providence: Brown University Press, 1970.

Simmons, William S. *Spirit of the New England Tribes: Indian History and Folklore, 1620-1984*. Hanover: University Press of New England, 1986.

Smith, Andrew F. *Sugar: A Global History*. London: Reaktion Books, 2015.

Smith, Frederick H. *Caribbean Rum: A Social and Economic History*. Gainesville: University Press of Florida, 2005.

Smith, Gregg. *Beer in America: The Early Years, 1587-1840*. Siris Books: 1998.

Smith, S.D. *Slavery, Family, and Gentry Capitalism in the British Atlantic: The World of the Lascelles, 1648-1834*. Cambridge: Cambridge University Press, 2006.

Smith, Woodruff D. "From Coffeehouse to Parlour: The Consumption of Coffee, Tea, and Sugar in North-western Europe in the Seventeenth and Eighteenth Centuries." In Goodman, Lovejoy, and Sheratt, *Consuming Habits*.

- Smith, Woodruff D. "Complications of the Commonplace: Tea, Sugar, and Imperialism." *The Journal of Interdisciplinary History* 23 (1992): 259-278.
- Smith, Woodruff D. *Consumption and the Making of Respectability, 1600-1800*. New York: Routledge, 2002.
- Snow, Dean R. *The Archaeology of New England*. New York: Academic Press, 1980.
- Solow, Barbara L. *The Economic Consequences of the Atlantic Slave Trade*. Lanham: Lexington Books, 2014.
- Solow, Barbara L. "Slavery and Colonization," In *Slavery and the Rise of the Atlantic System*, edited by Barbara L. Solow. Cambridge: Cambridge University Press, 1991.
- Spencer, Colin. *British Food: An Extraordinary Thousand Years of History*. New York: Columbia University Press, 2002.
- Springer, James Warren. "American Indians and the Law of Real Property in Colonial New England." *The American Journal of Legal History* 30 (1986): 25-58.
- Spufford, Margaret. *The Great Reclathing of Rural England: Petty Chapmen and Their Wares in the Seventeenth Century* (London: Hambledon Press, 1984).
- Starbuck, Alexander. *The History of Nantucket: County, Island and Town*. Boston: C.E. Goodspeed, 1924.
- Starna, William A. "The Pequots in the Early Seventeenth Century." In Hauptman and Wherry, *The Pequots in Southern New England*.
- Stavely, Keith and Kathleen Fitzgerald. *America's Founding Food: The Story of New England Cooking*. Chapel Hill: The University of North Carolina Press, 2004.
- Stobart, Jon. *Sugar and Spice: Grocers and Groceries in Provincial England, 1650-1830*. Oxford: Oxford University Press, 2013.
- Stols, Eddy. "The Expansion of the Sugar Market in Western Europe." In *Tropical Babylons: Sugar and the Making of the Atlantic World, 1450-1680*, edited by Stuart B. Schwartz. Chapel Hill: The University of North Carolina Press, 2004.
- Styles, John. "Manufacturing, Consumption, and Design in Eighteenth-Century England." In Brewer and Porter, *Consumption and the World of Goods*.
- Thirsk, Joan. *Food in Early Modern England: Phases, Fads, Fashions 1500-1700*. New York: Continuum, 2006.
- Thomas, Peter A. "Bridging the Cultural Gap: Indian/White Relations." In *Early Settlement in the Connecticut Valley*, edited by John W. Ifkovic and Martin Kaufman. Deerfield: Institute for Massachusetts Studies, 1984.

Thomas, Peter A. "Contrastive Subsistence Strategies and Land Use as Factors for Understanding Indian-White Relations in New England." *Ethnohistory* 23 (1976): 1-18.

Thomas, Peter A. "Cultural Change on the Southern New England Frontier, 1630-1665." In Fitzhugh, *Cultures in Contact*.

Thomas, Peter Allen. "In the Maelstrom of Change: The Indian Trade and Cultural Process in the Middle Connecticut River Valley, 1635-1665." Ph.D. diss., University of Massachusetts Amherst, 1979.

Thornton, A.P. "Some Statistics of West Indian Produce, 1660-1685." *Caribbean Historical Review* 4 (1954): 251-80.

Trigger, Bruce G. "Early Native North American Responses to European Contact: Romantic versus Rationalist Interpretations." *The Journal of American History* 77 (March 1991): 1195-1215.

Turgeon, Laurier. "The Tale of the Kettle: Odyssey of an Intercultural Object." *Ethnohistory* 44 (1997): 1-29.

Upham, Albert G. *Family History*. Concord, MA: 1845.

Vaisey, D.G. "Probate Inventories and Provincial Retailers in the Seventeenth Century." In *Probate Records and the Local Community*, edited by Philip Riden. Gloucester, UK: Alan Sutton, 1985.

Valeri, Mark. *Heavenly Merchandize: How Religion Shaped Commerce in Puritan America*. Princeton: Princeton University Press, 2010.

Valeri, Mark. "Puritans in the Marketplace." In *The World of John Winthrop: Essays on England and New England, 1588-1649*, edited by Francis J. Bremer and Lynn A. Botelho. Boston: Massachusetts Historical Society, 2005.

Veblen, Thorstein. *The Theory of the Leisure Class*. 1899; repr., Oxford: Oxford University Press, 2007.

Ventura, Alison K. and Julie A. Mennella. "Innate and Learned Preferences for Sweet Taste During Childhood." *Current Opinion in Clinical Nutrition and Metabolic Care* 14 (2011): 379-384.

Vickers, Daniel. *Farmers and Fishermen: Two Centuries of Work in Essex County, Massachusetts, 1630-1850*. Chapel Hill: University of North Carolina Press, 1994.

Vickers, Daniel. "The First Whalers of Nantucket." In *After King Philip's War: Presence and Persistence in Indian New England*, edited by Colin G. Galloway. Hanover: University Press of New England, 1997.

Walsh, Lorena S. "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*, edited by Robert E. Gallman and John Joseph Wallis. Chicago: University of Chicago Press, 1992.

Walsh, Lorena S. "Peopling, Producing, and Consuming in Early British America." In *The Economy of Early America: Historical Perspectives and New Directions*, edited by Cathy Matson. University Park, PA: The Pennsylvania State University Press, 2006.

Walvin, James. *Fruits of Empire: Exotic Produce and British Taste*. New York: New York University Press, 1997.

Warren, Wendy. *New England Bound: Slavery and Colonization in Early America*. New York: W.W. Norton, 2016.

Waters, Henry Fitzgilbert. *The Gedney and Clarke Families of Salem, Mass.* Salem, MA: The Salem Press, 1880.

Waters, Henry F. *Genealogical Gleanings in England*. Boston: New-England Historic Genealogical Society, 1888.

Weinberg, Bennett Alan and Bonnie K. Bealer. *The World of Caffeine: The Science and Culture of the World's Most Popular Drug*. New York: Routledge, 2001.

White, Bruce M. "Encounters with Spirits: Ojibwa and Dakota Theories about the French and Their Merchandise." In Mancall and Merrell, *American Encounters*.

White, Richard. *The Middle Ground: Indians, Empires, and Republics in the Great Lakes Region, 1650-1815*. Cambridge: Cambridge University Press, 1991.

Wickes, I.G. "A History of Infant Feeding I." *Archives of Disease in Childhood* 28 (1953): 151-158.

Willan, T.S. *The Inland Trade: Studies in English Internal Trade in the Sixteenth and Seventeenth Centuries*. Totowa, NJ: Rowman and Littlefield, 1976.

Wills, John E. "European Consumption and Asian Production in the Seventeenth and Eighteenth Centuries." In Brewer and Porter, *Consumption and the World of Goods*.

Wilson, Anne C. *Food and Drink in Britain: From the Stone Age to the 19th Century*. London: Constable and Company, 1973.

Wilson, C. Anne. "The Evolution of the Banquet Course: Some Medicinal, Culinary, and Social Aspects." In *'Banqueting Stuffe': The Fare and Social Background of the Tudor and Stuart Banquet*, edited by C. Anne Wilson. Edinburgh: Edinburgh University Press, 1991.

Wilson, C. Anne. "Introduction: The Origin of 'Banqueting Stuffe.'" In Wilson, *Banqueting Stuffe*.

Woolgar, C.M. "Feasting and Fasting: Food and Taste in Europe in the Middle Ages." In Freedman, *Food: A History of Taste*.