

Yaupon Drink: A Medicine Bundle in the Atlantic World

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Acknowledgments

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“Thus is our treaty written; thus is agreement made.

Thought is the arrow of time; memory never fades.

What was asked is given. The price is paid.”—Robert Jordan, *The Shadow Rising*

Abstract

This dissertation examines yaupon drink, a tea made from yaupon holly along with other ingredients, as a medicine bundle in the Atlantic World. Originally a medicinal drink used by Native Americans across the what is today the American South, over time the tea became a trade good demanded by the Spanish and a medicinal herb sought by European botanists and medical practitioners. Chapter One traces yaupon's origins across the southeast and bundles the drink into the many cosmic and social connections it held. Chapter Two shows how the Spanish colonial presence offered an alternative to yaupon in Florida, through Christianity and its Sacraments even as the Spanish themselves began to commodify it, demanding it as an item of tribute. Chapter Three looks beyond Spanish Florida into the interior of the southeast as Creek, Cherokee, and Natchez towns negotiated the "Shatter Zone" and shows how towns of the Native Americans preserved or changed how they used yaupon in response to European colonialism. Chapter Four explains how the yaupon became a part of medicine and gardens in early modern Europe and how its leaves negotiated the changes that the Enlightenment brought. Using archaeology and European narrative histories, this dissertation examines yaupon drink within its relational fields, recognizing its affordances and how these help write a small piece of a decolonized history of the tangled relationships among Native Americans and Europeans in Southeast and the larger Atlantic World.

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Introduction

In the spring of 2011, a senior librarian from the University of Tennessee-Knoxville approached Classics Professor Maura Lafferty about a translation. The University's Rare Book Collections had acquired a pamphlet printed in Paris in 1725. The pamphlet was written in Latin, but a word in the title— "Apalachine"—had caught the librarian's eye. Since the University of Tennessee is in the heart of the region of the United States called Appalachia, the library wanted to feature a translation of this document at a reception for its donors. Dr. Lafferty gave me the opportunity to do the translation, since I had just passed my Latin exams. At the time, I was floundering, looking for a dissertation project after my primary adviser chose to leave the university. As I began to translate this document, it became clear to me, through conversations with professors or graduate students in the University of Tennessee's Anthropology Department, that I was translating a medical disputation defending the virtues of what they all called "black drink," a tea made from the leaves of yaupon holly from the coastal plains of the southeastern United States. One of my neighbors , Bobby Braly, who had made a tea from the tree's leaves, gave me the only book written specifically about the drink, Charles's Hudson's *Black Drink: A Native American Tea*.¹ After skimming that book to get a general idea of what I was translating, it sat on my bookshelf for a couple of years. I had more important things to worry about. I was trying to find a new advisor and a new topic for a dissertation. Although I ultimately found my way back to yaupon as the subject of my dissertation, it is perhaps also important

¹ *Black Drink: A Native American Tea* ed. Charles Hudson, (Athens: University of Georgia Press, 1979). Throughout this entire project, Hudson's volume and all the essays it contained were extraordinarily helpful, especially in finding quite obscure mentions of the drink. However, in the over forty years since its publication....

to trace the story of how I, a student of Early Modern English History, came to write a dissertation drawing on sources from Mississippian Native American archaeology, Spanish *visitas* and *residencias* from the Archives of the Indies, English and French travel writing and manuscript correspondence, and Latin medical text disputations from Paris. It is a strange road, and even though it left me as an expert in no traditional discipline, it allowed me to be able to piece together different disciplinary approaches and sources. I am telling this story not for sympathy, but as a suggestion that an approach to graduate school that only allows student to write a dissertation on a very limited topic in a single discipline, (or, as one of my early advisors put it “a brick in the wall”), may not be the only way to go about it. The next few pages are rather biographical. I feel that they are important for understanding how I came to attempt to write such an interdisciplinary dissertation, but if you as a reader would rather get to my argument, please, to quote Monty Python, “skip a bit” and jump to page seven.

When I originally applied to the University of Tennessee’s graduate program in History, I wanted to write a dissertation in the Atlantic World, specifically connections between borderlands in the British Isles and borderlands in the colonial American South. I had applied to the History program at the University of Tennessee, since my wife, Jessica Dalton-Carriger, was pursuing her PhD there in Mississippian Native American archaeology. While I myself was interested in the cultural connections between the British Isles and colonial British America (a field that had started to come into fashion as Atlantic History), I pitched my application more narrowly on Early Modern Europe, knowing how grad schools reward specialization. My MA thesis was about reactions during the English Civil War to Sir Walter Raleigh’s *History of the World*, and I was accepted to work with their

early modern English historian. What happened next seems comical to me now, but at the time it turned into a serious matter. I had reached out to a historian at UTK of Upper French Louisiana borderlands, excited to branch out from early modern England into the Atlantic World. My original advisor immediately advised away from meaningful intellectual partnerships with Americanists. I was told that Atlantic History was a “fad” that would be forgotten in a few years.

I still really wanted to write some sort of “Atlantic” History but couldn’t figure out how to fit my interests into what was expected of a dissertation on Early Modern England. I found English history enjoyable but was much more interested in how people across cultural boundaries saw, understood, and tried to figure each other out. How would living at the periphery of an Empire inform cultural interactions between people? How would a Cherokee woman, who had married a Scottish trader, for example, hear, see, and understand a performance of a Scottish ballad like “Lord Gregory,” where a pregnant peasant woman is scorned by her noble lover? Would such an approach not enrich the histories of Early Modern England? Even though I could not articulate it at the time, I wanted to learn and write history not as a story told, but as a conversation shared across boundaries of field and even discipline. I was drawn to questions about how people live with and understand one another, even through events that historiography had typically treated as extraordinary circumstances.²

² A few books, on very different times, topics, and places stand out to me here and stuck with me more than others. Guy Halsall, *Barbarian Migrations and the Roman West, 376-568*, (New York: Cambridge University Press, 2007); James Merrill, *Into the American Woods: Negotiators on the Pennsylvania Frontier*, (New York: W.W. Norton, 1995). Lorraine Daston and Katharine Park, *Wonders and the Order of Nature*, (New York: Zone Books, 2001); Richard White, *The Middle Ground: Indians, Empires, and Republics in the Great Lakes Region, 1650-1815*, (New York: Cambridge University Press, 2011); Steve Shapin, *The Social History of Truth: Civility and Science in Seventeenth-Century England*, (Chicago: University of Chicago Press, 1994).

It now seems to me that I was unconsciously drawn to seminars that appealed to this approach. A couple of examples stand out. I took a seminar on the Spanish Conquest of the Americas. In exploring narratives of conquest, I learned that that conquest was not any single event, but a sometimes violent and oppressive, sometimes amicable and empowering, but always a cacophonous conversation preserved not so much in the “Letters” of Cortez or Bernal Diaz’s *Relacion*, but inscribed in *legajos* in the Archive of the Indies and in Nahuatl land claims in Mexico. I took a seminar on how the English saw the Ottoman Empire through travel writing teaching me that history, more than just archives, was also embedded in larger conversations between genres—and that these conversations could circumscribe how whole groups of people imagined others. Neither of these seminars were in my primary field of Early Modern England. I took my Comprehensive Examinations and then my adviser emailed me to say she was leaving. Since I never really had a topic, I would have to start over. I began again as a historian of pre-modern Europe, working within the larger community of medievalists and classicists at UTK.

Yet it all was preparing me for what you will read in this dissertation. One way I found to get at this was through language. Although I did not mention it above, all that time I was also drawn to language. As an early modern English historian, I was only required to be proficient in reading French, but I wanted more. Latin had been a love of mine since high school. In studying it I discovered I could not only hear what people had to say in the past, but I came to understand how language frames thought. Some things are impossible to perfectly translate because the flow, the accidence, the cadence, the grammar, the syntax, the gender, the tenses are all bound in that particular language. At the same time those categories structured how people in the past communicated, so by looking at the edge of

what a language allowed and where writers tried to push into that edge, I could understand individuals as more than a sum of their words.³ I liked Latin for that reason. It also did not hurt that working towards mastering Latin helped me read French and Spanish as well. Of course, to translate a language is not so simple as reading a printed edition of a text. I came to love paleography as well, for some of the same reasons. Not only could I experience the words of a person, but the way they shaped them and the ways others interacted with that person and their words on a page.⁴

I'm drawn to the edges and frontiers; not just *in* history, but the edges *of* history. For example, in discussing the historiography of Late Antiquity, I noticed a disciplinary discrepancy. American historians love the ideas in something like Richard White's "Middle Ground," or James Merrill's *Into the American Woods*.⁵ Identities could blur on the American frontier, but historians of Late Antiquity, until quite recently, felt the need to delineate hard and fast identities.⁶ Why was it so easy to imagine a character like Hawkeye from *Last of the Mohicans* actually living on the American frontier, but not a Roman soldier who would begin to act as a Frank?⁷ Looking back, I can see I was already starting to formulate how I saw the past and how it ought to be written about and taught. Answers to such questions are messy and require tangled questions. I am drawn to frontiers and identity, because it is

³ A book that was similarly inspirational, to the above, for how I think about this is William Sherman, *Used Books: Marking Readers in Renaissance England*, (Philadelphia: University of Pennsylvania Press, 2008).

⁴ It is one of my great regrets that in the process of writing this dissertation I never learned the Native American languages which I have to use in translation in some cases. So much can be lost in translation. For example, Cherokee is not a gendered language in the sense that Spanish or Latin are. There are not masculine and feminine versions of the same adjective or noun, context is what matters. Theda Purdue, *Cherokee Women, Gender and Culture Change 1700 – 1835*, (Lincoln: University of Nebraska Press, 1998), 40.

⁵ Richard White, *The Middle Ground: Indians, Empires, and Republics in the Great Lakes Region, 1650-1815*, (New York: Cambridge University Press, 2011).

⁶ James Merrill, *Into the American Woods: Negotiators on the Pennsylvania Frontier*, (New York: W.W. Norton, 1995).

⁷ Guy Halsall, *Barbarian Migrations and the Roman West, 376-568*, (New York: Cambridge University Press, 2007).

often there that people both try to hold onto what they think makes them, them, and where they have to deal with Others trying to do exactly the same thing. It is in these sorts of complicated interactions that history has its most powerful lessons for the present.

As I sought out a new advisor and started a full-time job teaching at a community college trying to communicate these concepts to students, I decided that I could now try to fully pursue my original goal of writing Atlantic History. Luckily the department had just hired an Atlantic World historian. So, for a year I studied the historiography of the Atlantic World and learned that “Atlantic” could mean many different things. If I wanted to write that sort of history, I had to come to terms with how I wanted to do it. At the same time, I was taking this independent study, a seminar in paleography was offered, a year-long course only offered every few years. As part of my language requirements I had become very proficient in Latin and decided that having the ability to read manuscripts would open options for a floundering graduate student. Late Roman Cursive or even thirteenth century Northern Textualis *libraria*, were not easy to learn and certainly didn’t do me any favors in my aim of studying Atlantic History. What that year of paleography did do though, was give me a skill that not all historians who write about Atlantic history have. At the end of the 2011- 2012 academic year, I was no closer to a specific topic, even though I had translated the Latin pamphlet on yaupon and even though my second advisor seemed to be pressing me to find something just like yaupon. So, I started over one more time, reading glosses and notes in sixteenth-century student textbooks from the University of Leipzig.

Finally, after another year spent pondering various different roads to bring me to the terminus of my degree, my wife and her advisor, Dr. Lynne Sullivan, along with our neighbor Dr. David Anderson, convinced me to try to return to that pamphlet on what they

called “black drink.” It finally made sense. The work on Spain in the New World, the work on the history of science and medicine, the work on frontiers and world history, the years of listening to debates about and reading Native American archaeology, the paleography: all these things had made me uniquely suited to write a history of yaupon drink in southeastern North America and the Atlantic World. There was still a big problem though, how to form a dissertation committee for such an expansive project. Fortuitously there was a historian at UTK who was willing to “speculate.”⁸ Dr. Kristen Block thought that my project was interesting enough to pursue and Dr. Julie Reed agreed to help supply the one field that I was lacking, Native American History. With one member of my original early modern Europe committee, Dr. Denise Phillips remaining to help me with the portions covering the History of Science and Medicine, I used my connections (built with the help of my wife Jessica Dalton-Carriger) to convince Dr. Barbara Heath from the Anthropology Department to serve as well.

This dissertation examines the ways Native Americans and Europeans used and understood yaupon as a drink in both southeastern North America and Europe from circa 1200 to 1825 AD. This is certainly a history of a commodity.⁹ Though I don’t think I was consciously aware of it at the time I began, I suspect now that I wanted to use yaupon as a “authorial conceit” to look at Native American history in the southeast.¹⁰ Indeed, much of

⁸ Kristen Block, *Ordinary Lives in the Early Caribbean: Religion, Colonial Competition, and the Politics of Profit*, (Athens: University of Georgia Press, 2012), 5.

⁹ Peter Coclanis, “Review: King Cotton, Sven Beckert *Empire of Cotton*,” *Technology and Culture* 57 no. 53 (2016), 661.

that approach remains. Reading Peter Coclanis's review of Sven Beckert's *Empire of Cotton*, I was struck by how little I had consciously considered this dissertation as following the works of Sidney Mintz, and Beckert, even as I took the work of Marcy Norton as my guide.¹¹ Although not nearly as ambitious as any of those works, I think my history yaupon fits into that historiographic field. Yaupon as it becomes a commodity is at the center of my narrative, but this dissertation adds to that field by looking at a tea that, even though it had similar opportunities, to sugar, cotton, as well as cocoa and tobacco, never became an object of widespread global consumption. Even as a medicine, compared to another botanical from the Americas, cinchona, it merely endured but never thrived in the global marketplace.¹² Through the course of this dissertation I hope to trace out the circumstances and historical trajectories yaupon navigated in the Southeast and Europe that ultimately led it on a different path than some of the commodities mentioned above.

Yet yaupon was so much more than a commodity. I see yaupon drink as one medicine bundle that was part of a larger bundling process, a process that Tim Pauketat argues was the "principle historical dynamic at work in North America."¹³ Using archaeology and European narrative histories, this dissertation examines yaupon drink within its "relational fields," recognizing its "affordances," and how these help write a "[de] colonized history" of the "tangled relationships" in Southeast and the larger Atlantic

¹¹ Sidney Mintz, *Sweetness and Power: The Place of Sugar in Modern History* (New York: Penguin Books, 1986); Sven Beckert, *Empire of Cotton: A Global History* (New York: Alfred A. Knopf, 2014); Marcy Norton, *Sacred Gifts, Profane Pleasures: A History of Tobacco and Chocolate in the Atlantic World*, (London: Cornell University Press, 2010).

¹² Matthew James Crawford, *The Andean Wonder Drug: Cinchona Bark and Imperial Science in the Spanish Atlantic, 1630-1800* (Pittsburg: University of Pittsburg Press, 2016).

¹³ Timothy Pauketat, *An Archaeology of the Cosmos: Rethinking Agency and Religion in Ancient America* (New York: Routledge, 2013), 58.

World.¹⁴ In the chapters that follow I will cut through the past to reveal layers of bundled meanings yaupon drink embraced and discarded in the Southeast and Europe from the eleventh through the nineteenth century. These layers are like a geologic record for the unwritten Southeastern histories witnessed by yaupon drink's harvest, preparation, and consumption over the centuries.

Along those lines, this dissertation also seeks to make a small contribution to the literature surrounding the concept of "object itineraries."¹⁵ Yaupon drink, once brewed, was an object, but the leaves it was made from, the visible markers of the life-cycle of a yaupon holly over the course of a year, the pots in which it was brewed, the whirls of the busycon shells in which it was publicly drunk, the designs carved into the clay beakers that Native Americans also used to consume it, the festivals it was drunk at, the victories in war, the deliberations in council, the brewings Spanish soldiers drank on garrison duty, and the medicine Bernard de Jussieu recommended; all these put yaupon into a "constant state of becoming, vibrating, [and] extending out along lines and across webs of being."¹⁶ The snippets from primary sources and archaeological evidence that make up the bulk of the source materials for this dissertation, like the offhand observations about yaupon by David

¹⁴ Pauketat, *Cosmos*, 4 and 58; Alexander Bauer, "Itinerant Objects," *Annual Review of Archaeology* 48 (July 2019), 335 – 52.

¹⁵ For a concise summary of this literature, see Bauer, "Itinerant Objects," 335 – 52. Pauketat, my theoretical main inspiration, owes much to work that has been done in this field. Although he mentions Bruno Latour and Tim Ingold, the work of Marcel Mauss, Arjun Appadurai, Igor Kopytoff, Rosemary Joyce, and Susan Gillespie; see Marcel Mauss, *The Gift : The Form and Reason for Exchange in Archaic Societies* (New York: Routledge, 2002); *The Social Life of Things: Commodities in Cultural Perspective* ed. Arjun Appadurai (New York: Cambridge University Press, 1986); and especially chapter two of that book; Igor Kopytoff, "The cultural biography of things: commoditization as a process," *The Social Life of Things: Commodities in Cultural Perspective* ed. Arjun Appadurai (New York: Cambridge University Press, 1986), 64 – 91; *Things in Motion: Object Itineraries in Anthropological Practice* eds. Rosemary Joyce and Susan Gillespie (Santa Fe: School for Advanced Research Press, 2015). This body of anthropological literature came to my attention rather late in the writing process, so I regret I have not been able to make as much use of it as I would have liked.

¹⁶ Bauer, "Itinerant Objects," 343.

Taitt (Chapter Three), are like polaroid snapshots of bundled itineraries entangling objects and people. From these snapshots this dissertation examines an often-fuzzy background to create not only a complex history of yaupon and the peoples who used it, but to also reveal a small untold story of the Atlantic world that Timucuan, Apalachee, Guale, Creek, Cherokee, Natchez, Yuchi, Spanish, French, and English women and men told.

To call it a medicine bundle is not to say that yaupon drink has any particular properties that make it act like modern medicine. As this dissertation will show, there is a difference between empirical description and perceived mechanism of action. One is a technology of language and the other a technology of thought. Both can be empowering tools for those who want to remain in power, and those who want to take some of that power for themselves. It was no different in the past. To concentrate on one or the other sells the whole short. At the same time the Timucuans of Florida were using yaupon drink to purify themselves before battle, Spanish soldiers were praising its effects as a diuretic. Whose story is more right to tell? Neither, because to understand the conversation, you have to listen instead of talk. This dissertation is not a complete answer to any questions about yaupon drink, but, hopefully, the beginning of a conversation.

Michel Foucault wrote about “constellations” of knowledge and power. But constellations can imply structure and rigidity. Points and lines help us see connections, masters, servants, dependents, and patrons, beginnings and ends, but not conversations. I would like to refine his metaphor in this dissertation into “oscillations of power.” Oscillations, like conversations and music, ebb and flow, there are crescendos and

decrescendos, movements, phrases, and beats.¹⁷ Meteorologically, oscillations are broad planetary processes that determine individual weather patterns. Humans have lived in a world whose weather is driven by these seasonal cycles and oscillations. A story that tells history as an oscillating conversation, rather than a description, fits with these natural cycles. Interactions, conversations, the tangled and ordinary lives of people and objects fill the pages that follow. But how do you trace a conversation? It would certainly help to know what the individuals involved are talking about. To that end I suggest seeing yaupon as a crystallization of one facet of these conversations, but a significant one. Yaupon was a spiritual medicine for purity for the Timucua and Guale. It was a tool for winning the ball game in Apalachee towns. It was a clever mask for a spy to wear in Apalachicola. It was a peace offering for Henry Timberlake. It was an initiation rite for Louis Le Clerc de Milford and a stimulating, healthy medicinal drink for Bernard de Jussieu. Although it was one biotechnology caught up in the larger oscillations of colonialism in the Atlantic World, as a shared item, it becomes a common denominator that allows us to see how individual conversations in places like—Cahokia, Ocmulgee, Ft. San Juan, Mission San Luis, St. Augustine, Coweta, Chota, and Paris—helped shape and were shaped by larger discourses sometimes more and sometimes less beyond the ken of the people in turn shaping and being caught up in them.

The rituals associated with and consumption of yaupon drink make it a verb. The bundling of those ritual moments makes it a noun. To me this seemed a very useful way to

¹⁷ In a small way I follow Edward Said's idea about contrapuntal reading here since it changes narrative to music. Said's "discrepant experiences" coexisting and interacting seem to compliment the sorts of arguments that Pauketat makes about bundles. Edward Said, *Culture and Imperialism*, (New York: Vintage Books, 1993), 32.

draw more meanings out of a necessarily ephemeral activity in the past. The methodology and approach to the written sources in this dissertation owes much to two scholars: one an archaeologist, Timothy Pauketat, and the other a historian, Marcy Norton. As I was reading *Cosmos: rethinking Agency and Religion in Ancient America*, Pauketat first gave me the idea for how to approach yaupon drink. He uses the metaphor of the “medicine bundle” to approach religion in pre-Columbian North America, since it is at once both a meaningful symbol for the people he is writing about as “relationships entailed and mediated spatially and materially” as well as a way of breaking down “conceptual bifurcations” that have informed post Enlightenment interoperation of religion.¹⁸ Objects, Pauketat argues, could have agency. They can become ontological bundles reflecting specific moments of use, memories of events, and the meanings that people ascribed to them. Not only can objects be agents for social memorializing and in individual memories, but they also can bundle together ritual moments that connect people across time and space. This sort of an approach compliments the work of Norton. I was drawn to her work as model for this project. She quite literally wrote the book on how to “revise” the history of how “Europeans assimilated” ceremonial technologies from the Americas.¹⁹ What she did for tobacco and cocoa, I hope to do, at least in part, for yaupon. I see the work of both Pauketat and Norton as complimentary and as vehicles for expressing my goals for this dissertation. Using the language of a more recent article by Norton, I see yaupon as a “subaltern technology” that bundles the signatures of time and space in the southeast and acts as an “entangler” for

¹⁸ Timothy Pauketat, *An Archaeology of the Cosmos: Rethinking Agency and Religion in Ancient America*, (New York: Routledge, 2013), 58; 88.

¹⁹ Marcy Norton, *Scared Gifts, Profane Pleasures: A History of Tobacco and Chocolate in the Atlantic World*, (London: Cornell University Press, 2010), 7.

European ontologies even as those ontologies were already entangled in epistemological battles with their own pasts and futures.²⁰ A history of yaupon, not simply as a drink, but as a “bundle,” an active verb, “mediating relationships through its own motions” can help us to understand colonialism over time, not simply as a teleological process, but as a conversation.²¹

These are just the sorts of stories that are perfect to piece together shattered worlds. Robbie Ethridge has used the idea of a “shatter zone” to explain how European economies, politics, and microbiology created Native American “coalescent societies” in the Southeast: these were spaces for people to persist, to fail, or even to thrive.²² But these cycles were not anything new. Even before the first Spanish *entradas*, towns and leadership rose and fell, for reasons that certainly are connected to ecology and the environment, but may have also been connected to political and religious movements.²³ However, European colonial competition, among the French, English, and Spanish certainly gave new opportunities for individuals and towns to gain or lose power. In this dissertation I want to use peoples’ experiences, tangled up with yaupon drink, to show how this one practice/commodity/medicine/ceremony could thread its way through a shattered landscape to connect people over space and time. Memories of the past were inscribed

²⁰ Marcy Norton, “Subaltern Technologies and early modernity in the Atlantic World,” *Colonial Latin American Review* 26, no. 1 (2017), 18; Block, *Ordinary Lives*, 3.

²¹ Pauketat, *Cosmos*, 41 -2.

²² Robbie Etheridge, “Introduction,” *Mapping the Mississippian Shatter Zone: The Colonial Indian Slave Trade and Regional Instability in the American South* ed. Robbie Ethridge and Sheri Shuck-Hall, (Lincoln: University of Nebraska Press, 2011), 1 – 62.

²³ David Anderson, *The Savannah River Chiefdoms: Political Change in the Late Prehistoric Southeast*, (Tuscaloosa: University of Alabama Press, 1994); see also *Colonialism and Native Communities in the Southeastern United States* eds. Edmond Boudreaux III, Maureen Myers, and Jay K. Johnson (Gainesville: University of Florida Press, 2020); Charles R. Cobb, *The Archaeology of Southeastern Colonial Landscapes of the Colonial Era* (Gainesville: University Press of Florida, 2019).

onto the bowls used to roast and brew yaupon, and these embedded memories existed at the same time as Franciscans were preaching the Gospel to the people of Guale towns in the early sixteenth century, offering them an alternative to yaupon with the body and blood of Christ. Those memories were also there in 1761 and 1762, when Lieutenant Henry Timberlake looked on as a Beloved Woman waved the white wing of a swan over a pot of yaupon drink to bless it. They were still there when Bernard de Jussieu, Demonstrator of Plants at the *Jardin du Roi* cited Native American practices to affirm the benefits and safety of drinking yaupon as a medicinal tea. Those experiences resonated for a spy to the governor of Georgia who claimed, in 1817, that to drink yaupon could turn a man “Indian.” Yaupon tea became an exploitable commodity for the Spanish, French, English, but at the same time it remained a vital part of Creek, Cherokee, Natchez, Apalachee, Guale, and Timucuan communities and towns, connecting these people to a rich cosmos that predated European colonialism. In both the colonial Southeast and early modern Europe, the drink mediated relationships as a medicine bundle, helping to patch up and reconnect old ties that had been broken and frayed and cutting through new ties and affinities, all the while preserving old meanings and becoming entangled in new ones.

A history of a consumable drink presents a further particular problem for a historian. How do I describe something that was consumed in the past? How do I describe a fleeting experience? This problem is compounded by the fact that many of the Native Americans who drank it never wrote anything about it. The only records are secondhand observations from Europeans who had totally different ways and categories of thinking, so they likely missed much of the embedded meanings Native Americans saw and ascribed to the drink and the ceremonies that surrounded its preparation and consumption. We have

three genres of sources from which to start.²⁴ One set, ethnohistorical sources, describe yaupon drink for early modern European audiences, but they often failed to grasp the meanings ascribed to it by whoever was using it. Although I am at heart a historian trained in that discipline's methods, I knew that many historians (especially of the Native South) reach out to other disciplines—and it was easy for me, given that I was married to a historical archaeologist. These scholars read ostensibly mute objects, meaningfully buried in the past, but excavated and interpreted to fit into the larger narratives that those archaeologists and anthropologists were composing about the people who used them. Such studies can give us very useful data on material culture and that data can answer questions. However, critics argue that archaeologists privilege Eurocentric perspectives as much as the ethnohistories, by subordinating meaning to classification. With encouragement from my co-advisor, Julie Reed, I also learned to delve into oral histories—the stories told, retold, recycled and refreshed, diminished and extolled by Native Americans in the present and past. I also begin each of my chapters with a vignette. These fictional, but plausible stories, imagined from snippets of primary sources, are the bones of the primary sources given flesh and breath to European documents that often erase Native Americans. Through these stories I hope to set the tone for the rest of the chapter, providing possible pasts in conversations with scholars and my own analysis of sources.²⁵

²⁴ I use the word “genre” here purposefully, to try and communicate that I am not privileging one sort of source over another.

²⁵ Others before and after have situated their narratives and arguments with similar approaches: Ramón Gutiérrez, *When Jesus Came the Corn Mother Went Away: Marriage Sexuality, and Power in New Mexico, 1500 – 1846* (Stanford: Stanford University Press, 1991,) especially the introduction to chapter 2; *Fort San Juan and the Limits of Empire: Colonialism and Household Practice at the Berry Site* eds. Christopher Rodning, Robin Beck, and David Moore (Gainesville: University Press of Florida, 2016); Robbie Ethridge, *From Chicaza to Chickasaw: The European Invasion and the transformation of the Mississippian World, 1540 – 1715* (Chapel Hill: University of North Carolina Press, 2010). Christopher Rodning offers a thoughtful defense for deemphasizing

Approaching any one of these sorts of sources presents ample challenges. Before the first description of yaupon tea by Europeans in the 1560s, we know almost nothing about yaupon drink (according to any empirical measure) or any of the ceremonies that undoubtedly accompanied its consumption. Looking further back in time, through the Mississippian era in the Southeast (c. 1200 – 1500), not much more can be found. An expansive survey of the available archaeological evidence that is presumed to directly relate to yaupon drink throughout the region (shell cups and ‘dippers’ with traces of yaupon residue as well as a few ceramic beakers similarly marked by the drink from Etowah and Cahokia) leaves us with a pretty simple and unremarkable conclusion: the drink, its cups, and its ceremonies were important. But for me, to try and reconstruct an exact description of some sort of idealized “black drink” ceremony misses the point. If I were to simply look for physical evidence of yaupon drink and present it, not only would this dissertation be quite short, but I think we might miss a larger picture. People, buildings, beliefs, activities, and even the physical objects that were used to prepare and serve the drink, are all significant. The shell cups and beakers used to carry yaupon drink were incised with powerful meanings not only by the images on them, but by the fact that these objects might not only be reused, but also repurposed. The mounds that most of these cups and beakers came from could be used as mortuaries for the honored dead, elevated platforms for the honored living, foci for powerful memories, and even recycled from one use to another. Yaupon drink was not only a tea, but also a ceremony steeped in a larger cosmology.

colonial perspectives in his *Center Places and Cherokee Towns: Archaeological Perspectives on Native American Architecture and Landscape in the Southeast*, Tuscaloosa: University of Alabama Press, 2015,) 60 – 2.

In Chapter One I will “blur the background” to present yaupon in all its possible agency –much more fully and cohesively than the written record alone allows me to do, but in a way that provides a baseline for my later chapters’ depth and technical subtlety. To this end I have constructed a wildly diachronous narrative: I pull together objects and fragments of written sources from the twelfth to the late eighteenth centuries, as well as observations on the appearance and lifecycle of yaupon hollies to try to reconstruct possibilities for what this bundle might have meant for indigenous peoples. Although Spanish, English, and French writers describe yaupon variously as a commodity, a ceremonial drink, a peace offering, or a war medicine, they all see yaupon as a thing. But doing research into anthropology and oral history has convinced me that it was not just a drink to be consumed and then forgotten, but to drink this drink would have been an active process that encompassed and brought to life a larger cosmology for the Timucua, Guale, Apalachee, Cherokee, Creek, and Natchez. This new story then, where it intersects with European narratives, may change how we see those narratives and the people who wrote them.

Having created a bundle of meanings and histories and connections, in Chapter Two I focus on two specific areas in the Southeast: the Gulf and Atlantic Coasts of what are today Florida and Georgia. Here we will meet the some of the descendants of the Mississippians who populated Chapter One, the Apalachee and Guale, as well as the Timucua, who were more connected to the Arawakian world of the Caribbean and who never adopted many of the practices and beliefs of the Mississippians. It was here that the first encounters between Spanish colonists, soldiers, governors, and Franciscan friars with yaupon, a tea they called *caçina*, provided one focus for what Robbie Ethridge has called the “shatter

zone.” Over the course of about one hundred and fifty years the Spanish colonial presence gradually gave a new meaning to yaupon, that of a commodity, valuable mostly on the fringes of a larger Atlantic trade network. The Spanish kept thorough written records, chronicling official audits, reviews of their provinces (called respectively *residencias* and *visitas*), and court cases. In these, yaupon tea and its leaves as emerge items demanded as tribute by Spanish governors and garrison commanders. These sources help elucidate the amount of the tea being consumed and how its use changed over time. Even though Spanish demand had successfully transformed yaupon into an eagerly sought item of tribute “*caçina*,” Apalachees were able to use this demand to their advantage. In the late seventeenth century, some Franciscans were overly zealous in their persecution of “idolatry,” so Apalachees found if they offered Spanish soldiers bribes of yaupon, they would look the other way during their “pagan” ceremonies. Spanish colonial demand and medical needs began to narrow the cosmic scope of yaupon drink even as Christian Franciscans offered Holy Sacraments as competition for yaupon’s purifying powers.

In Chapter Three I expand beyond the immediate coast to look inland. How did the Cherokee, Creek, and Natchez navigate the shatter zone unleashed by Spanish, English, and French colonization? Spanish Franciscan missions never made it much further inland than the coastal plain of southern Georgia, so in this case it was French and English merchants who preached a mercantilist gospel. These merchants had no real government oversight like the *Real Patronato* of the Spanish to circumscribe their actions, and rarely had much interest in proselytizing at all. In the backcountry of the Southeast, did yaupon have a better chance of remaining a spiritual bundle (less a commodity) than it had held before the Spanish arrived? We will see how the Spanish redirection of trade spurred Native

Americans to exploit new resources for what the Cherokee called the “Beloved Tree.” We will also see how the ways yaupon was brewed and used could vary over space and time. When the Spanish reoriented trade that had once flowed inland to their coastal garrisons and towns, the material culture of yaupon adapted. For example, the clay cups and gourds, once used with yaupon in addition to the shell cups, became more common and the Cherokee and the Creek were able to plant their own groves of the trees in some of their towns or buy it as another commodity in the commercialized economy of Native-European trade.

Although Native Americans continued to use yaupon tea in many of the same ways that archaeologists believe that their ancestors had, as the tea travelled to Europe, it arrived as the commodity and medicinal product that the Spanish had created. In Chapter Four I look beyond the Southeast and focus in on how yaupon drink, as a medicinal tea named *apalachine*, came to be recommended by the Demonstrator of Plants, Bernard de Jussieu, at the *Jardin du Roi* in Paris. At the time that the Spanish were commoditizing yaupon, European understandings of how the world worked were changing in the Enlightenment and Scientific Revolution. Moreover, mercantilist policies urged states and their officials to bioprospect in cultigens from their colonized new worlds. How yaupon was understood in these new systems of thought and ways of organizing knowledge tells us something about why Europeans adopted it as a medicine, favoring some uses for it and eschewing it in others. Yet some vestiges of its earlier bundled meanings remained. It made its way into Europe as a medicine for preventing bladder and kidney stones, for it had been prepared as such for Spanish and later French colonists by Native American wives, concubines, and slaves. Other ways Native Americans identified the connection yaupon had

to a bigger world (like the white cross of its flowers suggesting peace and its red berries suggesting war) were lost over time. This active signature of day-to-day use and preparation endured and became a tool for a struggling third son of a wealthy family to secure his place in Paris as a physician and royal botanist at the *Jardin du Roi*.

This work is, at its heart, about scope and perspective. There are great studies of the English Atlantic World, the French Atlantic, the Spanish Atlantic, and even the Native American Atlantic. However, there are very few histories that try to incorporate all of these Atlantics in a single narrative. My subject, a biotechnology that was used by all of the peoples mentioned above, and my background, allows me to write such a story. As I mentioned earlier, I intend this dissertation not as a “brick in the wall” but more like the mortar that holds and patches together the several stones of the fields of study I examine. As a committee member reminded me, sometimes a history can be just a story that needs to be told, and this is one of those stories. One of my primary goals in writing this is to encourage students of the Atlantic World to ask questions, not to provide them with all the answers.

A word about terminology, too. In the chapters that follow I have consciously chosen to use several different names for the beverages made with yaupon. Although I have chosen to call it “yaupon drink” in general, when I am writing about it in a more geographical or chronological narrative, I also call it *caçina*, *asi*, black drink, and *apalachine*. These are the different names the Timucua and Apalachee, the Creek, as well as the English and French colonists respectively called it. Occasionally I even use two different words for it in the same sentence. Despite this confusion of names, I use this multiple terminology to enliven the past, and to show how “entangled” meanings and names were in the Southeast and

broader Atlantic World. I also want to encourage archaeologists, who rather ubiquitously write about it as “black drink,” to look at other words and meanings, since coming into this project only knowing it as “black drink” originally handicapped how I wrote about it.

Yaupon drink was more than an inert liquid. It was a tool, a powerful biotechnology whose usefulness drove men and women, elite and common, across political, religious and social lines to not only seek it, but also to, use it, and become part of its story.

Chapter One

Yaupon Drink: Building a Bundle²⁶

Month of the Chestnuts, according to the Creek calendar
October 1540, by Spanish reckoning,

Earlier in the day, Tuscaloosa ordered his micos to meet with him in their winter council house. Only three moons had passed since the Busk and the New Year, but the first of winter's cold winds had already howled down from the northwest. As those winds passed by, the Thunderers, Lordly beings who live in the Sky, had announced the first frost as they headed west. The previous morning hunters had brought a concerning message from the northeast, men whom he had heard rumor of, men who rode some strange beasts and marched with dogs trained to fight and kill, men who had war clubs made of some ore that looked like copper but was much stronger, men who covered their bodies in the same ore, men who stole food and women and had loosed other strange hoofed beasts upon the land, beasts that ate crops stored against the coming cold; those men were at Coosa. Especially concerning was that the town of Coosa seemed to be on good terms with these men. How might that town's council decide to use these men to their advantage? So, he called his town's leaders together. How they acted now might determine whether or not they survived the winter. The day before, to prepare for this council meeting, he had asked women from his mother's clan to begin to gather the leaves and herbs to make yaupon drink. Now those leaves were boiling in large pots in the council house. His demeanor and the mist rising from the boiling pots might have even been enough to draw his councilors to see him. Even as he was thinking, his nephew walked by, carrying the large shell that he would use to share the drink among his followers. The boy should be proud and he looked it. Becoming a singer for the drink was not only an honor, but the first step he would take to becoming a warrior. A tall man, Tuscaloosa turned from the town square and stooped over to walk into the winter council house.²⁷

²⁶ For this chapter I will be calling what archaeologists mostly name "black drink," yaupon drink. I do this because in my subsequent chapters we will see a variety of Native American and European names for this tea and I will use the words that the individuals at the time used. For now, however, I want to keep it as simple as possible.

²⁷ For the events described in my narrative, see *The De Soto Chronicles: The Expedition of Hernando de Soto to North America in 1539 – 1543 vol. II*, eds. Lawrence Clayton, Vernon James Knight, Jr., and Edward Moore (Tuscaloosa: University of Alabama Press, 1993), 324 – 56.

The plan Tuscaloosa and his councilors came up with in 1540 was a smart one. He offered the Spanish friendship, while at the same time ordering warriors to gather at the town of Mabila to be ready in case things turned ugly. The chief sent one of his sons to meet with Hernando de Soto and encourage him to visit his town. De Soto was impressed when he arrived. Tuscaloosa presented himself in a palanquin with a hundred of his councilors and warriors and flew a banner, a deerskin painted with three blue stripes. But de Soto had been with Francisco Pizarro at Cajamarca and Cuzco less than a decade earlier. Although de Soto had claimed to have felt sadness at the injustice of Atahualpa's summary execution, he knew that Native American kings were powerful and commanded great loyalty among their warriors. As a result, he looked for any advantage Tuscaloosa could give him. After a couple of days, de Soto decided to travel on and, tried to force Tuscaloosa to join him. When the chief refused, a soldier cut off the chief's arm and fighting began. The battle came to be known as the Battle of Mabila. As fate would have it, the Spanish had attacked a chiefdom whose ancestors in the Black Warrior River valley specialized in death. Nevertheless, the nine-hour battle resulted in the annihilation of almost all the warriors in the town and the burning of the town. The Spaniards lost eighty-two men and forty-five horses, over ten percent of his original force and nearly a quarter of his original number of horses. De Soto himself suffered an arrow wound and for weeks afterwards he and his force limped along, wounded, while raiding nearby towns for food.²⁸

I chose to open this chapter with this historically plausible vignette leading up the battle of Mabila, because it affords us a window into the ways which black drink was used

²⁸ George Lankford, "Was there a Moundville Medicine Society?" *Rethinking Moundville and its Hinterland* eds. Vincas Steponaitis and C. Margaret Scarry (Gainesville: University Press of Florida), 74-98.

across the southeast, some of the broader cosmological connections it held, and how Native Americans resisted colonial encroachment by negotiation, astute diplomacy, and violence. I situate this chapter within the call for “completing the turn” toward a Native American history, emphasizing Native Americans’ stories by engaging materials “created by and for colonists” in a different way.²⁹ To write the history of a drink, not simply as a commodity appearing in trade records, but as an experience often felt beyond any written records, is an especially daunting task for a historian. Europeans, who I will show in subsequent chapters missed much of the deeper significance of the yaupon holly and its tea, are the only ones who give us a written record. And as the vignette above makes clear, understanding these deeper meanings was not ever a goal of European writers. Yaupon tea, the tree it came from, the way it was prepared, how it was served, and how it was drunk held a much deeper significance than any European writers could appreciate.³⁰ Not only did early Europeans in the Southeast³¹ not always see the act of preparing and drinking it,

²⁹ See Alyssa Mt. Pleasant, Caroline Wigginton and Kelly Wisecup, “Materials and Methods in Native American and Indigenous Studies: Completing the Turn,” *The William and Mary Quarterly*, 75, no. 2 (April 2018), 207-236. Others before and after have situated their narratives and arguments with similar approaches: Ramón Gutiérrez, *When Jesus Came the Corn Mother Went Away: Marriage Sexuality, and Power in New Mexico, 1500 – 1846* (Stanford: Stanford University Press, 1991,) especially the introduction to chapter 2; *Fort San Juan and the Limits of Empire: Colonialism and Household Practice at the Berry Site* eds. Christopher Rodning, Robin Beck, and David Moore (Gainesville: University Press of Florida, 2016); Robbie Ethridge, *From Chicaza to Chickasaw: The European Invasion and the transformation of the Mississippian World, 1540 – 1715* (Chapel Hill: University of North Carolina Press, 2010). Christopher Rodning offers a thoughtful defense for deemphasizing colonial perspectives in his *Center Places and Cherokee Towns: Archaeological Perspectives on Native American Architecture and Landscape in the Southeast*, Tuscaloosa: University of Alabama Press, 2015,) 60 – 2.

³⁰ Timothy Pauketat, *An Archaeology of the Cosmos: Rethinking Agency and Religion in Ancient America* (New York: Routledge, 2013). Pauketat translates the concept of a medicine bundle into a lens for historical and archaeological analysis. This idea allows him to break down what he calls the “bifurcations...that yet pervade many interpretations of ancient religion.” In trying to enliven the story I’m telling here I find this approach facilitates a more expansive reading of what sources remain from the limits of the written and archeological records.

³¹ I use this term throughout this dissertation to describe what we today call the American South.

but their very ontological and epistemological traditions made it impossible to fully appreciate what they saw.

To this end I borrow Timothy Pauketat's metaphor of a "medicine bundle" as a lens-in-motion to focus in on how yaupon tea, in a variety of forms, not only functioned as a cultural "citation" or "practice," but also as a "modifier," "translator," and "mediator."³² Although in later chapters this bundle will gain new meanings and put down old ones, in this chapter I will piece together a bundle that will travel with us through the "relational fields" of individual experiences of yaupon drink from the sixteenth through the early nineteenth centuries in the Southeast and eventually Europe. As Pauketat's book reminds us, not only can objects be agents for social memorializing as they exist in individual memories, but they also can bundle together ritual moments, seasonal cycles, or even meteorological events that connect people across time and space.³³ The rituals associated with yaupon drink make it a verb. The bundling of those ritual moments makes it a noun. Along these lines this chapter will craft a "blurry" background to present yaupon in all its possible agency –much more fully and cohesively than the written record alone allows me to do and in a way that provides a baseline for my later chapters. To be sure, written accounts from British Indian agents and governors and French soldiers of fortune, in the eighteenth century, will appear alongside those of Franciscan missionaries and mestizo families in Florida from the sixteenth and seventeenth centuries. But even though Spanish,

³² Timothy Pauketat, *Cosmos: Rethinking Agency and Religion in Ancient America* (New York: Routledge, 2013), 38 – 42. Pauketat draws heavily on Bruno Latour's actor-network theory and Tim Ingold's "meshworks" and entangled lines of movement. For a history of this approach see Alexander Bauer, "Itinerant Objects," *Annual Review of Archaeology* 48 (July 2019), 335 – 52; although Bauer does not see the same connections that Pauketat does between Ingold and Latour.

³³ Clara Sue Kidwell, Homer Noley, and George E. "Tink" Tinker, *A Native American Theology* (Maryknoll, NY: Orbis Books, 2001), Introduction.

English, and French writers often describe yaupon as a commodity, a ceremonial drink, a peace offering, or a war medicine, they all see yaupon as a thing. Doing research into anthropology, archaeology, and oral history has convinced me that it was not just a drink to be consumed and then forgotten. To drink this drink encompassed and brought to life a larger cosmology for the Timucua, Guale, Apalachee, Cherokee, Creek, and Natchez. This new story then, where it intersects with European narratives, may change how we see those narratives and the people who wrote them. Their stories will be anchored by my diachronic narrative by oral histories, archaeology, and even the appearance and lifecycle of yaupon hollies to try and reconstruct possibilities for what this bundle might have meant. This approach is important for what follows in this chapter because if we look at everything it was related to yaupon drink's, its vessels, the leaves it was brewed from, the pots it was steeped in, and the people who brewed it as representing fields of bundled moments—moments connected to people, places, and the environment—its story in the pre-Columbian and historic Southeast gets quite a bit more interesting and significant.

To help understand the usefulness of such an approach, I will examine two images that seem to show Native Americans using yaupon. Sometime in the summer 1564 René Goulaine de Laudonnière and some of his soldiers watched as a group of men assembled in a “great public house.”³⁴ From the highest seat in the house a “king” called for priests and elders for advice.³⁵ According to Laudonnière, as part of the decision making process, a tea was brewed called “*casiné*” in order to determine who was and who was not to be entrusted with any important task or decision.³⁶ This tea, prepared by women, was passed

³⁴ René Laudonnière de Goulaine, *L'histoire notable de la Florida*, Paris, 1586, 6 verso.

³⁵ Laudonnière, *L'histoire notable de la Florida*, 6 verso.

³⁶ Laudonnière, *L'histoire notable de la Florida*, 6 verso;

around among his councilors, in order of rank, in cups made of marine shell. If anyone vomited the tea, that person was forced to fast for several days. Those who did not vomit and endured the following sweat, might be able to go twenty-four hours without hunger or thirst. Their thoughts and actions could be trusted. From this event, the Dutch engraver Theodore de Bry produced an engraving (Figure 1).



Figure 1: Theodore De Bry's engraving of Timucuan women preparing, drinking, and vomiting yaupon drink while French soldiers watch.

For the second image, I submit the following. As part of the living history museum at the reconstructed Fort San Luis de Talimali in modern Tallahassee, Florida, an artist was hired to paint images from the daily lives of Apalachee townspeople. Among the images was one depicting the serving of yaupon tea. The story this image (Figure 2) tells is quite similar to that of Tuscaloosa. A chief has gathered his councilors and warriors, both young and old, and seated around the council fire in a council house, they are being served yaupon tea. Artist John Locastro has created a depiction of a typical council meeting, at least one that the archaeologists overseeing historic preservation and interpretation at Mission San Luis were willing to use as part of their exhibitions. Furthermore, John Hann and Bonnie McEwan, accomplished historian and archaeologist respectively, who were chosen to write the companion book to the exhibition, also used this same artist's works to be representative of life at the mission.³⁷ These authors and their book were endorsed by Jerald Milanich, who wrote an article describing what was wrong with the early depictions of scenes of Native American life in Florida.³⁸

Which depiction, which story is more accurate? Which artist more fulsomely recreates the past? Certainly, the more recent one makes the activities seem more alive. The Apalachees look like people, instead of homogenous classical models. They smoke, they drink, they smile, and they dance as a fire burns, but how much of that is a modern expectation for such a story? What about the Europeans who were certainly there and wrote about what they saw? Aside from the fact that de Bry's engraving shows these men

³⁷ John Hann and Bonnie McEwan, *The Apalachee Indians and Mission San Luis*, (University Press of Florida, 1998) x – xi.

³⁸ Jerald Milanich, "The Devil in the Details," *Archaeology* 58, no. 3 (2005), 26 – 31.

and women outdoors, the actions, events, and the stories represented in both works are quite similar. Women prepared the tea and men sat on benches in order of rank, to drink it from whelk shells. Yet there are some striking differences. De Bry shows a man serving the tea; the more modern depiction, a woman. Perhaps he was a young man, like the nephew of Tuscaloosa described above, serving the tea before he had earned enough honor to become a full warrior. Also of note are the French soldiers who stand in the lower right of the engraving, seemingly discussing what they are witnessing. They had to be there, even if they were mistaken about what they saw and de Bry is mistaken about their numbers or appearance. Otherwise any such event would never have been recorded.

The point of all this, the reason for this lengthy introduction is not to critique either work of art. Each one was created at a particular historical time with the sensibilities and fashions of its day. What I want to do in this chapter is to look beyond traditional narratives, whether they be written, crafted, or painted, and give a scope for the chapters that follow. In the following chapters I will show exactly how the tea was divested from how Native Americans used it in the past, how it became a commodity for Spanish colonists in Florida, how Creek and Cherokee towns resisted and participated in this commodification, and finally how the tea would become a medicine in Europe. But to understand what was lost, we have to first step back and look at what was.³⁹

³⁹ Part of my approach here is also in response to reading the questions and contentions of Patricia Galloway in her introduction to *Choctowgenesis*. There she asks her readers to consider “facts” in narratives and other sorts of sources generated by colonists about the Southeast. Both the pictures I am using look at similar “factual,” but lost experiences and it is only by casting a wide net and reading these sources with a slightly blurred vision that we can give lively scope to actions in the past that have too often been circumscribed by European and Western lust for their visions of the virginal truth.



Figure 2: An Apalachee man reclines on a bench as a woman serves him yaupon drink in a busycon shell cup. Other Apalachees watch a dance and a sir beside a fire in a council house. Painting by John Locastro. Source: <https://www.missionsanluis.org/learn/history/mission-san-luis/>

To try to fully excavate, in as much as possible, a world of possibilities for the drink, I will break down the process of planting, gathering, preparing, and consuming the drink into its constituent parts. In this chapter there will sometimes be more suggestions and questions than definitive answers. But my explanations and explorations will be educated ones, informed not only by secondary sources, but also Native American stories, languages, and oral histories. By casting my net as widely as I can, I hope to prompt anyone who is reading this in the future to look beyond not only typical disciplinary boundaries, but to also beyond the sorts of things each discipline examines. Below I will examine how the plant may have been cared for, how the colors and shapes of its flowers, leaves, and berries connected it to a larger cosmology, who harvested it and how the act of harvesting it connected it to the larger community. I also ask how it was made. Who brewed it? What did such a process look like? Were yaupon leaves the only ingredients? Are there any images or patterns in either the ceramic record or the *busycon* shell cups that remain to let us see a symbolic language that surrounded this process? How was it served and who served it? Service is a visible and public act and yaupon tea was embedded in larger social webs in towns. The tea was often served in large *bucycon* whelk shells (*Busycon perversum pulleyi*), many of which have serendipitously survived not only several hundred years, but also the destructive work of looters. These shells serve as the largest repository of pre-Columbian art in North America. I think that some of the designs on these shells offer insights into the wider cosmos that entangled yaupon. The tea itself was not only drunk for purification but employed for other purposes. Although overall it was used as a “white medicine” for ritual purification, it could also serve, as in the story of Tuscaloosa above, as a preliminary for

discussions, preliminary for war (or war's little brother, the ball game), or even as a tool to hex one's opponents in that game.

Yaupon drink was brewed primarily from the yaupon holly (*ilex vomitoria*), an evergreen shrub. The appearance of this plant, throughout its lifecycle, entangled the people who used it with events and cosmology beyond the simple fact that it could make a drink. Its colors and shapes as they changed throughout the year evoked connections to seasonal and human cycles. This lifecycle was semiotics-in-action. The blossoms open, are pollinated, grow red berries, the berries are eaten by animals, the seeds sown, and the cycle begins again. The plant flowers in the spring, producing small bunches of white flowers (Figure 3) with cross-shaped petals. The cross was a symbol of the division of the cardinal directions, a division often mirrored in town and house construction.⁴⁰ Even the Busk fires, heralding the New Year across the southeast, were, at least in some towns, built in the shape of a cross.⁴¹ This holy day was also known as the "white day" in Creek stories.⁴² Since white could also be a color of peace, it is possible that this naturally occurring white cross was one of the aspects of this plant which made it powerful.⁴³ Many gorgets worn by leaders and interred with individuals when they died also reproduced a white cross reminiscent of the yaupon holly's flowers.⁴⁴ In fact, some Creek towns named

⁴⁰ Charles Hudson, *The Southeastern Indians* (Knoxville: University of Tennessee Press, 1976,) 122 – 3; Jon Muller, "Prolegomena for the Analysis of the Southeastern Ceremonial Complex," *Southeastern Ceremonial Complex* ed. Adam King (Tuscaloosa: University of Alabama Press, 2007,) 21 – 2.

⁴¹ Bill Grantham, *Creation Myths and Legends of the Creek Indians* (Gainesville: University Press of Florida, 2002), 74.

⁴² Grantham, *Creation Myths of the Creek Indians*, 74.

⁴³ Hudson, *Southeastern Indians*, 235.

⁴⁴ William Marquardt and Laura Kozuch, "The Lightning Whelk: An Enduring Icon of Southeastern North American Spirituality," *Journal of Anthropological Archaeology* 42 (2016), 19.



Figure 3: A white, cross-shaped yaupon flower. Photo by the author.

yaupon tea *asi*, the “white medicine.” According to British traveler James Adair, visitors could be asked to sit upon the “white seat” when they were offered yaupon tea.⁴⁵ Henry Timberlake, a lieutenant in the British army assigned a diplomatic mission to the Overhill Cherokee towns in the late eighteenth century, also pointed out that a Beloved Woman who helped consecrate the tea waved a white swan’s wing over it.⁴⁶ According to Major Caleb Swan, Deputy Agent of the United States to the Creek Nation, the Creeks he spoke with in 1791 emphasized the tea’s purifying powers to the degree that they believed it cleansed them of sin.⁴⁷ Once pollinated, the yaupon holly grows a bright red fruit that can last into winter.⁴⁸ The colors red and white were powerful to peoples across the southeast and were associated with war and peace as well as cardinal directions, though which direction each was assigned differed among towns and lineages.⁴⁹ It is also important to remember that war and peace for the people who brewed this tea were not just ideas, but invoked vivid memories of loss, bloodshed, and reconciliation. Although other trees, like the dogwood, also grow flowers in the shape of a white cross and produce red berries, yaupon holly is unique because it is an evergreen plant, so it would have maintained a deep green color throughout the year, making it easy to spot in woodland areas where many other plants

⁴⁵ Grantham, *Creation Myths of the Creek Indians*, 58.

⁴⁶ Henry Timberlake, *the Memoirs of Lieutenant Henry Timberlake* ed. Duane King (Cherokee, NC: The Museum of the Cherokee Indian Press, 2007), 39.

⁴⁷ Henry Schoolcraft, *Fifth report to the honorable Commission of Indian Affairs* (1855), 257.

⁴⁸ All botanical information here comes from Shiu Ying Hu, “The Botany of Yaupon,” *Black Drink: A Native American Tea* ed. Charles Hudson, Athens, GA: The University of Georgia Press, 1979, 10-39.

⁴⁹ David Hally, *The King Site: The Social Archaeology of a Late Mississippian Town in Northwestern Georgia*, Tuscaloosa: AL: University of Alabama Press, 2008, 15; see also Charles Cobb and Eric Drake, “The Color of Time: Head Pots and Temporal Convergences,” *Cambridge Archaeological Journal* 18, no. 1 (2008), 87-8; Eastern Dogwoods, *Coreus florida*, also flowers with white flowers in the spring and produce red berries. Native Americans used the trees bark to alleviate fevers and headaches. Alama Hutchens, *An Indian Herbiology of North America* (Boston: Shambala Press, 1973), 11 – 2.

had shed their leaves. All of its physical traits set the yaupon holly apart visually and mirrored a larger cosmic cycle in a way that few other plants in the southeast could claim.

Today, the plant's natural range is limited to coastal areas from the Chesapeake Bay to the Texas Gulf Coast.⁵⁰ According to genetic studies, yaupon may have originated in the higher elevation forests of Ouachita and Ozark mountains in Oklahoma and Arkansas. If so, today's range represents a population adapted to a harsher environment near the coast. Even though the plant now almost only grows near the Gulf and Atlantic coasts, there are some tantalizing clues that Native Americans may have transplanted it further inland. Moundville on the Black Warrior River in Alabama, and Okmulgee on the Macon Plateau still have small numbers of the plant. These isolated groves at Moundville and on the Macon Plateau in Georgia suggest that in the past, when both town sites were more populated by the ancestors of the Creek and Choctaw, Mississippian towns cultivated groves of the plant. Historical evidence among the Cherokee illustrates that such cultivation was not uncommon. In 1700, the English botanist John Lawson observed that Native Americans on the North Carolina coast were trying to sell yaupon at inflated prices to inland towns.⁵¹ Nearly a century later William Bartram saw the Cherokee's solution. By the 1790s they had planted some of the trees in their Lower Towns.⁵²

Since we have evidence that yaupon was consumed at all times of the year across the southeast, it seems reasonable to suggest that it could be harvested at any of these times. However, at least in one instance a Creek town preferred to use some of the new

⁵⁰ Charles Fairbanks, "The Function of Black Drink among the Creeks," *Black Drink: A Native American Tea* ed. Charles Hudson (Athens, GA: University of Georgia Press, 1979), 129.

⁵¹ John Lawson, "A New Voyage to Carolina," 1709.

⁵² *The Flower Hunter and the People: William Bartram in the Native American Southeast* ed Matthew Jennings, Atlanta: Mercer University Press, 2014, 58 – 9.

shoots of the holly in the summer as an offering in their Busk fire, the sacred fire that heralded the New Year, and seeds found in the hearth of an Apalachee council house also suggest that Native Americans used certain stages of yaupon growth, flowering, and fruiting for specific rituals.⁵³ Who performed the harvest? Around some places on the Gulf and Atlantic coasts, ethno-historical accounts indicate that women picked, harvested and roasted the leaves. Among different Nations and towns, women from different social groups gathered it. On the other hand, Benjamin Hawkins writes that Creek men, second chiefs, were in charge of the process of gathering and brewing yaupon, so there was likely some difference among towns and Nations across the southeast.⁵⁴

Once harvested, yaupon leaves were not the only ingredients used to make yaupon drink. The Muskogee language, spoken by Upper and Lower Creek towns, gives the tree its name in modern English: “*iäpún*.” The verb means “it is mixed” and suggests that other herbs or ingredients might sometimes be mixed with the leaves.⁵⁵ By far the most evidence for any other plant points to button snakeroot, or as it was called by the Creek, rattlesnake tamer. Snakes and winged serpents appear frequently in Cherokee and Creek stories and often decorated the shell cups used by their Mississippian ancestors to drink yaupon drink. *Así* is the Muskogee name for the specific mixture of yaupon and button snake root and was used as a purgative medicine before warfare and when initiating war chiefs.⁵⁶ There is also some evidence, at least near the coast, that the tea might have been mixed with seawater to

⁵³ Henry Schoolcraft, *Fifth report to the honorable Commission of Indian Affairs* (1855), 257; John Hann and Bonnie McEwan and John Hann, “Reconstructing a Spanish Mission: *San Luis de Talimali*,” *OAH Magazine of History*, (Summer 2000), 17.

⁵⁴ *The Collected Works of Benjamin Hawkins* ed. Thomas Foster II (Tuscaloosa: University of Alabama Press, 2009), 69s.

⁵⁵ Wickman, *Osceola's Legacy*, 76.

⁵⁶ Wickman, *Osceola's Legacy*, 76.

facilitate vomiting.⁵⁷ Early Spanish drinkers of yaupon tea noticed that it did not make them vomit in the same ways they had seen Timucuans who drank it in council, so it is also possible, as Charles Hudson suggested, that the vomiting was a learned behavior. Henry Timberlake, a lieutenant in the English army, points out that a Beloved Woman among the Cherokee, a woman who had proven herself in battle and in council, mixed a few dry herbs and other things in, just before a peace treaty was signed.⁵⁸ Despite these historical clues, we may never know exactly what ingredients could potentially be added to in the brewing process.

After the leaves were collected, they were toasted. Europeans observers, from De Bry in the 1560s to Henry Timberlake in the late eighteenth century, remarked that yaupon tea was toasted in large bowls. Archaeologists agree that large quantities of the leaves were probably roasted in large pots.⁵⁹ Individuals or families likely used a much smaller vessel, the cazuela bowl. We know these types of pots were used for yaupon tea because archaeologists have shown that some of them exhibit carbon deposits consistent with either “decocting” yaupon tea or the process of toasting yaupon leaves.⁶⁰ The task of brewing the drink fell to both men and women, young and old, depending on the Nation or town. Laudonnière, de Bry, and Cabeza de Vaça all remark that women brewed the tea, but further inland among the Creek, young men, warriors-in-training connected to the matrilineage that controlled the town, often brewed the tea. The botanist William Bartram

⁵⁷ Pierre-François-Xavier de Charlevoix’s “A Journey to North America vol. II,” trans. Anonymous (London, 1761), 303 – 6.

⁵⁸ Timberlake, *Memoirs*, 39.

⁵⁹ Fairbanks, “Black Drink,” 130.

⁶⁰ Jessica Miller, “Interior carbonization Patterns as Evidence of Ritual Black Drink Preparation in Powell and Ramey incised Vessels,” *American Antiquity* 80, no. 1 (2015), 170-183.

and French soldier of fortune Louis Le Clerc mention men making the drink in the late eighteenth century.⁶¹

Many cazuelas feature an interlocking spiral motif on their rims, a design whose significance will become evident below in my discussion of the spirals of the *busycon* whelk shells, used to drink the tea. As we will see, these shells, like the white cross-shaped flowers and red berries, embodied the power of spirals as tangible reminders of the cycles and storms in the Upper World, the abode of, among other spiritual beings, the Thunderers. Although the designs in Figures 4 focus on Ramey incised pottery from Cahokia and the American Bottom, their conclusions regarding the way the vessels were used and viewed, can still apply further afield since similar carbonization patterns are found across the Southeast on similar vessels inscribed with similar designs.⁶² It is possible that part of the Mississippian culture that emerged at Cahokia in the eleventh and twelfth centuries and eventually percolated to towns across the Southeast may have bundled these cosmic connections in the designs on pottery.⁶³ Shell tempering was one distinctive marker of the spread of Mississippian culture and the experience of decorating

⁶¹ William Bartram, *Travels Through North & South Carolina, Georgia, East & West Florida, the Cherokee Country, the Extensive Territories of the Muscogulges, or Creek Confederacy, and the Country of the Chactaws; Containing An Account of the Soil and Natural Productions of Those Regions, Together with Observations on the Manners of the Indians* electronic edition, <https://docsouth.unc.edu/nc/bartram/bartram.html>, 450 – 1; Louis Le Clerc de Milford, *Milford's Memoir*, 139 – 42.

⁶² *Lamar Archaeology* eds. Mark Williams and Gary Shapiro, Tuscaloosa: University of Alabama Press, 1990; esp. pages 86, 91, 97; also see note 39.

⁶³ The exact nature of the origin and dispersion of what archaeologists call variously “Mississippian” culture, the “Southeastern Ceremonial Complex” or the “Mississippian Ideological Interactive Sphere” are still somewhat debated. What is (mostly) agreed is that something significant happened at Cahokia in the American Bottom near the confluence of the Mississippi and Missouri Rivers around 1050 CE and that the cultural changes that happened there eventually spread (over the next three centuries) to other parts of the Southeast. Although different areas reacted differently to these changes, some practices and iconography marked the progress of this “Mississippianization:” shell tempered pottery, adoption of large-scale maize agriculture, platform mounds, wall trench architecture, and motifs like the birdman. For the most up-to-date take on these processes, see *Cahokia in Context: Hegemony and Diaspora* eds. Charles McNutt and Ryan Parish (Gainesville: University Press of Florida, 2020).

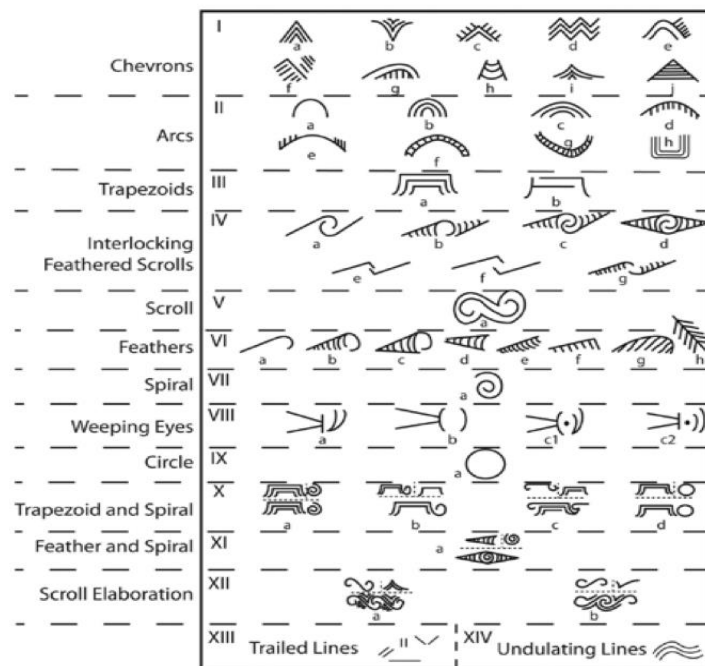


Figure 4: Ramey incised rim motifs. Source: Christina Friberg, "Cosmic Negotiations: Cahokian Religion and Ramey Incised Pottery in the Northern Hinterland," *Southeastern Archaeology* 37, no. 1 (2018), 39-57.

pots and cazuela bowls with cosmic symbols may have spread with the new ceramic technology. While these new ideas spread across the Southeast, they may have imbued the making of yaupon tea with new powers, but they don't seem to have changed the fact that it was drunk. Power structures and religious symbolism might change, but yaupon tea endured.

To better understand how something as seemingly mundane as roasting could connect and aid a person in participating in the larger cosmos, imbuing the process with larger powers in a very visible way, we need to think about ceramics three-dimensionally. When using it, one doesn't look at a pot as though it were on a page. These large pots would have been situated over fires on the ground and tended by people who would look down into them. Christina Friberg has argued that the rim designs on large cooking vessels were not merely decorative. They show a process of religious negotiation, transference, and syncretism, in the ways the pots were meant to be viewed by the person using the bowl, and in the ways prepared ingredients were removed from the bowl.⁶⁴ There are a variety of rim designs on these bowls, but for my argument the ones she cites as: "scroll, scroll elaboration, feathers, interlocking feathered scroll, and spiral" are the most significant as sky motifs associated with the Upper World.⁶⁵ On the other hand, Thomas Emerson has argued that the common spiral and left-handed scroll motifs along the rim of these jars represent a ritual connection to fertility, water, and the underworld.⁶⁶ He takes the

⁶⁴ Christina Friberg, "Cosmic Negotiations: Cahokian Religion and Ramey Incised Pottery in the Northern Hinterland," *Southeastern Archaeology* 37, no. 1 (2018), 39-57; Thomas Emerson and Timothy Pauketat, "Historical -Processual Archaeology and Culture Making: Unpacking the Southern Cult and Mississippian Religion" *Belief in the Past: Theoretical Approaches to the Archaeology of Religion*, eds. David Whitely and Kelley Hays-Gilpin (Walnut Creek, CA: Left Coast Press, 2008), 167-88.

⁶⁵ Friberg, "Cosmic Negotiations," 45.

⁶⁶ Thomas Emerson, "Water, Serpents, and the Underworld," *The Southeast Ceremonial Complex: Artifacts and Analysis* ed. Patricia Galloway, Lincoln, NE: University of Nebraska Press, 1989, 45-92.

argument further, connecting two directions of two spirals, one counterclockwise (associated with water, fertility, the moon, serpents, and the underworld) and the other clockwise (associated with air, storms, thunder, and the sun). In essence, Emerson argues that the linked spirals, one clockwise and one counter clockwise, evoke a connection, a bundling, even if only temporary, between the divisions in the upper and lower worlds, and male and female roles, working together in the context of a community aimed at maintaining the “agricultural ceremonialism cycle.”⁶⁷ Like the flowers and berries of the yaupon then, the process of toasting and brewing connected worlds that might otherwise seem to European observers to be divided. Not only did these pots bundle yaupon tea to a larger cosmic vision of the upper and lower worlds, but they likely also bundled an “elite-commoner discourse” allowing for a diffusion of the elite ideas and awarding a degree of participation to people who may not have normally participated in elite ceremonialism.⁶⁸ Thinking three dimensionally, now we turn to the whelk shell vessels that elites used to drink the tea and how they drank from them, the spiral was a powerful shape. If an individual could not use the specialized vessels, at least they could harness some of that power as part of the brewing process. Maybe a useful way to look at how they gained some of the power from the spiral is to consider any sort of religious or brand symbolism on modern cooking and eating vessels. Brand symbolism on modern cooking and eating vessels can be consciously considered; historical archaeologists have long looked at the importance of decorative motifs on ceramics for elevating the status of the users—so for example people routinely used tin glazed coarse earthenwares decorated with Chinoiserie

⁶⁷ Emerson, “Water,” 91.

⁶⁸ Timothy Pauketat and Thomas Emerson, “The Ideology of Authority and the Power of the Pot,” *American Anthropologist* 93, no.4 (1991), 935.

designs in the 17th and early 18th century because they looked like more costly Chinese porcelain. This was intentional. Ceramics can invoke individual memory/experience, but they can also be consciously deployed to communicate shared ideas with users and viewers.

It is possible that yaupon tea was brewed in the same pots in which the leaves were toasted, the boiling water being poured on top, or the leaves could have simply been added to a pot of boiling water. Both are documented in the historical record in different places and times. The physical process of boiling could have also been viewed as connected to the larger cosmos. To create hot water, you need fire. Fire was a sacred center of not only the cosmos for the historical nations in the southeast, but at the physical center of towns.⁶⁹ It could even be kindled by placing logs or combustibles in shapes like crosses or spirals.⁷⁰ Once heated, water gives off steam. A contemporary understanding of physics points out the difference in temperature between the air and the boiling water, but this may not have been exactly how the brewers of yaupon tea saw it. I want to be careful here not to assume that Southeastern peoples were not able to figure out that a temperature difference could cause steam, since that seems to assume too much. However, the meanings ascribed to these physical processes were likely quite different. For example, one of the ways people can naturally see steam is on or around bodies water, typically early in the morning in the late summer or fall in the southeast as the air temperature has fallen lower than that of the water (Figure 5). This steam doesn't typically stand still. It swirls, dances, and rises across the surface of the water. The steam is white, a significant color as we have already seen.

⁶⁹ George Lankford, "Some Cosmological Motifs in the Southeastern Ceremonial Complex," *Ancient Objects and Sacred Realms* eds. F. Kent Reilly and James Garber,

⁷⁰ Charles Hudson, *Southeastern Indians*, 126.



Figure 5: Mist rises and eddies in the Tennessee River Valley on an autumn morning.
Photo by the author

The white color could have represented purity and peace, but I think the ephemeral, swirling and rising vapor is equally significant. At least one shell engraving from Spiro (Figure 6) in Oklahoma show individuals holding large bowls.⁷¹ The overall composition indicates a desire to evoke balance. Here we see the two dancers holding the pot with a pole in the middle. Their raised knees seem to make the cross, seen in so many gorgets and yaupon flowers. Beyond the composition, one reading of the scenes might be that these represent bowls of hot liquid with steam rising from the top, or perhaps one streamer is steam rising from the liquid, but another is coming into the bowl, infusing what's inside with another type of power. In fact this drink, at least among the Creeks, was one of the only medicines that did not require a priest to blow into it.⁷² Intertwining streamers (or stylized tails), acting in this way, have been identified around the poles in the center of some gorgets and shell cups.⁷³ Furthermore, if we suspend the belief that the pots have to be depicted as opaque, and view them as transparent, we see that the lines come together in the pot. No matter how we view the steam, it might have also been seen as a living, apotropaic pattern.⁷⁴ If the drink were intended to purify a person before careful deliberation, the ball game, or war, the swirling vapor would have been a powerful device for ensuring success against any spiritual threat that might be arrayed against them.⁷⁵

A further case for the inherent, bundled power of the drink can be made by looking at the final preparatory steps before yaupon drink was served. At that time the preparers

⁷¹ Phillip Phillips and James Brown, *Pre-Columbian Shell Engravings*, vol. 2, plate 126 and 127.

⁷² Fairbanks, "Black Drink," 131.

⁷³ Lankford, "Some Cosmological Motifs," 30-1; The Hixon gorgets are taken from Lynne Sullivan, "Shell Gorgets, Time, and the Southeastern Ceremonial Complex in southeastern Tennessee," *Southeastern Ceremonial Complex: Chronology, Content, Context* ed. Adam King, Tuscaloosa, AL University of Alabama Press, 2007, 100; the cup is from Phillip Phillips and James Brown, *Pre-Columbian Shell Engravings*, vol. 2, plate 192.

⁷⁴ Alfred Gell, *Art and Agency: An Anthropological Theory*, New York: Oxford University Press, 1998, 83-4.

⁷⁵ Hudson, *Southeastern Indians*,



Figure 6: A shell gorget from Craig Mound in Spiro, OK. Source: Phillip Phillips and James Brown, *Pre-Columbian Shell Engravings*, vol. 2, plate 127.

poured the brew back and forth between two large pots to work up some froth and to strain the remaining leaves.⁷⁶ This white froth seems to have been recognized as one of the key visual clues to the drink's purifying qualities, so much so that Francisco Pareja used it as a metaphor in his *Confesionario* in both Castilian and Timucua, by likening the frothy bubbles produced by to the manifold nature of God.⁷⁷

Once made, yaupon drink purified men before battle or deliberation in council, as a peace offering for visitors to a town's council, as a device to ensorcel or weaken through magic, one's enemies in the ball game, and as a medicine that could be used by men and women to cure physical or spiritual ailments. Most of the context for how and when yaupon tea was consumed comes from European observers, like Laudonnière and his soldiers, who watched the ceremony and in some cases were invited to participate. On these important occasions, whether a peace treaty was being signed, war was being deliberated, or a council was held, these accounts typically remark on the marine shells used by leaders and warriors to drink the tea. Every written account that I am aware of, save one, always attests to yaupon tea being used in a town, whether in a council house, or the town square. Under these circumstances elite warriors drank yaupon tea, either by itself or with added ingredients, for purity.

⁷⁶ Fairbanks, "Black Drink,"

⁷⁷ Francisco Pareja, *Confesionario en Lengua Castellana y Timucua*, Mexico, 1613; To try to understand better how this froth might have looked, as an experiment I made some black tea, something I do every day (admittedly not from yaupon leaves) and poured it back and forth between two large mugs that hold approximately 16 ounces of liquid.⁷⁷ The first thing I noticed was that it must have been a difficult job to do this without spilling the drink, even in the small mugs I spilled quite a bit at it at first. Beyond the difficulty, no head formed until I had poured the tea back and forth nearly 10 times.⁷⁷ What I did notice, once I had some froth, was that there was quite a bit of size difference among the bubbles and that the froth lingered longer than I expected from a non-carbonated beverage. The froth also remains if the tea is poured into another container and if the container is smaller, the froth is more pronounced. The Creek saw yaupon's white froth as part of what made it a "white" medicine.⁷⁷ The bubbles are one of the more interesting qualities in that they form little bundles of air, trapped by a thin membrane of liquid, thus trapping a portion of the upper world, in a shell of the lower world.

How did they drink it? I suspect that this is one of the places where de Bry (see introduction, Figure 1) was more accurate than the modern art at the living history museum at Mission San Luis. Jerald Milanich critiqued de Bry for drawing nautilus type shells, instead of the *busycon* whelk shells that we know were used. How could Southeastern leaders and warriors use a shell found in the Pacific, Milanich rightly asked.⁷⁸ It is pretty unlikely that they used nautilus shells, considering the overwhelming archeological evidence to the contrary. But there is a clue that may vindicate de Bry in the shells themselves. Archaeologists who look at these shells have puzzled over why the beak often seemed to be rounded or sanded, to take the edge off. I suggest here, and will argue more below, that the beak of the shell was used like the tip of a funnel to facilitate quicker drinking (Figure 7). Milanich may be right in thinking that de Bry only had nautilus-type specimens to look at for these engravings, but what if the original art, that completed by Jacques le Moyne du Morgue, the artist who accompanied Laudonnière, was right, because the angle at which one drunk from the shell put the whirl of the crown toward the viewer?

One of the remarks Europeans often made about yaupon tea was that it induced a series of physiological responses in the Native Americans who drank it (Figure 1). Vomiting was the most common. Chemical analyses of the caffeine content of yaupon indicate that in and of itself, yaupon tea would likely not induce vomiting. Nicole Bishop has suggested that perhaps it was other alkaloids in yaupon holly's leaves that caused it to be an emetic, but this does not take into account the number of Europeans who claimed to have drunk it with no ill effects.⁷⁹ A simple explanation would be that other ingredients, like button snakeroot,

⁷⁸ Milanich, "The Devil in the Details," 26 – 31.

⁷⁹ Nicole Bishop, "Black Drink: It's not the Caffeine," *SAS Bulletin* 31 no. 4 (2008), 9 – 12.



Figure 7: A Busycon shell as seen from the crown. Stock photo.

were sometimes added under certain circumstances. Louis Le Clerc in fact plainly states this, claiming the “Big War Medicine” brewed with yaupon caused him to feel violently ill, while other brewings of yaupon might not have had similar effects.⁸⁰ Charles Hudson suggested that perhaps it was simply a learned behavior. That may be the case as well. But I would also like to suggest that the beak of the shell, if used as a tool to facilitate yaupon quickly going down an individual’s throat, might also help induce vomiting by triggering a gag reflex.

Aside from deliberations in towns’ council houses, another way that the tea could be used was to prepare for victory in the ballgame in Florida. The game pole (Figure 8) was typically raised when two towns were about to play a match. According to two Apalachee informants, residents of the town who raised the pole would often pour some fresh *cacina* into the hole the pole was put in, in the hopes of giving their town victory. This brew was not the typically concocted of yaupon or even yaupon mixed with bitten snakeroot, but contained small sticks meant to represent the players from the opposing town. Also, Beloved Men (*usinola*) were asked to fast and stand watch all night before the game. In a given town, one Beloved Man was asked to drink a bit at a time, all night and even if he wanted to stop, people kept bringing him the tea until he vomited. In these cases, a specific sort of yaupon was preferred, that from the local area, instead of what one of the Apalachee informants describes as “from the seacoast.”⁸¹

This ballgame, along with many of the other day-to-day practices surrounding yaupon I have described above, starts to reveal a deeper, more complex world. The

⁸⁰ Le Clerc, *Memoir*, 147 – 9.

⁸¹ Merrill, “The Beloved Tree,” 50 – 1.

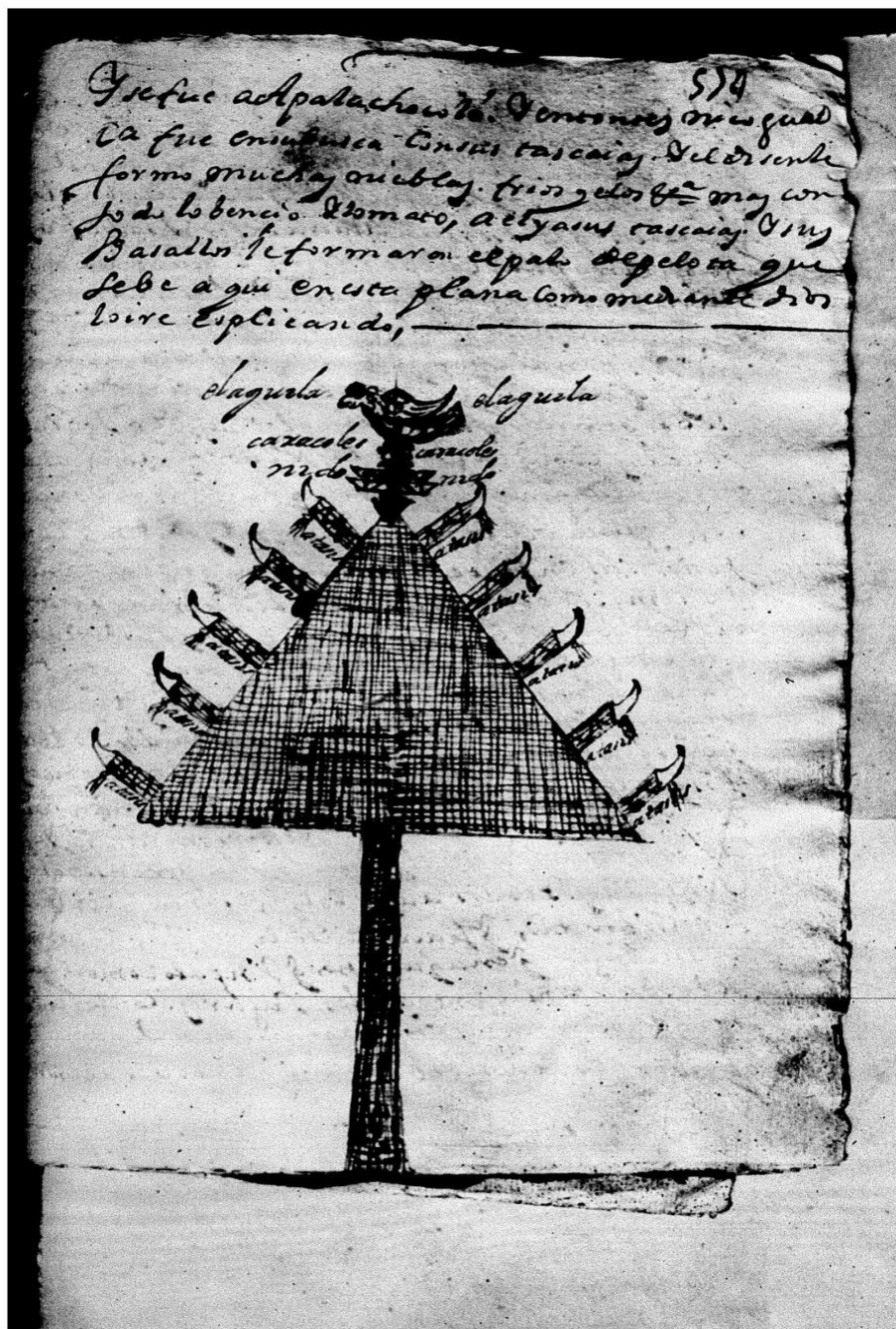


Figure 8: A page from the famous "Pelota MS" of Francisco Pareja. This drawing depicts the pole and goal used in the ball game as it was played by Apalachees. Photo by the author.

ballgame as the Apalachees played it for example, had a rich mythos. This mythos, though extending well beyond the scope of this dissertation, works well to introduce exactly how yaupon was intimately tied to more than just its harvesting, brewing, and drinking. The story goes the two micos, leaders of Native American towns, had an orphaned granddaughter who, in the course of her daily routine, mysteriously became pregnant. Afraid, she left the child in a thicket, where he was discovered by three animals, representing the three portions of the cosmos: the panther from the Lower World, the bear from the Middle World, and the jay, from the Upper World. These animals brought him to his great-grandfather, who rightly deduced that his grandfathers (the micos) would try to kill the child. One of the micos devised a plan to kill him, involving three extraordinarily difficult tasks and his great-grandfather helped him complete them safely. Each task, once again, was carried out in a region representative of each of the three worlds in the Apalachee cosmos: a sink hole (Lower World), a cane break (Middle World), and an eagle's nest (Upper World). When all these tasks failed to kill the child, the two micos decided to try another tactic and thus the ballgame was born.

Even the players on each side took sides by painting themselves different colors and claiming descent from either "dark" animals (bears, panthers, wolves), or another type. Francisco Pareja's informants note that these players would use yaupon, as I described above, but would also occasionally howl like a wolf, shouting "*Yahola*," a word and sound that carried with it the implications of the wolf's howl. The appearance of the pole itself and the specific mythology surrounding it suggest that the game had strong connections to the Upper World, and specifically the Thunderers. Furthermore, the game was begun at noon

or no later than two, lasting sometimes until sundown, and only in the summer.⁸² This is an incredibly hot and humid time of day and year in the southeast, so why play it then?

Beginning around one or two in the afternoon cumulus clouds start to build as the Atlantic subtropical high-pressure ushers in warm, moist air from the Gulf of Mexico. As these storms begin to build into cumulonimbus clouds, they roll and grow and eventually their tops feather out. About this time the storms begin to create thunder and lightning and rain falls. I suspect playing at this time of day had a double significance. Lighting would have provided a real and dramatic background for a match and made visual the game's mythological connections to the gods of the Upper World.⁸³

There is also one account of yaupon tea being used outside of towns and council houses. Theodore de Bry's engravings were accompanied by a narrative written by Jacques le Moyne du Morgue, the artist who accompanied Laudonnière to Florida and from whose paintings de Bry reportedly made his more famous engravings.⁸⁴ For the most part le Moyne holds close to Laudonnière's narrative about the same council meeting in which he saw the Timucuan chief Saturiwa along with his warriors and councilors drink yaupon tea. At the end though, le Moyne mentions that "hermaphrodites" carry gourds filled with the tea.⁸⁵ Le Moyne also mentions that these individuals were tasked with carrying any other war supplies, the dead for burial, as well as taking the sick away and caring for them. Sadly,

⁸² Amy Bushnell, " 'That Demonic Game': the Campaign to stop Indian *pelota* playing in Spanish Florida, 1675 – 1684," *The America* 4, no. 2 (2017), 5 – 6. This timing was also common to the Cherokee version of this ball game.

⁸³ J. Grant Stauffer and F. Kent Reilly III have also suggested that the ball game, as well as the "spaghetti style gorgets" which resemble anthropomorphized lightning strikes, were very closely related to the Thunderers. See J. Grant Stauffer and F. Kent Reilly III, "Playing the Apalachee Ballgame in the Fields of the Thunder God: Archaeological and Ideological Evidence for its Antiquity," *Prehistoric Games of North American Indians* ed. Barbara Voorhies (University Press of Florida, 2017), 34 – 47.

⁸⁴ Milanich, "The Devil in the Details," 26 – 31.

⁸⁵ René Laudonnière de Goulaine, *L'histoire notable de la Florida*, Paris, 1586.

this is the only mention we have of what were likely “Two-Spirits” as being carriers of yaupon and any mention of yaupon being used outside of any particular village. It makes sense though, since the drink was a white medicine for creating purity, that warriors might drink it after a battle.

Yaupon might also be brewed as a medicine for spiritual and physical illnesses. In 1678 a Spanish lieutenant, Domingo de Leturiondo was asked by an unnamed *cacica* (the Spanish word for a female leader of a town) if she could brew some yaupon drink because she had been ill for several years and no other cures had worked.⁸⁶ A Franciscan, Francisco Pareja also wrote a *Confessionario* in both Timucuan and Castilian to encourage converts to understand some of the “pagan” practices they held onto were sinful. Although he was rather vague about which herbs the people he calls herbalists, midwives, and sorcerers used to cure or harm (simply mentioning “*la yerua*”), some of the specific situations like slowing a town’s opponents in a ball game or race have other documentary references to yaupon, so it is likely that yaupon could be used in a variety of concoctions. Finally, Pierre François Charlevoix and David Taitt both mention Native Americans in Florida and further inland taking yaupon drink twice a day as a regimen to stay healthy.

In certain circumstances there may have been a specific spirit associated with making and drinking yaupon. In the late sixteenth century the Guale, linguistic relatives to the Creek, may have venerated a special god of yaupon or at least associated the drink with a particular deity. As a young man, Fray Miguel was shipwrecked on the coast of what is today Georgia and while there, gave us one of the earliest descriptions of yaupon being

⁸⁶ Fred Lamar Pearson Jr, “Spanish – Indian relations in Florida: A Study of Two Visitas, 1657 – 1678” (unpublished PhD Dissertation, University of Alabama, 1968), 285 – 9. The *visita* in question was that of Captain Domingo de Leturiondo in 1678.

drunk. In addition to the typical descriptions of warriors drinking it, he also tells us that there was an “idol” that watched over the tea in jugs, just inside the council house.

In the council house and close to the door on its right side, there was a little idol or human figure badly carved. For ears it had those of a coyote and for a tail that of the coyote as well. The rest of the body was painted with red ochre. Close to the idol's feet there was a wide-mouthed jar full of a drink that they call *cacina* and around the jar and the idol was a great number of two-liter pots also full of *caçina* [the Spanish word for yaupon drink].⁸⁷

It is hard to know exactly what to make of Fray Miguel's account, especially since he already seemed prejudiced against what he saw as pagan art. The red color may be a symbol of war. In the late eighteenth century, Louis Le Clerc describes yaupon serving vessels being painted red.⁸⁸ The men who he saw drinking had just been playing chunkee (a game involving rolling a stone and betting on who could throw a spear nearest to where the stone would stop), so perhaps yaupon tea was served to engender athletic ability and skill. The description of the “idol” as looking like a coyote is even more puzzling, albeit intriguing, since this is the only record we have of an zoomorphic image being associated with yaupon. Coyotes are usually associated with tricks and mischief, but I can find no Creek myths specifically about a coyote. Another possibility is that Miguel was completely wrong in who he interpreted the statue and that maybe it was of a cougar, a creature associated with masculinity and warfare.⁸⁹ Another consideration is that *asi* was associated

⁸⁷ John Hann, “An Early Florida Adventure Story: The Fray Andres de San Miguel Account,” <https://ufdc.ufl.edu/AA00039635/00001>.

⁸⁸ Le Clerc, *Memoir*, 147 – 9.

⁸⁹ Charles Hudson, *Southeastern Indians*, 257 and 384.

with wolves among the Creek. *Asi Yahola's* (Osceola) name meant not only yaupon singer, but singer in the sense that the “yahola” chant, mimicking the cry of a wolf.⁹⁰

One more being associated with yaupon comes from much Cahokia in the mid eleventh century. The only carving depicting the whelk shells being used is a small figurine called the “Exchange Avenue Figurine” (Figure 9) who offers a *busycon* shell. This figure was found near Cahokia and is made from flint clay. It is difficult to assign a gender to the figure which seems to be kneeling and cradling the crown of a whelk shell in their right hand and the beak in their left. The carving may in fact be a representation of a person offering yaupon tea to someone, or perhaps it is a representation deity?⁹¹ It certainly looks nothing like what Fray Miguel described on the Georgia coast in the late sixteenth century. Although at first glance it seems like the figurine is offering the drink, on closer examination this seems unlikely, since the artist depicted the liquid in the shell cup flowing over its edge toward the ground. Perhaps it preserves a reminder of a Cahokian practice similar to that of later towns; offering some yaupon tea to the earth.

These *busycon* whelk shell cups, like the one depicted in the Exchange Avenue Figurine, are the most well-known artifacts associated with yaupon tea. Shell cups were used to hold the tea, but they were unrivalled as vessels for drink.⁹² They were made from iridescent white and purple shells and were often, but not always, inscribed with religious symbols. Furthermore, the shape of the whirl in the shell may have put the power of the

⁹⁰ Wickman, *Osceola's Legacy*, 75.

⁹¹ Thomas Emerson, Randall Hughes, Mary Hynes, and Mary Wisseman, The Sourcing and Interpretation of Cahokia- Style Figurines in the Trans-Mississippi South and Southeast. *American Antiquity* 68 (2003), 287 – 313.

⁹² There is evidence that these shells were used for other drinks, including one made from *datura*. See Adam King et al. “Absorbed Residue Evidence for Prehistoric *Datura* Use in the American Southeast and Western Mexico,” *Advances in Archaeological Practice* Volume 6, no. 4 (November 2018), 312-327.



Figure 9: Exchange Avenue Figurine. Source:
<https://blogs.illinois.edu/view/7924/654280>

heavens in a drinker's hand. The left-hand whirl present in almost all the cups may have mirrored the rotation of the sky and the purple streaks on the shell looked like lightning (Figure 10).⁹³ The shell itself came from the sea and likely represented an object that had the power of both Upper and Lower Worlds.⁹⁴ They are almost always shells from the Gulf Coast of Florida with left-handed whirls, whose cores have been removed to make the shell's outer layer into a cup.⁹⁵ Some of the shells also show abrasion on the beak, or point of the shell, indicating that drinkers may have used that end to consume the tea as though through a funnel.⁹⁶ If this were the case, the whirl and associated artwork would have been visible to anyone watching. As I explained above, we know not everyone was allowed to consume the tea, in the ceremonial settings in which these sorts of cups were used. There are no written records of women drinking it from these shell cups and only a few burials of females with them at the King site in northern Georgia and Toqua in eastern Tennessee River valley.⁹⁷

European observers indicate that for the most part, drinking yaupon tea from busycon shell cups was an elite male activity. These cups are a unique piece of material culture for yaupon tea, because both the written and archaeological records underscore their significance. Writers from the French privateer Laudonnière in 1564 to British trader

⁹³ William Marquardt and Laura Kozuch, "The Lightning Whelk: An Enduring Icon of Southeastern North American Spirituality," *Journal of Anthropological Archaeology* 42 (2016), 3-4.

⁹⁴ F. Kent Reilly, "People of Earth, People of Sky," *Hero, Hawk, and Open Hand American Indian Art of the Ancient Midwest and South* ed. Robert Sharp, New Haven: Yale University Press, 2004, 127.

⁹⁵ William Marquardt and Laura Kozuch, "The lightning whelk: An enduring icon of southeastern North American spirituality," *Journal of Anthropological Archaeology* 42 (2016), 1 – 26.

⁹⁶ Dr. David Anderson, personal communication, 2017.

⁹⁷ Richard Polhemus, *Toqua: A Late Dallas Phase Town* (Knoxville: Tennessee Valley Authority, 1987), 994; David Hally, *The King Site: The Social Archaeology of a Late Mississippian Town in Northwestern Georgia*, Tuscaloosa: AL: University of Alabama Press, 2008, 262.



Figure 10: Busycon shell. Note the lightning-like streaks.

Source:

<https://wespeoplesfossils.blogs.wesleyan.edu/2017/12/30/curves-florida-pliocene-snails/>

David Taitt in the late eighteenth century describe their use in public ceremonies, while archaeological evidence points to a much deeper temporal connection to Native Americans' societies and cosmos. They were even sometimes used to ceremonially close town or mound sites.⁹⁸

The carvings etched into the outer shells of these cups represents the single largest remaining cache of Native American artwork in southeastern North America. In fact, it is from these cups' imagery, read within the context of oral histories, that modern artists have attempted to reconstruct a cosmology for Precolumbian Native Americans in the midwestern and southeastern parts of North America. In some of the earlier paragraphs in this chapter, I have used this iconography, but for the next section I want to explore a way in which I argue the very shape and color of these cups, regardless of what messages were later etched onto them, connected Native American leaders to both their towns and the heavens. Mark Catesby suggests that that these shells were, in certain circumstances, only used once. He writes that the "King" during the Busk, shared yaupon drink among his all his people in order or rank from a "conch-shell, never used before."⁹⁹ Given that this ceremony occurred in July and August, it is likely that this tradition was also linked to summer thunderstorms which can have downburst, or even severe *derechos*, that plow down from the Ohio Valley into the southern Appalachians at that time of the year.¹⁰⁰

⁹⁸Phillip Phillips and James Brown, *Shell Art Pre-Columbian Shell Engravings from the Craig Mound at Spiro, Oklahoma* vol. 2 (New York: Peabody Museum Press, 1978), plate 285; Dale Hutchinson, *Tatham Mound and the Bioarchaeology of Contact*, Gainesville: University Press of Florida, 2006, 35 – 6.

⁹⁹ Mark Catesby, "The natural history of Carolina, Florida, and the Bahama Islands vol. II," (London, 1754), 57.

¹⁰⁰ Theda Perdue, *Cherokee Women: Gender and Cultural Change, 1700 – 1830* (Lincoln, NE: University of Nebraska Press, 1998), 26.



Figure 11: A busycon shell cup in a winter council house at Ocmulgee National Monument. Photo by author

One remarkable connection that these *busycon* shell had was to tornados. Understanding the cups in this light, helps explain the significance of the whirls and spirals often found on the toasting bowls, steeping bowls, and in depictions of the steam rising from these bowls. Before I explain, this claim needs some background to help situate it in not only meteorological realities, but also connect it to archaeological evidence., Timothy Pauketat has shown conclusively that Native Americans built their environment to align with lunar standstills.¹⁰¹ The obvious difference between celestial progressions and cycles and meteorology phenomena, is that one is much more regular and predictable than the other. The moon seems to “stand still” approximately every twenty-eight years and the sun does the same twice a year. Certain constellations appear at certain times of the year and disappear just as regularly, making room for other stars. Historical ecology has also shown that climatic cycles and weather cycles can impact not just single activities, but seasonal ones as well. For example, Stephen Behrendt has shown that the monsoon cycles influenced the development of patterns in the Atlantic Slave trade and Elliot West has also advocated for historians to take into account the environment in their research.¹⁰²

Individual weather events can have a profound impact on peoples’ lives, but in the historical record, especially lacking any detailed written sources, it is nearly impossible to locate any one meteorological event. Yet the long-term climate of North America has

¹⁰¹ Pauketat, *Cosmos*, 70; Susan Alt, “The implications at the Religious Foundations at Cahokia,” *Cahokia in Context* eds. Charles McNutt and Ryan Paris (Gainesville: University press of Florida, 2020), 36.

¹⁰² Stephen Behrendt, “Ecology, Seasonality, and the Transatlantic Slave Trade,” *Soundings in Atlantic History* ed. Bernard Bailyn (Cambridge: Harvard University Press, 2009), 44 – 85; Elliott West, *The Contested Plains: Indians, Goldseekers, and the Rush to Colorado*, Lawrence, KA: University Press of Kansas, 1998), 18 – 32; for a more large-scale approach, rooted in agriculture, see David Montgomery, *Dirt: The Erosion of Civilizations* (Berkeley: The University of California Pres, 2007); for a more specific case study from the American southwest in Chaco Canyon, see R. Gwinn Vivian, et al., “Ecology and Economy,” *The Archaeology of Chaco Canyon* ed. Stephen Lekson (Santa Fe: SAR Press, 2006), 45 – 65.

followed certain cycles. Meteorologists, climatologists, and paleoclimatologists can use ice cores and dendrochronology to tentatively reconstruct a long wave pattern (the overall consistent pattern of the sub-tropical and polar jet streams during a given season), for particular years and seasons. For example, dendrochronological studies in the southwestern United States indicate that the Pacific Decadal Oscillation (PDO) was more consistently negative from 1000 to 1500 AD than from 1500 AD to 2000 AD.¹⁰³ The PDO is a measurement of sea surface temperatures in the North Pacific and has a statistically significant correlation to the long wave pattern over North America. Thus, researchers can reasonably argue that when the PDO was negative, seasonal trends, especially in the late winter and spring, favored troughs in the jet stream over the southwestern United States and ridges further east. This is important because disturbances are driven by the jet and these disturbances, as they kick out of the southwest towards the Great Plains, are often the catalysts for the atmospheric forces that produce tornados. Therefore, we can reasonably argue that certain periods, as documented by tree ring data, may have been more conducive for tornados in the Midwest, Southern Plains, and Southeast.

It goes without saying that tornados, hailstorms, severe cold, floods, and hurricanes all must have had a profound impact on peoples' beliefs and communities' policies well before any written accounts. The New Madrid earthquakes are one well-documented example of their impact in the early nineteenth century. Jonathan Hancock has shown how Native American and Moravian interpretations of the New Madrid earthquakes changed

¹⁰³ Fenbiao Ni, et al. "Cool-Season Precipitation in the Southwestern USA since AD 1000: Comparison of Linear and Nonlinear Techniques, for Reconstruction" *International Journal of Climatology* 22 (2002), 1645 – 62 esp. the graphs on 1656 – 7; G.M. Macdonald and R.A. Case, "Variations in the Pacific Decadal Oscillation over the past millennium". *Geophysics Research Letters* 32, no .8 (2005).

how each group saw themselves and each other.¹⁰⁴ It is easy to see their impact an earthquake, but even today they are very hard to predict with any accuracy. Individual weather events too are hard to predict, even with numerical weather prediction models and high resolution, multi-spectra satellite imagery. Seasonal activity *is* predictable. The shortening of wavelengths in spring in the Northern Hemisphere engenders stronger disturbances embedded in the jet stream and warming temperatures create a clash of air masses that often has violent consequences. It does not take a fancy satellite or a computer model the size of a room to notice that such storms are more common at certain times of the year and I argue that Native Americas were acutely aware of these seasonal patterns, since their lives could depend on seeking shelter if tornadic storms were approaching. Wind shear, the wind changing direction with height, indicated by clouds moving in different directions is one of the key ingredients for tornadic supercells.¹⁰⁵ Looking up, clouds would seem to be moving perpendicular to one another as you looked higher into the atmosphere. At a place like Cahokia, for example, Monk's Mound today affords a view all the way to St. Louis and in the past would have offered an equally expansive view. But even flatter places like western Tennessee and the prairies of northeastern Mississippi could give just as good a view from atop a mound. Supercells that produce tornados have certain visible characteristics that are quite familiar to modern storm chasers. Winds changing direction with height proceed the storm, the supercell itself has a darker core, connecting the Upper Worlds to the surface, and the top of the cloud builds up and

¹⁰⁴ Jonathan Hancock, "Shaken Spirits: Cherokee, Moravian Missionaries and the New Madrid Earthquakes," *Journal of the Early Republic* 33, no. 4 (2013), 643 – 73.

¹⁰⁵ On tornado formation, an accessible source is <https://www.weather.gov/jetstream/tornado>

eventually shears off into a familiar anvil shape (Figures 12 and 13). I see no reason why Native Americans would not have been familiar with these characteristics.

In fact, their stories and artwork intimate the respect they held for thunderstorms. All the towns and nations we will examine throughout the rest of this dissertation, believed that supernatural beings called “Thunderers” lived in the Upper World. These beings could speak to people through their thunder.¹⁰⁶ The Apalachee ballgame and the version played by the Cherokee, each not only consciously invoked a connection to these beings, but I argue that the time of day and year in which they were played shows how well attuned towns across the southeast were to the daily cycles of weather. There were a number of beings understood to be Thunderers. Among the Mikasuki Seminole, one in particular matches the description of a tornado. “The Good Snake or Celestial One” lived in the earth and when he emerged, he swirled up and up with a “great noise.”¹⁰⁷ Furthermore, these beings moved through the heavens in a cycle that corresponded to the seasonal weather pattern changes outlined above. During the summer, when thunderstorms are more likely on any given day, these beings travelled through the heavens.¹⁰⁸ For the Cherokee, the Thunderers lived in the west and the brightest color of their raiment was red. Often times, as the sun rises or sets, thunderstorms capture and refract that particular color. Since red was associated with war, perhaps this is why the gourds were painted red that were used to present the war medicine Louis Le Clerc drank, during his initiation as war chief for the

¹⁰⁶ Franciscan Francisco Pareja compiled a *Confesionario* to help with converting Timucuan to Christianity. Pareja seems to have simply copied common Spanish language version of *Confesionarios* but then asked two acolytes to translate these into Timucuan. Interestingly, one of the questions posed involves Thunderers, who the acolytes, unbeknownst to Pareja, continued to understand as active speakers, even after conversion. See Alejandra Dubcovsky and George Broadwell, “Writing Timucua: Recovering and Interrogating Indigenous Authorship” *Early American Studies* 15, no. 3 (2017), 435 – 6.

¹⁰⁷ Grantham, *Creation Myths*, 34.

¹⁰⁸ Grantham, *Creation Myths*, 34.



Figure 14: A tornado. Source:
<https://www.nssl.noaa.gov/education/svrwx101/tornadoes/types/>



Figure 12: a busycon shell drinking cup from Craig mound at Spiro, with an intertwined serpent design. note the funnel shape. Source: Phillips and Brown, *Shell Engravings*, cover.



Figure 13: An afternoon thunderstorm begins to grow a sheared, anvil top. Photo by the author.

Creek.¹⁰⁹ The medicine, also containing button snake root (rattlesnake master), was a living palimpsest for warfare. Thunderers often went under the guise of snakes, so that both button snake root and the red gourd imparted their powers to the drinker and made all this manifest for observers who understood these connections.¹¹⁰ Yaupon tea was then, a spiritual medicine, in the sense that its cup evoked the Upper World and Thunderers, while the water used to brew the tea held the power of the Lower World.

I argue the shape of the shell embodied the motions of the heavens and gave elites and their followers a connection to the Upper World. Almost all the whelk shells that have been found have a sinistral or left-handed spiral, when viewed from the top down. This whirl is mirrored in dances and in how fires were constructed across the southeast.¹¹¹ William Bartram, Page du Pratz, and James Adair, describing Creek and Natchez customs, note the use of the sinistral spiral in acts of creation and death. If the wear on the beak of the shell is any indication, onlookers would have seen the spiral as drinkers consumed the tea. This spiral snake is also evocative of rattlesnakes. Remember that one the primary ingredients besides yaupon, at least for certain ceremonies, was button snake root, or rattlesnake tamer. Rattlesnakes are pit vipers, that can attack quickly, in part, because they coil in a spiral when they defend themselves. Also, consider the marine animal that creates the *busycon* shell. Its common name is the lightning whelk, because the jagged lines that mark its edges resemble lightning striking from the heavens. Even the bumpy shape of the top of the whelk resembles a supercell gaining strength. Many depictions of the Birdman, a being connected to the Upper World and respected across the southeast, show him wearing

¹⁰⁹ Le Clerc, *Memoir*, 147 – 9.

¹¹⁰ For the Thunderers as snakes, see Grantham, *Creation Myths*, 33 – 4.

¹¹¹ Marquardt and Kozuch, "The Lightning Whelk," 9.

a whelk shell's columnella as a pendant, the column that was cleared out when the shells became drinking vessels. Many elite burials have also been unearthed adorned with this type of a pendant. On some occasions, to separate its wartime use from its peacetime use, the tea might be served in gourds painted red, instead of the usual white lightning whelk cups.¹¹²

The way yaupon was served and drunk also reiterated the order of the cosmos and may have imbued not only more visible ceremonial consumption with power, but also individuals in their homes, drinking the tea out of beakers and effigy vessels. Historical sources indicate it was consumed daily, at least in the historic Creek towns of the southeast. These writers don't always report elaborate ceremonialism replete with shell cups and elaborate rituals. Mundane use, I would argue, far from weakening all the powerful associations I've described above, may have made the connections more powerful, more mnemonic, more embodied. Small ceramic beakers from the American bottom and cups from Etowah have been tested and shown to have held a liquid that contained caffeine.¹¹³

In some burials, beakers were located near the head, similar to the location of marine shells in other burials.¹¹⁴ In others there were examples of beakers either turned over pots commonly called "water bottles," or in other cases the beakers were covered by a

¹¹² Louis Le Clerc de Milford, *Memoir*, trans. Geraldine de Courcy, ed. John McDermott, Santa Barbara, CA: The Narrative Press, 2000, 147 – 9.

¹¹³ Patricia L. Crown, et al., "Ritual Black Drink Consumption at Cahokia," *Proceedings of the National Academy of Sciences of the United States of America*, Vol. 109, No. 35 (August 28, 2012), pp. 13944-13949; and Patricia Crown et al., "Ritual drinks in the pre-Hispanic US Southwest and Mexican Northwest," *Proceedings of the national Academy of Sciences* 37, no.112 (2015), 11436-11442; Adam King et al. "Cautionary Tales on the Identification of caffeinated beverages in North America," *Journal of Archaeological Science* 85 (2017), 30-40.

¹¹⁴ See C.B. Moore, "Certain Mounds of Arkansas and of Mississippi," *Journal of the Academy of Natural Sciences* ser. 2, 13 (1908), 520;540-3; and C.B. Moore, "Certain Sand Mounds of the St. John's River, Florida part 1", *Journal of the Academy of Natural Sciences* ser. 2, 10 (1894), 11-2; 162.

larger pot. Without similar testing, we cannot be sure that all of these the beakers held yaupon tea, but pottery design and shape may offer some clues. A very common form of these beakers is comprised of a “beak” style handle and a series of waves-like whirls in the design under the rim, a design that, as I have shown above, could be associated with yaupon tea. These designs may also be evocative of the general shape of the marine shells with the “handle” imitating the “beak” or long end of the *busycon* shells and the whirl, spiral, or wave design, imitating the whirl of the shell. Another interpretation is that these were dippers, used to serve the drink. It would certainly make sense for a ceremony so important to have not only the final destination for the drink as a special vessel, but other vessels as well. Other sorts of vessels even sought to imitate the general shape of these shells. The gourds, already mentioned, that Louis Le Clerc drank from during his initiation, naturally mimic the beak and crown of the whelk shells. Even ceramic forms could be used to imitate the shells.. In the American Bottom near Cahokia for example, archaeologists have found ceramic shells that look like the whelk shells.

Although many of the acts of brewing and drinking yaupon offer few surprises, beneath the superficial processes, beneath the harvesting, roasting, brewing, pouring, drinking, and vomiting, there were much deeper connections to an invisible cosmic hierarchy. Even a single leaf might have power. At Moundville, Vernon J. Knight and other archaeologists noticed clay figures that looked at times so “non-descript” that it might be easy to mistake them for randomly fired bits of clay (Figure 15).¹¹⁵ By accident one broke open and revealed “numerous thin internal voids each of which was the impression of a

¹¹⁵Knight, *Moundville*, 69 – 70.

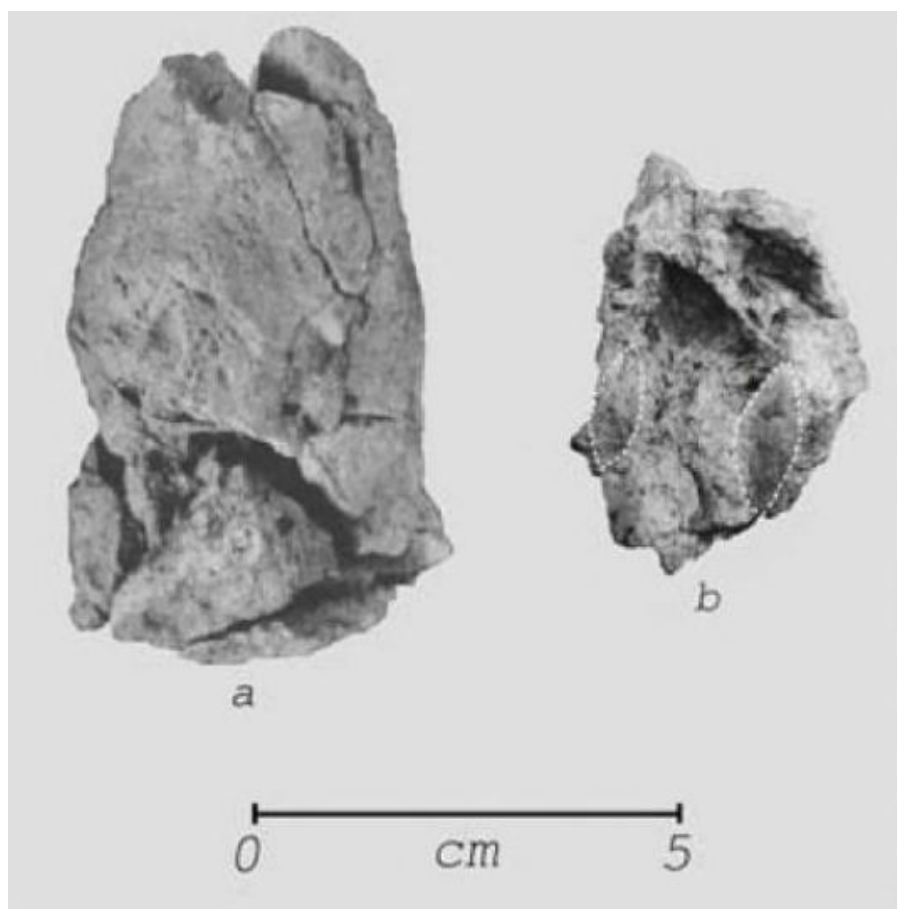


Figure 15: One of Knight's "Caspar figurines." Note the impression of yaupon faintly outlined by Knight. Source: Knight, *Moundville*, 69 – 70.

small leaf.”¹¹⁶ Knight was able to identify these leaves as belonging to yaupon. Could this be a physical bundling of the power of the leaves of this powerful plant? While this discovery may have just been a lucky one, George Lankford has recently argued that Moundville may have been the center of a medicine society specializing in death.¹¹⁷ If this was a place where shamans were trained in inscribing and imbuing objects with cosmic powers, Knight’s discovery may strengthen Lankford’s argument. It also suggests that Yaupon tea was something that not only the living could use. There is certainly some evidence that some people may have tried to co-opt the powers of the symbols in the Mississippian belief system at Cahokia by inscribing their designs not on shell ornaments or copper plates, but in small pottery fragments, capable of being carried and perhaps bundled to their person or other powerful objects.¹¹⁸ This leaf was powerful and there is a tantalizing clue that it was used in specific recipes to combat various illnesses. For that clue, we now turn in Chapter Two to the plea of a woman to a Spanish lieutenant, in the early eighteenth century.

¹¹⁶ Knight, *Moundville*, 160.

¹¹⁷ Lankford, “Was there a Moundville Medicine Society?” 74-98.

¹¹⁸ Thomas Emerson, “Water, Serpents, and the Underworld,” *The Southeast Ceremonial Complex: Artifacts and Analysis* ed. Patricia Galloway (Lincoln, NE: University of Nebraska Press, 1989), 80-1.

Chapter Two:

Caçina: Yaupon Drink's Cultural and Colonial Change, 1565 – 1704

Word had come to her town Asilepaja in the province of Timucua several weeks earlier. Governor Pablo Hita Salazar was finally sending someone to look into the complaints she and other leaders of nearby towns had been sending to St. Augustine. Many of the men in her village had fled. Not that she blamed them. After all, the work that the governor had assigned her village, that they operate the heavy ferry across the River of San Juan, was boring and strenuous; the work in St. Augustine paid better and there were more things on which to spend what little money the men earned. But the ferry still needed people to pull the rafts across. Her town was too small to merit a visit for the visitador, so she had travelled to the ferry town, San Diego de Salamoto. It was a hard journey. Not that it was terribly far, but for five long years things just hadn't been right. She had been ill and felt sad and none of the physical or spiritual remedies offered by the Franciscans had worked. So, she wanted to ask him if she could brew a special drink from yaupon leaves: caçina. As the governor's man, Domingo de Leturiondo, was finishing his discussion of the ferry problem with the other towns' leaders that Sunday, he called out to ask if there was any other business that day. This was his last stop before returning to St. Augustine and he was likely in a hurry to return and report to the governor. Nonetheless, she approached and told him her story. Leturiondo agreed that she could make the medicine, but only she could drink it.¹¹⁹

Much had changed in the nearly one hundred and thirty years since French soldier Rene Laudonnière and Jacques le Moyne recorded *caçina*, the Spanish rendering of what the Timucua called yaupon drink, being brewed by Timucua women and freely shared by the cacique Saturiwa among his warriors and council. This *cacica*, the leader of a Timucua town Domingo Leturiondo could not even be bothered to visit, less than a day's journey from St. Augustine, felt she needed his public approval to brew something as simple as an herbal medicine. Competing colonial visions would soon bring even more significant changes in Florida and across the southeast. By 1705, only twenty-seven years after the Timucua *cacica* asked Leturiondo permission to brew *caçina*, almost the entire Spanish province was abandoned. As a colonial enterprise, *La Florida* ended as a total failure for

¹¹⁹ This narrative was taken from my reading of the following Fred Lamar Pearson Jr, "Spanish – Indian relations in Florida: A Study of Two Visitas, 1657 – 1678", (unpublished PhD Dissertation, University of Alabama, 1968), 285 – 9. The *visita* in question was that of Captain Domingo de Leturiondo in 1678.

Spain. Only the *Castillo de San Marcos* in St. Augustine remained unburned by the Creek and their English allies. The mission system, the skeleton of the colony running across what is today northern Florida and southeastern Georgia, was crushed. The Apalachee, in what is today north central Florida, the Timucua along the eastern coast of Florida, and the Guale further north along the coast of modern Georgia—whose , whose labor supported the Spanish in Florida—had either chosen to relocate closer to St. Augustine, left Florida entirely or were dead. Is Florida an example of Matthew Restall’s myth of the “desolation” wrought by the Spanish conquest come to life?¹²⁰ Does the colony’s fall show just how broken Robbie Etheridge’s “shatter zone” could be?¹²¹

In Chapter One I created what I called “blurry” background, a sort of bundle of possibilities, for the following chapters. Now I want to focus in on a specific part of that background; the use of yaupon drink in Timucua, Guale, and Apalachee towns, and among Spanish colonists. This chapter is in part a perspective on the history of Spanish colonization. I will show how yaupon drink (which the Timucua called *caçina*, in the spelling adopted by the Spanish), was a part of the colonization process. In this Chapter I want to use that bundle to offer a sketch of colonialism in Florida as seen from yaupon drink, with all its connections to politics, society, and religion. Other scholars have traced the history of Spanish colonialism in Florida and tried to recreate the worlds of the Native

¹²⁰ Matthew Restall, *Seven Myths of the Spanish Conquest*, (New York: Oxford University Press, 2003), 100 – 30.

¹²¹ Robbie Etheridge, “Introduction: Mapping the Mississippian Shatter Zone,” *Mapping the Mississippian Shatter Zone* eds. Robbie Etheridge and Sheri Shuck-Hall, Lincoln: University of Nebraska Press, 2009, 1 – 62. This is framework I look more at in chapter 3.

Americans, but here I want to use *caçina* to give a picture of how colonialism was an “interconnected suite of relations.”¹²²

The story of yaupon drink was not simply a story of yet another piece of Native American knowledge being commodified. The Spanish offered powerful new spiritual technology that gave alternatives for anyone who would try them. Baptism, the Eucharist, and mission churches imported and sold another bundle of meanings, Christianity’s rituals and substances, which competed for the special place yaupon held as a means of creating purity. At a place like the Baptizing Springs Mission, the Franciscans likely gave small pieces of ceramics from their churches to children, in the process of trying to convert them.¹²³ These white earthenwares, whether the Franciscans knew it or not, imitated the shells previously reserved as jewelry for elites. Spanish sources also give us an unparalleled record of how Native Americans in the southeast negotiated colonialism and often won battles against the Spanish Crown and Roman Catholic Church.

Not all political ventures are successful in the end. Colonies fail and empires fall. But a teleological obsession with endings or failure often hides what was at the same time being created and what persisted as the regimes of power changed. Such a focus can divest

¹²² Timothy Pauketat, *An Archaeology of the Cosmos: Rethinking Religion in Ancient America*, (New York: Routledge, 2013), 38; The most thorough work on the history of the Spanish in Florida is Amy Turner Bushnell, Situado and Sabana: *Spain’s Support System for the Presidio and Mission Provinces of Florida*, (Athens, GA: Anthropological Papers of the American Museum of Natural History, 1994); for works on the Timucua see John Worth, *The Timucuan Chiefdoms of Spanish Florida* vols. I and II, (Gainesville: University Press of Florida, 1998); for the Apalachee see John Hann, *Apalachee, The Land Between the Rivers*, (Gainesville: University Press of Florida, 1988); for the Guale see Rebecca Saunders, “The Guale Indians of the Lower Atlantic Coast: Change and Continuity,” *Indian of the Greater Southeast* ed. Bonnie McEwan (Gainesville: University Press of Florida, 2000), 25 – 56; for the mission system see Bushnell above and Jerald Milanich, *Laboring in the Fields of the Lord: Spanish Missions and Southeastern Indians*, (Gainesville: University Press of Florida, 2006).

¹²³ Jill Loucks, “Political and Economic Interactions between Spaniards and Indians: Archaeological and Ethnohistorical Perspectives from the Florida Mission System”, Unpublished PhD Dissertation, (University of Florida, 1979), 244, for shell gorgets, 233 – 4.

historical actors of the agency they exercised.¹²⁴ On the surface, this chapter tells the story of a slow, one hundred and fifty year-long commodification of a ceremonial drink. *Caçina*, once a medicine that connected peoples across the Southeast to a larger cosmos, was later demanded by colonists and used as a political bargaining tool by Native American towns. But what could certainly be described as a linear progression from holy drink to a piece of tribute is not quite enough. By focusing more on *caçina*'s role in specific interactions between people and groups, we can help wrangle the narrative of Spanish colonialism away from what is most certainly a trajectory of loss and destruction and shift focus to the tangled negotiations, accommodations, and misunderstandings that characterized the process of colonization and colonialism in Florida's piece of the "shatter zone," a place of opportunities as well as destruction.¹²⁵ In Florida, both Native American and Spanish individuals were active participants in shaping the trajectories of their own lives, even as colonialism destroyed and reshaped old structures of power, economies, and religion.¹²⁶

As Marcy Norton has shown, food and drink have profound connections to the "sacred and the social."¹²⁷ *Caçina* in the towns and villages of the Timucua, Guale, and Apalachee, like chocolate and tobacco in Mesoamerica, "worked in the service of defining and articulating social relationships" and helped "mediate and explicate the relationship between humanity and divinity."¹²⁸ As I will show below, some of these entangling

¹²⁴ Guy Halsall, *Barbarian Migrations and the Roman West: 376 – 568*, (New York: Cambridge University Press, 2007), 168 – 9.

¹²⁵ Ethridge, "Introduction," 1 – 62.

¹²⁶ Michael Wilcox, *The Pueblo Revolt and the Mythology of Conquest*, (Berkeley: University of California Press, 2009), 35 – 53.

¹²⁷ Marcy Norton, *Sacred Gifts, Profane Pleasures: A History of Tobacco and Chocolate in the Atlantic World*, Ithaca, NY: Cornell University Press, 2008, 13-43.

¹²⁸ Norton, *Sacred Gifts*, 30; see also Kathryn Sampeck, "Cacao and Violence: Consequences of Money in Colonial Guatemala," *Historical Archaeology* 53 (2019), 535 – 58.

mediations and relationships were quite subtle, and that subtlety often led to misunderstandings and mistakes that could have both creative and destructive consequences as they were woven into the larger history of *La Florida*.¹²⁹

Another useful concept for my approach to these sources is James Lockhart's concept of "double mistaken identity." Lockhart argued that the processes of conquest in Mexico were defined by the fact that both Spanish and Nahua assumed that a given "form or concept is functioning in the way familiar within its own tradition and unaware of or unimpressed by the other side's interpretation."¹³⁰ Spaniards and Native Americans in Florida saw both religious ceremonies and social interactions and made assumptions about them. Frequently these ceremonies and interactions involved *caçina*, the process of making it, and its use. These assumptions informed actions that could have unexpected results, results that could create new avenues for power on behalf of, colonial authority while simultaneously reshaping or destroying older ones.

I begin this chapter with a section explaining how the Guale, Timucua, and Apalachee brewed, consumed, and understood *caçina* in the time of Spanish colonization in Florida. There was some variety among the Timucua, Guale, and Apalachee. In Timucuan towns, women often made *caçina*, but in Apalachee towns, men brewed it. Not only was it used in the circumstances Spanish observers most often saw it, as a ceremonial medicine for purity, but *caçina* was also entangled with ideas of impurity and pollution. Next I look at the circumstances where Spanish soldiers in *entradas* first saw *caçina* and the implications of those circumstances for how the Spanish subsequently understood the drink. The

¹²⁹ Richard White, "Creative Misunderstandings and New Understandings," *The William and Mary Quarterly*, Third Series, 63, no. 1 (January 1, 2006): 9–14.

¹³⁰ James Lockhart, *Of Things of the Indies*, (Stanford: Stanford University Press, 1999), 99 – 100.

second part of this chapter's story is one where some competition for the sacred power vested in *caçina* arrived with the Franciscans. In many ways, the Franciscans represent the widest European presence in Florida and the most lasting.¹³¹ Even though military *presidios* and blockhouses were the centers of authority, friars like Francisco Pareja and Francisco Paiva were more often than not the boots on the ground in the villages and towns of Florida. The rituals they offered may have seemed quite similar to those surrounding *caçina* and competed with it for social and spiritual rewards. I argue that the liturgies and ceremonies of the Catholic Church and the objects used in those ceremonies in the *doctrinos*, missions built in Native American towns, specifically baptism and the Eucharist, were powerful tools for syphoning power out of *caçina* and desacralizing the drink. Franciscans certainly took issue with the drink's connections to "pagan" ideas, practices, and beliefs, but more importantly they offered an alternative alongside their opposition. The Franciscans were only one part of the commodification of *caçina*, however. In the last section I look at the literal commodification of the drink as Spanish elites in St. Augustine and the Franciscans, as well as soldiers, colonists, and their families in provincial blockhouses and forts, demanded it in tribute as part of the *sabana* system Spanish authorities and Franciscans developed to augment the often late or missing annual shipment of supplies from Mexico. *Caçina's* demand by Spanish colonists as an everyday medicinal drink, divested of ceremonial attachments, played a role in its commodification, but so did the fact that Native Americans came to use it as a political bargaining chip.

¹³¹ For information on the mission systems see: *The Spanish Missions of La Florida* ed. Bonnie McEwan (Gainesville: University Press of Florida, 1993). Jerald Milanich, *Laboring in the Fields of the Lord: Spanish Missions and Southeastern Indians* (Gainesville: University Press of Florida, 2006); Michael Gannon, *The Cross in the Sand: The Early Catholic Church in Florida, 1513-1870* (Gainesville: University Press of Florida, 1965).

Before we can understand what changed, let us take a look at what existed first. Political and religious change was not something all that new for the Timucua, Guale, and Apalachees. For several centuries (and perhaps much longer) the ancestors of these groups lived at one end of a long trade network connecting the Gulf of Mexico to much of eastern and central North America. From the north, down the Apalachicola, Chattahoochee, and Altamaha Rivers came buffalo hides from the Great Plains and copper from the hills near Lake Superior. From the Gulf, traders and merchants carried marine shell and yaupon leaves.¹³² Ideas also moved along these commercial waterways. The Mississippian culture that emerged in Cahokia in the eleventh century, which inscribed cosmological symbols on shell gorgets and cups came too. Yet Mississippianization reminds us that the Timucua, Guale, and Apalachee were unique peoples whose histories, regions, and societies could redirect or reinterpret the ideas the Spanish and later the French and English brought. Spaniards would not be the first people to bring new religious practices and technologies. The Apalachee and Guale chose to adopt many of the technologies of Mississippian culture, like platform mounds and wall-trench architecture. The Timucua did not.¹³³ The Guale and Apalachee spoke languages that belonged to the Muskogee language family, while the Timucua spoke a variant of Arawak, which indicates their origins were not in North America, but the Caribbean.¹³⁴ Regardless of the reasons for their differences, the peoples

¹³² F.K. Seeman, *Hopewell Interaction Sphere*, (Bloomington: Indiana Historical Society, 1979); Phillip Phillips and James Brown, *Precolumbian Shell Engravings*, (Cambridge, MA: Peabody Museum Press, 1978), 153 – 209; William Merrill, “The Beloved Tree: *Ilex vomitoria* among the Indians of the Southeast and Adjacent Regions,” *Black Drink: A Native American Drink*, ed. Charles Hudson, (Athens: University of Georgia Press, 1979), 40 – 1.

¹³³ John Worth, *The Timucua Chiefdoms of Spanish Florida* vol. 1, (Gainesville: University Press of Florida, 1998), 13.

¹³⁴ If Julian Granberry’s hypothesis is correct, it is possible that the “*caçina*” that the Spanish heard is an Arawak word and that the *asi* name given to yaupon drink by Muskogee speakers is related and represents evidence that the Timucua were the first to brew yaupon drink when they arrived from Amazonia and saw similarities between yaupon and the holly from which *mate* is made. See Julian Granberry, *A Grammar and*

the Spanish Crown put under the umbrella of “Republic of the Indies” were not a single “Indian” people, but individuals, families, and towns with separate histories, beliefs, and even languages. *Caçina*’s role in reinforcing social hierarchies and connections to religion varied among these peoples as well.

At a superficial level, there seems to have been much that these peoples shared with other drinkers of yaupon drink, but some of the unique and specific ways that *caçina* defined and articulated social and cosmic relationships will help to measure changes over time in the specific setting of Florida. The physical processes of brewing and consuming the drink was fairly similar across the Southeast. Leaves were toasted in *cazuela* bowls and then added to a pot of boiling water. After the drink had steeped, it was strained and poured between larger pots to work up a froth. Finally, the drink was served out or shared according to rank. There was some variety in exactly how humans worked with one another through the physical brewing and serving processes. Timucua women brewed this drink, while men served it. Among the Apalachee and Guale, men, typically young warriors were the brewers and the servers. This likely had to do with the fact that culturally and linguistically the Guale and Apalachees had more in common with each other and other Muskogee language speakers.¹³⁵ In some instances, a *busycon* shell cup was used; in other cases, small beakers. The rarity of reports of shell cups among early Spanish authors seems to indicate that they were used only on especially momentous occasions.¹³⁶ Vomiting

Dictionary of the Timucua Language (Tuscaloosa: University of Alabama Press, 1993). Of course it is also possible that Native Americans of North America discovered the use of yaupon without any help from South America.

¹³⁵ This pattern closely follows what Creek towns did and most likely indicates cultural ties between Creek towns and those of the Apalachee and Guale.

¹³⁶ René Laudonnière de Goulaine, *L’histoire notable de la Florida*, (Paris, 1586), 6 verso; “Relación of Fray Andreas de San Miguel” trans. John Hann, <https://ufdc.ufl.edu/AA00039635/00001>.

sometimes (but not always) followed drinking *caçina*. In the cases where vomiting is mentioned in the historical record, it was always a masculine activity and a ritual part of purification.¹³⁷

The societies of the Timucua, Guale, and Apalachee were not simple hierarchies. Nor were they patriarchal. Although males were interpreted as the leaders by most Spanish sources, it was a town's matrilineages that defined who could and who could not lead.¹³⁸ The cups were a source of power and as shown in Chapter One, these cups were likely seen as not just something used by a special person on special occasions, but objects the entire community valued. Shell cups have been found at Timucua, Guale, and Apalachee archeological sites, often interred with a leader, but occasionally alone in mounds, indicating that the whole community likely took some ownership in cups and the memories of its ceremonies and cures.¹³⁹

The objects and actions that were part of the process of brewing and consuming *caçina* were likely what the Spanish first noticed, but as we saw in the previous chapter, *caçina* was connected to larger social and spiritual worlds of the Timucua, Guale, and Apalachee. *Caçina* was a white medicine, a medicine used to promote peace and purity. It was used as to purify minds and bodies before deliberation in council, or battle.¹⁴⁰ While Laudonnière and Jacque le Moyne du Morgue described how *caçina* was brewed and made,

¹³⁷ For a quick summary of many of these sources, see William L. Merrill, "The Beloved Tree: *Ilex vomitoria* among the Indians of the Southeast and adjacent Regions, *Black Drink* ed. Charles Hudson, (Athens: University of Georgia Press, 1978), 40 – 82; Even the binomial name in the above footnote suggests the contexts in which most early Europeans saw the drink.

¹³⁸ See citation 37 below. For roles specific to *caçina*, see Charles Fairbanks, "Function of Black Drink," 131 – 6.

¹³⁹ Dale Hutchinson, *Tatham Mound and the Bioarchaeology of Contact*, (Gainesville: University Press of Florida, 2006), 35 – 6.

¹⁴⁰ For the Timucua, see Laudionnière above; for the Guale see Fray Miguel above for the Apalachee, see Hann and McEwan, *The Apalachee Indians and Mission San Luis*, Gainesville, University Press of Florida, 1998, 128.

Laudonnière also mentioned that “hermaphrodites” carried it into battle for warriors.¹⁴¹ As discussed in Chapter One, *caçina* also helped articulate the social order among the Guale, Timucua, and Apalachee. Although Timucuan towns did not have the Busk ceremony discussed in Chapter One, they did have a similar “first fruits” ceremony that René Laudonnière called the “Ceremony of the Stag.”¹⁴² In the engraving of this ceremony in the de Bry engraving that depicts the Timucuan making offerings to the pillar set up by the French, there is a basket full of small green leaves propped up next to the pillar.

The drink was also a medicine in a very real sense, in that it cured different types of sicknesses.¹⁴³ Franciscan Francisco Pareja was particularly concerned about how those who he named “*herbalarios*,” midwives, and conjurers prescribed herbal remedies, including *caçina*, for everything from depression to abortion. Sadly Pareja is rather vague in his Timucuan and Castilian *Confesionario*, when referring to which herbs were being used. He refers to something he names “*la yerua*,” but there are some contextual clues that yaupon leaves may have been the “herb” he meant in at least a few cases. For example, we know from a later manuscript document, Francisco Pavia’s study of *Pelota* or Ball Game manuscript, that the yaupon could be used to help players or towns win, and indeed Pareja interrogates his potential audience: “When they are running for some prize or stake, have

¹⁴¹ Laudonnière and Le Morgue, “Employment of the Hermaphrodites.” Was Laudonnière seeing Two Spirits, people who the Spanish in New Mexico would later derogatorily call “berdaches?” Since this is the only reference we have to this particular role, it is hard to say, although occasional references in Spanish sources to trials and executions of Timucua for the “nefarious sin” exist. Hann, MS 67; *Residencia* of Juan Marquez Cabrera, 1682. Obviously there isn’t a direct correlation between Two Spirits and modern or even early modern Spanish ideas of gender and sexuality, but leaving this bit in for now since if I am able to find further evidence of the sorts of people convicted in these crimes, it might shed some light on a way that Spanish colonialism divested *caçina* of some of its connections to Timucua gendered identities and social roles.

¹⁴² Tamara Spike, “To Make Graver this Sin: Concepts of Purity and Pollution among the Timucua of Spanish Florida,” Unpublished Master’s Thesis, (Tallahassee: Florida State University, 2006), 17 – 20.

¹⁴³ Francisco Pareja, *Confesionario en Lengua Timucua y Castellana*, 202 and 204.

you made someone in the race faint with some herbs? Have you taken an herb to run faster than the other in order to take the bet or the prize that they put up?”¹⁴⁴

Caçina was important in the ball game (called *pelota* by Spanish writers). Even though most English translations call it a game, its connections to the larger cosmos and real social structures within villages and village hierarchies made it much more than what the modern connotation of the word “game” suggests. This game brought out *caçina*’s connections to beliefs, but also social structures. It not only helped purify one’s own drink but could also hurt opponents.¹⁴⁵ A village’s power could rest on the outcome and the best players were afforded seats on honor in council and in the village.¹⁴⁶ Furthermore, *caçina* nourished connections between the players, their pasts, and the Upper World. The ceremony for raising the pole (in the village where the game was to be played) contained a liturgy explaining the origins of the Apalachee and their connections to the gods. Before the pole was raised however, the people raising the pole poured some specially brewed *caçina* the hole into which it was to be set. Atop this pole were set, among other symbols, whirled shells, miniature versions of the shell cups.¹⁴⁷ Furthermore, to help ensure victory, a male elder had to fast overnight, consuming nothing but *caçina* to ensure a win.¹⁴⁸ Another possibility is that Pareja, like Paiva in his “Ball Game” manuscript, used Timucuan acolytes to translate the Spanish into Timucuan and left the choice of which herb they used in their

¹⁴⁴ Spike, “To Make Graver this Sin,” 32 – 42. *Francisco Pareja’s Confesionario: A Documentary Source for Timucuan Ethnography*, eds. Jerald T. Milanich and William C. Sturtevant, trans. Emilio F. Moran, (Tallahassee: Division of Archives, History, and Records Management, Department of State, 1972).

¹⁴⁵ Hann, *Apalachee*, 341 – 2.

¹⁴⁶ Hudson, *Southeastern Indians*, 408 – 21.

¹⁴⁷ *Pelota* MS, part of the 1678 Leturiondo *Visita legajo*, trans. John Hann, <https://ufdc.ufl.edu/AA00039645/00001>.

¹⁴⁸ John H. Hann, *Apalachee: The Land between the Rivers*, Gainesville: University Press of Florida, 1988, 341.

language up to them.¹⁴⁹ Unfortunately not enough Timucuan has been translated to get a sense of exactly which herbs Pareja or his writers meant.¹⁵⁰ So, it is possible that even if it was not used as an abortifacient (as Milanich and Sturtevant suggest in their translation of Pareja's *Confesionario*) that it may have been used as a means of purifying a healer as he was praying on behalf of another.

When Rene Laudonnière described Timucua ceremonies and preparation of *caçina* before a battle in 1565, he noted that only women could brew it and only the highest-ranking males could drink it from shell cups.¹⁵¹ When it was not being drunk to purify councilors for deliberation or warriors for battle, *caçina* could be brewed for more mundane reasons and others in the community could drink it. On these occasions the drink was prepared at a council house and distributed from there. This was one of the ways leaders maintained their status as providers in a village or town. On some occasions the drink was simply used as a refreshing break for men in a town, after an afternoon of playing chunckee.¹⁵² The world the Spanish entered into with their first *entradas* in Florida and the Southeast was a complicated one, in ways that did not necessarily make sense to the Spanish or had no clear analogous comparison.

¹⁴⁹ Alejandra Dubcovsky and George Aaron Broadwell, "Writing Timucua: Recovering and Interrogating Indigenous Authorship," *Early American Studies: An Interdisciplinary Journal*, 15, Issue 3, (Summer 2017), 409-441.

¹⁵⁰ What is clear is that there is a much more sinister tone to at least the admonishment for those who might help a woman with pain during pregnancy in the Timucuan language version of Pareja's question to midwives and herbalists.

¹⁵¹ Laudonnière, 1586, 6 verso.

¹⁵² Relación of Fray Andreas de San Miguel" trans. John Hann, <https://ufdc.ufl.edu/AA00039635/00001>. A tantalizing but lonely reference to a female version of the ball game suggests that men may not have always been the only people to drink it Did the same ceremonies accompany it? Amy Bushnell, "That Demonic Game," 12.

The first mistakes the Spanish made in understanding *caçina* came from the *entradas* of the early sixteenth century. Trying to imitate the success of soldiers like Hernán Cortés, Hernando de Soto travelled inland looking for a route to Mexico and wealth. These early encounters with *caçina* helped begin to create a reputation for it as a commodity and a drink that denoted status, but not a ceremonial drink. Curiously though, one of the most intriguing parts of the de Soto *entrada* documents is that, despite how much ethnohistorical work they have helped to inspire, they never mention *caçina*. The only mention we have of something like *caçina* from that era comes from the *Relación* of Álgvar Núñez Cabeza de Vaca from his eight-year wanderings across the Gulf Coast, in search of a way back to Mexico. In it he mentions the brewing of a drink that causes vomiting, but not much else.¹⁵³

Two possibilities should be considered for why the *entrada* documents do not mention it. The first is that perhaps *caçina* just was not consumed among inland Native American towns in the ways that it would later often be observed. This makes little sense though given the number of artifacts associated with it and later ethnohistorical evidence from the seventeenth and eighteenth centuries. Yaupon drink was drunk before and after the *entradas*, so it was likely drunk while de Soto was there too. I suspect there are other reasons that the chroniclers of de Soto and Pardo never mention the drink.

The first is the simplest. In some cases the Spanish soldiers may have been invited into a council house to partake in *caçina* to cement a new alliance. De Soto was invited into several towns, early in his *entrada* and Pardo was invited into Chiaha, in what is today

¹⁵³ Alvar Nuñez Cabeza de Vaca, *Relación of Alvar Nuñez Cabeza de Vaca* trans. Buckingham Smith (New York: J. Munsell, 1871), 137 – 8.

eastern Tennessee. Pardo's men even spent a winter in Joara with women, stolen and enslaved from across the Appalachian mountains, who prepared food and drinks for them as though they were high status Native American males.¹⁵⁴ But even if they did partake of *caçina* as part of pacts and council deliberations, that the drink was vomited probably gave them some pause. For the *conquistadores*, as in Central America, the visible social hierarchy and deference infused into the ceremonies and consumption of *caçina* were easier to spot than its subtle religious connections and certainly easier to stomach than the purifying vomit that ended one's drink. I suspect another reason *caçina* was not a desirable drink at first then, was its association with vomiting.¹⁵⁵ As I will show in Chapter Four, emetics or purgatives were nothing new in Europe, but they were not in the same conceptual category as a social drink. They were medicines for individuals.

Another reason that the *entrada* documents do not mention *caçina* is that more often than not, the earliest Spanish encounters with *caçina* were not friendly. Even though it was a white medicine, it was part of how leaders and warriors prepared for battle across the Southeast and warfare was what the Spanish brought. What reason would Tuscaloosa, whose story I used to begin Chapter One, have had to share such a medicine with a man and warriors he intended to defeat? It is no surprise then that many of the first written sources do not overtly mention *caçina* or anything like it. A drink of peace would

¹⁵⁴ Heather A. Lapham, "Fauna, Subsistence, and Survival," *Fort San Juan and the Limits of Empire: Colonialism and household Practice at the Berry Site* eds. Robin Beck, Christopher Rodning, and David Moore, Gainesville, University Press of Florida, 271 – 300.

¹⁵⁵ I explore this contention further in Chapter Four.

not have been something to share with people who enjoyed hacking off limbs of their defeated enemies, so their dogs could enjoy themselves more.¹⁵⁶

As for the drink, there were two categories that *caçina* might fit into for the Spanish soldiers serving a Crown legally bound to Christianize: a spiritual medicine and a medicine for physical ailments. Only one of those categories allowed competition. As it became clear that there were no diamond mines in the Appalachian Mountains and as other European powers began to try to colonize the coasts of southeastern North America, Spanish colonization efforts retooled to create a colony that would help protect their shipping interests. As the Crown's first governors built relationships with towns near St. Augustine, the Crown also tried to fulfill its duty under the *Real Patranado*; to save the souls of Native Americans who they believed Satan had bound to hell.

Spanish *conquistadores* only slowly began to see the power of *caçina* and its broader connections. By the time of Juan Pardo's *entrada* into the interior of Florida in 1565, the Spanish were beginning to see how yaupon drink, or more specifically the cups leaders used to consume it, were valuable parts of a larger trade network and system of tribute. Juan Pardo, in preparation for his *entrada* to try and found a series of forts from Santa Elena, thought enough to bring a large conch shell as a gift to at least one chieftain in the interior.¹⁵⁷ Pardo used the shell more like a curious present, a thing given to a wealthy leader who could potentially become an ally. It seems he understood that trade in these

¹⁵⁶ *The De Soto Chronicles: The Expedition of Hernando de Soto to North America in 1539 – 1543* vol. I, eds. Lawrence Clayton, Vernon James Knight Jr, and Edward Moore (Tuscaloosa: University of Alabama Press, 1995), 257.

¹⁵⁷ Charles Hudson, *The Juan Pardo Expeditions: explorations of the Carolina and Tennessee, 1566 – 1568*, Tuscaloosa: University of Alabama Press, 1990, 139.

shells was important, but not much else. The intervening twenty years between his *entrada* and de Soto's had taught some lessons, but only the ones the Spanish needed or wanted.

The story of the commodification of *caçina* is not simply one of Spanish misunderstanding, dismissal, or manipulation. Just as the Timucua, Guale, and Apalachee had selectively adopted the new spiritual technologies of Cahokia centuries before, many of them now actively sought out an alternative or supplement to the drink's social and religious power. The Franciscans were happy to oblige with the Holy Sacraments. We have little evidence for the precise details of how Franciscans converted Timucua, Guale, and Apalachees, but we do know how these conversions proceeded in the early years in Nahua towns in Mexico. The first Franciscan mission in the Americas was established in Mexico in 1524. In the early years the catchphrase seems to have been: "where there's a will, there's a way." Some friars expressed reluctance to baptize quickly, but in the province of New Galicia in Mexico in 1541, the Franciscans were happy to baptize if their potential converts could simply acknowledge that they "believe in a single God, creator of heaven and earth, and creator of man, soul and body; original sin; the divinity of Jesus Christ; heaven and hell; good and bad angels; and the recognition of themselves as subjects of the Pope and the Emperor."¹⁵⁸ Deeper theological understanding could come later. This sort of glossed religion at an initial encounter certainly left wide latitude for interpretation of how it all worked, as later scholars have certainly shown.¹⁵⁹ Therefore, leaving the theological niceties and catechism aside for now, I think it is significant that the first taste of Christian

¹⁵⁸ Ricard, *The Spiritual Conquest of Mexico*, 84; By contrast some of the earliest Franciscans in Florida would only baptize if candidates also knew several prayers. Hoffman, *Florida's Frontiers*, 69

¹⁵⁹ *Words and Worlds Turned Around: Indigenous Christianities in Colonial Latin America*, ed. David Tavárez, (Boulder, CO: University of Colorado Press, 2017); Gutiérrez, *When Jesus Came the Corn Mothers Went Away*, especially parts I and II; David Tavárez, *The Invisible War, Indigenous Devotions, Discipline and Dissent in Colonial Mexico*, (Stanford: Stanford University Press, 2011).

ritual that the Timucua, Guale, and Apalachee received was one that involved public, ritualized purification. Native Americans sought the visible rituals, the objects of power that the Spaniards brought, because those objects were bundled with as much, if not more, power than the spoken word.¹⁶⁰

Baptism, at its heart, was about purification. It was a washing away of sin. The ceremony and objects involved in baptism, as well as its perceived results, offered competition for *caçina*. Even the word for white and pure in Timucua was “bapi, bapima” and there may have been some unintentional overlap between the two ideas.¹⁶¹ These Franciscans were also fortunate that their preaching came at least a generation (in 1595) after De Soto and Pardo’s *entradas*. In 1549, even ten years after De Soto had landed there, a Dominican attempted a mission at Tampa Bay in Florida and was mobbed and beaten to death on sight, likely because of the recent memories of Spanish atrocities.¹⁶²

Although we do not have contemporary accounts of the ceremonies the Franciscans used, we do know enough about the ceremony in medieval Europe and how Franciscans adapted these ceremonies in the New World, to get a good idea of what happened.¹⁶³ One of the major problems facing this sacrament was that, at least according to Fray Toribio de Motolina, it was “impossible” to baptize anyone in Florida with even the ceremony afforded

¹⁶⁰ Ricard, *The Spiritual Conquest of Mexico*, puts this rather simply, perpetuating in a way the trope of “Indians like trinkets” but I think work like Pauketat in his *Cosmos* is starting to show that this was a much more complicated story than earlier scholars have suggested; for the sorts of objects Timucua, Guale, and Apalachees demanded see Bushnell, *Situado and Sabana*, 76;

¹⁶¹ John Hann MS 32, “Fray Francisco Pareja’s Timucua Grammar, Excerpt,” <https://ufdc.ufl.edu/AA00038904/00001>.

¹⁶² Albert William Vogt, “‘Trust yourself to God:’ Francisco Pareja and the Franciscans in Florida, 1595 – 1702,” unpublished Master’s Thesis, (Columbia: University of South Carolina, 2006), 25.

¹⁶³ Bushnell in *Situado and Sabana* on page 73 asserts that the Council of Trent had doubled down on liturgy in response to the Protestant threat and working from that assumption I conclude that even if the friars had to occasionally make do with less fancy religious implements, the basic procedure of the liturgy as well as the acts it allowed for, would have been present at these baptisms.

a single child in Spain, due to shortages of salt, candles, and linen.¹⁶⁴ The first part of baptism required the friar to draw a cross on the candidate.¹⁶⁵ What did the Timucua, Guale, and Apalachee see in a cross? I'm sure that if there were an interpreter (and there occasionally was), he or she would have explained the Latin liturgy and, the significance of the cross for Christianity, but for the peoples who the Franciscans were trying to convert, the cross was a symbol of cosmic unity. Not entirely dissimilar to the Hopi and Zuni who saw the crosses the Franciscans carried as prayer sticks, the witnesses to the first baptisms likely saw what made sense to them, a powerful leader who soldiers followed, drawing a powerful symbol, a symbol they understood in a way different from the Franciscans, on one of their leaders.¹⁶⁶ The water used for baptism also had to be divided like a cross before it could even be used. Finally, the friar spoke in Latin for the ceremony, his words empowering the sacrament, just as a sacred syllable “yahola” was spoken as *caçina* was being prepared and served.¹⁶⁷ The baptism itself was likely not a complete immersion, but accomplished through sprinkling, or pouring of water over the candidate's head.¹⁶⁸ None of this is very surprising, since one of the most well-known Bishops in Mexico, Don Vasco de Quiroga, in the years leading up to the Franciscan missions in Florida, encouraged priests and mendicants to compete for spiritual authority.¹⁶⁹

¹⁶⁴ Edwin Sylvest Jr, *Motifs of Franciscan Theory on Sixteenth Century New Spain Province of the Holy Gospel*, (Washington, DC: Academy of American Franciscan History, 1975), 113.

¹⁶⁵ The following discussion of the liturgy and acts of baptism is taken from Martin Dudley, “Sacramental Liturgies in the Middle Ages,” *The Liturgy of the Medieval Church*, eds. Thomas Heffernan and E. Ann Matter, (Kalamazoo, MI: Medieval Institute Publications, 2005), 200 – 2.

¹⁶⁶ Gutiérrez, *When Jesus Came the Corn Mothers Went Away*, 82.

¹⁶⁷ Fairbanks, “The Function of Black drink,” 135.

¹⁶⁸ This assumption is based on the fact that in New Mexico, Native Americans who had accepted baptism were derogatorily known as “wet heads”. See Gutiérrez, *When Jesus Came the Corn Mothers Went Away*, 65. Most medieval artwork of pagans being baptized suggests that water was poured over a convert's head.

¹⁶⁹ Bernardino Verastique, *Michoacán and Eden: Vasco de Quiroga and the Evangelization of Western Mexico*, (Austin: The University of Texas Press, 2000), 136 – 7.

Another interesting connection between *caçina* and baptism may have been the shell cups. During the initial conversion period, the Franciscans needed some sort of bowl to hold the water in the absence of a baptismal font. From Late Antiquity through to the present day, depictions of Jesus's baptism occasionally show John the Baptist using a shell. Certainly later on we have lists of church property and imagery that supports special bowls or pitchers being used, but in the earliest approaches to the Timucua, Guale, and Apalachee, I think it is possible that the Franciscans could have used an abundant resource from the Gulf and Atlantic coasts of Florida, a resource whose worth would have been apparent if not completely understood. Like the Franciscans who sought to convert the Pueblos of the Southwest, these Franciscans positioned themselves as "ritual specialists, before whom mortals had to kneel."¹⁷⁰ They wielded ritualized powers and objects and aimed to cleanse those mortals. A major step then, in the commodification of *caçina*, occurred when the Franciscans first presented themselves, wittingly or not, as rivals to the people who provided *caçina* and the purity that came along with it. It must have been appealing because by 1595, governor Domingo de Martinez de Avendaño noted that there were nearly 3,000 baptized Timucua near and just north of St. Augustine.¹⁷¹ Even if this number is exaggerated and even if these conversions may not have been as thorough as Avendaño thought, even a portion of that number still demonstrates that Christianity's social and spiritual language was appealing.

Over time, exactly how the Franciscans approached baptism changed. As the conversions continued, the Franciscans and their Timucua, Guale, and Apalachee neophytes

¹⁷⁰ Gutiérrez, *When Jesus Came the Corn Mothers went Away*, 58.

¹⁷¹ Hoffman, *Florida's Frontiers*, 79. AGI, Santo Domingo, 235, Testimony of Alonso Sanchez Saez de Mercado, 23 January 1597.

began to build compounds near villages to support the friars' continued presence. They also began to assume a role as spiritual chiefs in towns and villages, and became more careful about who they baptized and when such a person might be admitted to the sacrament.¹⁷² By the 1640s, emissaries of Native American towns were approaching Franciscans asking for missions, so they could afford to be more circumspect in how they treated potential *catecumenos*, Christians-in-training. In the larger towns, "church complexes" consisted of two and sometimes three buildings: a church, a convent, and occasionally a kitchen.¹⁷³ These locations were called *doctrinas*. In towns without a resident friar, often the townspeople simply constructed a *ramada* (a roof supported by four poles). These locations the Franciscans called *doctrinas de visita*, often simply named *visitas* in the records.¹⁷⁴ From these locations the Franciscans would continue to offer sacramental purity that would challenge *caçina*.

Perhaps as significant as the sacraments, the physical space occupied by the church complex or the simple *ramada* competed for attention in the social space of village plazas with council houses.¹⁷⁵ Both summer and winter council houses were also gathering places for the village or town. In fact, summer council houses were often large roofs, supported by four poles, much like the *ramadas* the friars ordered Native Americans to construct.

Alejandra Dubcovsky has shown that writers hired to translate Christian doctrine,

¹⁷² Michael Gannon, *The Cross in the Sand: The Early Catholic Church in Florida, 1513 – 1870*, (Gainesville: University Press of Florida, 1965), 55.

¹⁷³ B. Calvin Jones and Gary N. Shapiro, "Nine Mission Sites in Apalachee," *Columbian Consequences*, vol. 2, ed. David Hurst Thomas, (Smithsonian Institution Press, 1990), 504; for some of the differences with Guale mission layout see Rebecca Saunders, "Ideal and innovation," *Columbian Consequences*, vol. 2, ed. David Hurst Thomas, (Smithsonian Institution Press, 1990), 529 – 32.

¹⁷⁴ Bushnell, *Situado and Sabana*, 73.

¹⁷⁵ Hudson, *Southeastern Indians*, 218- 19; John Hann and Bonnie McEwan, *Mission San Luis*, 75 – 8; Weisman, *Excavations on the Franciscan Frontier*, 55.

confessions and catechism often chose to offer their own spin on a particular passage, so that the message would make more sense to potential converts.¹⁷⁶ Might Native American architects have done the same thing as they were building new public houses demanded by the Franciscans? Perhaps some process, some visible act or architectural style was preserved in these houses that would have facilitated Franciscans and their purifying rituals wrestling power away from older sources.¹⁷⁷

The makeshift ceremonies of the initial missions were replaced by more elaborate ceremony with all the proper Christian pomp, gear, and décor. Based on archaeological records, the most likely type of construction was wattle and daub and even though their images are lost to the historical record, the walls of the churches would have been painted with religious images.¹⁷⁸ But even in the *doctrinas de visita*, ceremonies were eminently public, since the *ramada* was open air and located adjacent to the village plaza. The friars staged a powerful sacramental alternative to the local leaders in their own council houses, just across the plaza. Not only were the Franciscans offering powerful rituals and objects, but they were maintaining themselves as spiritual chiefs. Leaders provided power and protection to their followers, and the Franciscans were one part (if not the most visible) of that equation for the Spanish.

¹⁷⁶ Alejandra Dubcovsky, "Writing Timucua: Recovering and Interrogating Indigenous Authorship," *Early American Studies* 15, no. 3 (2017), 409 – 41.

¹⁷⁷ Sadly, the nature of the sorts of materials (wood and other plant materials) used to build these public houses, in the climate of the Southeast, has erased architectural evidence for this, but evidence for similar processed survives from the Southwest. See Bushnell, *Situado and Sabana*, 76 – 8.

¹⁷⁸ Bushnell, *Situado and Sabana*, 76; Antonio Rubial Garcia, "Icons of Devotion: The appropriation and Use of Saints in New Spain," *Local Religion in Mexico* ed. Martin Nesvig, (Albuquerque: University of New Mexico Press, 2006), 37 – 62; for the archaeology of the mission and presidio systems see: Ronald Childers, "The Presidio System in Spanish Florida 1565-1763," *Historical Archaeology* 38, no. 3 (2004), 24 – 32; Weisman, *Excavation on the Franciscan Frontier*, (Gainesville: University Press of Florida, 1992), 54 – 109.

Some evidence for Franciscans fashioning themselves as spiritual leaders exists even on one of the smaller *visitas*, at a site called Fig Springs. Here archeological work has revealed an intriguing possibility for how the Franciscans might dispense powerful objects to villagers. Some of the *majolica* (a Spanish tin-glazed earthenware made to imitate porcelain), has been found as sherds, not near the waste areas associated with the mission, but with those areas associated with the Timucua village's waste.¹⁷⁹ Jill Loucks argues that their presence within the Timucua village resulted from the Franciscans making gifts of damaged ceramics used in the churches and *conventos*, and even notes how some of these pieces were refashioned into shell gorgets, symbols of leadership and power across the Southeast.¹⁸⁰ This strategy of gift-giving may correspond well with the Christianizing process noted by Gutiérrez in New Mexico. There, parents were set against children as both a tactic of dividing resistance and as an example for the older generations.¹⁸¹ Were the Franciscans offering small bits of sacramental blessings to children so they might see themselves as the spiritual elders to their more recalcitrant parents? Perhaps, in the absence of Christian godparents, the Franciscans filled that role. Like chiefs among the Timucua, Guale, and Apalachee, the Franciscans also nominated secondary leaders as *fiscales* to act as examples for other townsfolk and administer punishment to those who disobeyed the friars.

¹⁷⁹ Majolica was a European ceramic type available through the *situado*. Kathleen Deagan found that it "varied positively with income" in St. Augustine. Kathleen Deagan, *Spanish St. Augustine: The Archaeology of a Creole Community*, (New York: Academic Press, 1983), 240.

¹⁸⁰ Jill Loucks, "Political and Economic Interactions between Spaniards and Indians: Archaeological and Ethnohistorical Perspectives from the Florida Mission System", Unpublished PhD Dissertation, (University of Florida, 1979), 244, for shell gorgets, 233 – 4.

¹⁸¹ Martinez, *When Jesus Came the Corn Mothers Went Away*, 75.

In the larger churches and *ramadas*, as the Franciscans gradually accumulated the finery necessary for their calling, another sacrament also competed with *caçina*: the Eucharist. Even more so than baptism, the Eucharist offered purity and blessings as not only a remembrance of the key Christian moment of Jesus's sacrifice, but also a substantial, present connection to the body and blood of Christ. As explained in the Roman Missal of the fifteenth century, the acts and theology of the Eucharist and Mass in general competed with *caçina* for its purifying power and at the same time flipped the ritual on its head by encouraging recipients not to vomit, but to let the body and blood in the form of the wafer and wine "cling" to their "innermost parts."¹⁸² Monstrances, chalices, cruets, ewers, patenas, and bells, among others, likely some of the most expensive and sacred objects brought by the Spanish into Florida, were used in performing the rituals of the sacrament.¹⁸³ These objects were stored in public, but sacred spaces, much the same as shell cups were in the Southeast.¹⁸⁴ In the early years of conversion in Mexico, there was some question as to whether or not Native Americans could receive communion. Over time, the Church extended the same opportunities of Spanish peasants to all Native Americans who were baptized.¹⁸⁵ Even in Europe, attending, listening to, and watching a Mass was much more common than partaking of the body and the blood.¹⁸⁶ That communion was

¹⁸² *Medieval Latin Liturgy in English Translation* ed. Michael Salisbury, (Kalamazoo: Medieval Institute Publications, 2017), 33.

¹⁸³ Elizabeth Parker McLachlan, "Liturgical Vessels and Implements," *The Liturgy of the Medieval Church* eds. Thomas Heffernan and E. Ann Matter, (Kalamazoo: Medieval Institute Press, 2017), 333 – 89; For some lists of what was available in the missions of Florida see Bushnell, *Situado and Sabana*, 73 – 4.

¹⁸⁴ Fairbanks, "The Function of Black Drink among the Creeks," *Black Drink* ed Charles Hudson, (Athens, GA University of Georgia Press, 2004), 133.

¹⁸⁵ Ricard, *Spiritual Conquest of Mexico*, 122 – 6; By at least 1614 Francisco Pareja was convinced that Timucua were ready for the Eucharist as well; Pareja, *Relacion*, 1614, in Bushnell, *Situado and Sabana*, 98.

¹⁸⁶ Martin Dudley, "Sacramental Liturgies in the Middle Ages," *The Liturgy of the Medieval Church* eds. Thomas Heffernan and Ann Matter, Kalamazoo: Medieval Institute Press, 2005, 204 – 5.

withheld except for the individuals the Franciscans saw as most pious, would have likely increased the desire of individuals to live up to the friar's expectations and made the whole ritual seem to evoke the ceremonies for *caçina*, a drink at least in some of the more significant moments of public anxiety or celebration (warfare, deliberation, festivals), only consumed by a few, elite, and male individuals.

Converted Timucua, Guale, and Apalachee were expected to attend Mass at least every Sunday, for a variety of Holy Days throughout the liturgical calendar, and on the feast day of their particular village's patron saint.¹⁸⁷ This may have also made the Franciscan seem more like Native American spiritual leaders, since the liturgical calendar followed seasonal cycles.¹⁸⁸ Even though the most significant Christian Holy Days and Seasons (Easter and Christmas) did not coincide with the Busk, that those two Holy Days occurred in the Winter and Spring allowed Native American towns to continue to practice some of their older ceremonies, at least in some fashion, while also obtaining the power of the new, Christian, Holy Days as well.

There is some evidence that Native Americans from the Southeast may have equated the chalices and other objects associated with Mass and the Holy Days and a parades with the shell cups. Luisa Mendez, a woman stolen by Juan de Ribas, one of Juan Pardo's soldiers, was asked in the year 1600 if there were any items of value in the interior of Florida. She responded that her people (in modern Tennessee) did indeed possess gold and silver cups brought out for dances and festivities.¹⁸⁹ Besides the chalices, the wafers of

¹⁸⁷ Bushnell, *Situado and Sabana*, 90 – 2.

¹⁸⁸ Clara Sue Kidwell, Homer Noley, and George E. "Tink" Tinker, *A Native American Theology* (Maryknoll, NY: Orbis Books, 2001), Introduction.

¹⁸⁹ *The Juan Pardo Expeditions* ed. Charles Hudson, 192.

the Eucharist may have evoked a connection to the powerful symbols of pre-Christian religion. Much like baptism, Mass involved Latin liturgy and signs of the cross. The wafers had to be made from European wheat, never maize.¹⁹⁰ These small white wafers were often pressed with a cross, so that they resembled the shell gorgets worn by some leaders.¹⁹¹

A reason that some of the Timucua, Guale, and Apalachee may have chosen the rituals and objects the Franciscans offered, was that they and their powers were potentially available to anyone, young or old, healthy or infirm, male or female. *Caçina*, in its role as a purifying drink, was more strictly regulated. Although I suspect there were many more cases of women using *caçina* than the Spanish records would attest, in association with public purification rituals, only elite male warriors or councilors are recorded as drinking it. Even infants could be purified in Christianity, though. Babies were best baptized young. That Spanish writers frequently cast conversion as spiritual warfare may have also been appealing in that it afforded a sort of warrior status to individuals normally not allowed to fight.¹⁹² People who may otherwise have been unable to become warriors or participate in the ball game and warfare, could now become warriors for God and help the friars extirpate pagan practices and beliefs that had served their parents, but were no longer in this time. The Franciscan mission even offered a privilege to all its spiritual warriors, which before was only allowed to elites: being buried within a sacred space.¹⁹³ Just as chiefs and warriors had been buried into the sacred and social landscapes capped by

¹⁹⁰ Bushnell, *Situado and Sabana*, 88.

¹⁹¹ *Hero Hawk and Open Hand*, ed. Richard Townsend, new Haven: Yale University Press, 2004. For examples of these gorgets see pp: 113, 127, 159 – 62, 208 – 9.

¹⁹² Jorge Cañizares-Esguerra, *Puritan Conquistadores: Iberianizing the Atlantic, 1550 – 1770*, Stanford: Stanford University Press, 2006, especially chapter 2; “The Satanic Epic”.

¹⁹³ John Hann and Bonnie McEwan, *Mission San Luis*, 119 – 20.; Clark Spencer Larsen, “On the Frontier of Contact: Bioarchaeology in *La Florida*,” *Spanish Missions of La Florida*, ed. Bonnie McEwan, Gainesville: University Press of Florida, 1993, 322 – 56.

platform mounds, now Christians were buried in the confines of the church, where the miracle of transubstantiation occurred. Furthermore, they could expect their descendants to remember them when they experienced this miracle, heard a Mass, or attended a baptism. As far as I can determine, no burials within church complexes have the shell cups often interred with warriors before Spanish arrival.

Not only did the Franciscans offer substitutes for *caçina*, but they also used it as part of indoctrination. Francisco Pareja, a Franciscan who worked among the Timucua and wrote a *Confesionario* and a Catechism in both Castilian and Timucua, likened the frothy bubbles produced as the drink is being made to the manifold nature of God.¹⁹⁴ But *caçina's* connections to medicine had to be eliminated to make room for God's handiwork to take over. *Caçina* was, after all, an obvious competitor for the sacraments. In his *Confesionario* he denounced vomiting as means for purification.¹⁹⁵ He also occasionally mentions an "herb" that conjurors, midwives, and sorcerers used as a medicine.¹⁹⁶ In one case he asks an herbalist if they were called upon to produce a medicine that would help someone run faster in chunkee. In another a midwife was asked if he or she had ever helped with labor pains. Finally he asks a sorcerer if he had ever used the herb to bewitch someone.¹⁹⁷ By denouncing many of *caçina's* medicinal uses, the Franciscans helped make *caçina* a commodity. Another troubling part of Timucua and Apalachee society for the friars was the ball game. Not only did it have extensive connections to pre-Christian religion, but *caçina* was often used as a tool for ensuring one side's victory, or the other side's defeat.

¹⁹⁴ Francisco Pareja, *Confesionario en Lengua Castellana y Timucua*, Mexico, 1613,

¹⁹⁵ Pareja, *Confesionario*, 202 and 204

¹⁹⁶ Pareja, *Confesionario*, 148 - 153

¹⁹⁷ Pareja, *Confesionario*, 148 - 153.

Interestingly though, in the debates about whether or not the ball game ought to continue, part of Domingo de Leturiondo's *visita* to Timucua and Apalachee in 1678, *caçina* never comes up.¹⁹⁸ Despite the prohibition of the ball game in 1678, despite the outlawing of some dances the Franciscans saw as too pagan, and despite the labeling of using *caçina* as a sin, *caçina* never stopped being brewed and drunk. Frey Alonso Leturiondo wrote that *caçina* was still communally used in 1701 and that it was still being brewed in the way that Laudonnière had described in 1564.¹⁹⁹ The Timucua, Guale, Apalachee, and the Spanish, were still drinking it in Florida as late as 1725.²⁰⁰

As spiritual chiefs, Franciscans had duties to their peoples and if they failed in these duties, there were violent consequences. *Caçina* lets us see how Native Americans could humiliate and hurt Spanish colonists and Franciscans as they attempted to wrestle authority away from Native American and Spanish individuals who they saw as failing or weak. The best example of these actions comes from the Juanillo Revolt among some of the Guale towns in 1597. The "living martyrdom" of Fray Francisco de Avila (sometimes written Davila) shows how the Guale might use *caçina* to redress grievances in a way that exploited the masculinity and purity of the friar. As in Mexico, Native American ideas about marriage—especially among the most visible converts, the village leaders—drew the ire of the Franciscans.²⁰¹ In early 1597, Fray de Avila tried to convince a Guale chief that it was unchristian for him to marry his wife's sister. The chief resisted and the friar tried to have him removed as chief. Some of the Guale sided with the Franciscan, but many others did

¹⁹⁸ Leturiondo, AGI, Santo Domingo, (Fred Lamar Pearson, "Spanish – Indian Relations in Florida: A Study of Two Visitas, 1657 and 1678," Unpublished PhD Dissertation, University of Alabama, 1968).

¹⁹⁹ 1701 Visitation of Mocama and Guale, AGI, Seville, Santo Domingo 858. (Hann);

²⁰⁰ *Contiente americano, argonautade la costas Nueva España, y Tierra Firma, islas, y baxos de esta navegacion, longitude y altura de polo, de sus puertos, y noticias de estas habitaciones*, 2 – 3.

²⁰¹ Tavárez, *Invisible War*, 35.

not. The young chief, named Juanillo by Spanish records, gathered supporters and began a revolt that would end the Spanish and Franciscan presence for a time. All the friars in that area were systematically killed, except for one. Fray de Avila was taken captive, tortured, and made a servant for nine months. Over time the Guale, in what seems like an attempt to adopt him into their community, offered him a wife. The most interesting part of this story though is what the friar was made to do in the meantime and what we may be able to get out of that story of exactly how the Guale saw the Franciscans. For the first few weeks after the revolt he was stripped naked and made to serve in the role of a woman in the council house of an ally of the rebellious chief.²⁰² He was also required to act as a bench for the chief. We also know the chiefs drank and vomited *caçina* on their benches in the council house and that the chiefs were give a primary place, visible to all present. What better way to emphasize the impurity of the hopeful spiritual leader, than to vomit while sitting atop him? The unholy sacrament-once denounced as demonic-was now part of his daily life. It is as though Juanillo and others, seeing that the friar had surrendered, decided the two most humiliating things they could do to him were to treat him as a woman (inverting the social order he had preached) and to expose him to the defilement spewed from their bodies as *caçina* purified them. De Avila's life was spared because a woman in the village had a son at St. Augustine. Eventually Spanish soldiers returned to Guale, freed the Franciscan, and captured Juanillo.

When the Franciscans did not live up to their duties as spiritual chiefs or acted in such a way as to violate those duties, they could face severe consequences. Jill Lepore has

²⁰²Here they once Stood: *The Tragic end of the Apalachee Missions* eds. Mark Boyd, Hale Smith, and John Griffin, Gainesville: University Press of Florida, 199, 86. Gannon, *The Cross in the Sand*, 41 – 2.

shown that in King's Phillip's War, Algonquians at least partially understood what would humiliate and shame their English adversaries and consequently used tactics aiming to "restore balance" to their world by defeating the English in ways they understood.²⁰³ Although her book is about a different set of circumstances, its points about how two groups try to communicate through violent symbolic behavior are salient here.

The story of Fray Francisca de Avila reminds us that the Franciscans and their Christian converts were not the only power brokers in Florida. Although up to this point, I have been examining how Franciscans offered an alternative to *caçina*, now I want to step back and look at how it was commodified from a different angle. While the Franciscans were building missions in Florida, Spanish governors, lieutenants, soldiers, and colonists lived in provincial blockhouses and at St. Augustine. The commodification of *caçina* was not only a process of Timucua, Guale, and Apalachee choice to see it as only one of several options for engendering purity, but also of Spanish commercial demand. Even as the Franciscans were offering alternatives to *caçina* and actively trying to disassociate the drink with what they saw as pagan practices, Spanish officials and colonists who demanded it as tribute were commoditizing the drink. As Christianity provided an alternative to the rituals of *caçina*, the tributary demands and rather mundane consumption of *caçina* by Franciscans, Spanish soldiers, and Spanish settlers gradually shifted how Timucua, Guale, Apalachees, and Spaniards saw the drink. As time passed, more and more ceremony was afforded to the rituals of Christianity. *Caçina* began to be consumed daily by Spaniards, separate from its original social and religious connections. Within this context, *caçina*

²⁰³ Jill Lepore, *The Name of War: King Phillip's War and the Origins of American Identity*, (New York: Alfred Knopf, 1998), 118 – 9.

gained a reputation as a cure for bladder and kidney stones, typically mentioned in records as “the stone.”²⁰⁴ As a diuretic that promoted urination, it was thought to be able to clear the urinary passages. If one were to develop such a stone though, this condition required invasive surgery that was often more deadly than the painful stones themselves.²⁰⁵

The same Church that had ordered the Franciscans to save souls, also laid a burden on the Spanish Crown: the *Patronato Real*.²⁰⁶ Under that edict, the Spanish Crown was responsible for not only naming missionaries, but also funding and supporting the Church’s activities. It was an expensive privilege. To offset the costs of not only maintaining soldiers and several forts in Florida, but also all the missions, the Crown relied on two sources: the *situado*, a subsidy from Mexico by way of Havana, and the *sabana* system which forced Native American towns to provide one-third of their provisions to the Spanish to offset the frequently inadequate or lost *situado*.²⁰⁷ In some of the same ways that Franciscans took on the role of spiritual leaders, governors and lieutenants were taking on the role of war chiefs who demanded tribute from their less powerful allies. *Caçina* as tribute and as a bargaining chip for social and political prestige was as powerful as *caçina* as a medicinal drink.

When Pedro Menéndez de Aviles decided to build a fort at St. Augustine, his primary goals seem to have been fulfillment of his obligations to spread and protect Christianity and to create a buffer around St. Augustine with allies who could help feed and if need be fight

²⁰⁴ Francisco Ximinéz, *Cuatro libros de la naturaleza y virtudes de las plantas y animales de uso medicinal en la Nueva España*, Mexico, 1635, 56 – 57.

²⁰⁵ Harry Kerr, “Cutting for the Stone: The Ancient Art of Lithotomy,” *BJU* 101 (2008), 1214 – 6.

²⁰⁶ Gannon, *The Cross in the Sand*, 37.

²⁰⁷ Amy Bushnell, *Situado and Sabana*, 43-8; 111.

for the town.²⁰⁸ As an *adelantado*, Aviles had to bear the brunt of the cost of colonizing, defending, and maintaining his colony. He seems to have quickly begun extorting tribute from local Timucua. *Caçina* was likely part of this tribute, since by 1615 it was reported by a friar recording medical plants for the Crown, that *caçina* in Florida was more of a vice than chocolate in New Spain and any Spaniard who did not drink it each day, “feels like he is going to die.”²⁰⁹ Despite his moralizing tone, he also recommended the drink as an effective cure for “the stone.” Beyond the rhetorical moralizing in this accusation of Frey Ximinez from this and other sources, it is a safe bet that *caçina* was already a common drink. Even the Franciscans dealt with the hardships imposed by the dwindling resources in the late seventeenth century by demanding *caçina* for their upkeep. They did not believe that they should have to serve only on royal alms.²¹⁰ One friar even grew so angry when his daily drink wasn’t delivered on time, he destroyed several jars used to store and prepare it in the council house of Mission San Luis in Apalachee.²¹¹ Soldiers were also allowed to sell their rations in exchange for cheaper food and they could then pocket the difference. The rations included wine, flour, oil, vinegar, salted meat, and a paste made from chickpeas and beans.²¹² It seems likely then, based on the fact that soldiers were known to take bribes of *caçina* in exchange for allowing “pagan” dances to continue, that *caçina* was one of the items they purchased with or traded for with excess rations or coin. But how were they introduced to *caçina*? What created this demand?

²⁰⁸ Jerald Milanich, *Laboring in the Fields of the Lord: Spanish Missions and Southeastern Indians*, (Washington, DC: Smithsonian Institution Press, 1999), 104.

²⁰⁹ Father Ximinez, *Cuartos libros de la naturaleza y virtudes de la plantas y animalos de uso medicinal en la Nueva España*, (63 - 4).

²¹⁰ Bushnell, *Situado and Sabana*, 116.

²¹¹ Rebolledo Visita, 1657. (Hann, *Apalachee*, 130).

²¹² Bushnell, *Situado and Sabana*, 56 - 7.

We may have an answer in the early years of St. Augustine. Lower class Spanish soldiers took Timucua woman as servants, concubines, slaves, and only rarely wives.²¹³ These women were the brewers of *caçina* in Timucua society.²¹⁴ Furthermore, after Santa Helena in Guale was abandoned in 1587, many of the soldiers brought Guale woman back to St. Augustine. Archaeological fragments prove women evidently brought their cooking methods and pottery styles back to the presidio.²¹⁵ With the *situado* often arriving late (or not at all), the Spanish colonizers were eager for local foods.²¹⁶ But *caçina* as it was traditionally consumed offered more than liquid. It could “combat disease.”²¹⁷ These soldiers were turning to Timucua women for support as concubines or slaves to bring them food and drink, but also trusting them with their medical care? These relationships would further explain why some of the Timucua medicinal understandings of *caçina* endured, separate from its broader religious contexts. In 1615 it already had quite a medicinal reputation. According to Francisco Ximénez, even an inquisitor in Spain, Juan de Llanos de Valdes had requested two Timucua to come with yaupon leaves to prepare the drink to help cure a urinary tract disease.²¹⁸

By at least the early 1660s, *caçina* was seen as an important part of the maintenance of a garrison town in Guale. When attacks from a people called the Chichimecos²¹⁹ began to

²¹³ Barbara Voss, “Gender, Race, and Labor in the Archaeology of the Spanish Colonial Americas,” *Current Anthropology* 489, no. 5 (2008), 869 – 70. Parrish marriage records in St. Augustine indicate that most marriages were between *criollos* and *peninsulares*.

²¹⁴ Laudonnière; Tamara Spike, “To Make Graver this Sin: Conceptions of Purity and Pollution Among the Timucua of Spanish Florida,” Unpublished PhD Dissertation, (Florida State University, 2006).

²¹⁵ Kathleen Deagan, “The Material Assemblage of 16th Century Spanish Florida,” *Historic Archaeology* 12 (1978), 31.

²¹⁶ Bushnell, *Situado and Sabana*, 78.

²¹⁷ Spike, “Graver this Sin,” 33.

²¹⁸ Ximenez, *Cuartos libros*, (63 - 4). It is unclear if these Timucuan came from Florida or elsewhere, but I will assume they came from Florida since that is the only place Timucua lived at this time.

²¹⁹ Although this is a name the Spanish gave to a group of people in Mexico, it is possible that they either thought these were the same people, or that they thought that they acted in a similar, warlike, way.

threaten allied Guale towns and missions, the governor at St. Augustine sent Captain Antonio de Argüelles to the leaders of those towns to see if they wanted a fort and to see whether or not they would agree to supply the soldiers who would have to be stationed there. They agreed. We don't know the exact amount of *caçina* promised at that meeting, but later on, in 1701, a similarly sized garrison was supposed to be supplied with 60 *veces de cazina* each month.²²⁰ This wording prompts a couple of interesting questions about the process of commodifying *caçina*. Exactly how was it brought to the soldiers? If we translate the word “*veces*” literally we get “times.” Amy Bushnell renders this word “brewings” with, I suppose, the sense that the tribute represents the result of 60 doses per made for the soldiers. Another possible reading is it represents enough leaves for someone in the fort to make it 60 times. Were the soldiers accustomed to have a batch brewed twice a day? This habit was possibly constructed by the practices of the Timucua who initially showed them how to drink it. It was drunk twice a day to ward of sickness.²²¹

The building pressures of running a colony losing its resources also helped divest *caçina* of its religious and ceremonial trappings. In the late seventeenth century, the English began to ally themselves with the towns and villages of the Westo and Apalachicola regions north and west of Florida, where some of the provisions for Florida originated. These alliances, coupled with an increasing threat of English and French pirates, outright warfare, and slave raids of the Lower Creek towns and their English allies, prompted Spanish authorities to ask more of the Timucua, Guale, and Apalachees in tribute. The Franciscans and soldiers competed for dwindling resources and *caçina* became a

²²⁰ Bushnell, 178; Caciques de Guale, 1701; Hann MS 35; AGI, SD, 840.

²²¹ S. J. P. de Charlevoix, “Journal d’un Voyage Fait par Ordre d’u Roi dans L’Amerique Septentrionale; Adresse á Madame la Duchesse de Lesdiguières,” (Paris: Chez la Veuve Ganeau, 1744).

bargaining chip in these debates. For example, in many of the council houses, both Franciscans and soldiers had permitted dances, as long as the dancers were present for any work duties related to food production or Christian ceremonies the next day. This practice often caused problems, especially with the friars, because towns that had converted to Christianity celebrated the holy day corresponding with the name of their town or chief, by dancing in the council house. Threats from “wandering Indians” may have also increased fears of people reverting to pagan practices. Apparently it was common for the dancers to bribe the lieutenants and soldiers with *caçina* to dance dances forbidden by Franciscans. In August of 1682, one such dance was planned at the council house of the pueblo of San Joseph de Ocuya, in honor of San Lorenzo and the chief who shared his name. As the night wore on, Fray Juan Arias de Servantes began to wonder why the dancing had not stopped. Informants told him that Captain Francisco Fuentes had arrived, and that the dancing was continuing in his honor because the captain had allowed it. Servantes was furious, raging in a complaint that the captain was nothing more than “worm shit” and that it was well known that for “[baskets] of cassina, maize cakes, hens and even watermelons,” lieutenants would allow the Guale to do as they pleased.²²² Even as Spanish authorities had to relocate allied Guale villages so as to protect them against the threat from Carolina, they still had to make sure *caçina* was near the new locations. In August 1684, several Guale chiefs were reportedly “pleased” with the new locations for their villages chosen by the Spanish because, among other things, of the abundance of *caçina*.²²³

²²² Hann’s source says that this word is *tacalos*, he renders it “baskets”.

²²³ Hann MS 56; Juan Márques Cabrera, Auto, St. Augustine, August 21, 1684; AGI, SD, 226, <https://ufdc.ufl.edu/AA00039453/00001>.

As a commodity, exacted as tribute, *caçina* also became a status symbol and a product interwoven into the complex society of not only St. Augustine, but the Spanish Empire in the Americas. By the seventeenth century, chocolate was certainly drunk at intervals throughout the day in Spain and “a day without chocolate came to be viewed as a one of great suffering.”²²⁴ We know from inventories of at least one soldier’s estate that chocolate was certainly something that could be occasionally found in Florida, but of course that assumes the *situado* arrived on schedule.²²⁵ A newly arrived governor might bring his own stash too. Pablo de Hita Salazar had above 300 pounds of cocoa imported over the course of his tenure as governor in the 1670s and 80s.²²⁶ Chocolate was a luxury drink and even more so in Florida, on the frontier of Spain’s empire in the Americas.²²⁷ In the early days of the colony, in times of famine or hardship *caçina* was commonly a fallback along with other products from Timucua and Guale villages. Another process was at work here as well in commodifying *caçina*. Timucua, Guale, and Apalachee leaders sought out Spanish clothing, weapons, and other status symbols—chocolate was likely one of the luxury items that could bestow elite status. Perhaps chocolate, in creating a hierarchy of beverages in Florida, pushed *caçina* into that hierarchy, not as a drink connected to indigenous religion and society, not as part of a series of actions embedded with cosmic and historical meanings, but as a consumable item which purveyed social status, and not just religious purity.

²²⁴ Norton, *Sacred Gifts, Profane Pleasures*, 195.

²²⁵ “Disposition of the Estate of Captain Francisco de la Rua, deceased in St. Augustine, 1649”, Hann, MS 62, <https://ufdc.ufl.edu/AA00039463/00001>.

²²⁶ *Residencia* of Pablo de Hita Salazar, December 1680, *AGI Santo Domingo*, 226, ff. 86v – 88r.

²²⁷ Although it became more common in the eighteenth century: Kathryn Ness, *Setting the Table: Ceramics, Dining, and Cultural Exchange in Andalucía and La Florida*, Gainesville: University Press of Florida, 2017, 89.

Consumption and the social status it brought proved tempting. *Peninsular* and *criollo* families, like the Florencias in Florida, used *caçina* to set themselves apart from Native Americans and *mestizos*. Connected to the *situador* in Mexico City (the person who oversaw the release of food, goods, and coin to Florida) the Florencias frequently manipulated that connection to profit from late shipments by selling their surplus to local people. The Florencia family might have sought out more “luxury” goods like chocolate or tobacco and may have even tried to buoy their status in the community (or at least in the eyes of Crown auditors Crown in Havana), by claiming to freely hand out tobacco and “*acasina*,” in times of dearth, likely the baskets of *caçina* that were part of the *sabana* system.²²⁸

The Florencia family is also a good example of how these extra pressures in towns with a blockhouse could turn *caçina* into a bargaining chip as well. They exploited their status by making demands that the Apalachee found tyrannical. Among other things they were accused of whipping women until they miscarried, and randomly forcing nursing mothers to leave their babies to gather nuts. So eager were the Apalachee to remove the family wholesale that during a *visita* by Juan de Ayala in 1710, the leaders of the town took one of his notaries aside and complained to him in the council house in private (Ayala was reputed to be a friend of the Florencias). In desperation they offered to provide all remaining soldiers with “as much *caçina* as they needed.”²²⁹ As in other regions of the Spanish empire in the Americas, individuals who attempted to emulate Spanish practices

²²⁸ “Testimony of Captain Juan Ruíz Mejia”, St. Augustine, July 8, 1709. AGI, SD, 843; Hann, doc 007, <https://ufdc.ufl.edu/AA00038865/00001>.

²²⁹ “Testimony of Manuel de Quiñones” (1721); AGI, Escribanía de Cámara, 153, <https://ufdc.ufl.edu/AA00038870/00001>.

and customs could also face a steep cost for defection.²³⁰ *Caçina* was so successful as a commodity and in demand in Florida that by 1700, at least some *caçina* had to be kept under lock and key in Guale villages.²³¹ The lieutenant kept one key and the principle cacique of a town the other.

In many ways the history of Florida from the time of Ponce de Leon in the sixteenth century through the war of blood and fire on the last missions by South Carolina's Colonel James Moore and his Creek allies in the early eighteenth century is a sad one. Hernando de Soto pillaged and raped his way through the region. Juan Pardo did much the same but further north. Once the Spanish Crown decided to settle permanently, they did so in much the same way as a dog pees on a tree: to claim territory in face of its rivals. Once settled in, the Crown often failed to maintain its colony in any meaningful way and the burden fell on the nearby Timucua first, then the Guale further north, and finally the Apalachees to the west. When the Franciscans came, they strove to end the beliefs of those peoples and lovingly whipped their own faith into many a back. Even resistance had a bad end. Some of the Guale revolted and the revolt ultimately brought back the Spanish who they had thrown out. Then Timucua and the Apalachees revolted. The result was much the same. In the end, the result was an abandoned and razed colony, but as I pointed out at the start of the chapter, endings are not everything. What *caçina* helps us see through the history of *La Florida* is that dichotomies like "beginning and end" or "conqueror and conquered" can only force narratives to take certain courses. Perhaps it is better to focus on the local and

²³⁰ Wilcox, *Pueblo Revolt*, 80.

²³¹ "1701 Visitation of Guale and Mocama." AGI, Seville, Santo Domingo 858; Hann MS 35, <https://ufdc.ufl.edu/AA00038907/00001>.

the circumstantial and build narrative from there.²³² Or perhaps, to put it more simply, it helps one see hope in what seems like a hopeless story. Matthew Restall suggested that there were “Seven Myths of the Spanish Conquest” and the story of *caçina* in this chapter allows us to plainly see his answers to each of them in Florida. Maybe that is a reason the historiography of Florida isn’t quite as large as that of places like Mexico or Peru. It never fit those trajectories. No one who has read anything about the full history of Florida would ever argue that the conquest was complete. No handful of adventurers ever conquered much of anything in the Southeast, in fact almost every *entrada* ended in death and disaster. There was never any sustained superiority in Florida, only a precarious compromise. No great white King’s army ever won successful great battles. Generational revolts and frequent *visitas* and *residencias* show us that miscommunication was much more complicated than one side simply not recognizing what the other was saying. The only myth of Restall that would seem to apply to Florida is that of “native desolation.”²³³ Despite the destruction and death that really occurred in *La Florida*, *caçina* helps us see that end as only a small part of the story. And it provides the first clues to why later European bioprospectors like William Bartram would be keenly interested in yaupon, not for its wider cosmological connections, but for its medicinal uses. By the late seventeenth century, *caçina* had not been replaced by the sacraments, but existed alongside them, seemingly divested of much of its original ceremony, but not so well as to keep Spanish authorities from asking questions about it.

²³² David Tavárez “Autonomy, Honor, and the Ancestors: Native Local Religion in Seventeenth Century Oaxaca,” *Local Religion in Colonial Mexico* ed. Martin Nesvig, Albuquerque: New Mexico University Press, 2006, 120 – 1.

²³³ Matthew Restall, *Seven Myths of the Spanish Conquest*, New York: Oxford University Press, 2003.

I now return to the unnamed Timucua woman's request from Leturiondo's *visita* of 1678 whose story began this chapter. Why did she have to ask for the right to consume caçina? What happened? Over the course of the seventeenth century, the meanings invested in the brewing and drinking of caçina were attacked. The Franciscans offered alternatives for its purifying powers. Colonists demanded it as a tribute from peoples they saw as defeated and it became a bargaining chip for all parts of society in a variety of disputes. All this happened without ending the production or consumption of caçina. With this in mind, there are some intriguing possibilities for why the unnamed woman approached Leturiondo. The physical process of brewing the drink seems to have changed very little, even as late as the early eighteenth century. Perhaps the visual culture of the brewing process preserved and embodied memories of its past. Even as caçina became more and more like a simple commodity on the surface, the memories of its old uses remained. Divested of its outward connections to an older cosmic order, might it have begun to undergo a transubstantiation of sorts? Just as the wine became the blood of Christ, maybe caçina maintained invisible, but substantial connections to a pre-Christian world. Or to put it another way, if chocolate and tobacco could retain some of their connections to Maya and Nahua ritual even as they were consumed by Europeans, why couldn't memories of caçina's pre-Christian heritage linger for the Timucua, Guale, and Apalachees? If this were the case, one possibility was that use had been suppressed among women for fear of witchcraft. As early as Pareja's *Confesionario* in 1615, Spanish authorities recognized the possibility that among other herbs, caçina might be used for spells, charms, and even to cause abortions. Was there some fear that she was an *herbalarío*, a *conjuradora*, or, perhaps a midwife? Perhaps some evils were worse than others. Although I have found no

records of it, it is possible that women were occasionally accused of witchcraft as brewers of *caçina* for their Spanish husbands. Perhaps this is why Leturiondo exacted a promise that she would brew it only for herself. Was she genuinely ill? Maybe. But it seems strange since *caçina* was widely brewed and consumed well after Leturiondo had left Florida that someone would feel the need to ask permission. Did she have to ask because she was a woman? Did having a Spanish captain's approval facilitate her use of a medicine that she would have otherwise been unable to use? Perhaps, like some of the people who relocated to the Jemez forest to resist Spanish colonialism during the Pueblo Revolt in New Mexico, she was trying to maintain "social distances or conceal cultural practices" from the Spanish. In this case social distance is social deference because of an inability to relocate, but that deference could have allowed her to safely maintain cultural practices. I'm not sure there is a single answer, but the possibilities presented by her question and Leturiondo's answer can help us better understand the history of the Timucua, Guale, Apalachee, and Spanish colonists. Now we turn to eight hundred Apalachees who, taking control of their own destiny in the face of Moore's wars, decided to travel west to the French colony of Louisiana and the fort of Mobile in in 1704. There they invited some of those French colonists to eat and drink with them on the feast day of the patron saint of the town they had left behind, Saint Louis.

Chapter Three

"It is mixed"²³⁴: Yaupon Drink and the Shatter Zone in the Eighteenth Century

Philip Georg Baron von Reck had lived in Georgia for two years and he still did not have a town. That would all change soon though. He had arrived in Georgia from Salzburg, led by his minister Johann Martin Boltzius. Boltzius was close to negotiating a deal with the governor, James Oglethorpe, that would allow him and his fellow Lutherans to construct their own town a few miles inland. In his time in Georgia, he had gotten to know many of the aboriginal inhabitants, people who called themselves Yuchi, and had even lived with them for a bit. With more than a passing interest in drawing this new world he found himself in, he had compiled a sketch book with many of the Yuchis he had met, as well as some local plants and animals. Today was a special day. The town was expecting the arrival of a mico, what the Indians called a chief, to arrange for a treaty in Savannah. When the Creek man named Chigilley arrived, he initiated conversation with Governor Oglethorpe by telling a story. As it was translated, von Reck came to understand he was hearing not some simple overture to peace, but the history of this man's Nation. And what a horrible past it was! War, famine, depravation all forcing his people to move. Perhaps there was some truth to the idea that these were the descendants of the Lost Tribes of Israel and this was some faint recollection of the Exodus. Thankfully his own Pilgrim's journey had finally ended when they were offered some of the Indians' tea, casseny, as the English called it. Von Reck had heard of the medicinal benefits of this tea, but had never found it quite to his taste. Nevertheless, as the drink was passed around promoting peace between English, Salzburger, and Creek, he thought it best to take it enjoy it. After all these men were his new neighbors.²³⁵

The white path that Chigilley had negotiated had been bought by walking a red one nearly a generation earlier. In the late summer of 1704, several hundred Apalachees from Mission San Luis de Talimali appeared on the outskirts of the French settlement of Fort Louis at Mobile. These men, women, and children seemed in some ways strikingly different than the Mobileans and Chatos the French had met since they arrived in the lower Mississippi valley. They were dressed as Spanish townspeople and carried crucifixes and

²³⁴ Yaupon is a Muskogee word that literally translated means: "it is mixed".

²³⁵ This migration story has a strange history. No English version of the story remains, but Philip Georg Baron von Reck, a Protestant immigrant to Georgia and present in 1735 when Chikilli Mico spoke with Governor James Oglethorpe, recorded what he heard in German as part of his diary and sketchbook. The sketch book is available, digitized on the website of the Royal Library of Denmark at: <http://www5.kb.dk/permalink/2006/manus/22/eng/>. The English version of the story that now exists was first published by Albert Gatschet: Albert Gatschet, "A Migration Legend of the Creek Indians," Philadelphia, 1884, 236.

rosaries. They asked to settle nearby, for the protection afforded by the local garrison, and priests to minister the Holy Sacraments²³⁶. Some of them were likely descended from Spanish soldiers who had intermarried with the Apalachees at Ivatichuco, the town Mission San Luis was built around. They came to Mobile because they felt the Spanish soldiers and governors of Florida had failed (and in some cases abused) them²³⁷. English raiders and slavers, led by James Moore from Carolina and their Creek allies, had burnt almost all the missions of Florida and killed or enslaved the people of those settlements in the first few years of the eighteenth century. Bereft of spiritual and worldly care in Florida, they sought it elsewhere.

In the last chapter we saw an example of how subtle and not so subtle changes deeply cracked the world of the Southeast. Even though many Native Americans resisted conquest and the changes Europeans brought, others immediately began to fill in these cracks with new ideologies, as well as religious and political practices which they refined over time to negotiate and claim power in the colonial Southeast. Yaupon drink helps us understand how people in the Southeast, colonists and Native Americans, suffered and thrived in what Robbie Ethridge has called the “shatter zone.” Her shatter zone is in fact defined by the forces that shaped the end of the last chapter and the beginning of this one: disease, political instability, slave raids, and economic upheaval.²³⁸ Although Ethridge

²³⁶ Jay Higginbotham, *Old Mobile: Fort Louis de la Louisiane, 1702-1711*, Tuscaloosa: University of Alabama Press, 1977, 189 – 90. Abstract of Letters from Bienville to Ponchartrain, July 1706, in *Mississippi Provincial Archives* vol. II eds. and trans. Dunbar Rowland and Albert Sanders, Jackson, MS: Press of the Mississippi Department of Archives and History, 1929, 25.

²³⁷ Memoir of D’Artaguette to Pontchartrain, September, 1712, in *Mississippi Provincial Archives* vol. II eds. and trans. Dunbar Rowland and Albert Sanders, Jackson, MS: Press of the Mississippi Department of Archives and History, 1929, 72.

²³⁸ Robbie Ethridge, “Introduction,” *Mapping the Mississippian Shatter Zone: The Colonial India Slave Trade and Regional Instability in the American South* eds. Robbie Ethridge and Sherri Shuck-Hall, Lincoln: University of Nebraska Press, 2009, 2.

initially faced some criticism for her phrasing, her approach has continued to help archaeologists ethnohistorians, and historians understand the “destabilization and reformation” of societies in the Southeast in areas where historical sources are scarce.²³⁹ Ethridge and Charles Hudson also contend that these fissures allow societies to forge new ties in what they term a “coalescent society.”²⁴⁰ John Worth delineated several responses to the shatter zone that coalescent societies might take: contraction, relocation, aggregation, confederation, and assimilation.²⁴¹ We saw all of these as they were experienced by the Timucua, Guale, and Apalachee. Each of these categories are not mutually exclusive, but the policies of the Spanish Crown and the Franciscans dealt with Native Americans very differently than the English Crown and the Lords Proprietors and traders of Carolina and Georgia. For this reason, it is much easier to see adoption of the empowering aspects of Spanish colonial presence as a response to the shatter zone in Florida. The mission system offered a powerful alternative to *caçina*, while Spanish trade goods adorned the bodies of chiefs. In this chapter we will broaden our scope and see how *caçina* (known as *asi* to Muskogee speakers of the Upper and Lower Creek towns and “black drink” to English traders) reveals how Creeks, Cherokees, and British colonists navigated the shatter zone.

By the time we have the written records of European observers outside of the Gulf Coast, over a hundred years had already passed since the Spanish established the *sabana* system to support their forts and the Franciscans’ missions. Older trade routes running

²³⁹ Ethridge, “Introduction,” 2 – 3; 42 n.3.

²⁴⁰ Charles Hudson, “Introduction,” *The Transformation of the Southeastern Indians* eds. Robbie Ethridge and Charles Hudson, Oxford: University of Mississippi Press, 2002, xxvii.

²⁴¹ John Worth, “Spanish Missions and the Persistence of Chiefly Power,” *The Transformation of the Southeastern Indians* eds. Robbie Ethridge and Charles Hudson, Oxford: University of Mississippi Press, 2002, 50 -3.

from the Gulf Coast to the Tennessee, Ohio, and Mississippi River valleys had once carried yaupon leaves and busycon shells from the Gulf Coast of Florida to places as far away as Spiro in modern Oklahoma. Was this trade interrupted? I first look at archaeology and documents to see how the material culture of yaupon tea survived or changed across the interior Southeast from the late seventeenth century through the early nineteenth. In John Lawson's *A New Voyage to Carolina*, we will see some Native Americans made a place for themselves as merchants and took advantage of shortages of yaupon. On the other hand, Creeks and Cherokees were not content with the redirection of yaupon trade and as savvy players in the colonial Southeast, they found a way around the shortage. As we have seen, the tea was much more than boiled leaves. Other items traded from the Gulf Coast were a part of yaupon's connection to a larger cosmos. How did people continue to use yaupon? The tea was mostly parched, boiled, and prepared in earthenware bowls during the Mississippian era. Did European trade goods like kettles become part of *asi's* material culture. Were any substitutes for the busycon shells from Florida's Gulf coast used to drink the tea?

As I showed in Chapter One, Shells, pots and beakers also embedded *asi* in a symbolic world much more complex than its material culture. Brewing and drinking *asi* embodied it in the daily practices of Creek and Cherokee alike. The next section of this chapter will offer a narrative showing how *asi's* place slowly changed as other liquid options and practices became more popular. We will see how the Creek and Cherokee saw *asi* as a white medicine for peace and purity. English and French traders offered competition in drinks and practices, just as the Franciscans had offered the sacraments. *Busycon* shell cups and items made from the same shells were markers of identity and

bundles that connect individuals and whole communities to their past and the larger cosmos. Objects that Europeans traded like glass beads and cups might slowly usurp the place of shells? As we will see, especially in the case of the Cherokee, some societies had already adapted yaupon tea into their beliefs and practices in ways that were different from what we saw along the Gulf Coast and were perhaps better able to adapt to the changes and opportunities time and trade held. There were also political and religious implications of these disruptions. Yaupon's social and cosmological place suffered as access lessened to not only the leaves of the tree, but also the ceremonial shells leaders used to drink it? Among the Timucua, Guale, and Apalachee, *caçina* also served as a political tool. It was consumed by leaders in council meetings. Furthermore, among the peoples I examined in the last chapter, it served as a marker of gender roles, since women prepared it for these council meetings and only men drank it. Did other people use it the same way and if so did the shatter zone cause changes to these practices? We also saw in the previous chapter that Christian sacraments offered an alternative to the cosmological power of *caçina* by offering a competitive purity. Did the English in Carolina, especially with their resistance to Catholicism, offer another option to compete with *asi*? Like the Spanish they created outposts in the interior, but instead of missions, these were centers of trade. I show that there was room for trading posts to fill a social niche similar to the Franciscan mission system and that traders and trading posts offer the similar opportunities for advancing social status that the Franciscans and their sacraments did? Finally, I consider the results of all these changes and explore how yaupon tea changed as the socio-political environments changed, while some of its symbolic connections to an older cosmos endured.

In the first chapter of this dissertation I explained the key components of the material assemblage of *asi*: yaupon bushes, shell cups, beakers, cazuela bowls for toasting the leaves, and large pots for boiling the water. Beakers, cazuela bowls, and pots were relatively easy to make from local clays, but both the shell cups and the yaupon bushes came from the Gulf coast of Florida and so their trade was likely disrupted by the Spanish soldiers, colonists, and Franciscans as they demanded it as tribute. In fact, John Lawson, a botanist and physician travelling through the Carolina and Georgia Piedmont in 1700, remarked that yaupon was a dear commodity to groups inland. Not only did Native Americans of the coast trade it inland he said, but they also sold it at a “considerable price.”²⁴² It is unclear exactly who in Lawson’s account the “savages” of the coast were sending it to, or which group was collecting yaupon. Mark Catesby, writing a half century later, clarifies the picture somewhat. He noted that some unnamed Cherokee towns “brokered” the trade of yaupon further inland, once they had procured it from the coast, to people to their north and west. Exactly which peoples he meant here, especially those to the north, is intriguing, since I have encountered no evidence that any towns north of what is today eastern Tennessee, used yaupon in the seventeenth or eighteenth centuries. Of course it is also possible that he simply means Lower towns traded it to Overhill towns.²⁴³ At least some of the Overhill Cherokee towns like Tanasi and Cherokee town, were eager consumers of urban Atlantic culture, so perhaps the Native Americans of the Carolina coast

²⁴² John Lawson, “A New Voyage to Carolina,” 1709.

²⁴³ Mark Catesby, “The natural history of Carolina, Florida, and the Bahama Islands vol II,” (London, 1754), 57.

were also following the practices of traders of Carolina, trying not only to make money, but position themselves as competitors to trading houses in Charleston.²⁴⁴

Another bit of evidence for yaupon being traded widely in the Southeast in the seventeenth century comes from Virginia. According to Phillip Miller, an English botanist and gardener, Virginians were drinking “cassine” In the seventeenth and eighteenth centuries.²⁴⁵ They called the drink, Miller remarks, “yaupon.” “Yaupon” is a Muskogee word meaning, “it is mixed.”²⁴⁶ Most of the Native Americans with whom the Virginians interacted spoke Algonquin, Siouan, and Haudenosaunee, that the Virginians would not just know, but also regularly use a Muskogee word is somewhat puzzling. It is possible that they learned this from their English neighbors to the south in Carolina, who would have had many opportunities to hear this word in their negotiations with the Creek towns of the interior, or perhaps they were trading fairly far afield. There was certainly an opportunity for the Carolinians to sell yaupon to others, if Miller is right in asserting that the colonist there found it distasteful.²⁴⁷ Either way that Virginians could use yaupon, speaks to how well this drink percolated through a changing Southeast.

Earlier still in 1685, a spy mission orchestrated by the governor of La Florida gives us a glimpse at how the English already understood the value of yaupon and how scarce it had become. Florida’s governor, Juan Marquez Cabrera, had ordered Yamasee spies to investigate reports of English merchants trading among the villages of the Lower Creek

²⁴⁴ Nathaniel Holly, “From Itsa’ti to Charleston: The Urban Lives of Cherokees in Early America,” unpublished PhD dissertation, College of William and Mary, 2019.

²⁴⁵ Phillip Miller, “The Gardner’s Dictionary,” 2nd edition, (London, 1733), no pagination, <https://archive.org/details/gardenersdictio03millgoog/page/n279/mode/2up>.

²⁴⁶ Patricia Wickman, *Osceola’s Legacy: Man vs Myth*, (Tuscaloosa: University of Alabama Press, 2007), 76.

²⁴⁷ Miller, “The Gardner’s Dictionary,” no pagination, <https://archive.org/details/gardenersdictio03millgoog/page/n279/mode/2up>.

Apalachicola. Sure enough, two of the spies reported to deputy governor Antonio Matheos that an Englishman had come into Apalachicola and promised weapons in exchange for beaver and deer skins. One of the Yamasee saw another Native American man arrive at the town of Cauetta from Apalachicola and tell everyone that the English had arrived and then he asked for some “*sesina*.” Upon hearing this, the spy disguised himself and made his way to Apalachicola.²⁴⁸ Even as yaupon was becoming scarce, English traders and diplomats quickly understood the drink’s value and power.

But it is not quite as simple as that vignette suggests. Evidence for yaupon travelling inland reveals a picture of change over time. Lawson was writing in 1700, before several wars changed the political landscape of the Southeast. As these wars continued to entangle more inland Native American towns and disrupt trade patterns, Creeks and Cherokees planted their own yaupon bushes. The English botanizer William Bartram, writing in the late eighteenth century, remarked that both the Lower Cherokee and the Creeks had groves of the plant transplanted around their villages.²⁴⁹ At “Jore” (near modern Morganton, North Carolina) he remarked that he saw a “a little grove of the Casine yapon...”²⁵⁰ He wrote further that this was the only place that he saw it growing in Cherokee lands; a fairly interesting statement for a botanist who had travelled through many of the Lower and Middle Cherokee towns. He also tells us that the Cherokee there called it a “Beloved tree” and took care to keep the tree pruned. Even though this is the only place in “Cherokee country” he saw the grove, he maintained that the Cherokee all drank it. So if the Cherokee

²⁴⁸ Cloak and Dagger in Apalachicola province. Juan Matheos to Governor Cabrera, May 21, 1686.

²⁴⁹ *The Flower Hunter and the People: William Bartram in the Native American Southeast* ed Matthew Jennings, Atlanta: Mercer University Press, 2014, 58 – 9.

²⁵⁰ This town is likely the “Joara” taken over by Spanish soldiers under Juan Pardo in the 1540s.

were drinking it, where did it come from if it was not grown in groves near each village? Admittedly Bartram did not make it to the Overhill towns, so there could have been groves there, but what about the Lower towns he passed through? Maybe the area near Joara was the place yaupon grew best, since it naturally becomes more common closer to the sea, perhaps this town had specialized in cultivating it. If that were the case, its cultivation represents an astute business practice for that town, since its location would have made supplying Virginians easier.

Aside from the tree and its leaves, pieces of the material culture of the drink likely changed over time. As I argued in the first chapter, one of the most power symbols that embodied the Mississippian cosmos in the material culture was the left-handed whirl of the busycon whelk shell. Although these shells can be found from Florida to Virginia, shells chosen for drinking cups were nearly all from the Florida Gulf coast.²⁵¹ At least as late as the 1720s, we have some evidence that the shells were still in use. Baron Marc du Villiers drew an Upper Creek Townhouse that appears to hold at least one busycon shell.²⁵² The whelk shells were curated in public town houses, kept as ceremonial items, along with a pot and dipper, all tools used in the production of *asi*, and other ritual drinks. For at least one of the shells we can reasonably speculate that it was indeed one of the “sinister” or left-handed whelks whose spiral was counterclockwise. The middle shell’s opening indicates that such a wrapping would have not only echoed the cosmological connections to the counterclockwise spiral, but would have also allowed the “beak” of the shell, its most

²⁵¹ Laura Kozuch and William Marquart, “The Lightning Whelk: an Enduring Icon of Southeastern Native American Spirituality,” *Journal of Anthropological Archaeology* 42 (2016), 1 – 26.

²⁵² Image reproduced from Charles Fairbanks, “The Function of Black Drink among the Creeks,” *Black Drink: A Native American Tea* ed. Charles Hudson, 1999, 133.

narrow end, to function as a funnel, to deliver the tea more quickly. Whelk shells, unlike yaupon leaves, can be curated for a long time without decay, so that a particular town's shells might be held on to for decades, or centuries. The archaeological record indicates that shells were only occasionally buried with leaders, vulnerable populations, or to ceremonially open or close a public space. (see Chapter One). One would expect shells then, to be some of the last items to disappear, even with a shattering of trade. In fact, it was not until the early nineteenth century that whelk shells as cups for *asi* began to disappear from written descriptions. An anonymous ranger who travelled with Georgia governor James Oglethorpe in 1742 into the back country, reported that shells were still in use in the lower Creek town of Coweeta. Upon the arrival of the governor's party, the mico greeted them with "English colors" but also "black Drink in Conch Shells."²⁵³ However, we have other pieces of evidence in an eighteenth-century drawing by a French traveler (Figure 16) that suggest busycon shells were becoming less common. Left of center are three objects that appear to be dippers or cups for *asi*, but only one of these is indisputably a busycon shell, the middle of the three. The two on the left may also be busycon shells, but they might also be gourds like the ones described by Jean-Antione Le Clerc that were used during his initiation as war chief of the lower Creeks in the 1780s (discussed in more detail below). Likewise, David Taitt, the Scottish Deputy Superintendent to the Lower Creeks, often described the men he saw in the public square "at black," as using "calabashes" or gourds for their daily dose of *asi*. A drawing by Phillip von Reck, a Protestant immigrant to Georgia in the 1730s, also shows a Yuchi man prepared for a hunt carrying a gourd and a

²⁵³ "A Ranger's Report of Travels with General Oglethorpe," 1739 – 42 in *Travels in the American Colonies* ed. Newton Mereness, (New York: Antiquarian Press, 1961), 220. The Ranger likely meant one of the *busycon* shells mentioned in Chapter One.

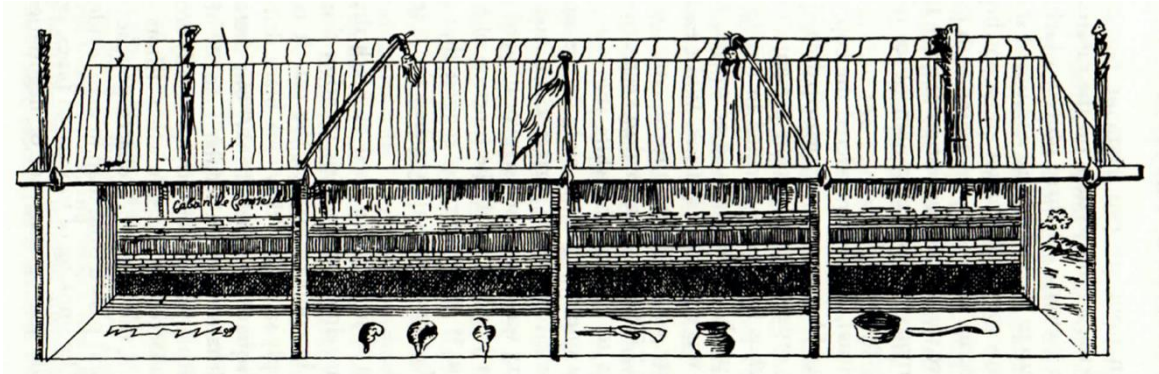


Figure 16: A Creek Townhouse from the eighteenth century. Source: Fairbanks, "The Function of Black Drink," 133.

backpack with an iron pot (Figure 17). It is not clear that he was carrying *asi* in this gourd, but there is reason to believe that Baron von Reck was interested in the tea. Among the images in his sketch book were not only scenes from Yuchi life, but also drawings of a few plants and animals. “Cassini” is one of these plants. Von Reck’s drawing also indicate that at least the Yuchis also schewed European goods for ones made by other Native Americans.²⁵⁴ We know from earlier ethnohistorical evidence that Native Americans in the Southeast sometimes carried yaupon with them in “calabashes.”²⁵⁵ We also know, from Louis Le Clerc’s description of his initiation as a war chief among the Creek, that gourds were painted according to their use. I think it is reasonable to suggest that the white gourd carried by the man in (Figure 17) could have contained yaupon tea.

Further north in the towns of the Lower, Middle, and Overhill Cherokee, we might expect to see fewer objects from Florida’s Gulf Coast, even before the Spanish reoriented Southeastern trade networks. Before the Spanish, the Cherokee had access to the Gulf’s busycon shells, but they also had other trade routes that would prove helpful when Spain’s *sabana* system began to redirect some trade toward St. Augustine, Franciscan missions, and Spanish garrisons in *La Florida*. Ancestors of the Cherokee, in what archaeologists call the Dallas phase of the Mississippian culture in Toqua, were able to get some of the shells from the Gulf, but in some cases, other types of shell were used. For example, there is a burial at Toqua with a whelk of the species *Cassis cameo* found on the Southeastern Atlantic coast. Specifically, at Hiwassee Island there was a pendant carved from a *Cassis*

²⁵⁴ Jessica Yirush Stern, *The Lives in Objects: Native Americans, British Colonists, and Cultures of Labor and Exchange in the Southeast*, Chapel Hill: University of North Carolina Press, 2017, 136 – 8.

²⁵⁵ Rene Laudionnère mentions this, as does Cabeza de Vaca, both accounts from the early to mid-sixteenth century.



Figure 17: Excerpt from Georg Philip von Reck's drawing, Yuchis going hunting. Source: <http://www5.kb.dk/permalink/2006/manus/22/eng/25+verso/?var=>

tuberosa, which, like the *Cassis cameo*, is found on the Atlantic Coast. The above suggests the Cherokee had other sources for these large shells and were able to reorient their trading as the Spanish economic centers of gravity like Saint Augustine drew more trade into la Florida. This is corroborated by Lawson's statement that the Cherokee were already trading with the Atlantic Coast.

Did Europe's material culture prove as intrusive as its peoples? Europeans also drank tea, though of a different sort. As early as the late 1600s, Native Americans near Charleston experienced British tea culture. On Thomas Lynch's (b. 1675) first house on the Wando River, Eric Poplin has excavated a variety of porcelain cups and other vessels, apparently used by African slaves, Native American slaves, and Europeans.²⁵⁶ Further inland there is less evidence that such cups were sought after. In fact, there was a European demand in Carolina's Lowcountry, at least for a time, for cooking pottery either made by or made in imitation of Native American styles.²⁵⁷ On the other hand, metal kettles (copper in particular) proved extremely popular among Native America leaders as prestige items. Micos held copper kettles in high esteem in the Southeast and these were likely very public symbols of the chief's prestige. Over time we have evidence that these may have begun to gradually take the place of the old earthenware pots. Baron Marc du Villier's drawing (mentioned above) seems to indicate that the Upper Creeks were still using earthenware pots in the 1720s. However, in Jean-Antoine Le Clerc's narrative of how he became a war chief for the Lower Creek towns, priests used two large copper kettles to boil

²⁵⁶ M. Patrick Hendrix, *Down and Dirty: Archaeology of the South Carolina Low Country*, Charleston: The History Press, 2006, 60 – 1.

²⁵⁷ Brett Riggs, "Temporal Trends in Native Ceramic Traditions of the Lower Catawba River Valley," *Southeastern Archaeology* 29, no. 1 (2010), 31 – 43; Enslaved Africans were as involved in making these ceramics as Native Americans.

the water for *asi* and then infused the tea into that water. What we likely see in these two accounts is shatter zone innovation over the approximately sixty years between the two accounts. The material culture only tells us so much though. Did these shortages and new ideas impact the embodied practices of brewing and drinking *asi* or the web that connected it to the larger cosmos?

What exactly did *asi* mean to the people who consumed it in the eighteenth century? One set of its meanings encompassed peace, friendship, and alliance. One of those *micos* trying to navigate the changes of the shatter zone, Chigilli of Coweta, came to Savannah in May 1735 for talks of truce and trade. As part of the speech he made upon arrival, he gives us one of the earliest versions of how the Creek came to the Southeast. In the distant past, the Creek left their homes to the west and travelled east in search of a place to live. War and death followed them. It was not until they arrived at the towns of the Paluchacolas that they found friends. They knew they were friends because they offered them *asi*, the white medicine of peace.²⁵⁸ For the Creeks, *asi* was a key part of how they understood peace and security.

The association of *asi* with peace and friendship seems to span the Southeast and connect disparate societies across space and time, but in the specific ways this plant was used and its broader cosmological connections, there was more diversity. Among the Cherokee and Creek, it is likely that women could consume it in public settings, unlike what

²⁵⁸ This migration story has a strange history. No English version of the story remains, but Philip Georg Baron von Reck, a Protestant immigrant to Georgia and present in 1735 when Chikilli Mico spoke with Governor James Oglethorpe, recorded what he heard in German as part of his diary and sketchbook. The sketch book is available, digitized on the website of the Royal Library of Denmark, <http://www5.kb.dk/permalink/2006/manus/22/eng/>. The English version of the story that now exists was first published by Albert Gatschet: Albert Gatschet, "A Migration Legend of the Creek Indians," Philadelphia, 1884, 236.

we saw among the Apalachee, Guale, and Timucuan. The earliest European to record yaupon use among the Cherokee was Henry Timberlake. Timberlake was a British soldier stationed at the Long Island of the Holston, in what is today Tennessee, in Fort Robinson, built toward the end of the French and Indian War. His superiors asked him to accompany a group of Cherokee to Chota, the Overhill capital, in the western foothills of the Appalachian Mountains, beside the Little Tennessee River. Along the way he travelled to the town of Chilhowie and there was allowed to not only watch *asi* being brewed, but to drink it.

As I was informed there was to be a physic dance at night, curiosity led me to the townhouse, to see the preparation. A vessel of their own make, that might contain twenty gallons (there being a great many to take the medicine) was set on the fire, round which stood several gourds filled with water, which was poured in the pot, this done, there arose one of the beloved women, who, opening a deer-skin filled with various roots and herbs, took out a small handful of something like salt; part of which she threw on the headman's seat, and part into the fire close to the pot; she then took out the wing of a swan, and after flourishing it over the pot, stood fixed for near a minute, muttering something to herself, then taking a shrub-like laurel (which I supposed was the physic) she threw it into the pot and returned to her former seat.²⁵⁹

So, the Cherokee were still brewing yaupon in their own pots as late as the 1760s. Maybe it was a lot of trouble to get the pots over the mountains and not worth it to traders? On the other hand, one Moravian remarked that Cherokee pottery, stained black by pine pitch smoke, looked like fine ironware, so perhaps their ceramics were preferable to anything they could have found in Charleston.²⁶⁰ But the way Timberlake says this also seems to indicate that Native Americans making something in their own pots was somewhat remarkable. After all, why mention it all? This is likely an indication that certain sorts of

²⁵⁹ Henry Timberlake, *The Memoirs of Lt. Henry Timberlake*, London, 1765, 77 – 8.

²⁶⁰ Perdue, *Cherokee Women*, 22.

“physic” and Timberlake called them, required certain types of their own ceramics.

Timberlake also revealed another aspect of Cherokee and Creek culture which we have not yet seen in the Southeast, a Beloved Woman. Beloved Men and Women were individuals who, through their own merit, were given special status by a town. The woman Timberlake saw in Chota was respected enough to have earned the title and oversee parts of the ceremony. She blessed the drink with the swan wing she held and even seemed to legitimize the ceremony by throwing a mixture onto not only the fire, but at the feet of the chief. At this, Timberlake briefly left the townhouse, since there was nothing else happening. It is possible at this juncture Timberlake was asked to leave since he was not part of the select group of people able to brew the tea. When he returned, he found the townhouse full of dancers and one of the “headmen” gave him some of the medicine in a gourd to drink. The man told him it was “a spiritual medicine...taken to wash away their sins.” Timberlake must have asked for more information, since he goes on to describe how the space in which the medicine was drunk was prepared.

They are very solicitous about its success; the conjurer, for several mornings before it is drunk, makes a dreadful howling, yelling, and hallowing from the top of the townhouse, to frighten away apparitions and evil spirits.²⁶¹

Timberlake introduces the complexities of yaupon preparation in the Southeast and perhaps a new way it was understood to work. When he describes the “shrub like laurel” being thrown into the boiling pot, it is only after the Beloved Woman had added several other ingredients. Maybe this mixture is only that of the leaves of the tree and water. It is possible, but the Muskogee word for the drink itself “*asi*” argues that more than yaupon

²⁶¹ Henry Timberlake, *The Memoirs of Lt. Henry Timberlake*, London, 1765, 77 – 8.

was sometimes added to the tea. In Creek, “*asi*” means “button snake root” a war medicine for the Creek.²⁶² Even more so than yaupon, button snake root, also called “rattlesnake master” is an emetic that may have even been poisonous in large doses.²⁶³ It is possible that trade disruptions also forced adaptations to the balance of herbs used to make yaupon tea, depending on its use. Just such a situation occurred later with the Seminoles in the Florida Everglades, descendants of the Creeks from the eighteenth century, who now use button snake root and other plants in making the tea, since yaupon does not grow there.²⁶⁴

The Beloved Woman whom Timberlake saw, also introduces us to another difference regarding how yaupon drink was consumed in the interior. Aside from the Beloved Women, there were also War Women among the Cherokee and Creek. These honored women gained status through deeds in war and were ultimately afforded a place of honor at councils and may have had a special role in preparing *asi*. At Toqua, a late Mississippian Dallas phase town (1300 – 1600 CE), there was one woman buried with a whelk shell necklace. This may be similar to what David Hally has found at the King Site in northwestern Georgia. There, two burials contain biological females interred with male grave goods. Each of the above burials also held a *busycon* whelk shell.²⁶⁵ Although I have found no written descriptions of a War Woman using *asi*, the archaeological evidence argues that they held some power through yaupon drink’s ritual associations.

²⁶² Patricia Wickman, *Osceola’s Legacy: Man vs Myth*, Tuscaloosa: University of Alabama Press, 2007, 76.

²⁶³ Charles Fairbanks, “Function of Black Drink Among the Creeks,” *Black Drink: A Native American Tea* ed. Charles Hudson, Athens: University of Georgia Press, 1979, 123.

²⁶⁴ Charles Fairbanks, “Function of Black Drink Among the Creeks,” 140 – 1.

²⁶⁵ Richard Polhemus, *Toqua: A Late Dallas Phase Town* (Knoxville: Tennessee Valley Authority, 1987), 994; David Hally, *The King Site: The Social Archaeology of a Late Mississippian Town in Northwestern Georgia*, Tuscaloosa: AL: University of Alabama Press, 2008, 262.

Timberlake also introduces the idea that the Cherokee had synthesized some aspects of Christianity into their beliefs. The concept of “sin” is certainly a European one and although Cherokee people felt a need for purity, that the female leader who spoke to Timberlake explained the function of the drink with that word, at least suggests that yaupon tea may have found a new purpose among the Cherokee as they navigated the religious differences between themselves and the English; perhaps in part changing Christianity to fit their needs. On the other hand, it is entirely possible that this Beloved Woman was dumbing down a very complicated process for an English male soldier who she either thought could or would not understand.²⁶⁶ After all, Timberlake’s mission was to solidify a peace treaty between Great Britain and the Cherokee, so it is understandable that some Cherokee might have still regarded him as a foreign enemy. Timberlake’s observations can help us see how *asi* helped the Cherokee cope with the stresses of the eighteenth century. It can also help us understand how the Cherokee coalesced as a society at the very edge of the old Mississippian world.

Asi’s role in town politics also changed as different practices, religious and otherwise, offered competition. While the Spanish Crown and its ministers operated under the ordinances of the *Real Patronato*, to Christianize and Hispanicize Native Americans, the English government had no such official policies.²⁶⁷ The English Crown, colonists, and Carolina’s proprietors of the late seventeenth and early eighteenth centuries saw Native Americans as divided into “tribes” and “nations;” separate and smaller bodies politic with whom they could bargain, make treaties, or wage wars. Day-to-day practices show that the

²⁶⁶ Perdue, *Cherokee Women: Gender and Culture Change: 1700 – 1830*, 17 – 8.

²⁶⁷ I offer the following interpretation as a critique of the differences emphasized by Patricia Seed, *Ceremonies of Possession in Europe’s Conquest of the New World*, New York: Cambridge University Press, 2009.

political realities of negotiation and trade on the ground were much the same as what the Spanish had encountered over a hundred years earlier.²⁶⁸ Appropriation of European goods happened on terms Creek, Cherokee, and the British negotiated in the backcountry and in cities like Savannah and Charleston. Creek micos, Cherokee chiefs, as well as ambitious young men, sought out European gifts in much the same way as Timucuan, Guale, and Apalachee leaders had in Florida in the interests of alliance. English traders married Creek women, even while they had wives on plantations in Carolina and Georgia; mixed unions produced sons with claims to the powerful matrilineal blood lines in towns across the Southeast, just like the Leturiondo and Florencia families had in Spanish Florida. Indeed, it is from the traders who often married into Creek society that we get our first looks at *asi* there. While there were certainly no Franciscan missions under the auspices of the English, traders constructed outposts that held enticing and sometimes empowering European goods. At the same time, they created new spaces and peddling ideologies that, like the missions of Florida, might compete with those of the Creek and Cherokee. In fact, the English had another type of proselytizing in mind. Mendicant traders made their way into the back country of the south and like the Franciscans, they built outposts of European culture.

Trading posts in the backcountry were England's version of the Franciscan missions. Instead of preaching the Gospel, proprietors peddled fruits of the Atlantic economy. Native Americans eagerly sought European goods, so much so that one scholar has suggested that

²⁶⁸ John T. Jurich, *Endgame for Empire: British Creek Relations in Georgia and Vicinity, 1763 – 1776*, Gainesville: University Press of Florida, 2015, 256. Jurich's argument is used here to support the idea that the British avoided what they would consider assimilation, it is my argument that day-to-day practices undermined this policy.

in Henry Timberlake's map, where he names the Cherokee town of Chota a "metropolis," that he got the idea from the strikingly urban sense of taste he saw among the Cherokee there.²⁶⁹ Further south in Creek towns, the deerskin trade reveals a staggering increase of trade goods that must have been making their way inland. The weight of these deerskins was recorded in Charleston and Savannah and from 1721 to 1764, the amount of deerskins tripled that made their way from the backcountry of the Southeast to England.²⁷⁰ Changes in trade altered the political landscape. One of the ways micos held power was through distributing gifts to their followers. An influx of new goods created an imbalance since merchants held the power to choose who their trading partners were. The power of micos began to wane as new outlets opened for young men to increase their status through hunting. The younger men who became wealthy through trade with the English could sometimes usurp the economic positions of these older micos.²⁷¹ As the eighteenth century wore on, younger warriors began to resist the deals their elders made to gain goods to maintain their power, deals the elders wanted to pay for with land.²⁷² Alexander McGillivray is a good example of just such a political opportunist. McGillivray was the son of a woman from the powerful Wind Clan and a Scottish trader who saw opportunities in an aging leadership and the multicultural Atlantic World to which the Southeast was now inextricably bound. Through Creek matrilineal politics he rose to become a paramount chief and to even arrange for another ambitious European, Louis Le Clerc, to join him.

²⁶⁹ Nathaniel Holly, "From Itsa'ti to Charleston: The Urban Lives of Cherokees in Early America," unpublished PhD dissertation, College of William and Mary, 2019.

²⁷⁰ Joshua Piker, *Okfuskee: A Creek Indian Town in Colonial America*, Cambridge: Harvard University Press, 2004, 148.

²⁷¹ Kathryn Braund, *Deerskins and Duffels: The Creek Indian Trade with Anglo-America, 1685 – 1815*, Lincoln: University of Nebraska Press, 2008, 147.

²⁷² Joshua Haynes, *Patrolling the Border: Theft and Violence on the Creek-Georgia Frontier, 1770 – 1796*, Athens: University of Georgia Press, 2018, 45 – 62.

Faced with a new world of trade and new examples of leadership, some young men sought the esteem of their communities as traders and hunters first, and as warriors second. Sometimes, bad blood could cause splits and even warfare between even fathers and sons. The Cherokee Beloved Man Attakullkulla's (Little Carpenter) son, Tsiyu Gansini (Dragging Canoe) left Sycamore Shoals during the negotiations for the Transylvania Purchase, a deal that the Englishman Richard Henderson and his Transylvania Company considered to give them sole rights to approximately twenty million acres.

Rum played a role in this process and could in some cases could offer an option for young men who no longer needed to rely on their elders allowing them to participate in ceremonies of yaupon drink. British policy encouraged the trade on rum, both above and below the table. The drink was so valuable, that even a Spanish governor at Pensacola tried to lure Creek warriors away in 1780 with a promise to "load" them with "presents and rum."²⁷³ The Crown cancelled debts for merchants incurred while trading "perishable food" in the backcountry and "disallowed ten percent" from every trade there as well.²⁷⁴ The liquor was so valuable that merchants would risk their lives swimming for it in flooded creeks to get it back.²⁷⁵ That rum could occupy a similar place as yaupon, is apparent from how Louis Le Clerc was treated before he married into the Creek Nation. As a sort of consolation offering for not being allowed to sit at council, he was given a glass of rum after being asked to leave a council meeting.²⁷⁶ In no way did rum totally supplant yaupon tea,

²⁷³ Joshua Haynes, *Patrolling the Border: Theft and Violence on the Creek-Georgia Frontier, 1770 – 1796*, Athens: The University of Georgia press, 2012018, 79.

²⁷⁴ Paul Pressley, *On the Rim of the Caribbean: Colonial Georgia and the British Atlantic World*, Athens: The University of Georgia Press, 2013, 208.

²⁷⁵ David Taitt, "David Taitt's Journal," *Travels in the American Colonies* ed. Newton Mereness, New York: MacMillan, 1916, 500.

²⁷⁶ Louis Le Clerc de Milford, *Memoir*, trans. Geraldine de Courcy, ed. John McDermott, Santa Barbara, CA: The Narrative Press, 2000, 142.

but it created some long-term competition. Instead of retiring to the council house to smoke and drink *asi*. Sometimes, a more raucous evening could ensue. A trader visiting a Creek town in 1812 was upset that after he retired to bed, the townspeople, after drinking heavily in the townhouse that evening, harangued him all night and tried to coax him back out to the plaza to drink more.²⁷⁷ The earliest accounts we have of yaupon tea show that, as among the Apalachee, Timucuan, and Guale, leaders regulated its use and distributed it among their followers. Yaupon was therefore one of the items that these leaders used to kindle support for their position in the community. Young warriors from important matrilineages, most famously *Asiyahola* (Osceola, “black drink singer”) served it, while micos and other high ranking warriors consumed it.²⁷⁸ While micos used *asi* as a carrot to coerce Creek warriors to abstain from alcohol, younger men sought wealth and power as traders and distributors. Jean Antione Le Clerc tells us that chiefs would not allow anyone to drink *asi* who had recently drunk rum.²⁷⁹ Prohibition was one tactic for controlling misbehavior, but abstinence made the heart grow fonder. Micos ran the risk of antagonizing their supporters in town, if they totally cut off the rum trade. Rum proved so popular that clandestine trading posts sprung up that only traded in that commodity. These locations attracted motley and often rowdy assemblies or backcountry whites, warriors looking to escape village moral pressure, and traders eager for a drink in exchange for a few skins.²⁸⁰ Success in hunting and trading occasionally bred big heads and many traders

²⁷⁷ Ethridge, *Creek Country*, 89 - 90.

²⁷⁸ Wickman, *Osceola's Legacy*, 76.

²⁷⁹ Louis Le Clerc de Milford, *Memoir*, trans. Geraldine de Courcy, ed. John McDermott, Santa Barbara, CA: The Narrative Press, 2000, 135 – 6.

²⁸⁰ Pressley, *On the Rim of the Caribbean*, 208.

were prepared to part with of hard earned profits in exchange for a drink of rum.²⁸¹ If trading posts were the English version of Franciscan missions, people like Jean-Antoine Le Clerc and David Taitt were its mendicant friars preaching Great Britain's mercantilist Gospel. In as much as they sold European ideas and trade to Native Americans, they also had to buy into the symbolic economies in Creek towns and their writings help reveal other purposes and meanings *asi* held in the eighteenth century.

Even as rum was becoming a competitor with yaupon tea as a socially significant drink, yaupon also allows us to see how Europeans could use it to navigate the social and political worlds of the Southeast. Jean-Antoine Le Clerc, a French soldier of fortune who travelled to Creek country to fight alongside the British in the American Revolution, provides one of the most detailed descriptions of the preparation, serving, consumption and rituals of *asi* among the Lower Creek towns. After marrying into a Creek family, he became a warrior and war leader. *Asi* now, was subject to European tastes. Apparently Le Clerc was not so fond of the medicines the Creek brewed, so much so that he claims to have often brewed his own to drink instead.²⁸² Under the auspices of mico Alexander McGillivray, he led several raids. In preparation for these raids, Le Clerc took what he called "war medicine" as part of his initiation as a war chief. His account is important because its details give not just superficial observations, but the interpretation of someone who had become part of a Creek matrilineage.

Le Clerc was afforded the honor of a war chief and carried on a litter covered with a bear skin and adorned with "garlands of ivy." He also mentioned that the priests who

²⁸¹ Braund, *Deerskins and Duffels*, 136 – 7.

²⁸² Louis Le Clerc de Milford, *Memoir*, trans. Geraldine de Courcy, ed. John McDermott, Santa Barbara, CA: The Narrative Press, 2000, 147 – 9.

perform the ceremonies of war medicine carried deerskins “fashioned to look like chasuble,” a vestment in the Catholic Church.²⁸³ Certainly, it is possible that Le Clerc, a Frenchman may have been inferring too much, but I also think it is important to consider the implication of Creek priests fashioning religious robes like the Franciscans might have used. The Lower Creek towns had certainly been aware of the Franciscans, and perhaps by the late 1700s this fashion had been co-opted by polytheistic people who saw no need to stick to the traditions of one religion. Le Clerc also provided us with a clue to understanding the clay ball with yaupon impressed inside, found at Moundville. As the ceremony continued, priests tossed red hot pebbles into the gourds filled with *asi*. These could be ordinary “pebbles” as he calls them, but it would help explain why yaupon would be mashed into a clay ball. We know from Poverty Point in Louisiana that Native Americans were using heated clay balls to boil water thousands of years earlier.²⁸⁴

Many Europeans embraced the “white path” Chigilli spoke of in Savannah, but to walk that path, both sides had to meet in the middle. The Creek Confederacies and towns were some of the most successful in how they survived the shatter zone. In part this was because they were further from colonial centers and had access or multiple European trade partners, but this was also due to active steps leaders and individuals took to redirect European encroachment and seize opportunities and learn from the mistakes of groups like the Yamasee and Apalachee. Creek towns tried to pursue the “white path” in dealing with

²⁸³ Chasubles were outer vestments used when celebrating a Mass. Elizabeth C. Parker, “Architecture as Liturgical Setting, *The Liturgy of the Medieval Church* eds. Thomas Heffernan and E. Ann Matter Kalamazoo, MI: Medieval Institute Publications, 2005, 253.

²⁸⁴ Louisiana Division of Archaeology. “Poverty Point.” In Discover Archaeology. Louisiana Department of Culture, Recreation and Tourism. Published October 1, 2014, www.crt.state.la.us/cultural-development/archaeology/discover-archaeology/poverty-point.

the English, making them “untouchable” insiders. The Creek took these deals seriously and many traders gained diplomatic advantage through marriages with Creek women. This approach to dealing with colonists could create situations that while seeming perfectly normal to Creek eyes, may have seemed somewhat odd to Europeans. As welcomed “insiders,” many of these traders saw into Creek towns and how *asi* was a part of the coalescence of these new confederacies. No trader gives us a better picture into what “black drink” became in the late eighteenth century than David Taitt.

A Scot, like many of the Indian traders and dealmakers in the eighteenth century south, Taitt arrived in the Creek towns just after the French and Indian War and remained through the early years of the American Revolution as John Stewart’s Deputy Superintendent to the Creeks. Taitt seems to have already been eyeing a position as British representative to the Creek since he first travelled overland from Pensacola to Charleston and kept a journal of what he saw among the Creek. Taitt then, was a relative newcomer to the interior of the Southeast. Judicious use of his journal can give us a gauge for change over time in many of the Creek towns. At almost every town he stopped at, he wrote that he saw Creek men drinking black drink in the square or townhouses, depending on the season and interestingly, that they welcomed him to join them on most occasions. That Creek men asked him to join is not particularly noteworthy. Sharing food and drink was a way that many towns all across the Southeast welcomed travelers, even as early as the *entrada* of Hernando de Soto.²⁸⁵ Taitt’s journal nevertheless reveals a general democratization of yaupon tea. We have many earlier accounts of the drink, but none describe it as ubiquitous as Taitt’s narrative. As new societies coalesced, yaupon seems to have become less a drink

²⁸⁵ Stern, *The Lives in Objects*, 97.

controlled by elites and more a daily draught. The ubiquity in Taitt's account is rather surprising, given how little other authors write about black drink: "drinking black drink in the usual manner;" "I went this morning to Black Drink in the Square;" "after black drink I set out."²⁸⁶ Although he mentioned "ceremonies" occasionally, more often than not the sense one gets from reading his journal is that "black drink" had almost become a way to normalize and ease social relationships strained by recent warfare and the social changes encouraged by European trade.²⁸⁷ Among the peoples he encountered, "black drink" seems to have been used like tea or coffee were used in Europe, as a social drink to fuel conversation and promote friendship. It is also possible that the tea Taitt and the Creeks he met were consuming was not the same medicine as that which revolted Le Clerc. Button snake root, as part of *asi* and not just yaupon tea, would have had a much more dramatic effect on the digestive stems of those who drank it and Taitt never seemed to be concerned about vomiting, nor did he remark on it among the Creeks he saw. He did describe the very familiar brewing process and that the drink was often presented to a "head man" first, but after this cursory explanation, it seems to have been a remarkably quotidian drink. The way he wrote about it, I think what we see in Taitt's almost off hand, but ubiquitous remarks about "black drink" is that Creek desire to promote trade among the English had resulted in a new bundle of meanings for *asi* by the late eighteenth century. New trade relations paved the way for *asi* to turn into more of a social beverage for the Creek, or at least gain that sort of a use in addition to other uses, especially since coffee and tea may have been hard to come by in the interior. Rum may not so much supplanted *asi*, as it

²⁸⁶ Taitt, "Taitt's Journal," 506, 513, 515, 524, 528, 529, 531, 546, 552, 560. Although I don't have a quotation from all these page numbers, I cite them to show just how common it is in Taitt's eyes.

²⁸⁷ Taitt, "Taitt's Journal," 502 – 3.

helped to dilute some of its social power. Taitt's journal supports the idea that a general democratization was happening across the Southeast, if only in the masculine sphere. He was interested in trade and strategy, and that he only noticed men consuming the drink is unsurprising. What Taitt missed, is that women, as gardeners and growers in their towns, were the ones who tended to and harvested yaupon.²⁸⁸

As access to yaupon became more erratic, at least in Creek towns, another ritual may have helped diminish some of the elitism which had previously been associated with some of the ceremonies surrounding drinking *asi*: the calumet. Tobacco was certainly a part of peace negotiations and ceremony in the Southeast, long before la Salle travelled down the Mississippi, but the French explorer may have inadvertently introduced an approach particular to Native American towns in the upper Mississippi Valley and Great Lakes. As early as the seventeenth century, the first French explorations down the Mississippi were well underway. Even though the French had over a hundred years of experience in North America, they were newcomers to the cultural worlds and symbolic languages of the Southeast. The world they were walking into was different not only from the region they knew as the *pays d'en haute*, the high country, the areas around the Great Lakes and upper Mississippi and Illinois valleys, but as the appearance of the Apalachee hinted, it was a world that was changing. The Chickasaw, Choctaw, Alabamas, and Natchez were not the same peoples the French and Jesuits had been trading with and preaching to in the North. Nor were these people the same as they had been even a hundred years before, but the French treated them in the same way they had the nations they had met in Canada. In fact, the Cherokee remembered when smoking was done differently. A man named A'yun'ini,

²⁸⁸ Perdue, *Cherokee Women*, chapter one.

trained to become a priest, told James Mooney of the “Old Sacred Things.” Among them was a “great peace pipe, carved from white stone, with seven stem holes” so that the seven leaders of the Cherokee nation could smoke it together.²⁸⁹ Archaeology and ethnography lend some support to A’yun’ini’s story.²⁹⁰ Some Cherokee dances incorporate a version of the calumet, but it is not attached to a pipe and although records of pipe smoking go all the way back to the Mississippian period across the Southeast, the type of pipe bowl used varied across time and space.²⁹¹ Large, disk shaped pipes are common across the interior Southeast, while the elbow shaped pipes used in the calumet ceremony are not, at least until the seventeenth century when the French arrived.²⁹² Even as Mississippian ideologies had travelled from the mid-Mississippi valley at Cahokia into the Southeast, the calumet ceremony observed by midwestern peoples seems to have begun to compete with yaupon tea as a ceremony for welcoming outsiders and establishing peace. The calumet ceremony was a familiar ritual for the French, affirming peace and friendship among the nations they traded with around the Great Lakes, what they called “up country” or the *pays d’en haute*. The French, assuming all Native Americans would respond positively to an offer of the calumet, seem to have introduced the ritual and that specific pipe type into the interior Southeast in the late seventeenth century.²⁹³ In this ritual a long stemmed pipe with a smaller bowl than the earlier disk pipes, typically decorated with an arching array of feathers, was offered towards the sun and then to potential allies as an overture to

²⁸⁹ James Mooney, *Myths of the Cherokee*, New York: Dover Press, (1995), 399.

²⁹⁰ Christopher Rodning, *Center Places and Cherokee Towns*, 59 – 62.

²⁹¹ Frank Speck and Leonard Broom, in collaboration with Will West Long, *Cherokee Dance and Drama*, (Berkeley: University of California Press, 1951), 39 – 40.

²⁹² Brown, “The Calumet Ceremony,” 322.

²⁹³ Brown, “The Calumet Ceremony,” 326.

friendship. In the same way that *caçina* engendered friendships and alliances in the Florida, the calumet ceremony also opened negotiations further north and west.

For the Cherokee, yaupon's place may not have been challenged in a similar way. In fact, it is possible that the Cherokee, speakers of an Algonquin language, brought a calumet ceremony with them as they migrated south in their past. During the Booger Dance sequence, in both the Eagle and Bear Dances, a series of events similar to the calumet ceremony occur.²⁹⁴ The Booger dance represents a fictional arrival of strangers into a council house and includes a series of exchanges where the Boogers (dancers wearing masks to represent strangers) are eventually allowed to dance with those Cherokee who are unmasked and smoke tobacco.²⁹⁵

More personal choice may have played a role in the adoption of this ceremony, at a time when older group identities were being challenged in the shatter zone and young men often sought to circumvent the will of elders.²⁹⁶ These "peace pipes" as English travelers often called them, might have found a place similar to yaupon tea for a couple of reasons. The pipes were often adorned with objects and could be crafted to create a personalized medicine bundle for an individual, town, or family. Henry Timberlake mentions that men at the Cherokee town of Citico offered him "170 to 180" pipes, each one decorated with "porcupine quills, dyed feathers, deer hair, and such gaudy trifles."²⁹⁷ What seemed gaudy trifles to Timberlake were likely significant and meaningful messages for anyone able to read them. These pipes communicated identity, in the same way the carved gorgets and

²⁹⁴ Speck, Broom, and Long, *Cherokee Dance and Drama*, 100.

²⁹⁵ Speck, Broom, and Long, *Cherokee Dance and Drama*, 32 – 9.

²⁹⁶ Henry Timberlake, *The Memoirs of Lt. Henry Timberlake*, London, 1765, 37 – 9.

²⁹⁷ *The Memoirs of Lieutenant Henry Timberlake: the Story of a Soldier, Adventurer, and Emissary to the Cherokees, 1756 – 1765* ed Diane King, Cherokee, NC: Museum of the Cherokee Indian, 2007, 20 – 1.

busycon shells had, but to a wider segment of the population. A Creek legend also supports not only the idea that the calumet ceremony and its particular pipes were not always part of Southeastern ceremonies, but also the idea that *asi* use was older than tobacco. In the story, a man was drinking *asi* and eating one morning, when he felt nature's call. The man left the town square, went out, and found a "pretty little plant" that he took the dry lower leaves to smoke. Soon the whole town joined him.²⁹⁸ If my suggestion that some of the yaupon trade was stifled by the Spanish as they redirected it as a tribute item from the Atlantic and Gulf coasts, it seems plausible that the calumet filled a niche that yaupon no longer could. It's possible too that the French merely sped up a cultural exchange that was travelling across eastern North America anyway. After all, other practices and ideas had freely travelled along river bottoms, from the Midwest hundreds of years earlier. Was the calumet ceremony just a new iteration of the same patterns that had brought Mississippian culture to places like Etowah in Georgia? The evidence suggest that the Creek and Cherokee adopted and adapted the sorts of pipes used in the calumet ceremony to meet their needs alongside yaupon tea.

While material cultures change and economies can fail, the embodied practices that connect people to the past can be maintained much longer. This was certainly the case of the ceremonies associated with and connected to *asi*. In Chapter One I argued that the left-handed spiral of the whelk shell was a reminder of the connections leaders had to the sky. As they drank yaupon tea out of the shells by the narrow beak, onlookers would have seen that spiral. So as shells diminished, what other ways might leaders have to remind people of their place during ceremonies involving *asi*? Travelers to the Creeks and the Cherokee

²⁹⁸ Bill Graham, *Creation Myths and Legends of the Creek Indians*, 239.

occasionally remarked on the curious use of spiral in their fires in their council houses. William Bartram drew what he saw in the “rotunda” of the Creek. At the center of this built echo of the cosmos was the town’s sacred fire, wrapping around the pole that supported the roof, representative of the tree that supported the sky. This spiral was twisted just like the whelk’s shell. Among the Natchez too, spirals retained power. In 1725 Antoine-Simon le Page du Pratz describes the funeral of the Great Sun, Tattooed Serpent, leader of the Natchez. In his funeral procession (Figure 18), his cortege is carried in a spiral as it proceeds towards his final resting place.²⁹⁹

Glass beads may have also filled in the place marine shell lost. Before European and Native American traders brought these valued beads, marine shell was often used as adornment and as a part of mortuary practices.³⁰⁰ Perhaps the most famous example of shell beds being used in a funerary context is Mound 72 at Cahokia, where marine shell beads were laid out so as to imitate a large bird.³⁰¹ It is also likely that glass trade beads took the place of marine shell in trade networks and this may have lessened the supply of the busycon and cassis shells in the backcountry. Recent analyses of glass beads in Cherokee burials reveals a pattern similar to that of marine shell. At the towns of Tanasee and Chota, most of the burials with the glass beads were males or children. Mark Babin

²⁹⁹ Antoine-Simon le Page du Pratz, *The History of Louisiana*, 352 – 7; See also William Marquardt and Laura Kozuch, “The lightning whelk: An enduring icon of southeastern North American spirituality,” *Journal of Anthropological Archaeology*. 42 (2106), 1-26. Marquardt and Kozuch have written in much greater length and depth about the significance of the spiral of the busycon shell.

³⁰⁰ *Mississippian Mortuary Practices* eds. Lynne Sullivan and Robert Mainfort Jr, Gainesville: University Press of Florida, 2012, 18, 23 – 5, 42-44, 70 – 71, 85, 103, 119 – 20, 139 – 43, 152, 154, 156 – 60, 169, 179, 182 – 4, 187 – 9, 192, 206, 11, 214, 244, 255 – 7, 259 – 60, 266, 275 – 6.

³⁰¹ Timothy Pauketat, *Ancient Cahokia and the Mississippians*, New York: Cambridge University Press, 2004, 87 – 92.

argues that the beads in the male burials were ones that they “most likely possessed in life which served to mark their status as hunters, warriors, or traders.”³⁰² He also argues that

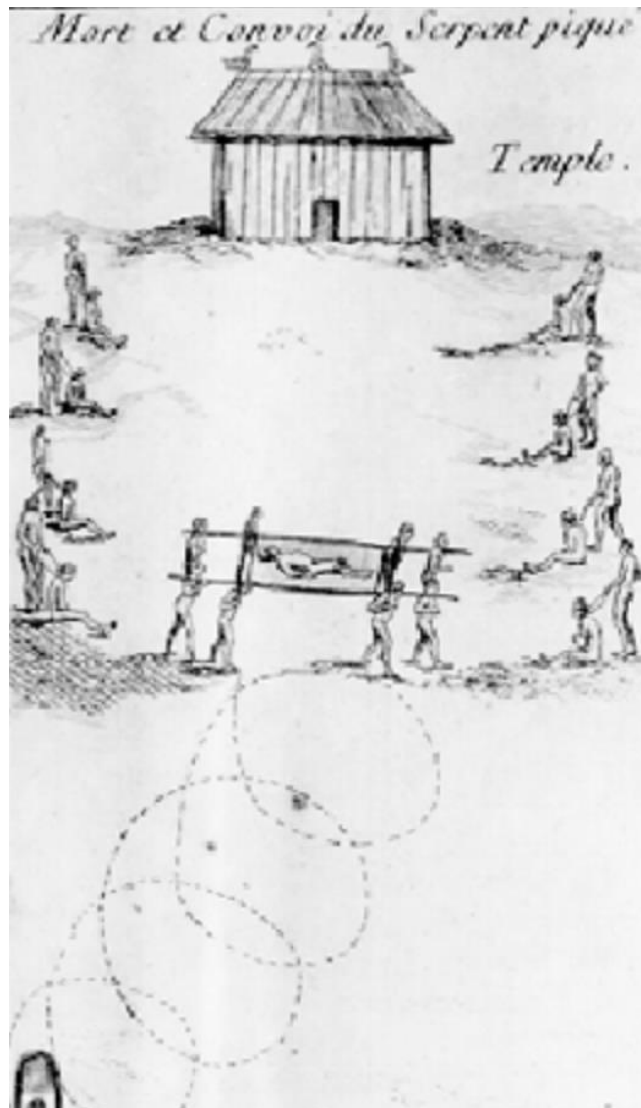


Figure 18: Page du Pratz's depiction of the funereal procession of the Tattooed Serpent of the Natchez. Source: William Marquardt & Laura Kozuch, “The lightning whelk: An enduring icon of southeastern North American spirituality.” *Journal of Anthropological Archaeology* 42 (2016), 10.

³⁰² Mark Babin, “Glass Beads of Chota-Tanasee: An Historical and Archaeological analysis of Overhill Cherokee Networks, Unpublished MA thesis, University of Tennessee, 2018, 125 – 6.

the beads served to connect deceased children to the social fabric of the community. The ancestors of the Cherokee certainly had used similar practices in the Mississippian era.³⁰³ The color blue was a very special color for the Cherokee at least and one that is difficult to find in nature. European glass makers had no difficulty producing glass beads of this color.³⁰⁴

Yaupon's transformations in the shatter zone also changed how Europeans understood it. I opened this chapter with the sad story of the Apalachees who sought refuge at Mobile. Sadly, the story only gets worse. Only a few weeks after the Apalachee arrived, a ship named *Pélican* sailed into Mobile Bay, carrying prospective French wives for settlers, whose morals had decayed, at least according to the colony's leaders, by cohabiting with Native American women.³⁰⁵ Unfortunately for the passengers, colonists, and Native Americans who lived nearby, several of the passengers had contracted what was likely yellow fever during a brief stop in Havana. By mid to late August, all the people who had contracted yellow fever in Havana were now recovering or dead. Sadly, the mosquitoes of Mobile Bay were just as hungry as their Caribbean cousins and, having bitten some of the infected passengers, they picked up the virus. By the third week of August there was an epidemic and by early September the disease had spread nearly sixteen miles upriver to

³⁰³ Jessica Dalton-Carriger, "New Perspectives on the seventeenth – Century Protohistoric Period in East Tennessee: Redefining the Period through Glass Trade Bead and Ceramic analysis," unpublished PhD Dissertation, 2016.

³⁰⁴ Thomas Hatley, *The Dividing Paths: Cherokee and South Carolinians through the Era of the Revolution*, (New York: Oxford University Press, 1993), 3 – 4.

³⁰⁵ Reverend Henri Roulleaux de La Vente to Louis Phélypeaux, comte de Pontchartrain, 2 March 1708, in *Mississippi provincial Archives, 1701 – 1729*, ed and trans. Dunbar Rowland and A.G. Sanders, Jackson, MS: Press of the Mississippi Department of Archives and History, 1929, 31. Roulleaux worried that too many French men were cohabiting with women and were subsequently not receiving the sacraments. He urged Pontchartrain to consider a ban on such unions.

the location the Apalachee had chosen for their new town. Parents, who only a few months earlier had thought themselves much safer than they had been in Florida, began carrying children to priests at Mobile for deathbed baptisms. In all about forty colonists died by the time the disease had run its course in October. There was no count of the Apalachee, Mobile, or Chato dead.³⁰⁶ If the nameless woman who begged Domingo de Leturiondo to permit her to brew *caçina* in Chapter Two is any clue to another of the changes the shatter zone had on yaupon, since it was a powerful medicine for them, these Apalachees likely used yaupon to try to ward off and cure the fever. It was in this environment than the French first saw yaupon tea and learned of its power firsthand. As a medicine yaupon would enter Europe, and it is to that process that I now turn.

³⁰⁶ Higginbotham, *Old Mobile*, 161 – 201.



Figure 19: A Page from George Philip Baron von Reck's journal, depicting "cassini." Source: <http://www5.kb.dk/permalink/2006/manus/22/eng/19+verso/?var=>

Chapter Four Apalachine

Pierre-François-Xavier de Charlevoix watched the man die. It was a bad way to die, vomiting to death. All the blood vessels in the wretch's eyes had burst and he looked very much like a demon. Of course he was a Christian and would die as one, but Charlevoix couldn't help but notice how this pagan practice that remained among the Apalachees had led to this man's death. But what had the man expected? If one drank sea water, one would certainly die. These Apalachees who had made a home in Mobile had strange customs. Not, perhaps, as strange as those he had read about from his Jesuit brothers in Japan, but dangerous nonetheless. Charlevoix, after trekking from Quebec, across the pays d'en haute, down the Mississippi River, and across the sea coast toward La Florida, after suffering a shipwreck in the Bahamas and being left to slowly navigate back to Louisiana, had been eager to see how these Indians employed a simple he had seen in Paris before he left. Why not? He had nothing but time now as he and his party coasted along the beaches of Florida and one of the commands of His Majesty, Louis XV, was to look for anything profitable on his journey traversing the borders of France's possessions in North America. Traveling through Florida he had seen Spanish colonists use this "cassina" tea made from the shrub found on the seacoasts to great effect as a diuretic. However, some of these Apalachees still insisted on mixing the tea with sea water to facilitate a good vomit. But if they mixed in too much, well, it could end poorly. Excess, in all things, was certainly a sin. The men who had tried to make a fortune off of this tea in Paris had certainly learned that.³⁰⁷

As the last two chapters made clear, tea made from yaupon leaves served many different purposes in the Southeast and took many different forms. French soldier of fortune Louis Le Clerc saw it used as a war medicine, English lieutenant Henry Timberlake as a peace offering, and Spanish soldier Domingo Leturiondo as a medicinal cure. For Native Americans this drink could be all of the above, but European observers and colonists, like Charlevoix, it came to be primarily interested in it as a commodity. Yaupon's leaves came to Europe as a medicinal tea. Native American additives, cosmological connections, and methods of preparation did not. Yaupon tea's reputation as a cure may have begun to spread in Europe as early as the late sixteenth century. The first evidence we

³⁰⁷ This narrative is reconstructed from a passage in Pierre-François-Xavier de Charlevoix's "A Journey to North America vol. II," trans. Anonymous, (London, 1761), 303 – 6.

have for the tea being brought to Europe was when Jaon Valdez, an Inquisitor and canon in Seville, was suffering from kidney or bladder stones. After all other medicines had failed, two Timucuan were summoned and brewed him a pot of *caçina*. The drink healed him.³⁰⁸ His experience was known, not only in Seville or St. Augustine, but also in Mexico.³⁰⁹ Yaupon drink's reputation had begun to spread. Although Valdez's experience was only the first of many, the language used to describe it begins to reveal how Europeans would appropriate yaupon tea while simultaneously excising the meanings that Native Americans ascribed to it. In the story, Native Americans are only useful in brewing the drink; the rest of Francisco Ximénez's chapter praises the purgative virtues of the tea as a useful medicine for Europeans. In this way, the spirit of the plant, the bundle of meanings I wrote about in Chapter One, were changing, not just to a commodity for Spaniards, but to a European medicine. In this chapter I will show how Native American meanings continued to be divested from yaupon as it was tangled up in new ones in Europe as medical practitioners wrapped new meanings into the bundles they were creating.³¹⁰

³⁰⁸ Francisco Ximénez, *Cuatro libros de la naturaleza y virtudes de las plantas y animales de uso medicinal en la Nueva España* (Mexico, 1635), 56 – 57; Ximénez was adding additional plants onto a text about medicinal plants in Mexico and Peru written by Francisco Hernández de Toledo a few decades earlier.

³⁰⁹ Ximénez's text was actually begun by Spanish court physician Francisco Hernández in the 1570s. Unfortunately, he died before he was able to publish it and we have Ximénez, a friar and nurse at a convent in Mexico, to thank for finishing it and even adding this particular digression about yaupon tea. For a brief discussion of the text and authors, see <https://www.wdl.org/en/item/7334/>.

³¹⁰ Although this is the first time the story of how yaupon travelled to Europe will be told, the bountiful historiographical framework for Native American plants travelling to Europe as commodities informs my approach. Marcy Norton has masterfully shown how tobacco and cocoa not only travelled to Europe, but became important commodities reinvested with new meanings. Londa Schiebinger's work on the peacock flower is more akin to what I am attempting here, since fewer of the Native American ideas and uses surrounding yaupon traveled than they did for cocoa and tobacco. Marcy Norton, *Sacred Gifts, Profane Pleasures*; Londa Schiebinger, *Plants and Empire*, Marcy Norton, *Sacred Gifts, Profane Pleasures: A history of Tobacco and Chocolate in the Atlantic World*, Ithaca, NY: Cornell University Press, 2008; Matthew Crawford, *the Andean Wonder Drug, Cinchona Bark and Imperial Science in the Spanish Atlantic World*, Pittsburg, University of Pittsburg Press, 2026; Amy Greenfield, *A Perfect Red: Empire, Espionage, and the Quest of the Color of Desire*, New York: Harper, 2006.

³¹⁰ Steven Shapin, *The Scientific Revolution*, 19.

The Inquisitor's story above seems rather straightforward on its surface. A European wanted something to cure an illness and a medicine from a colony worked. But by digging a bit below the surface, we can start to see that things were more complicated. How did the Inquisitor learn about the tea and its restorative reputation? What were the communication lines between a poor backwater of Spain's global monarchy and the sickbed of an Inquisitor? Why did he only seem interested in the tea as a cure of last resort and not as a daily drink as the Spanish and Native American used it in Florida? As I will show below, only some of the information understood by Native Americans to be "bundled" into yaupon tea translated for Europeans. As a diuretic, the caffeine in the tea encouraged urination and it gained a reputation as an effective way to stave off bladder and kidney stones. In Florida and later Louisiana, Europeans experienced its effectiveness first-hand. The Inquisitor's story also shows that there was uncertainty about how to make the tea, so Timucuan were needed to provide their practical knowledge. At least insofar as yaupon was concerned, Native Americans then were useful not so much for the cosmic ties that bundled their knowledge with a larger world, but for the practical benefits of that knowledge. It is also somewhat surprising that Valdez would trust a cure from the New World. Were exotic medicines from far-flung tropical lands and the reactions they produced appropriate for European bodies and their constitutions? In the late sixteenth and early seventeenth centuries, medical practitioners from apothecaries to university-trained physicians disagreed over whether or not European bodies could benefit from Native American cures.³¹¹ University-trained humanists and scholastic physicians were still

³¹¹ Marcy Norton, *Sacred Gifts, Profane Pleasures: A history of Tobacco and Chocolate in the Atlantic World*, Ithaca, NY: Cornell University Press, 2008, 109 – 11.

trying to figure out if they could disentangle some packets of bundled knowledge that came with drinks more well known, like cocoa. What were the boundaries between medicinal and cultural use? Where did they overlap, and where were more distinct lines?³¹²

In Chapter Two, I discussed how *caçina* became a commodity for the Spanish colonists. Herbal healing, as it was practiced by the Timucua, Guale, Apalachee, Creek, and Cherokee was much more holistic in the sense that what Europeans might term a “spiritual” illness, needing spiritual medicines, could also be treated with certain pieces of the natural environment.³¹³ This is significant for *caçina* in the Southeast, where Europeans first encountered it. The Timucua and Guale saw medicine as something that could influence a person’s degree of purity, impurity, or pollution. The Franciscans, like Father Pareja who wrote a *Confesionario* to focus his converts attention on their sins, needed Native Americans to see the spiritual power of Jesus, as ministered by the Church, and its Holy Sacraments and its clergy. For the Franciscans, herbs, salves, or teas could not and must not replace the cross. Purity came from the Church and its sacraments, not a shaman or midwife’s concoctions. Acts that had simply been a matter of choice before (like abortion or even recovering from a minor illness) now needed strict supervision and policing, lest new converts fall away from the Church back into the clutches of demons and Satan. To be sure, European colonists embraced some cures that the Timucua, Guale, and Apalachee practiced, but only in certain ways.

Eventually yaupon tea arrived in greater quantities to Europe, first as small plantings and later as an addition to European pharmacopeias. But as the tea became more

³¹² Norton, *Sacred Gifts*, 125.

³¹³ For a more detailed explanation see Theda Purdue, *Cherokee Women: Gender and Changing Culture, 1700 – 1835*, Lincoln: University of Nebraska Press, 1998), 183.

available in Europe in the late seventeenth and early eighteenth centuries, it arrived at a time when there was competition among merchants, gardeners, apothecaries, royal clients, (sometimes all in the same person) alongside other assorted financial speculators looking to make their names and fortunes from plants like coffee.³¹⁴ Unfortunately, French interests in Paris and in its colonies ultimately focused on other plants like coffee and tea from East Asia, relegating yaupon to the visions of entrepreneurs who wanted to nibble the scraps left by those more successful. There were, however, other avenues to fame, if not great fortune. In the last part of this chapter I will show how the second son of an apothecary family of apothecaries, Bernard de Jussieu became yaupon's greatest advocate in the burgeoning botanical and scientific world of the early eighteenth century.

Marcy Norton has shown how the "sacred gifts" of tobacco and chocolate travelled from Central and South America to Europe and became "profane pleasures."³¹⁵ These two substances in particular swiftly travelled around the globe and even today (though in quite different forms) are marketed for consumption. Yaupon drink is not. This chapter will also engage with the historiography of commodities, but in a way that acts as a foil to the conspicuous adoption of tobacco and chocolate. Yaupon was a medicinal plant, consumed in ritual settings, by elites, much like cocoa in Central America. Like cocoa, as well the Spanish encountered it in the sixteenth century. Why then, did yaupon not join tobacco and chocolate as a sought-after commodity in early modern Europe? As I will show below, one answer lies in the "agnotology" of Londa Schiebinger. Her history of the peacock flower

³¹⁴ In this chapter I follow the approach of E.C. Spary who argues that plants like coffee (and here yaupon as well) "became a major commodity, an everyday recreation, and a botanical species, pretty much in that order." In *Eating the Enlightenment: Food and the Sciences in Paris: 1670 – 1760*, (Chicago: University of Chicago Press, 2013), 76. Although in the case of yaupon the plant followed a similar trajectory, I will argue that it skimmed around the "recreational" stage.

³¹⁵ Norton, *Sacred Gifts, Profane Pleasures*.

demonstrates that “gender practices” and “mercantilists concerns” in the Atlantic could block “useful knowledge” from travelling to Europe.³¹⁶ Although yaupon may have been used as a abortifacient in some circumstances (see Chapter Two), the reputation it gained among European colonists, physicians, botanists, and apothecaries, was more of a wholesome and effective, diuretic and emetic. Yaupon drink existed in a middle ground between the enthusiastic adoption of cocoa and tobacco, and the willful ignorance of the peacock flower. Never truly loved or hated by Europeans in Europe, it became just another medicine from the Americas. Even though very little of the cosmos bundled with yaupon drink in a place like Cahokia remained in what travelled to the *Jardin du Roi* in Paris, subsequent recommendation and use of yaupon by botanists like Bernard de Jussieu show that a substrata from yaupon’s ancient lineage ran across the Atlantic as he and others became “bundle custodian[s]” who possessed “Enlightened” versions of “esoteric knowledge and supernatural connections.”³¹⁷

Francisco Ximénez, in writing about Valdez’s condition and recovery, suggests that both Native Americans and Spanish colonists in Florida not only drank *caçina*, but drank it a lot. “They can’t go a day,” he wrote, “without a cup or two.”³¹⁸ Charlevoix, whose story began this chapter, asserts that Spaniards and Native Americans in Florida drank it every day, twice a day, and that Native Americans preferred to go without food than *caçina*.³¹⁹ Why did they drink it? Once answer is perhaps that it provided a jolt of caffeine and

³¹⁶ Londa Schiebinger, *Plants and Empire: Colonial Bioprospecting in the Atlantic World* (Cambridge: Harvard University Press, 2004), 332 – 39.

³¹⁷ Pauketat, *Cosmos*, 58.

³¹⁸ Ximénez, *Cuatro libros de la naturaleza y virtudes de las plantas*, 56 – 57.

³¹⁹ Pierre-François-Xavier de Charlevoix’s “A Journey to North America vol. II,” trans. Anonymous, (London, 1761), 306.

promoted alertness.³²⁰ But this doesn't entirely explain why botanical writers like Ximénez and the colonists he describes, praised the tea's healing powers. Caffeine suppresses the antidiuretic hormone and promotes urination. Like Valdez then, many drinkers likely saw it as a way to prevent bladder and kidney stones. As we saw on Chapter Two as well, at least one Spanish garrison demanded sixty "brewings" per month, so this lends credibility to both Charlevoix and Ximénez's claims about how often the Spanish drank it. I think it is likely that the tribute, required by the Spanish, allowed one sort of yaupon brewing to remain common, at least publicly; one that was brewed only with yaupon and only drunk for its medicinal benefit. Once again, as we saw in Chapter Two, over time yaupon lost much of its spiritual resonance, at least across the Gulf Coast.

There was certainly an incentive to keep drinking it regularly. All Europeans had good reason to try to worry about and to try to avoid developing any sort of calcification in the bladder or kidneys. As extraordinarily painful as the stones themselves were, the cure could be even worse. By the late sixteenth century, the latest in surgical intervention was called the Marian or greater operation. During this procedure, patients were asked to lay on their backs while practitioners passed a sound (a small metal rod with a groove) through their urethra and ultimately cut into their perineum. In some of the best cases for males, the operation could result in erectile dysfunction; in the worst cases, death from infection or hemorrhaging.³²¹ In fact, a dissertation published at Caen in 1638 did not even mention surgical intervention as an option.³²² For the most part, probably due to the low

³²⁰ Patricia Crown, et al. "Ritual Black Drink Consumption at Cahokia," *PNAS* 109, no. 35 (2012), 13945.

³²¹ Harry Kerr, "Cutting for the Stone: The Ancient Art of Lithotomy," *BJU* 101 (2008), 1214 – 6.

³²² Lauren Brockliss and Colin Jones, *The Medical World of Early Modern France*, (New York: Oxford University Press, 2004), 165, fn. 310.

survival rate among patients undergoing a lithotomy, the standard methods of treatment were emetics, purgatives, and diuretics.³²³

Did this medicine Spanish colonists drank to ward off bladder and kidney stones have anything besides yaupon in it? As we saw in the Chapter Three yaupon leaves were not necessarily the only ingredient in the mixture. Pierre-François Charlevoix stated that Native Americans in Florida and Louisiana, at least in the early 1720s when he travelled there, would mix sea water in the drink to facilitate vomiting. I suspect that neither seawater, nor *asi*, button snake root, the ingredient mixed with yaupon to create the war medicine for the Creeks, were used in the medicinal preparation French and Spanish colonists praised. Louis Le Clerc distinguished between two sorts of yaupon tea: the “big” and the “little” war medicine.³²⁴ Both were purgatives, but the “big” war medicine was the one Le Clerc never wanted to take and in fact avoided until his inauguration as paramount war chief for the Lower Creek towns. He wrote that he had always taken his own prepared “medicine” to earn the Creeks’ trust, yet he had no choice but to take the real tea at his inauguration. After drinking it, Le Clerc claimed to have “severe pains in my heart” and was forced to “disgorge” all that he had consumed.³²⁵ Later on, Le Clerc went so far as to suggest that this “big” war medicine, could induce seizures and euphoria, something that button snake root can do in sufficient quantities.³²⁶ Countless Europeans who write about the drink by the eighteenth century, many of whom had consumed it, never describe anything

³²³ Brockliss and Jones, *The Medical World*, 159 – 60.

³²⁴ Louis Le Clerc de Milford, *Memoir*, trans. Geraldine de Courcy, ed. John McDermott, (Santa Barbara, CA: The Narrative Press, 2000), 135 – 6.

³²⁵ Louis Le Clerc, *Milford’s Memoir*, 158.

³²⁶ Charles Fairbanks, “The Function of Black Drink among the Creeks,” *Black Drink: A Native American Tea* ed. Charles Hudson, (Athens: University of Georgia Press, 2007), 123.

like the reaction of Le Clerc's "nauseating ceremony."³²⁷ Why, in the context of Native American ritual, did Europeans often associate yaupon with vomiting, but not in their own consumption?³²⁸ There are two possible answers to this question. Native Americans were likely reluctant to give out their most powerful medicines to many Europeans. Only after Le Clerc was initiated as War Chief, did he experience the "big" war medicine with button snake root. But I think this answer is only part of the story. Another answer is more complicated and lies in how medicine, particularly vomiting, was practiced and understood by Europeans.

Was there something in vomiting, as Europeans saw it in Southeastern North America in conjunction with yaupon, that they found distasteful? I think the question is worth asking. Vomiting is today something that we try to avoid, but that act, along with a variety of other sorts of purgatives and emetics were, after all, a large part of European medical practice.³²⁹ These emetics and purgatives were often prescribed by physicians for their patients. While depictions of medical consultations from medieval and early modern Europe were by no means private, the target of the consultation was an individual and their particular case.³³⁰ Family members could see physician prescribed vomiting, bloodletting, and other practices, but healing was not communal. By contrast, the accounts of Le Clerc, David Taitt, Rene Laudonnière, Timberlake, the nameless ranger with governor Oglethorpe, and many others from the late sixteenth through the eighteenth century create a picture of

³²⁷Louis Le Clerc de Milford, *Milford's Memoir*, 158.

³²⁸ Fairbanks, "The Function of Black Drink among the Creeks," 137 – 8; 141. Charles Fairbanks suggested that Native Americans had learned to voluntarily vomit as a part of the ritual consumption of yaupon tea. Fairbanks even brewed the tea for himself, using nothing but yaupon leaves and claimed only to feel more energetic, an effect he attributed to the leaves' caffeine.

³²⁹ Mary Lindemann, *Medicine and Society in early Modern Europe*, (New York, Cambridge University Press, 2010), 278.

³³⁰ Lindemann, *Medicine and Press* 276 - 7.

a drink that was not only for communal purity and health, but a status symbol eagerly expected by young men and occasionally women as they rose as warriors in their towns. Therefore, I think Europeans found the communal vomiting at best a strange practice and at worst, “nauseating.”³³¹ This revulsion also encouraged yaupon alone as simply a diuretic and stimulant to travel to Europe.

Further, more specific evidence, suggests the yaupon tea European colonists were drinking was not the same as what Le Clerc found nauseating, and that lies in the anecdote is used to introduce Chapter Two. In Domingo de Leturiondo’s *visita*. When the nameless Timucua woman asked him for permission to brew *caçina*, it seemed odd to me. Was there another reason she was asking him to brew it, aside from his authority as the governor’s lieutenant? Why ask him to make something that was a common trade good in La Florida? Why not just go and find some and make it? A plausible reason for her question though seems rather apparent now. What if she wanted to enhance the tea with button snake root, or other ingredients? These ingredients were often mixed into the tea by Native American priests, during highly visible ceremonies with connections to indigenous religion. Henry Timberlake, Louis Le Clerc, and Rene Laudionnère each describe small amounts of other nameless ingredients being added to yaupon tea on occasion. As yaupon, and just yaupon, was commoditized by the Spanish, I think that the extra spark yaupon mixed with other ingredients might give was regulated, while plain old yaupon tea was not.

Another part of the Southeastern experience of yaupon that never made it to Europe was its material culture. The most distinctive vessel was the *busycon* whelk shell, described

³³¹ Louis Le Clerc de Milford, *Memoir*, trans. Geraldine de Courcy, ed. John McDermott, (Santa Barbara, CA: The Narrative Press, 2000), 135 – 6.

in Chapter One. These whelk shells were used not only by the Mississippians, but were in some cases still in use as late as the eighteenth century across the interior of the Southeast. They never became part of European yaupon consumption. However, the Spanish eagerly adopted *jícaras* from Mexico and King Charles II even held a chocolate drinking party with them in 1669.³³² Furthermore, Europeans imported and even tried to imitate Chinese porcelain vessels for tea from the far east. Is there any reason they would choose not to use the shells for yaupon? I suspect part of the reason is that they recognized the bundled power and meanings Native Americans ascribed to these vessels, as they certainly did for the *jícaras* and porcelain teacups from the Ming dynasty, but *busycon* shells were also the vessel most associated with communal vomiting, an act that was encouraged by adding herbs like button snakeroot.³³³ There is some evidence that more mundane consumption typically occurred in clay beakers, or perhaps gourds, like the ones discussed in Chapter One. David Taitt, the most prolific observer of yaupon drink in the eighteenth century, consistently mentions many men drinking in town squares, but never mentions the shell cups. This idea is supported by the fact that Ximénez, when writing about Valdez's cure in the early seventeenth century, mentions that the drink was taken in "clay cups."³³⁴ So, if one wished to avoid vomiting, drinking yaupon alone, out of a clay cup, would be the right choice. Yaupon's place in the social world of La Florida (explained in Chapter Two) encouraged it to remain in more readily available vessels. We know from the 1649 record

³³²Norton, *Scared Gifts, Profane Pleasures*, 170; 173. These *jícaras* were gourds, hollowed out, dried, and painted, and then used as cups.

³³³ That decorative shell vessels were not uncommon in Europe, at least for other drinks, supports the idea that the ritual vomiting was a reason why the *busycon* shells were never adopted. For the use of shells see Lorraine Daston and Katharine Park, *Wonders and the Order of Nature, 1150 – 1750* (New York: Zone books, 2001), 255 – 301.

³³⁴ Ximénez, *Cuartos Libros*, 57.

of Captain Francisco de la Rúa's estate that chocolate and some of the more elaborate vessels for its preparation and consumption were available in Florida.³³⁵ Yaupon was a trade good demanded by the Spanish, but it never superseded the social prestige that conspicuous consumption of cocoa from Mexico bestowed. Spain had the opportunity to make yaupon into a profitable European commodity, but the more famous commodities like tobacco, cocoa, and cinchona bark left little room for competition. Even in the Americas, where it might make more sense to use a local product, yaupon was never traded, produced, or consumed on anything like the scale of Jesuit production of yerba maté in South America.³³⁶

Even though much of the meaning bundled into yaupon drink by centuries of use in the Southeast never made it to Europe, by the early eighteenth century, at least in a small way, yaupon leaves had become part of the European pharmacopeias. When exactly did yaupon drink, under the names *cassina* and *apalachine*, come to Europe on a commercial scale? Besides the Timucuan who helped heal Juan Valdez, I can pinpoint no precise moment when yaupon became consistently imported to Europe. After that, the earliest evidence we have for yaupon arriving in Europe is in England is in the very late seventeenth century, and not just as a tea, but as a decorative shrub. At that time seedlings from Carolina were planted first in Chelsea Gardens, home to the Worshipful Society of Apothecaries.³³⁷ The tree travelled to England, but under a different name with a more

³³⁵ Disposition of the Estate of Captain Francisco de la Rúa, deceased in St. Augustine in 1649, trans. John Hann, <https://ufdc.ufl.edu/AA00039463/00001>

³³⁶ Evelyn R. Nimmo & João Francisco Miró Medeiros Nogueira, "Creating hybrid scientific knowledge and practice: the Jesuit and Guaraní cultivation of yerba mate," *Canadian Journal of Latin American and Caribbean Studies* 44, no. 3 (August 2019), 347 – 67; see also Julia Sarreal, *The Guaraní and their Missions: A Socio-Economic History*, (Stanford: University of Stanford Press, 2014).

³³⁷ Phillip Miller, "The Gardner's Dictionary," 2nd edition, (London, 1733), no pagination.

decorative purpose: the Cassioberry Bush. There, many people seem to have enjoyed the bush not just for its medicinal qualities, but also as a decorative plant for gardens. Phillip Miller, chief gardener at the Chelsea Gardens, remarked that “it was brought to us from Carolina and, even to this day it thrives in many places around London in gardens of curiosities.”³³⁸ A botanist, Charles Dubois, who was also a Treasurer for the English East India Company, planted the yaupon in his gardens in Surrey in the late seventeenth century. The plant became popular as a decorative shrub in England by the early eighteenth century, but a widespread freeze in 1740 killed many of these plants.³³⁹ Given the dates suggested by Miller, it was likely the colonization of Carolina in the 1670s that provided the first seeds and plantings for England. The English had tried for a long time to stifle Spanish Florida and I suspect that attempts to grow yaupon were a part of this goal. If Spanish colonists were using it and it was a useful ward against “the stone” why shouldn’t the English have their own plants? It does not seem to have caught on in Carolina however, although as we saw in Chapter Three there were many instances of colonists in the early years of the colony being asked to drink it with their Creek allies. Miller commented that those colonists found it too bitter. It is possible though that Miller was only aware of elites’ opinions and that more common people used it regularly. He goes on to state that the colonists in Virginia used it more, but this seems strange given that yaupon becomes much harder to find the further north one travels on the coast and, perhaps more telling, there is no record of the Powhatans in Virginia using yaupon in any way. It is possible that the Virginians were using the dahoon holly, a relative of the yaupon, and indeed Miller is

³³⁸ Leonardius Plukenetius, *Almagesti Botanici Mantissa*, London, 1696. Reprinted in 1769 as part of *Opera Plukenetii* volume III, page 40.

³³⁹ Miller, “The Gardner’s Dictionary.”

somewhat confused about exactly which holly is which, writing about yaupon and maté from Peru as though they were the same plant. Although he noted that Virginians drank it, there is no mention of them using it for any sort of medicine, as Spanish writers had when writing about it in Florida. The Virginians' use, along with the plantings in England in the 1680s, suggests to me that yaupon first arrived in large quantities in Europe through English colonies and that it was subsequently through the intellectual networks of botanists like Hans Sloane, that the plant arrived in France, since France had no permanent presence in any location yaupon grows until 1702. As early as 1695, yaupon under the name "cassiny" had earned a reputation among English apothecaries. Some in London even paid for medical endorsement in the hopes that they could find profit in the leaves and plantings they were having shipped to London from Carolina. In 1695 London physician John Peachy urged people in a pamphlet to use a tincture of "cassiny" as a cure for smallpox.³⁴⁰ In France, the Director of the *Jardin du Roi*, Antoine de Jussieu described in a letter to Hans Sloane the first plantings there in 1720.³⁴¹

Early writers often noted the similarities between yaupon and its South American relative, *ilex paraguensis*, the holly that produced yerba maté. To make matters worse, another similar plant grew in some of the same areas in which yaupon thrived. According to Linnaeus this tree, the Dahoon Holly, was also kept next to the yaupon (which he called *ilex cassine*) in the garden he used when compiling his *Species Plantarum*. The two plants are superficially similar, with the Dahoon growing a bit larger. Oddly, Linnaeus gives the Dahoon the name "*ilex cassina*," reporting that it was the same holly that Plunkett called

³⁴⁰ John Peachey, "Some Observations made upon the Herb Cassiny," 1695.

³⁴¹ Letter from Antoine de Jussieu to Hans Sloane, March 1720, British Library, MS Sloane, 4045, ff. 310 – 11.

“true” and only records the word “*ilex*” or holly, for the other tree at the garden.³⁴² Another botanist, William Aiton, described the plant as he saw it at Kew Gardens in the mid-eighteenth century and gave it another name, *ilex vomitoria*. These new systems of classification allowed comparison between regions of the globe and led medical practitioners to deduce that some plants exhibiting similar characteristics, even though they were separated by thousands of miles, might be used in similar ways. Yaupon’s safety and effectiveness as a diuretic and remedy for “the stone” might be tied to its perceived relationship to other similar, better known plants that occurred at similar latitudes across the globe.³⁴³ There was an “Ethiopian” variety of yaupon, an Indian variety, maté in South America was seen as very closely related, and closer to home in France, sweet myrtle made a similar drink called “galé.”³⁴⁴

This confusion not only reflects thinkers stretching to help European science embrace and control nature, but also misunderstandings and misinterpretations of literature current at the time over how the plant could affect those who drank it. For many medical practitioners, they had two types of writing from which to judge yaupon’s powers. Travel writings from as early as the sixteenth century explained how the drink made Native Americans vomit, yet experiences from botanical agents in the colonies and colonists

³⁴² *Ilex* has an interesting etymology. Originally the name was used in Latin to describe oak trees and hollies, some of whose leaves like similar to oak leaves, got the second name, *aguifolium*, an evolution from the earlier Latin, *acrifolium*, or “sharp leaf.” The English word “holly” appears to be distantly related to the word *ilex*, by way of the Old High German and Middle Dutch *hulis*; for linnaeus’s approach see Shiu Ying Hu, “The Botany of Yaupon,” *Black Drink: A Native American Tea* ed. Charles Hudson, (Athens: University of Georgia Press, 2007), 23.

³⁴³ In the 1720s Michel Sarrazin urged French colonists to investigate the possibility that cinchona bark might be found in Canada, since portions of the colony lay at roughly the same latitude north, as Spain’s sources lay south. James E. McClellan and François Regourd, *The Colonial Machine: French Science and Overseas Expansion in the Old Regime*, Brepolis, 2011, 259 – 60.

³⁴⁴ Jussieu, *Quaestio Medica*, 3.

themselves emphasized its use to prevent and cure bladder and kidney stones. The earlier discussion of Europeans and vomiting becomes important now and it is easy to see why almost all the early botanical writers used some version of the Spanish name for the drink ‘*caçina*’ in their systems. Yet it would gain fame in France under a different name: *apalachine*, Apalachee tea. At least as early as the 1720s, French colonists in Louisiana were using the tea in much the same way that the Spanish had been using it, as a diuretic and cure for kidney and bladder stones.³⁴⁵

Although yaupon gained a reputation in England as a useful herbal remedy, it was in France that it would become most famous. But before we see how and why yaupon travelled to France, it is important to step back and look at the commercial and scientific worlds it would find and that would entangle it. As plants like yaupon were travelling to Europe, they were caught up in debates about health and embroiled in scrapes for commercial success. Merchants in different cities collaborated to exploit or circumvent trade monopolies limiting the ports of entry for specific plants. Coffee, for example, could only legally arrive in France through Marseille and would then make its way up the Rhône River.³⁴⁶ One of the cities from which it was distributed throughout France was Lyon. Lyon had a long history as an entrepôt for plants from both Indies and elsewhere. In 1671, Phillippe Sylvestre Dufour published a book titled *De l'Vsage du Caphé, du Thé et du Chocolate*. Initially this work was nothing more than collections of travelers testaments and observations about the three drinks, but a later edition in 1684 aimed to defend and situate coffee within the “technologies of knowledge” of European medicine at the time “case

³⁴⁵ Bernard de Jussieu, “*Quaestio medica cardinalitiis disputationibus mane discutienda in scholiis medicorum, die Jovis octava Martii 1725.*” Paris, 1725. All translations of this disputation that follow are mine.

³⁴⁶ E.C. Spary, *Eating the Enlightenment*, 72.

histories—cures and illnesses caused by [it]—as well as printed denunciations and defenses.”³⁴⁷ One reason, it seems, that yaupon was introduced so late after Europeans first used it consistently in the Americas, was that individuals were seeking a commercially successful product to compete with the more well-known and available substances, coffee, and tea. In Europe, these commodities also came with their own particular material culture or developed specialized spaces for consumption and each was already fashionable in its own way by the time yaupon came to Europe. Tea, for example, brought porcelain, earthenware, and silver tea bowls and saucers, waste bowls, sugar bowls, creamers, caddies, tea pots, and specialized boilers, burners and spoons. Chocolate arrived with its *jícaras* and coffee had its own cafés. Nicolas de Blégny shows us how this sort of assemblage might be appealing. He advertised a variety of instruments one could use to prepare tea, instruments made out of silver and porcelain that carried a high price tag.³⁴⁸ Tea as a medicine could also be shaped according to the patient’s taste or a particular ailment. Blégny lists a variety of forms the medicinal power of tea could take, including tablets, syrups, distillations, powdered reductions, tinctures, in addition to a simple infusion.³⁴⁹ Tea, chocolate, and coffee already occupied substantial social and commercial real estate in Europe. If we take Spary’s suggestion to heart, that “individuals employ foods for self-fashioning,” what sort of self could be fashioned with yaupon?³⁵⁰ *Apalachine*, coffee, tea, chocolate, and tobacco each brought with them messy, tangled vestiges of the cosmic orders that had produced them, but the equipage of *apalachine* did not offer the same

³⁴⁷ E.C. Spary, *Eating the Enlightenment*, 64.

³⁴⁸ Nicholas de Blégny, *Le Bon Usage*, 34 – 5.

³⁴⁹ Blégny, *Le Bon Usage*, 39 – 42.

³⁵⁰ Spary, *Eating the Enlightenment*, 295.

prestige of the other four. But a new medicinal plant could still help a botanist gain fame and a reputation. Yaupon remained a cure because it worked. Even though its cosmic bundle was unwrapped and only the leaves remained, those leaves could be reinvested with new meanings by a new sort of medicine man, Bernard de Jussieu.

Despite these disadvantages discussed above, yaupon still made a run at becoming a famous plant and medicine from the Americas. As commodities, medicinal plants from across the globe could be stolen and traded, but in the struggle for imperial dominance, trade, familial, and affinitive connections could be as powerful as weapons as arms. It was through these sorts of ties that yaupon came to France. One family in particular was instrumental in bringing yaupon to France, the Jussieu family. Nicolas de Jussieu was an apothecary in Lyon. In the late seventeenth century he gained a reputation as a defender of what he saw as the traditional role of his fellow medical practitioners by penning a book aiming to dispel some of the myths peddled by authors he calls “ignorant of botany” and “charlatans” purveying “trumperies.”³⁵¹ At the time, traditional apothecaries competed with people like Nicolas de Blêgny who hawked the virtues of new exotic drinks like tea and chocolate, but also new sorts of medicines: both simples and “chymical” concoctions that promised miraculous results. Moreover, by the mid-seventeenth century, physicians like Philibert Guibert had begun divulging academic secrets through vernacular publication, opening up this knowledge to people who had not received formal medical education.³⁵² It would only get worse. Chemical cures for venereal disease were all the rage

³⁵¹ Christopher de Jussieu, *Nouveau Traite de la Thériaque*, Lyon 1708, 5, 148.

³⁵² Susan Broomhall, *Women's Medical Work in Early Modern France*, Manchester, UK: Manchester University Press, 2011, 131.

and buoyed the reputations and purses of apothecaries who peddled them.³⁵³ The Jussieu family did have a singular advantage though. They were based in Lyon, one of the entrepôts for many of the new plants coming from the East and West Indies.

Nicolas de Jussieu may have also considered himself blessed with four sons, two of whom at least he was able to send to college in Montpellier. Both of these sons, Antoine and Bernard, studied medicine in the early eighteenth century under professors who advocated for iatrochemical understanding of the human body and its motions. The iatrochemical approach to medicine was created by Jean Baptiste Van Helmont in the mid-seventeenth century. Following Van Helmont, iatrochemists aimed to explain “all physiological and pathological change in terms of chemical reactions.”³⁵⁴ A balance of “chemical agents” in the body caused disease and acids or alkalis, judiciously applied by a learned practitioner, could render a person healthy.³⁵⁵ In the medical school of Montpellier this new approach to medicine found a ready audience and it was the medical theory that underpinned the education of both the Jussieu brothers. Although iatrochemistry was the principle way that the Jussieu brothers learned medicine, they seem to have had an even keener interest in botany. In 1716, a seventeen-year-old Bernard accompanied his brother on a botanizing trip into the Pyrenean peninsula in Spain.

After college, since their eldest brother, Christophle, had inherited their father’s apothecary business, both Bernard and his two remaining brothers, Antoine and Joseph, sought their fortunes in Paris and abroad.³⁵⁶ The relationships they cultivated at

³⁵³ Brockliss and Jones, 636 – 637.

³⁵⁴ Brockliss and Jones, 138.

³⁵⁵ Brockliss and Jones, 144- 8.

³⁵⁶ Spary, *Utopia’s Garden*, 40.

Montpellier bore fruit. In 1708 Antoine was appointed to succeed Joseph Pitton de Tournefort (himself a graduate of Montpellier) as the Professor of Botany at the *Jardin du Roi*. Founded in 1635, the *Jardin* was initially a garden for king's physicians and botanists to grow local medicinal plants, but soon it became a clearing house for plants from all of France's colonies. The wealth of material and the fact that it was conveniently situated in the heart of Paris, led to the establishment of a medical college in anatomy and botany and drew the poor and desperate as test subjects for new drugs.³⁵⁷ But Paris also drew in the same new practitioners and their new cures that Antoine and Bernard's father had written against. Antoine was the first of the Jussieu brothers to come into favor with the French Crown. In 1714, acting as the Demonstrator of Plants, he was first to show a coffee plant successfully grown at the *Jardin*.³⁵⁸ Significantly the person he showed it to was none other than the nephew of the Comte de Ponchartrain, a primary correspondent with Pierre le Moyne sieur D'Iberville, the founder of Louisiana.³⁵⁹ Bernard initially practiced medicine in Montpellier, but seems to have found more delight in the practical application of herbal remedies, if his later career is any indication. Antoine helped arrange his brother Bernard's later appointment as Demonstrator of Plants at the *Jardin* in 1722. The third brother, Joseph, was shipwrecked in South America where he remained for the rest of his life and acted as a correspondent and bioprospector for his older brothers in Paris.

³⁵⁷ On the origins of the *Jardin*, see Londa Schiebinger and Claudia Swan, "Introduction," in *Colonial Botany* eds. Londa Schiebinger and Claudia Swan, (Philadelphia: The University of Pennsylvania Press, 2005), 5; for changes see Brockliss and Jones, 103; and see pg. of the same 312 for medical testing; for the significance of the *Jardin* itself, see Emma Spary, *Nature's Utopia: French Natural History from the Old Regime to the Revolution*, (Chicago: University of Chicago Press, 2000), 15 – 47.

³⁵⁸ Spary, *Eating the Enlightenment*, 83.

³⁵⁹ Sara Chapman, *Private Ambition and Political Alliances: The Phélypeaux de Pontchartrain Family and Louis XIV's Government, 1650 – 1715*, (Rochester, NY: University of Rochester Press, 2004), 21.

One reason that these brothers were drawn to botany, was that Lyon, their hometown, was an entrepôt for many of the new medicines from French colonies. The Jussieu family was placed in a position to take financial advantage by offering the newer sorts of herbal drugs that came into France from that town. The Jussieu brothers also had university connections to Louisiana; both royal doctors (*medecin du roi*) of the colony graduated from Montpellier and served in Louisiana in the early 1700s. Part of the duties of these royal doctors was to botanize and observe local medicine for potential cures, so it is likely that Louis Prat, one of these doctors, played a role in sending yaupon back to Jussieu, a fellow graduate of the medical school at Montpellier. In fact, in 1720, this Lyon-Montpellier-Paris connection was responsible for the first planting of yaupon in the *Jardin du Roi*, when a Montpellier associate in Louisiana shipped it to Antoine.³⁶⁰ Yaupon itself had first been sent to Paris from Louisiana in 1716, when the colony's governor, Antoine de la Mothe Cadillac, sent a few of the leaves with instructions for boiling them and a fulsome praise of it as a purgative, a treatment for kidney stones, a diuretic, and something that might help return color to one's complexion."³⁶¹

While his brother was endorsing the virtues of coffee, Bernard took up his pen to praise the medical usefulness of yaupon drink (what he calls *apalachine*). In 1725 Bernard de Jussieu published a disputation about yaupon, titled *Whether or not in America, or in our country, Apalachine is Healthy for men of Letters*.³⁶² This document represented a discussion

³⁶⁰ Letter from Antoine de Jussieu to Hans Sloane, March 1720, British Library, MS Sloane, 4045, ff. 310 – 11.

³⁶¹ William Sturtevant, "Black Drink and other Caffeinated Beverages," *Black Drink: A Native American Tea* ed. Charles Hudson, (Athens: University of Georgia Press, 2007), 164, note 22; The Letter that mentions this is Cadillac to the Council, January 23, 1716, *Archives Nationales*, Paris, C13, A4, ff 615 – 6.

³⁶² The title, as published, was *An ut in America, aut in hac regione Apalachine potus salubris?* The phrase "men of Letters" is nowhere to be found in the Latin, but I follow Spary here in suggesting that this was one of his target audiences. Spary, *Eating the Enlightenment*, 77.

among the faculty of Medicine in Paris regarding the supposed health benefits of drinking *apalachine*. This was not the first or the last time Bernard would publish such a disputation for his colleagues, but none were quite as publicly ambitious up to that time. His disputation allows us to bring into sharper focus some of the topics this chapter has discussed so far and gives us a particularly complex window into early eighteenth-century medicine. This printed disputation is at once an endorsement of the safety of *apalachine* as a potential public commodity for France, a defense of his family's profession, and the statement erudition of a man who was trying to make a name for himself as an intellectual. In constructing and publishing this text, Jussieu fashions a new medicine bundle around yaupon, wrapping into it iatrochemical medicine, his family's business, and his reputation as a botanist for the French Crown.³⁶³

The text of this disputation is divided into five parts. In each he constructed his case for the safety and indeed desirability of yaupon drink as a medicinal tea, as useful as tea from Asia and chocolate from the Americas. In the first part he demonstrated his practical knowledge of botany, likely learned at home from his father. In doing so he defended traditional herbal remedies (like those his family sold) against a market that was demanding more chemical cures. Not only did he defend his family's profession, but he did so with an empiricist's penchant for detailed observations. Jussieu began by arguing from authority: not just the authority of a Doctor of Medicine (a title he held), but the authority of one long accustomed to observing and working in medical botany. "There are as many

³⁶³ In the eighteenth century, through the work of the brothers, the family was able to add the ennobling particle "de" to their surname. Rogel L. Williams, "Bernard de Jussieu and the *Petit Trianon*," *Botanophilia in Eighteenth Century France* (Paris: International Archive of the History of the Ideas series, no. 179), 31.

drinks as there as species of plants,” he writes.³⁶⁴ Indeed, even the different parts of plants, the roots, the petals, the stems, the fruits, the seeds, each can produce different sorts of drinks for different tastes. Why bother with chemical medicines then, if plants offered such a cornucopia of drinks? Not only did he know from experience what the leaves taste, smell, and feel like, he knew that there were a variety of ways to use yaupon. He showed off his deep knowledge of compounding drugs, likely learned at home, to prove that he was not a hack, like the charlatans his father Nicolas de Jussieu had publicly eviscerated twenty years earlier. Jussieu divulged a variety of ways to prepare medicine from plants: tinctures, distillations, teas, alcoholic spirits, mixture, and concoctions. All, he said, are possible ways of forcing plants to yield their medicinal properties. Yet there is more to Jussieu’s praise of plants than a simple desire to promote their use over chemical remedies and show off his pedigree as the son of a notable apothecary. As the Demonstrator of Plants at the *Jardin du Roi*, he also had an interest in literally demonstrating how useful they were.³⁶⁵

Bernard is also defending the place of traditional botanical apothecaries. In the early eighteenth century, the Aillaud family began to market what it called “purgative powders.”³⁶⁶ Jean Aillaud claimed his family’s powders were a panacea that cured what he saw as the cause for most sicknesses, retained feces.³⁶⁷ People jumped at the chance to try them, from farmers to a *secrétaire d’état*.³⁶⁸ By the 1750s Jean Aillaud could claim content clients in most major French cities and was even granted a royal patent in 1769.³⁶⁹ These

³⁶⁴ Jussieu, *Quaestio Medica*, 1.

³⁶⁵ Jussieu, *Quaestio Medica*, 4.

³⁶⁶ Brockliss and Jones Chapter, 652 – 3.

³⁶⁷ Mary Lindemann, *Medicine and Society in Early Modern Europe*, New York: Cambridge University Press, 2010, 118.

³⁶⁸ Brockliss and Jones Chapter, 652 – 3.

³⁶⁹ Brockliss and Jones, 651- 3.

powders show the opportunities that existed at the time. Even if they never directly competed with yaupon tea, the success of these powders at least shows that there was a market for remedies that claimed to simplify medicine, into terms the average person could appreciate.³⁷⁰ New chemical medicines and proprietary remedies sprang up even as the Faculty of Medicine in Paris tried to discredit them, and these threatened to supplant old herbariums.³⁷¹ Even beyond the Aillaud dynasty, provincial snake oil salesmen could end their careers as celebrated ocular surgeons, like Giacomo Casanova's ophthalmologist, Tadini.³⁷² There was also money in the sale of mineral waters and *orviétan*. Sellers of the latter were even protected from being run out of towns by the Prévôté de l'Hôtel du Roi, an office licensing cures.³⁷³ As a marker of these medical entrepreneurs' success, from 1570 to 1780 the number of apothecaries in Lyon had dropped by half, as the children of many apothecary families chose to pursue a more prestigious medical degree like the Jussieu brothers, or other professions.³⁷⁴ Clearly there was at least an opportunity for *apalachine* to become yet another one of these wonder drugs.

Scattered throughout the first part are signposts to signal how he will approach the yaupon's chemical mechanism of action. Although Bernard was trained as an iatrochemist, in this disputation he argues that drinks distilled, brewed, or extracted from the various parts of plants could cure. It is in the second section though, that Jussieu offers a brief iatrochemical theory to explain how drinks made from plants are healthy and why drinks from all over the world can be healthy for anyone. To that end he explained his theoretical

³⁷⁰ Lindemann, *Medicine and Society*, 118.

³⁷¹ Brockliss and Jones, 627 – 43.

³⁷² Brockliss and Jones, 655.

³⁷³ Brockliss and Jones, 639 – 40.

³⁷⁴ Brockliss and Jones, 204, 522, 532 – 3.

first principle, that “the mutual harmony of solids with liquids perfects bodily functions” and in that principle one ought to establish any “theory about health.”³⁷⁵ He extends this principle to food and drink, citing that each region of the world, hot, cold, and temperate, each has its own sort of food and drink that work with the chemical makeup of “indigenous” peoples.³⁷⁶ To prove his point, he lists the sorts of plants and their drinks that “nature” provides to each sort of climate. For those “burnt by the sun”, nature gives “the juices of acidic fruits;” to those in the “northern seas” it furnishes the spiritous fermentation of plants like juniper and barley; and for those who live in “temperate climates”, nature provides drinks like apple cider.³⁷⁷ This emphasis on chemical structure using words like “acidic” and “fermentation” was not really anything new by the date of Jussieu’s disputation, 1725, but it does show how Jussieu was answering with questions about yaupon’s safety. As we will see below, by breaking yaupon down into its constituent parts, and understanding how each of those parts interacted with the body, Jussieu was making it palatable for Parisiennes in general and iatrochemists in particular, who wanted “answers for everything.”³⁷⁸ He was fashioning a new bundle, more palatable for the tastes of his audience. Understood as part of chemical processes and localized to the people wherein a particular plant grew, “tea” and other drinks were not “vices”.³⁷⁹ If all these different people are helped by these drinks, if “experience proves the efficacy of different peoples using each other’s drinks,” why shouldn’t everyone use *apalachine*?³⁸⁰

³⁷⁵ Jussieu, *Quaestio Medica*, 2.

³⁷⁶ Jussieu, *Quaestio Medica*, 2.

³⁷⁷ Jussieu, *Quaestio Medica*, 1.

³⁷⁸ Brockliss and Jones, 146.

³⁷⁹ Jussieu, *Quaestio Medica*, 2.

³⁸⁰ Jussieu, *Quaestio Medica*, 2.

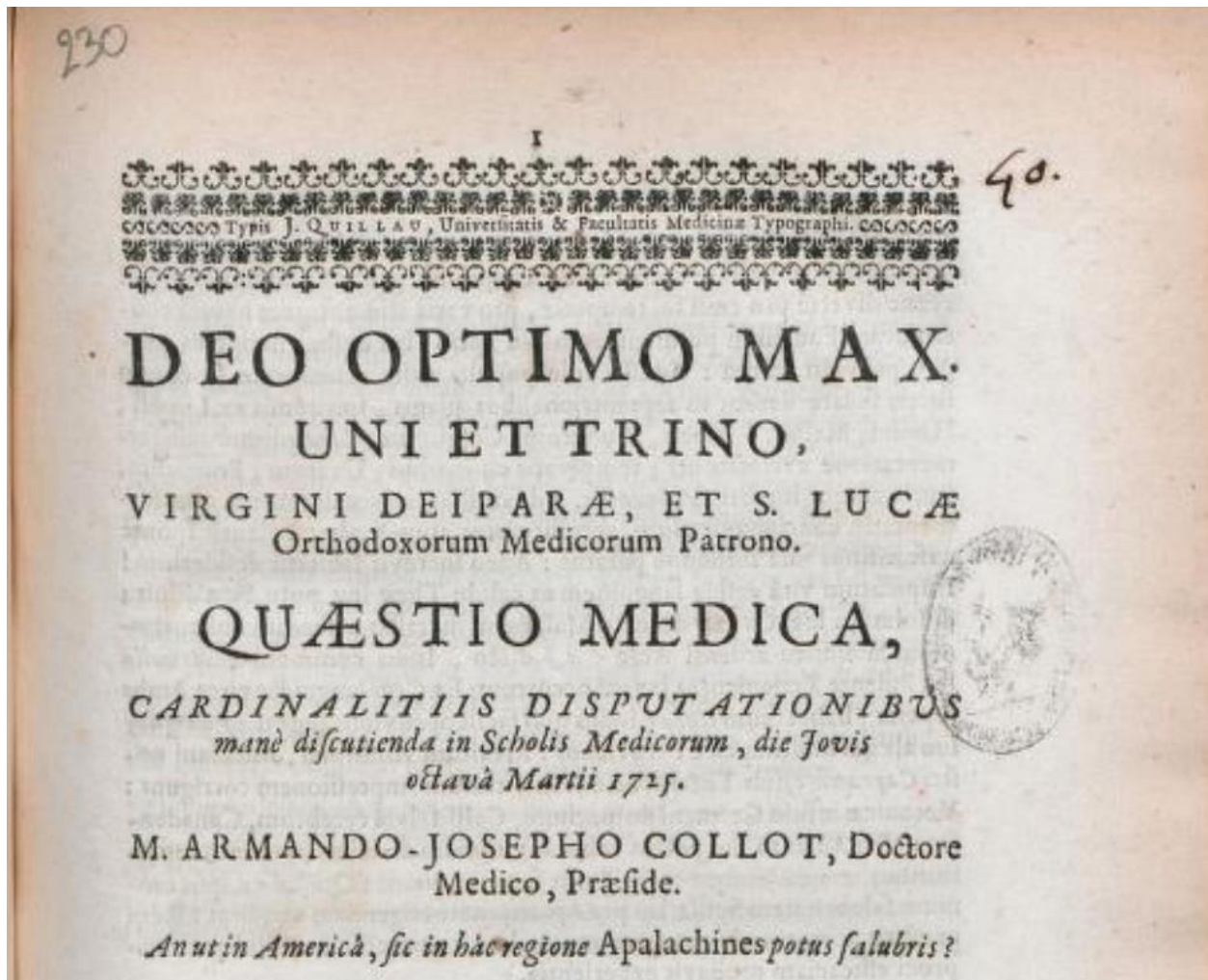


Figure 20: Dedication from Bernard de Jussieu's disputation on yaupon drink. Source: https://archive.org/details/BIUSante_ms02322_ms02337ax05x0040

Having proven that drinks ought to be judged by their chemical effects on a person's constitution, Jussieu moves on in part three to describing the origin and nature of *apalachine*. Jussieu's description bundles yaupon into the fold of the French empire by delineating its appearance with a detailed description of the plant's physical characteristics as well as by explaining that was, in fact, a Frenchman, René Laudonnière the privateer, who first brought the plant to the attention of Europe in 1564.³⁸¹ By mentioning Laudonnière, then quietly skipping over his defeat at the hands of the Spanish in St. Augustine, and immediately describing how the tree was planted in the *Jardin du Roi*, but did not thrive, Jussieu is staking out a French claim on this medicinal plant. The tree, similar to a French "almond tree," grows in Florida, a region Jussieu claimed as part of Louisiana and Mississippi."³⁸² Jussieu is careful to describe the color and shape of the branches, as well as the berries and seeds. In breaking down the tree into its constituent parts, Jussieu is showing a link between the iatrochemical training he received at Montpellier, training that broke down systems of health and illness into smaller manageable parts so as to better understand both, and the eighteenth century drive to understand and control Nature by organizing, describing, and classifying its plants.³⁸³ Jussieu, then, anticipated or perhaps began, the later work of George Louis Leclerc Comte de Buffon at the *Jardin du Roi*, who would become its director in 1739 and sponsor Bernard's nephew, Antoine-Laurent who took over as demonstrator after his uncle's death, finishing the classification system for plants Bernard had begun.³⁸⁴

³⁸¹ I follow E.C. Spary in seeing Jussieu's description as a way to control the botanical knowledge of a potentially useful plant for the French empire; Spary, *Utopia's Garden*, 84.

³⁸² Jussieu, *Quaestio Medica*, 3.

³⁸³ Bernard de Jussieu's nephew, Antoine-Laurent, would publish a finished version of his uncle's classification system after Bernard's death under the title *Genera plantarum*. Spary, *Utopia's Garden*, 56.

³⁸⁴ Lawrence Farber, *Finding Order in Nature: The Naturalist Tradition from Linnaeus to E.O. Wilson* (Baltimore: The Johns Hopkins University Press, 2000), 13.

Finally, he explains the tea's origins and gives a botanical description of the tree, its leaves, flowers, and seeds. He empirically peels back any rumors or hearsay about the tea's effects, disassociating it with Native American practices and cosmologies while at the same time carving out a niche for it in European systems of botany. Strikingly it is in this part that Jussieu describes how the Apalachees use it.

The Apalachees make it by mixing some of the leaves
with some other dried things and steeping it in a clay cup.
They call it *Cassina* and drink it again and again for a few days.
The Apalachees gave this drink, on account of its
virtues, to some explorers, who claimed to be
untouched by either gout or even bladder or kidney stones.
The Spanish have experienced this and our colonists praise
It for similar reasons.³⁸⁵

Nowhere does he mention vomiting, yet he still notes that "other dried things" are mixed into what the Apalachees drink. Strangely, neither the source he cites in this passage, Rene Laudonnière nor Theodore de Bry, the engraver who illustrated and further commented on what Laudonnière wrote in the 1560s, offer any ingredients in the teas other than the leaves of "a certain tree."³⁸⁶ What may be happening here is that Jussieu is conflating the experience of Spanish and French colonists as well as his eyewitnesses in Louisiana, with the earlier written descriptions and illustrations of Laudonnière and de Bry. Maybe this is just a momentary lapse in memory. Certainly, in the forum of an oral, public disputation such things happen. In this passage it seems as though Jussieu's empirical drive for detailed description is set at odds with his sensitivity to questions about the tea's effects on patients.

[Yaupon's] tighter structure demands a longer steeping and

³⁸⁵ Jussieu, *Quaestio Medica*, 3.

³⁸⁶ Rene Laudonnière, *L'Histoire notable de la Floride*; Theodore de Bry, *Brevis narratio eorum quae in Florida Americae provincia Gallis*, XXIX.

hotter water. From the bittersweet taste of the dry leaves, you know the power of the brew when the boiling water gets into the leaves. Particles race to flee their little cells. The inner and sweet parts of the leaves are drawn out. The number of leaves you use determines the brew's color. Drunk hot and bitter, it immediately revives the animal spirits. It goes straight to the brain, with a sweetness, following a light bitterness.³⁸⁷

Jussieu situated his text in an iatrochemical model of taste, popular in Paris at the time.³⁸⁸

"Any opinion concerning health" he claimed, ought to take as a principle that the "change from solid into liquid parts completes the animal functions."³⁸⁹ These animal functions were seen as one product of digestion, the inspiration for energetic thought and wit. Coffee, for example, praised by his brother in a public disputation nearly a decade earlier, was thought to be a particularly excellent beverage for stimulating these functions. *Apalachine* then, was in good company. By describing precisely how *apalachine* worked on and inside bodies, Jussieu staked his intellectual background, advocating a mechanical view of the human body. He not only walked the walk, so to speak, by having a deep understanding of practical botany, but he also talked the talk, flaunting his theoretical knowledge. In these first two sections Jussieu positioned himself as a follower of iatrochemical models of taste. Experience is more telling than theorizing. Jussieu wrote as one who not only supports *apalachine*, but as one who had drunk it himself. Arabs, Indians (he seems to mean Native Americans in this case), Peruvians, Mexicans, people of Java, French colonists, Germans, the French, and even Canadians all use herbs as remedies for a variety of ailments he argues, so "why...can't we look out for the health of everyone with all these things? Commerce,

³⁸⁷ Jussieu, *Quaestio Medica*, 4.

³⁸⁸ Spary, *Eating the Enlightenment*, chapter 5.

³⁸⁹ Jussieu, *Quaestio Medica*, 4.

everywhere, far and wide, presents a golden opportunity and experience proves the efficacy of seizing it.”³⁹⁰

Bernard, speaking as Demonstrator of Plants in the *Jardin di Roi*, is also advocating for the *apalachine* as a potentially profitable plant for France. International power struggles over colonial products urged governments to scramble to out-botanize one another.³⁹¹ The exigencies of colonial ambition circumscribed intellectual efforts to classify as states also sought to profit from the financial and even medical edge new plants could give. France in particular, was looking for an edge in the competition to out botanize other imperial powers wherever it could find it. *Apalachine* was one of the new drugs being hawked from Louisiana. Botanists working in the eighteenth century had to take into account not only their own prestige and careers in the intellectual environment of the time, but also the wishes of their respective Crowns. Botanists like Hans Sloane and three of the Jussieu brothers (Antoine, Bernard, and Joseph) worked to classify and collect, but at the same time they held high posts in the governments of England and France and actively pursued their governments’ agendas. While travelling through South America, Joseph du Jussieu acted as a collector and informant for his brother, the demonstrator of plants in the *Jardin du Roi*, in Paris.³⁹²

In parts four and five of his treatise, Jussieu supported the efficacy of colonial medicines from which the Crown might profit.³⁹³ He defends yaupon as a cure from a distant land by praising similar ones. Here we can see that *apalachine* was caught up in

³⁹⁰ Jussieu, *Quaestio Medica*, 2.

³⁹¹ Schiebinger, *Plants and Empire*, 38 – 44.

³⁹² Spary, *Utopia’s Garden*, 40.

³⁹³ Spary, "Peaches Which the Patriarchs Lacked": Natural History, Natural Resources, Natural History and the natural Economy in France,” *History of Political Economy*, 35 (suppl. 1, 2004), 14 – 41.

larger political currents in the Atlantic World. France had to keep up with other colonial powers and could only do so if its citizens consumed what it produced. To do this he tries to shame his readers by insisting that Frenchmen ought to be above fear of “foreign drinks.”³⁹⁴ France, he insists, is already full of similar drinks from far and wide like tea from China and cocoa from Mexico. This promotional tactic dictated that there was some hesitancy to use “foreign” drinks or medicines at the time. Jussieu promotes Apalachine as being as useful as tea, but gentler in how it affects the drinker. The title of the medical question he ask in his published “disputation” is “whether or not the tea of the Apalachees, is just as safe to drink here (in Paris or France) as in America.”³⁹⁵ The question was not necessarily whether or not “exotic” drugs were effective on Europeans; clearly there was a demand or there would have been no need for the pamphlet. The question was which ones Parisians ought to choose. In his disputation, Jussieu tries to strike a balance between praising and de-exoticizing yaupon, even given the already-known powers of local, indigenous remedies. After all, he says, if the end goal is health, that is all that really matters, not its source.³⁹⁶ His final pitch endorses it as, if not entirely a panacea, at least an herb that is effective for anyone and everyone, young or old.

This drink is singularly useful. It rouses the aged from sleep. It renders adults stronger by calming hunger and thirst and they return to work more alert and vigorous. It provides relief to children (who eat everything) by stirring up their bowels and bladders and is useful to women on account of its singular virtue of getting rid of too much milk.³⁹⁷

³⁹⁴ Jussieu, *Quaestio Medica*, 5.

³⁹⁵ Jussieu, *Quaestio Medica*, 1.

³⁹⁶ Jussieu, *Quaestio Medica*, 1.

³⁹⁷ Jussieu, *Quaestio Medica*, 5.

In the eighteenth century, bioprospecting world, any edge one could gain over one's rivals, whether it be on an international or national stage, mattered. John Law's failed colony among the Natchez illustrated that the French Company of the Indies and the Crown were willing to take great risks to try and outcompete rivals England and Spain making fortunes by growing, selling, and trading in plants from the New World. Law's Company of the West had tried to grow coffee, among other plants seen as potential cash crops, in Louisiana. Law was a Scottish economist who convinced the French Crown to invest in a scheme to make money. A sort of failed Alexander Hamilton, Law's scheme collapsed spectacularly, causing even the *Banque Générale*, which Law himself had founded, to flop.³⁹⁸ As part of his scheme, Law proposed a variety of plants to be transplanted to Louisiana, among them a sort of coffee that had recently been discovered on what is today Reunion Island, then called the *Île de Bourbon*.³⁹⁹ In fact, it was in the wake of this collapse that we hear the first mention of *apalachine* being used as a medicinal tea in Paris. I think it is telling that the very year that Law's "Mississippi Bubble" burst, Pierre-François Charlevoix left Paris and would later remark on the tea in the city: "It began to be of some repute in [Paris] when I left it; but that was a bad time for making fortunes, they appearing or vanishing almost as suddenly as they were acquired."⁴⁰⁰ In a later work, Charlevoix writes that the roasting process is analogous to "coffee in Turkey."⁴⁰¹ Does Charlevoix's claim that *apalachine* was roasted just like coffee imply that French settlers in Louisiana were to domesticate the practices associated with brewing the tea?

³⁹⁸ Spary, *Eating the Enlightenment*, 130 – 1.

³⁹⁹ Spary, *Eating the Enlightenment*, 74.

⁴⁰⁰ Charlevoix, "A Journey to North America vol. II," 303 – 6.

⁴⁰¹ Charlevoix's "A Journey to North America vol. II," 303 – 6.

Jussieu's spirited defense of the plant, even if not successful in making anyone a fortune, ensured its continued use and in part inspired later naturalists and botanists to look for it in the Southeast. As late as 1885 Jussieu was cited by French medical writers when they described the plant and its uses.⁴⁰² For Jussieu the bundle he crafted around yaupon was only one part of a larger one. Although he died in 1777, his nephew, the son of his older brother Christophle who had remained in Lyon, took up his post as Demonstrator of Plants and in 1789 published Bernard's classification system for plants, under the title *Genera Plantarum*.⁴⁰³ Throughout the eighteenth-century botanists sought to find order in nature through classification systems like Jussieu's. His supervisor at the *Jardin* after 1738 was George Louis Leclerc Comte de Buffon, whose *Historie naturelle* became a "central document of the Enlightenment."⁴⁰⁴ Likewise Bernard and Antoine's classification system would inform even zoological classification in France through the 1810s.⁴⁰⁵ Even as systems like these and perhaps more famously the *Systema Naturae* of Carl Linnaeus were being published and stripping yaupon of its older cosmic connections, a fraction of that older cosmic order bundled into yaupon endured. Linnaeus, William Aiton, the Jussieu crew described above, Thomas Walter, Jean-Baptiste de Lamarck, and William Bartram, all classified yaupon differently. The name given to it by Aiton is the one that successfully navigated the changes in the currents of natural history nomenclature: *ilex vomitoria*. Perhaps as part of the drive to commercialize yaupon drink and make it sound less nauseating for Europeans, other natural historians would use names that evoked where it

⁴⁰² Theophile Mongis, *Livre Toute plante porte son remède, ou La santé par les plantes*, (Nantes, 1885), 121 – 3, <https://gallica.bnf.fr/ark:/12148/bpt6k57435206.r=apalachine?rk=64378;0>.

⁴⁰³ Spary, *Utopia's Garden*, 4.

⁴⁰⁴ Farber, *Finding Order in Nature*, 17.

⁴⁰⁵ Charles Gillespie, *Science and Polity in France: The Revolutionary and Napoleonic Years* (Princeton: Princeton University Press, 2004), 7.

could be found (*caroliniana*, *paragua*, *floridiana*) while others emphasized that it was a common drink by using some version of the name that colonists used in the Southeast, *cassina*.⁴⁰⁶ According to Botanist Shiu Ying Hu, Linnaeus's failure to finish naming a holly beside the dahoon holly (which he call *ilex cassine*) in the gardens of George Clifford in Holland, also resulted in subsequent confusion around the plant's name.⁴⁰⁷

For someone like the famous naturalist William Bartram, it became just another curiosity to check off on a list of notable plants to look for as he travelled through Creek and Cherokee towns in the 1790s. Bartram was an astute observer of not just plants and animals, but also dabbled his toes in some ethnography. In his "Travels" he provided drawings of Creek and Cherokee architecture as well as what he called their "customs and beliefs." Maybe he was just careless, but I also think it shows just how much of the older cosmic order had been divested from yaupon drink that even when he was describing the spiral fires around which Creeks sat and drank "casseny," that he never thought to mention more than the name of the drink. But some of the ceremonialism must have continued. Bartram corresponded with Benjamin Smith Barton, a botanist who wrote one of the first textbooks on botany in the new United States. Barton himself would go on to try and explain the origins of contemporary Native Americans, using his own observations and those Bartram had sent him. In his *New Views of the Origin of the Tribes and Nations of America* noting the significance of yaupon, as reported by his informant Bartram, Barton advocated for a new binomial name for the tree in his *Collections*, *ilex religiosa*. By suggesting this name, Barton consciously made a connection between the people he saw as

⁴⁰⁶ Hu, "The Botany of Yaupon," 20 – 7.

⁴⁰⁷ Hu, "The Botany of Yaupon," 23.

the immediate ancestors of Native Americans and the Chinese, who he thought had a rather similar origin story for how tea was discovered. Although no other botanist adopted it, and although his speculations were wrong, Barton's binomial name perhaps best matched what yaupon was to Native Americans.

Conclusion

Black Drink: A Native American Tea

On July 3, 1817, Hugh Montgomery sat down to write a letter to the governor of Georgia, William Rabun. Montgomery had just returned from a four-day trip to Jefferson County Georgia, where the governor had asked him to look in on some settlers living on Creek lands. He reported the names of over seventy individuals and heads of households. Only three years after the Red Stick War, a war involving rival Creek towns, the newly United States, and Spanish Florida, the governor was likely trying to keep an eye on any white encroachment that might spark new violence, when he asked Montgomery to go, name names, and ask settlers to leave. Montgomery's report must have been poorly received. Not only were there probably one hundred or more settlers in this one location, but Montgomery must have despised the settlers, whom he called "Mixed Bloods, the spurious product of those Disgracefull & unnatural Matches" with Native American women.⁴⁰⁸ However, the governor's problem was rooted not in the Red Stick War, but much earlier in the shatter zone and its coalescent societies. Men would "Kiss a Squaw for the privallage of their Land & Range" while others (more disgracefully thought Montgomery) "give their Daughters to the Indian fellows for the privallage of Living in their Country."⁴⁰⁹ These sorts of choices were not new in the Georgia backcountry. Jean-Antoine Le Clerc, David Taitt, and Alexander McGillivray had done much the same half a century earlier and been sponsored by the colonial governments of Carolina and Georgia. By 1817

⁴⁰⁸ Hugh Montgomery to William Rabun, July 3, 1817. University of Georgia Rare Book and Manuscript Library, <http://dlg.galileo.usg.edu/nativeamerican/jpg/tcc453f.jpg>.

⁴⁰⁹ Hugh Montgomery to William Rabun, July 3, 1817. University of Georgia Rare Book and Manuscript Library, <http://dlg.galileo.usg.edu/nativeamerican/jpg/tcc453f.jpg>.

though, at least Hugh Montgomery could think of how what seemed to him such a sad state of affairs could happen. They were trying to imitate Indians he wrote, so much so that they may have well been “taking the Indian Black Drink it makes them inimical to every person who Does not ware a Long hunting Shirt & mockisins or a Match Coat & Smell like Tainted Dearskins...”⁴¹⁰ Yaupon drink had become a “black” potion that could turn one Indian. Yet despite Montgomery’s derisive words, the drink was still powerful.

Around the same time Hugh Montgomery was scouting out what today we might call coalescent societies, in Georgia, Major General Andrew Jackson was preparing to wage war in Florida on the Seminoles, groups of Creek who had migrated there. Another group of refugees headed south to join them after the Red Stick War. Among them was a mother who had taken her 14-year-old son, known as Billy Powell. In his time with the Seminoles, Powell gained a reputation as a skilled hunter and warrior and took a different name, *Asi Yahola*, (Osceola) yaupon singer, or shouter. Osceola fell, captured through the treachery of a Spaniard from St. Augustine who used a white flag to lure him to talks of peace and truce. Although English speakers don’t remember him for the meaning of his Muskogee name, his life shows us that yaupon’s old power as a war medicine endured, for those who choose to look for it.

Yaupon drink then, was understood by Anglo-American elites in the American South as something low class and mixed-race individuals drank, and interestingly something that could, like a magic potion, “turn” a person Indian. Understood by Osceola, it remained a powerful medicine that marked his status in society. A drink, once used as a medicine for

⁴¹⁰ Hugh Montgomery to William Rabun, July 3, 1817. University of Georgia Rare Book and Manuscript Library, <http://dlg.galileo.usg.edu/nativeamerican/jpg/tcc453f.jpg>.

purity by Native Americans and a cure for bladder and kidney stones by Spanish soldiers become a toxic, “black” drink. For those lower on the social ladder, “yeopon” continued to thrive as a medicine.⁴¹¹ Jussieu would be proud of the list of ailments North Carolinians thought yaupon could cure, throughout the nineteenth and early twentieth centuries: gout, smallpox, alcoholism, and diabetes. As disease names changed and medical practices evolved, yaupon endured.⁴¹² From being part of a derogatory slur (“yeopon-eaters”) aimed at poor whites in the Outer Banks, it has come to sit on the shelves of hip tea shops in Raleigh, where one can get a draught of it, or have it shipped via Amazon.⁴¹³ Even Dr. Google suggests that people are interested in yaupon’s medicinal benefits. When I search for yaupon, Google’s first suggestion to modify the search is “What is yaupon good for?” Despite centuries of colonialism, a drink made from yaupon remains part of the conversation about health in the Southeast.

James Lockhart wrote about of a cycle of sources for historians of Latin America:

There is a cycle of sources, from more to less synthetic, with corresponding kinds of history. For early Latin American history, the main elements of the series are 1) contemporary books and other formal accounts, which we call 'chronicles' 2) official correspondence; 3) the internal records of institutions; 4) litigation; 5) notarial records. With the chronicles, a sort of narrative history is practically ready made; the scope of reference is then gradually reduced as one proceeds through the series until in the notarial records the historian is confronted with an individual item about one ordinary person on one day of his life. The sources also get less and less accessible as one proceeds down the list, both in the physical sense and in the sense of requiring more special skills for use. They become more primary, minute, local, fresh, and of more direct interest to social history.⁴¹⁴

⁴¹¹ William Sturtevant, “Black Drink and Other Caffeinated Beverages,” *Black Drink: A Native American Tea* ed. Charles Hudson (Athens, University of Georgia Press, 2007), 154.

⁴¹² Sturtevant, “Black Drink,” 154.

⁴¹³ https://www.tinrooftes.com/?post_type=product&s=yaupon.

⁴¹⁴ James Lockhart, *Of Things of the Indies: Essays Old and New Concerning in early Latin American History*, “The Social History of Early Latin America: Evolution and Potential,” (Stanford: Stanford University Press, 1999), 30.

Although Lockhart was writing about the sorts of sources commonly used by historians of Early Latin America and how each helped shape the sorts of narratives historians could write, I think in a broad sense his statement could apply to any period of historical inquiry. In fact, when I first read his article, I was still studying early modern England. “If historians of Latin America had ‘sampled most of its known documentary resources’ by 1975,” I thought, sources that included Nahuatl language histories, “what sorts of sources could a historian studying Tudor England hope to find?”⁴¹⁵ He does suggest that new theoretical perspectives can prompt new readings of older types of sources, but as of the second publication of that essay in 1989, he could only speculate that “social history” was converging with “demography and anthropology on the one hand and approaching cultural-intellectual on the other.”⁴¹⁶ I would like to think that this dissertation has in some way realized this speculation, in an essay that has stuck with me through three advisers, tenure, and a dissertation.

But I also hope this dissertation stands as a suggestion that maybe it is time to look beyond his cycle, not by writing speculative fiction, but by allowing our projects to create more questions for future historians than answers and to allow objects to become actors in the histories we write, and looking deeper into things like the impacts of climate on peoples’ cosmologies. To do this requires the oft cited, but seldom performed interdisciplinary study. As a European writing about Native American history, this seems especially important for me when considering the actions and motivations of people whose

⁴¹⁵ Lockhart, “Social History,” 75.

⁴¹⁶ Lockhart, “Social History,” 80.

pasts were never written in a way that makes sense to Europeans. It is one of the reasons I chose to employ the “bundle” metaphor to help frame some of my arguments.

I see each of these chapters as a sort of ink-blot experiment, but not a Rorschach Test (although, for my readers, what I have written will probably prove to be such a test for me). Each chapter is like a drop of ink that I dripped onto a piece of wet paper; each sheet a different setting in the Atlantic World. Even though my chapters are finite and have endings, there is overlap between each and each continues to fractally expand beyond the scope of what I have written here. Even though the Beloved Woman Henry Timberlake wrote about falls off the pages of his memoir, even though Bernard de Jussieu pours himself into the page of his disputation, even though the nameless *cacica* only speaks a few sentences in Domingo de Leturiondo’s *visita*, and even though I have circumscribed what it was like to live in Cahokia or Etowah within the limits of my European languages, what each of those people did continues to touch the present. As I write this, the yaupon holly in my garden is blooming. Its blossoms are still white.

Bibliography

- Abercrombie, Thomas. *Pathways of Memory and Power: Ethnography and History Among an Andean People*. Madison: University of Wisconsin Press, 1998.
- Adair, Mary. *Prehistoric Agriculture in the Central Plains*. Lawrence: University of Kansas Publications on Anthropology no. 16, 1988.
- Adas, Michael. *Machines as the Measure of Man: Science, Technology, and Ideologies of Western Dominance*. Ithaca: Cornell University Press, 1989.
- Adelman, Jeremy and Stephen Aron. "From Borderlands to Border: Empires, Nation States and the peoples in between in North American History. *AHR* 104, (1999), 814-44
- Adelman, Jeremy. *Republic of Capital. Buenos Aires and the Legal Transformation of the Atlantic World*. Stanford: Stanford University Press, 1999.
- Agha, Andrew and Nicole M. Isenbarger. "Recently Discovered Marked Colonoware from Dean Hall Plantation, Berkeley County, South Carolina". *Historical Archaeology* 45(2): 184-187.
- Aiton, A.S. "Spanish Colonial Reorganization under the Family Compact". *HAHR* 12 (1932), 269-80.
- Albala, Ken. *Food in Early Modern Europe*. Westport: Greenwood, 2003.
- Allain, Math  . '*Not Worth a Straw*': *French Colonial Policy and the Early Years of Louisiana*. Lafayette: Centers for Louisiana studies, 1988.
- Allaire, Bernard. "Officiers ey marchands: Les societ  es de commerce des fourr  res, 1715-1760". *Revue d'Histoire de l'Am  rique Fran  aise* 40, 3 (1987), 409-29.

Amazons, Savages, and Machiavels: Travel and Colonial Writing in English, 1550-1630: An Anthology, ed. Andrew Hadfield. New York: Oxford University Press, 2001.

America's Ancient City, Spanish St. Augustine, 1565-1763. ed. Kathleen Deagan, New York: Garland Publishing 1991.

Anderson, David G. "Fluctuations Between Simple and Complex Chiefdoms: Cycling in the Late Prehistoric Southeast". *Political Structure and Change in the Prehistoric Southeastern United States*, edited by John Scarry, University Press of Florida, Gainesville., 1996, 231-52.

Anderson, David. *The Savannah River Chiefdoms: Political Change in the Late Prehistoric Southeast*, Tuscaloosa: University of Alabama Press, 1994.

Anderson, David G. and Kenneth E. Sassaman. "Foundations of Modern Southeastern Archaeology". *Recent Developments in Southeastern Archaeology*, The SAA Press, Washington D.C., 2012, 1-35.

Anderson, David G. and Kenneth E. Sassaman. "Mississippian Complexity and Contact Coalescence". *Recent Developments in Southeastern Archaeology*. The SAA Press, Washington D.C. , 2012, 152-90.

Anderson, Dean. "Documentary and Archaeological Perspectives on European Trade Goods in the Western Great Lakes Region". Ph.D. Dissertation, Michigan State University, 1992.

Anderson, Karen L. *Chain her by one Foot: The Subjugation of Native Women in Seventeenth Century New France*. New York: Routledge, 1993.

Anderson, L. *Charles Bonnet and the order of the Known*. Dordrecht: Riedel, 1982.

- Andrews, Charles. "The Florida Indians in the Seventeenth Century". *Tequesta* 1 (1943), 36-48.
- Andrews, Kenneth. "The English in the Caribbean 1560-1620". *The Westward Enterprise: English Activities in Ireland, the Atlantic, and America, 1480-1650* eds. K. Andrews, N.P. Canny, and P.E.H. Hair. Liverpool: Liverpool University Press, 1978, 103-23.
- Andrews, Kenneth. *The Spanish Caribbean: Trade and Plunder, 1530-1630*. New Haven: Yale University Press, 1978.
- Anthony, Ronald. "Descriptive Analysis and Replication of Historic Earthenware: Colono Wares from the Spiers Landing Site, Berkeley County, South Carolina. *Papers of the Conference on Historic Site Archaeology* 13, (1978), 253-68.
- Appleby, Joyce Oldham. *Economic Thought and Ideology in seventeenth Century England*. Princeton: Princeton University Press, 1978.
- Apter, Andrew, "Herskovits' Heritage: Rethinking Syncretism in the Africa Diaspora. *Diaspora* 1, 3 (1991), 263-79.
- Arber, Agnes, *Herbals, Their Origin and development: A Chapter in the History of Botany, 1470-1670*. Cambridge: Cambridge University Press, 1938.
- Archaeological Studies of Gender in the Southeastern United States*, eds. Jane M. Eastman and Christopher B. Rodning. (2001).
- Armitage, David. *The Ideological Origins of the British Empire*. Cambridge: Cambridge University Press, 2000.
- Arnaud Rabina, Juan Igancio et al. "Estructura de la población de una sociedad de frontera, La Florida Española, 1600-1763". *Revista Complutense de Historia de América* 17 (1991), 93-120.

- Arnold, J. Barto. "The Texas Historical Commission's Underwater Archaeological Survey and Preliminary Report on the *Belle La Salle's* Shipwreck of 1686". *Historical Archaeology* 30, 4 (1996), 66-87.
- Arnold, Jeanne. "Transformation of a Regional Economy: Sociopolitical evolution in the Production of Valuables in Southern California". *Antiquity* 62 (1991), 953-62.
- Arnold, Morris. "The Myth of John Law's German Colony on the Arkansas". *Louisiana History: The Journal of the Louisiana Historical Association* 31, 1 (1990), 83-88.
- Ashworth, William. "Natural History and the Emblematic World View". *Reappraisals of the Scientific Revolution* eds. David C. Lindberg and Robert Westman. Cambridge: Cambridge University Press, 1990.
- Atran, S. "The Nature of Folk-Botanical Life Forms". *American Anthropologist* 87 (1985), 298-315.
- Aubert, Guillaume. " 'The blood of France': Race and Purity of Blood in the French Atlantic World". *WMQ* 61, 3 (2004), 439-78.
- Aucoc, Léon. *L'Institut de France. Lois, statuts et règlements concernant les anciennes Académies et l'Institut de 1635 à 1889*. Paris: Imprimerie nationale, 1889.
- Axtell, James. *Natives and Newcomers: The Cultural Origins of North America*. Oxford: Oxford University Press, 2001.
- Axtell, James. *The Indian's New South: Cultural Change in the Colonial Southeast*. Louisiana State University Press, Baton Rouge, 1997.
- Babin, Mark. "Glass Beads of Chota-Tanasee: An Historical and Archaeological analysis of Overhill Cherokee Networks, Unpublished MA thesis, University of Tennessee, 2018,

- Baden, William W. "Evidence of Changing Settlement Patterns in the Little Tennessee River Valley of East Tennessee". *Exploring Tennessee Prehistory*, edited by Thomas Whyte, C. Clifford Boyd, Jr., and Brett H. Riggs, pp. 135–156. Report of Investigations No. 42. Department of Anthropology, The University of Tennessee, Knoxville, 1985.
- Bailyn, Bernard. "Reflections on Some Major Themes". *Soundings in Atlantic History*, eds. Bernard Bailyn and Patricia Denault. Cambridge, MA: Harvard university Press, 2011, 1-43.
- Baker, H.G. *Plants and Civilization*. Belmont, CA: Wadsworth Press, 1978.
- Baldwin, Martha. "Alchemy and the Society of Jesus in the Sixteenth Century: Strange Bedfellows?". *Ambix* 40, 1993, 41-64.
- Balvay, Arnaud. "The French and the Natchez: A Failed Encounter". *French and Indians in the Heart of North America, 1630-1815*. eds. Robert Englebert and Guillaume Teasdale. East Landing: University of Michigan Press, 2013.
- Banks, Kenneth. *Chasing Empire across the Sea: Communications and the State in the French Atlantic, 1713-1763*. Montreal: McGill-Queen's University Press, 2002.
- Barber, Michael B. " Human Prehistory beyond the Blue Ridge: A Brief Introduction". A revised version of a paper presented at the Blue Ridge Symposium, Roanoke College, February 29, 1980, 1989.
- Barber, Michael B., Michael F. Barber, and Christopher Brown. "The Hurt Power plant Site (44py144), Pittsylvania county, Virginia: A regional Perspective on the Early Contact Period Based on Bone Tool Analysis." Paper presented at the annual meeting of the Middle Atlantic Archaeological Conference, Ocean City, Maryland, 1997.

- Barfield, Eugene and Michael B. Barber. "Archaeological and Ethnographical Evidence of subsistence in Virginia during the Late Woodland Period". *Middle and Late Woodland Research in Virginia: A Synthesis*. eds. Theodore Reinhart and Mary Ellen N. Hodges. Special Publication 29, Archaeological Society of Virginia, Richmond, 1992, 225-48
- Barker-Benfield, G.J. *The Culture of Sensibility: Sex and Society in Eighteenth Century Britain*. Chicago: Chicago University Press, 1992.
- Barnett, Frances Mason. "Medical Authority and Princely Patronage: The Academia Naturae Curiosorum, 1652-1693". Ph.D. Dissertation. University of North Carolina Chapel Hill, 1995.
- Barr, Juliana. "From Captives to Slaves: Commodifyng Indian Women in the Borderlands". *JAH* 92, 1 (2005), 19-46.
- Barrera-Osorio, Antonio. *Experiencing Nature: The Spanish American Empire and the Early Scientific Revolution*. Austin: University of Texas Press, 2006.
- Barrios Pintado Feliciano, ed. *Derecho y administración pública en las Indias hispánicas*. (2 vols., Cuenca, 2002.)
- Barsanti, G. "Linné and Buffon: deux visions différentes de l'histoire naturelle". *Revue de Synthèse* 113-114 (1984), 83-107.
- Bauer, Alexander. "Itinerant Objects," *Annual Review of Archaeology* 48 (July 2019), 335 – 52.
- Bean, William J. *The Royal Botanic Gardens, Kew: Historical and descriptive*. London: Cassell, Bennet, William and Joel Gurin, 1908.

- Bécart de Granville, Charles. *Les Raretés des indes: "Codex Canadiensis"; Album manuscript de la fin du XVIIe siècle contenant 180 dessins concernant les indigenes leurs costumes, tatouages, la faune et la flore de la Nouvelle France plus deux cartes*. Facsimile. Montréal: Bouton d'Or, 1974.
- Beck Jr., Robin A. "Catawba Coalescence and the Shattering of the Carolina Piedmont, 1540-1675. In *Mapping the Mississippian Shatter Zone: The Colonial Indian Slave Trade and Regional Instability in the American South*, edited by Robbie Ethridge and Sheri M. Shuck-Hall, University of Nebraska Press, Lincoln, 2009, 115-41.
- Beck, Brandon. *From the Rising Sun: English Images of the Ottoman Empire to 1715*. New York: Lang, 1997.
- Beck, Robin A. Jr. "Consolidation and Hierarchy: Chiefdom Variability in the Mississippian Southeast". *American Antiquity* 68: (2003), 641-661.
- Beck, Robin A., Jr. David G. Moore, and Christopher B. Rodning. "Identifying Fort San Juan: a Sixteenth –Century Spanish Occupation at the Berry Site, North Carolina". *Southeastern Archaeology*, 25, no. 1 (2006), 65-77.
- Beckert, Sven. *Empire of Cotton: A Global History*. New York: Alfred A. Knopf, 2014.
- Beeman, Richard R. "Labor Forces and Race Relations: A Comparative View of the Colonization of Brazil and Virginia". *Political Science Quarterly* 86 (1971), 609-36.
- Beers, Henry. *French and Spanish Records of Louisiana: A Bibliographic Guide to Archival and Manuscript Sources*. Baton Rouge: Louisiana State university Press, 1989.
- Behrendt, Stephen. "Ecology, Seasonality, and the Transatlantic Slave Trade". *Soundings in Atlantic History*, eds. Bernard Bailyn and Patricia Denault. Cambridge, MA: Harvard university Press, 2011, 44-86.

- Beiler, Rosalind. "Dissenting Religious Communications Networks and European Migration, 1660-1710". *Soundings in Atlantic History*, eds. Bernard Bailyn and Patricia Denault. Cambridge, MA: Harvard university Press, 2011, 210-36.
- Belemessous, Saliha. "Assimilation and Racialism in Seventeenth and Eighteenth century French Colonial Policy". *AHR* 110,2 (2005), 322-49.
- Beltran, Gonzolo Aguirre. *Medicina y Magica: El proceso de aculturación en la estructura colonial*. Mexico City: Instituto Nacional Indigenista, 1963.
- Bencherif, Osman. *The Image of Algeria in Anglo-American Writings, 1785-1962*. Lanham, MD: University Press of America, 1997.
- Benedict, Barbara. *Curiosity: A Cultural History of Early Modern Inquiry*. Chicago: University of Chicago Press, 2001.
- Bennet, Herman. "The Subject in the Plot: National Boundaries and the 'History' of the Black Atlantic". *African Studies Review* 43, 1 (2000): 101-24.
- Berg, Maxine. *Luxury and Pleasure in Eighteenth-Century Britain*. Oxford: Oxford University Press, 2005.
- Berlin, Ira. *Many Thousands Gone: The First two Generations of Slavery in North America Between Contact and Colonies: Archaeological Perspectives on the Protohistoric Southeast*. eds. Cameron Wesson and Mark Rees. Tuscaloosa: University of Alabama Press, 2002.
- Bierce-Gerdis, Katherine. *Apalachee Hill: The Archaeological Investigation of an Indian Site of the Spanish Mission Period in Northwest Florida*. Unpublished Master's Thesis, Florida State University, Tallahassee, 1981.

- Binford, Lewis R. *Cultural Diversity among Aboriginal Cultures of Coastal Virginia and North Carolina*. New York: Garland Publishing, 1991.
- Bioarchaeological of Native American Adaption in the Spanish Borderlands*. ed. B.J. Baker and L. Kealhofer. Gainesville: University Press of Florida, 1996, 38-55.
- Bioarchaeology of Spanish Florida: The Impact of Colonialism*, ed. Clark S, Larsen, 2001.
- Bivins, Roberta. *Acupuncture, Expertise, and Cross-Cultural Medicine*. Houndsmill Basingstoke: Palgrave, 2000.
- Black Drink: A Native American Tea*, ed. Charles Hudson. Athens: University of Georgia Press, 1979.
- Blackburn, Robin. *The Making of New World Slavery: From the Baroque to the Modern, 1492-1800*. New York: Verso, 1997.
- Blair, Anne. *Too Much to Know*
- Blakely, Robert L. and David S. Mathews. "Bioarchaeological Evidence for a Spanish-Native American Conflict in the Sixteenth-Century Southeast." *American Antiquity* 55, no. 4 (1990): 718-744.
- Blassingame, John. *The Slave Community: Plantation Life in the Antebellum South*. New York: Oxford University Press, 2002.
- Blitz, John. "Mississippian Chiefdoms and the Fission: Fusion Process". *American Antiquity* 64 (1999): 577-592.
- Block, Kristen. *Ordinary Lives in the Early Caribbean: Religion, Colonial Competition, and the Politics of Profit*, (Athens: University of Georgia Press, 2012), 5.
- Blume, Herbert. *The German Coast during the Colonial Era, 1722-1803: Evolution of a Distinct Cultural Landscape in the Lower Mississippi Delta during the Colonial Era*.

- trans. Helen Merrill. Destrahan, La: German Acadian Coast Historical and Genealogical Society, 1990.
- Bono, James J. *The Word of God and the Languages of Man: Interpreting Nature in Early Modern Science and Medicine* vol 1: *Ficino to Descartes*. Madison: University of Wisconsin Press, 1990.
- Borah, Woodrow. "Representative Institutions in the Spanish Empire in the Sixteenth Century". *The Americas* 12 (1956), 246-57.
- Bourdieu, Pierre. *Distinction: A social Critique of the Judgment of Taste*. trans. Richard Nice. Cambridge, MA: Harvard university Press, 1984.
- Bowen, Joanne. "Foodways in the Eighteenth Century Chesapeake". *The Archaeology of 18th Century Virginia* ed. Theodore Reinhart. Special Publication no. 35 of the Archaeological Society of Virginia, 1996, 87-130.
- Boyd, Clifford and Donna C. Boyd . "A Multidimensional Investigation of Biocultural Relationships among Three Late Prehistoric Societies in Tennessee. *American Antiquity* 56 (1991): 75-88.
- Boyd, Clifford C. Jr., Donna C. Boyd, Michael B. Barber, and David A. Hubbard Jr. "Southwest Virginia's Burial Caves: Skeletal Biology, Mortuary Behavior, and Legal Issues". *Midcontinental Journal of Archaeology* 26 (2001), 219-31.
- Boyd, Mark F. "Enumeration of Florida Spanish Missions with Translations". *Florida Historical Quarterly* 27 (1948), 181-88.
- Boyd, Mark, Hale Smith, and John Griffin. *Here Once they Stood: The Tragic end of the Apalachee Missions*. Gainesville: University of Florida Press, 1951.

- Bozell, John R. "Late Precontact Village Framers: An Agricultural Revolution". *Nebraska History* 75, 1 (1994), 121-31.
- Brasseaux, Carl. *France's Forgotten Legion: Service Records of French military and administrative Personnel Stationed in the Mississippi Valley and Gulf Coast Region, 1699-1769*. CD-ROM. Baton Rouge: Louisiana State University Press.
- Braund, Kathleen HE. Holland. *Deerskins and Duffels: The Cree Indian Trade with Anglo-Americans, 1685-1815*. Lincoln: University of Nebraska press, 1993.
- Breen, T.H. " 'Baubles of Britain': The American Consumer Revolutions of the Eighteenth Century". *Past and Present* 119 (1988), 73-104.
- Brenner, R. *Merchants and Revolution: Commercial Change, Political Conflict, and London's Overseas Trade, 1550-1653*. New York: Cambridge University Press, 1989.
- Brian, Jeffrey P. "The Archaeology of the Hernando de Soto Expedition". *Alabama and the Borderlands: From Prehistory to Statehood*, edited by R. Reid Badger and Lawrence A. Clayton, pp. 96-107. The University of Alabama Press, Tuscaloosa, 1985, 96-107
- Briceland, Alan. *Westward from Virginia: The Exploration of the Virginia-Carolina Frontier, 1650-1710*. Charlottesville: University of Virginia Press, 1987.
- Bristol, Joan Cameron. *Christians, Blasphemers, and Witches: Afro-Mexican Ritual Practice in the Seventeenth Century*. Albuquerque: University of New Mexico Press, 2007.
- Brockbank, William "Sovereign Remedies: A Critical Depreciation of the Seventeenth Century London Pharmacopoeia". *Medical History* 8 (1964), 1-14.
- Brockliss, L.W. B. *French Higher Education in the Seventeenth and Eighteenth Centuries: A Cultural History*. Oxford: Clarendon Press, 1987.

- Brockliss, Lawrence and Colin Jones. *The Medical World of Early Modern France*. Oxford: Clarendon Press, 1997.
- Brooke, John H. *Science and Religion: Some Historical Perspectives*. The Cambridge History of Science Series. Cambridge: Cambridge University Press, 1991.
- Brooks, James F. *Captives and Cousins: Slavery, Kinship, and Community in the Southwest Borderlands*. Chapel Hill: university of North Carolina Press, 2002.
- Brown, Clair. *Vegetation of the Outer Banks of North Carolina*. Baton Rouge: Louisiana State University Coastal Studies Series, 4, 1959.
- Brown, Jacqueline Nassy. "Enslaving History: Narratives on Local Whiteness in a Black Atlantic Port." *American Anthropological Association* 27, 2 (2000), 291-325.
- Brown, Kathleen. *Foul Bodies: Cleanliness in Early America*. New Haven: Yale University Press, 2009.
- Brown, Kathleen. *Good Wives, Nasty Women, and anxious Patriarchs: Gender, Race, and Power in Colonial Virginia*. Chapel Hill: university of North Carolina Press, 1996.
- Brown, Margaret Kimball. *The Voyageur in the Illinois Country: The Fur Trade's Professional Boatman in Mid-America Based on Unpublished Documents from Illinois Kaskaskia Manuscripts and Related Sources*. Extended Publication Series 3. Napierville, Illinois: Center for French Colonial Studies, 2002.
- Brown, Vincent. *The Reaper's Garden: Death and Power in the World of Atlantic Slavery*. Cambridge, MA: Harvard University Press, 2008.
- Brown, Virginia. *Strangers in Blood: Fur trade Company Families in Indian Country*.
- Browne, E. J. *The Secular Ark: Studies in the History of Biogeography*. New Haven: Yale University Press, 1983.

- Browne, Eric. *Westo Indians : Slave Traders of the Early Colonial South*. Tuscaloosa, University of Alabama Press, 2004.
- Bruijn, Iris Diane Rosemary. "Ship's Surgeons of the Dutch East India Company in the Eighteenth Century: Commerce and the Progress of medicine". Ph.D. Dissertation. Rijkuniversiteit te Leiden, 2004.
- Brunfiel, Elizabeth M. "Elite and Utilitarian Crafts in the Aztec State". *Specialization, Exchange, and Complex Societies* eds. Elizabeth Brunfiel and Timothy Earle. Cambridge: Cambridge University Press, 1987, 102-18.
- Bushnell, Amy. *Situado and Sabana: Spain's Support System for the Presidio and Mission Provinces of Florida*. Athens, GA: Anthropological Papers of the American Museum of Natural History, 1994.
- Bushnell, Amy. "That Demonic Game: The Campaign to Stop Indian Pelota Playing in Spanish Florida, 1675-1684". *The Americas* 35 (1978), 1-19.
- Cahokia: Domination and Ideology in the Mississippian World*, edited by Timothy R. Pauketat and Thomas Emerson, pp. 248-268. University of Nebraska Press, Lincoln, 1997, 248-68.
- Cahokia in Context: Hegemony and Diaspora* eds. Charles McNutt and Ryan Parish. Gainesville: University Press of Florida, 2020.
- Caldwell, Norman. *The French in the Mississippi Valley, 1740-1750*. Urbana: University of Illinois Press, 1941.
- Callier, Janet Fishburne. *Marriage and Inequality in Classless Societies*. Stanford: Stanford University Press, 1988.
- Callot, Émile. "Système et method dans l'histoire de la botanique". *RHS* 18 (1965), 45-53.

Calumet and the Fleur de Lys: Archaeology of Indian and French Contact in the mid-continent.

eds. John Walthall and Thomas Emerson. Washington DC: Smithsonian Institute Press, 1992.

Campbell, Mary. *The Witness and the Other World: Exotic European Travel Writing, 400-1600*. Ithaca: Cornell University Press, 1988.

Cañizares-Esguerra, Jorge. *How to Write the history of the New World: Histories, Epistemologies, and Identities in the Eighteenth Century New World*. Stanford: Stanford University Press, 2001.

_____. *Nature, Empire, and Nation: Explorations of the History of Science in The Iberian World*. Stanford: Stanford University Press, 2006.

_____. *Puritan Conquistadors*. Stanford: Stanford University Press, 2006.

Carneiro, R.L. "The Chieftdom: Precursor of the State". *The Transition of Statehood in the New World*, edited by G.D. Jones and R.R. Kautz, Cambridge University Press, Cambridge 1981, 37-79.

Carney, Judith. *Black Rice: The African Origins of Rice Cultivation in the Americas*. Cambridge, MA: Harvard University Press, 2001.

Carson, James. *Searching for the Bright Path: The Mississippi Choctaws from Prehistory to Removal*. Lincoln: University of Nebraska Press, 1999.

Castro, Wendy. "Stripped: Clothing and identity in Colonial Captivity Narratives". *Early American Studies* 6, 1 (2008), 104-36.

Chaplin, Joyce. *An Anxious Pursuit: Agricultural Innovation and modernity in the Lower south, 1730-1815*. Chapel Hill: University of North Carolina Press, 1993.

- Chapman, Sara. *Private Ambition and Political Alliances: The Phélypeaux de Pontchartrain Family and Louis XIV's Government, 1650 – 1715*. Rochester, NY: University of Rochester Press, 2004.
- Chipman, Donald. *Spanish Texas, 1591-1821*. Austin: University of Texas Press, 1992.
- Clark, Emily. "Moving from Periphery to Center: The Non-British in Colonial North America". *Historical Journal* 42, 3 (1999), 903-10.
- Clark, John. *La Rochelle and the Atlantic Economy during the Eighteenth Century*. Baltimore: Johns Hopkins University Press, 1981.
- Cline, Howard. "The Relaciones Geográficas of the Spanish Indies, 1577-1586". *HAHR* 44 (1964), 341-74.
- Clive, John and Bernard Bailyn. "England's Cultural Provinces: Scotland and America". *WMQ* 3rd series, 11 (1954), 200-13.
- Cobb, Charles R. "Mississippian Chiefdoms: How Complex?". *Annual Review of Anthropology* 32 (2003): 63-84.
- Coclanis, Peter. "Review: King Cotton, Sven Beckert *Empire of Cotton*," *Technology and Culture* 57 no. 53 (2016), 661.
- Coker, William S. and Susan R. Parker. "The Second Spanish Period in the Two Floridas." in *The New History of Florida* ed. Michael Cannon. Gainesville: University Press of Florida, 1996, 150-66.
- Coker, William S. and Thomas D. Watson. *Indian Traders of the Southeastern Spanish Borderlands: Panton, Leslie & Company and John Forbes & Company*. Pensacola: University of West Florida Press, 1986.
- Colley, Linda. *Captives: Britain, Empire, and the World*. London: Cape, 2002.

- Collins, Patricia Hill. *Black Feminist thought: Knowledge, Consciousness, and the Politics of Empowerment*. New York: Routledge, 1991.
- Colonial Botany* eds. Londa Schiebinger and Claudia Swan. Philadelphia: The University of Pennsylvania Press, 200.
- Connerton, Paul. *How Societies Remember*. Themes in the Social Sciences series. Cambridge: Cambridge University Press, 1989.
- Connoly, Matthew. "The Missions of Florida". in *Explorations and Settlements in the Spanish Borderlands: Their Religious Motivations*. St. Augustine: Mission Nombre de Dios, 1967, 24-34.
- Constant, Jean-Paul. *L'enseignement de la chimie au Jardin royal des plantes de Paris*. Cahors: A. Couselant, 1952.
- Constructing Early Modern Empires: Proprietary Ventures in the Atlantic World*, eds. L.H. Roper and Bertrand Van Ruymbeke. Boston: Brill, 2007, 117-31.
- Cook, Harold and David S. Lux. "Closed Circles or Open Networks? Communicating at a Distance during the Scientific Revolution." *History of Science* 36 (1998), 179-211.
- Cook, Harold. "Good Advice and Little Medicine: The professional Authority of Early Modern English Physicians". *Journal of British Studies* 33 (1994), 1-31.
- Corbett, Theodore G. "Migration to a Spanish Imperial Frontier in the Seventeenth and Eighteenth Centuries: St. Augustine." *Hispanic American Historical Review* 54 (1974), 414-30.
- Courtwright, David. *Forces of Habit: Drugs and the Making of the Modern World*. Cambridge: Harvard University Press, 2001.

- Cowan, Brian. *The Social Life of Coffee: The Emergence of the British Coffeehouse*. New Haven: Yale University Press, 2005.
- Crawford, Matthew James. *The Andean Wonder Drug: Cinchona Bark and Imperial Science in the Spanish Atlantic, 1630-1800*. Pittsburg: University of Pittsburg Press, 2016.
- Crosby, Alfred. *The Columbian Exchange: The Biological and Cultural Consequences of 1492*. Westport, CT: Greenwood Publishing 1972.
- Crown, Patricia, et al., "Ritual drinks in the pre-Hispanic US Southwest and Mexican Northwest," *Proceedings of the national Academy of Sciences* 37, no.112 (2015), 11436-11442.
- Crown, Patricia, et al. "Ritual Black Drink Consumption at Cahokia," *Proceedings of the National Academy of Sciences of the United States of America*, Vol. 109, No. 35 (August 28, 2012), pp. 13944-13949.
- Cultures in Contact: The Impact of European Contacts on Native American Cultural Institutions, AD 1000-1800*. ed. William Fitzhugh. Washington, D.C. Smithsonian Institution Press, 1985.
- Cumming, William P. "Geographical Misconceptions of the Southeast in the Cartography of the Seventeenth and Eighteenth Centuries". *Journal of Southern History* 4 (1938) 476-92.
- Cunliffe, Barry. *Facing the Ocean: The Atlantic and its Peoples, 8000BC-AD 1500*. Oxford: Oxford University Press, 2001.
- Dalton-Carriger, Jessica. "New Perspectives on the seventeenth – Century Protohistoric Period in East Tennessee: Redefining the Period through Glass Trade Bead and Ceramic analysis," unpublished PhD Dissertation, 2016.

- Daniels, Christine and Michael V. Kennedy. *Negotiated Empires: Centers and Peripheries in the Americas, 1500-1800*. New York: Routledge, 2002
- Daston, Loraine and Katharine Park. *Marvels and the Order of Nature*.
- David, Brian. "Constructing Race in the British Atlantic". *William and Mary Quarterly* 54, 1 (1997), 7-18.
- Davidson, James. Interim Report of Investigation of the university of Florida Historical Archaeological Field School: Kingsley Plantation (8Du108), Timucuan Ecological and Historic Preserve, national Park service, Duval County, Florida. Tallahassee, Florida: the National Park service, Southeast Archaeological Center, 2008.
- Davis, Dave. *Perspectives on Gulf Coast Prehistory*, 1984.
- Davis, Natalie Zemon. *Women on the Margins: Three Seventeenth Century Lives*. Cambridge: Harvard University Press, 1995.
- Dawdy, Shannon. *Building the Devil's Empire: French Colonial New Orleans*. Chicago: University of Chicago Press, 2008.
- De Vorse, Louis. "Early Maps and the Land of Ayllón". in *Columbus and the Land of Ayllón: The Exploration and Settlement of the Southeast* ed. Jeannine Cook. Darien, GA: Lower Altamaha Historical Society-Ayllón, 1992, 1-25.
- Deagan, Kathleen. *Artifacts of the Spanish Colonies of Florida and the Caribbean, 1500-1800*. Vol. 1, Washington, D.C.: Smithsonian Institution Press, 1987.
- Deagan, Kathleen. *Artifacts of the Spanish Colonies of Florida and the Caribbean 1500-1800*, Volume 1: Ceramics, Glassware and Beads. Smithsonian Institution Press, Washington D.C., 1987.

- _____. *Spanish St. Augustine, the Archaeology of a Colonial Creole Community*. New York: Academic Press, 1983.
- Delanglez, Jean. "The French Jesuits in Lower Louisiana (1700-1763)". PhD Dissertation, Catholic University of America, 1935.
- DePratter, Chester B. "The Chiefdom of Cofitachequi". in *Forgotten Centuries: Indians and Europeans in the American South, 1521-1704*. eds. Charles Hudson and C. Chaves Tesser. Athens: University of Georgia Press, 1994, 179-96.
- DePratter, Chester B. and Marvin T. Smith. "Sixteenth Century European Trade in the Southeastern United States: Evidence from the Juan Pardo Expeditions (1566-1568)". *Spanish Colonial Frontier Research*, compiled and edited by Henry F. Dobyns. Center for Anthropological Studies, Albuquerque, 1980, 67-77.
- DePratter, Chester B., Charles M. Hudson, and Marvin T. Smith. "The Route of Juan Pardo's Explorations in the Interior Southeast, 1566-1568". *The Florida Historical Quarterly* 62, no. 2 (1983): 125-158.
- DePratter, Patricia K. Stephen Kowalewski. *Excavations at 9GE1081: A report to the United States Forest Service on Excavations at a Late Mississippian Ridge-top Hamlet*. Department of Anthropology, University of Georgia. Copy in Georgia Site Files, Laboratory of Archaeology, University of Georgia, Athens, 1983.
- Deschamps, Léon. "Pierre Belon: naturaliste et explorateur". *Revue de Géographie* 21 (1887), 433-40.
- Deslandres, Dominique. *Croire et faire croire: Les Missions Françaises au XVII^e siècle, 1600-1650*. Paris: Fayard, 2003.

- Diamond, Jared. *Guns, Germs, and Steel: the Fate of Human Societies*. New York: Norton, 1999.
- Dickason, Olive. "The Concept of *L'homme Sauvage* and early French Colonialism in the Americas. *Revue Française d'Histoire d'Outre-Mer* 64, 234 (1977), 5-32.
- Dickens, Jr., Roy S. "The Origins and Development of Cherokee Culture". *The Cherokee Indian Nation: A Troubled History*, ed. David H. King, University of Tennessee Press, Knoxville, 1979, 3-32.
- Ditz, Toby. "Shipwrecked, or, Masculinity Imperiled: Mercantile representations of Failure and the Gendered Self in Eighteenth Century Philadelphia". *JAH* 81 (1991), 51-80.
- Drayton, Richard. *Nature's Government: Science, Imperial Britain, and the improvement of the World*. New Haven: Yale University Press, 2000.
- Dreschel, Emanuel. "An Integrated Vocabulary of Mobilian Jargon, a Native American Pidgin of the Mississippi Valley". *Anthropological Linguistics* 38 (1996), 248-354.
- Dubcovsky, Alejandra and George Aaron Broadwell. "Writing Timucua: Recovering and Interrogating Indigenous Authorship." *Early American Studies: An Interdisciplinary Journal*, 15, Issue 3, (Summer 2017), 409-441.
- Dubcovsky, Alejandra Writing Timucua: Recovering and Interrogating Indigenous Authorship," *Early American. Studies* 15, no. 3 (2017), 409 – 41.
- Dunham, Gary H. "Common Ground, Contesting Visions: The Emergence of Burial Mound Ritual in late Prehistoric Central Virginia". PhD Dissertation, Department of Anthropology, University of Virginia, Charlottesville, 1994.

- Dunham, Gary, Debra Gold, and Jeffrey Hantman. "Collective Burial in Late Prehistoric Virginia: Excavation and Analysis of the Rapidan Mound". *American Antiquity* 68 (2003), 109-28.
- Dunn, Richard S. "A Tale of Two Plantations: slave Life at Mesopotamia, Jamaica and Mount Airy, Virginia, 1799-1828". *WMQ* 3rd series, 34 (1977), 32-65.
- Dunn, Richard. *Sugar and Slaves: The Rise of the Planter Class in the English West Indies, 1624-1720*. Chapel Hill: University of North Carolina Press, 1972.
- Dunnell, R.C. "Methodological Impacts of Catastrophic Depopulation". *Columbian Consequences 3: the Spanish Borderlands in Pan-American Perspective*. ed. D.H. Thomas, Washington, D.C. Smithsonian Institution Press, 1991, 561-80.
- Duran-Reynals, Marie-L. *The Fever Bark Tree: The Pageant of Quinine*. Garden City: Doubleday, 1946.
- DuVal, Kathleen. "Indian Intermarriage and Mestissage in Colonial Louisiana". *William and Mary Quarterly* 65, 2 (2008), 267-304.
- Duval, Kathleen. *The Native Ground: Indians and Colonists in the Heart of the Continent*. Philadelphia: University of Pennsylvania Press, 2006.
- Dye, David H. "Feasting With the Enemy: Mississippian Warfare and Prestige-Goods Circulation". *Native American Interactions: Multiscalar Analyses and Interpretations in the Eastern Woodlands*, University of Tennessee Press, Knoxville, 1995, 289-316.
- Earle, Carville. "Environment, Disease and Mortality in Early Virginia". *The Chesapeake in the Seventeenth Century: Essays on Anglo-American Society*, ed. Thad Tate and David L. Ammerman. Chapel Hill: University of North Carolina Press, 1979, 96-125.
- Earle, Peter. *The Pirate Wars*. London: Methuen, 2003.

Earle, Rebecca. " 'If you eat their food': Diets and Bodies in Early Colonial Spanish America".
AHR 115, 3 (2010), 688-713.

Early Travels in India, 1583-1619, reprint, ed. William Foster. Delhi: S Chand, 1968.

Egloff, Keith and Celia Reed. "Crab Orchard Site: A Late Woodland Palisaded Village".
Archaeological Society of Virginia Quarterly Bulletin 34, no. 3 (1980), 130-48.

Egloff, Keith and E. Randolph Turner. "Archaeological Investigations at the Richlands
Hospital Site (44TZ51).*Archaeological society of Virginia Quarterly Bulletin* 43
(1988), 14-23.

Ekberg, Carl. Black Slavery in Illinois, 1720-1765". *Western Illinois Regional Studies* 12, 1
(1989), 5-19.

Elliot, J.H. *Empires of the Atlantic World. Britain and Spain in America, 1492-1830*. New
Haven: Yale University Press, 2001.

Empire and Others: British Encounters with Indigenous Peoples, 1600-1850, eds. Martin
Dauton and Rick Halpern. Philadelphia: University of Pennsylvania Press, 1999.

*English Trader, Indian Maid: Representing gender, Race, and Slavery in the New World: An
Inkle and Yarico Reader* ed. Frank Felsenstein. Baltimore: Johns Hopkins University
press, 1999.

Epperson, Terrence. "Constructing Difference: The Social and Spatial Order of the
Chesapeake Plantation". *'I, Too, am America': Archaeological Studies of African-
American Life*. ed. Theresea Singleton. Charlottesville: University of Virginia Press,
1999, 159-72.

Etheridge, Robbie and Charles Hudson. *The Transformation of the Southeastern Indians*.
Jackson, MS, The University Press of Mississippi, 2004.

Ethnohistory and Archaeology: Approaches to Postcontact Change in the Americas eds.

Donald Rogers and Samuel Wilson. New York: Plenum Press, 1993.

Ethridge, Robbie and Charles Hudson. "The Early Historic Transformation of the Southeastern Indians". *Cultural Diversity in the U.S. South: Anthropological Contributions to a Region in Transition*, edited by Carole E. Hill and Patricia D. Beaver, pp. 34-50. The University of Georgia Press, Athens, 1998, 34-50.

_____. *From Chicaza to Chickasaw: The European Invasion and the Transformation of the Mississippian World, 1540-1715*. The University of North Carolina Press, Chapel Hill, 2010.

Ethridge, Robbie. "Introduction: Mapping the Mississippian Shatter Zone". *Mapping the Mississippian Shatter Zone: The Colonial Indian Slave Trade and Regional Instability in the American South*, edited by Robbie Ethridge and Sheri M. Shuck-Hall, pp. 1-62. University of Nebraska Press, Lincoln, 2009, 1-62.

Farber, Lawrence. *Finding Order in Nature: The Naturalist Tradition from Linnaeus to E.O. Wilson*. Baltimore: The Johns Hopkins University Press, 2000.

Fausz, J. Frederick. "Profits, Pelts, and Power: English Culture in the Early Chesapeake, 1620-1652". *Maryland Historian* 14 (1983), 15-30.

Ferguson, Leland G. "Crosses, Secrets, and Lies: A Response to W. Joseph's " ... All of Cross African Potters, Marks, and Meanings in the Folk Pottery of the Edgefield District, South Carolina. *Historical Archaeology* 45(2011),163-165.

Ferguson, Leland. "Indians of the Appalachians Before De Soto". *The Conference on Cherokee Prehistory*. Papers presented at the Conference on Cherokee Prehistory: The

- Archaeology of an Appalachian Culture. Warren Wilson College, Swannanoa, 1986, 1-6.
- Ferguson, Leland. "Looking for the 'Afro-' in Colono-Indian Pottery". *The Conference on Historic Site Archaeology papers* 12 (1977): 68-86.
- Fernandez-Armesto, Felipe. *The Americas: A hemispheric history...*
- Fett, Sharla. *Working Cures: healing, Health and Power on Southern Slave Plantations*. Chapel Hill: University of North Carolina Press, 2008.
- Finn, Margot. "Men's Things: Masculine Possessions in the Consumer Revolution". *Social History* 25 (2000), 133-55.
- The Flower Hunter and the People: William Bartram in the Native American Southeast* ed Matthew Jennings. Atlanta: Mercer University Press, 2014.
- Flynn, Dennis O. Arturo Giráldez. "Born with a 'Silver Spoon': The Origins of World Trade in 1571". *Journal of World History* 6 (1995), 201-21.
- The Forgotten Centuries: Indians and Europeans in the American South, 1521-1704* eds. Charles Hudson and Carmen C. Tesser. Athens: University of Georgia Press, 1994, 304-24.
- Forman, C.W. "Science for Empire". PhD dissertation, University of Wisconsin, 1941.
- Fried, Morton H. *On the Evolution of Social Stratification and the State*, Bobbs-Merrill, Indianapolis, 1960.
- Fuentes, Jutgado García. *El comercio español con América*. Seville: Escuela de Estudios Hispano-Americanos de Seville, Consejo Superior de Investigaciones Científicas, 1980.

- Galenson, David. "White Servitude and the Growth of Black Slavery in Colonial America". *Journal of Economic History* 61 (1981), 39-49.
- Gallay, Alan. *The Indian Slave Trade: The Rise of the English Empire in the American South, 1670-1717*. New Haven: Yale University Press, 2002.
- Gallivan, Martin D. *James River Chiefdoms: The Rise of Social Inequality in the Chesapeake*. Lincoln: University of Nebraska Press, 2003.
- Galloway, Patricia. "The Incestuous Soto Narratives". *The Hernando de Soto Expedition: History, Historiography, and Discovery in the Southeast*, edited by Patricia Galloway. University of Nebraska Press, Lincoln, 1997, 11-44.
- Games, Allison. "Atlantic History: Definitions, Challenges and opportunities". *AHR* 111, 3 (2006): 741-57.
- Games, Allison. *Migration and the Origins of the English Atlantic World*. Cambridge: Harvard University Press, 1999.
- Gannon, Michael. *The Cross in the Sand: The Early Catholic Church in Florida, 1513-1870*. Gainesville: University Press of Florida, 1965.
- Gascoigne, J. *Joseph Banks and the English Enlightenment: Useful knowledge and Polite Culture*. New York: Cambridge University Press, 1994.
- Gauci, Perry. *The Politics of Trade: The Overseas Merchant in State and Society, 1660-1720*. Oxford: Oxford University Press, 2001.
- Gaudio, Michael. *Engraving the Savage: The New World and Techniques of Civilization*. Minneapolis: University of Minnesota Press, 2008.
- Geier, Clarence R. and Melissa McFee. *The Harry Jaeger Site (44BA489): A multicomponent Protohistoric Indian/ Eighteenth Century Historic Site, Bath County, Virginia*.

- Occasional papers in Anthropology no. 7 Archaeological research Center, James Madison University, Harrisonburg, 1981.
- General History of the Caribbean. Volume II New Societies: the Caribbean in the Long Sixteenth Century* ed. Pieter Emmer. London: UNESCO Publishing, 1999.
- Gibbs, Tyson. "African-Americans at Snee Farm Plantation, Mount Pleasant, South Carolina". Atlanta: National Park Service, Southeast Region, Cultural Resources Division, 2006.
- Gijon, José Martinez. "Métodos comerciales utilizados en la Española durante el siglo xvi para la exportación de cañafistula". *Actasy estudios del iii congreso del instituto internacional de historia del derecho indano*. Madrid: Instituto Nacional de Estudios Jurídicos, 1973, 903-24.
- Gillaspie, William R. "Juan de Ayala y Escobar, Procurador and Entrepreneur: A Case Study of the Provisioning of Florida, 1683-1716". PhD dissertation, University of Florida, 1961.
- Gillespie, Charles. *Science and Polity in France: The Revolutionary and Napoleonic Years*. Princeton: Princeton University Press, 2004.
- Giraud, Marcel. *Histoire de la Louisiane francaise*, 4 vols. Paris, 1953-1974.
- Glacken, Clarence J. *Traces on the Rhodian Shore: Nature and Culture in western Thought from Ancient Times to the end of the Eighteenth Century*. Berkeley: University of California Press, 1967.
- Gleach, Frederic. *Powhatan's World and Colonial Virginia: A Conflict of Cultures*. Lincoln: University of Nebraska Press, 1997.

- Goggin, John. *Spanish Majolica in the New World*. New Haven: Yale University Publications in Anthropology, no. 72, 1968.
- Gold, Debra L. "Subsistence, Health, and Emergent Inequality in Late Prehistoric Interior Virginia. PhD Dissertation, department of Anthropology, University of Michigan, 1999.
- Gold, Robert L. *Borderlands Empires in Transition: The Triple-Nation Transfer of Florida*. Carbondale: University of Southern Illinois Press, 1969.
- Gomez, Michael A. *Exchanging our Country Marks: the Transformation of African Identities in the Colonial and Antebellum South*. Chapel Hill: University of North Carolina Press, 1998.
- Gould, Elijah. "Entangled Histories, Entangled World: The English Speaking Atlantic as a Spanish Periphery". *AHR* 112, 3 (2007): 764-86.
- Gourbet, Jean-Pierre. *The Ancien Régime: French Society: 1600-1750*. trans. Steve Cox. New York: Harper and Row, 1973.
- Grafton, Anthony. *Defenders of the Text: the Traditions of Scholarship in an Age of Science, 1450-1800*. Cambridge, MA: Harvard University Press, 1991.
- Grahn, Lance. *The Political Economy of Smuggling: Regional Informal Economies in Early Bourbon New Granada*. Boulder, CO: Westview Press, 1997.
- Granberry, Julian. *A Grammar and Dictionary of the Timucua Language*. Tuscaloosa: University of Alabama Press, 1993.
- Grantham, Bill. *Creation Myths and Legends of the Creek Indians*. Gainesville: University Press of Florida, 2002.

- Greenblatt, Stephen. *Marvelous Possessions: The Wonder of the New World*. Chicago: University of Chicago Press, 1991.
- Greene, Jack P. *Peripheries and Centers: Constitutional development in the Extended polities of the British Empire and the United States, 1607-1788*. Athens: University of Georgia Press, 1986.
- Griffin, Mark C., Patricia M. Lambert, and Elizabeth Monaghan Driscoll. "Biological Relationships and Population History of Native Peoples in Spanish Florida and the American Southeast". *Bioarchaeology of Spanish Florida*, edited by Clark Spencer Lawson. University Press of Florida, Gainesville, 2001, 227-73.
- Grove, R.H. *Green Imperialism: Colonial Expansion and the Origins of Modern Environmentalism*. New York: Cambridge, 1995.
- Gruzinski, Serge. *The Mestizo Mind: The Intellectual Dynamics of Colonization and Globalization*, trans. Deke Dunisbere. New York: Routledge, 2002.
- Gutierrez, Ramon. *When Jesus Came the Corn Mothers Went Away*. Stanford: Stanford University Press, 1991.
- Hahn, Roger. *The Anatomy of a Scientific Institution: The Paris Academy of Sciences: 1666-1803*. Berkeley: University of California Press, 1971.
- Hall, Gwendolyn Midlo. *Africans in Colonial Louisiana: The Development of Afro-Creole Culture in the Eighteenth Century*. Baton Rouge: Louisiana State University Press, 1995.
- Hally, David J. "The Territorial Size of Mississippian Chiefdoms". *Archaeology of Eastern North America Papers in Honor of Stephen Williams*, edited by James B. Stoltman, pp.

- 143–168. Archaeological Report No. 25. Department of Archives and History, Jackson, Mississippi, 1993, 143-68.
- Hally, David J., Marvin T. Smith, and James B. Langford. "The Archaeological Reality of DeSoto's Coosa. In *Columbian Consequences*, vol. 2: Archaeological and Historical Perspectives on the Spanish Boaderlands East, edited by David H. Thomas. Smithsonian Institution Press, Washington, D.C., 1990, 121-38.
- Halsall, Guy. *Barbarian Migrations and the Roman West, 376-568*. New York: Cambridge University Press, 2007.
- Hancock, D. *Citizens of the World: London Merchants and the Integration of the British Atlantic Community*. New York: Cambridge University Press, 1995.
- Hancock, David. "The Triumphs of Mercury: Connection and Control in the Emerging Atlantic Economy". in *Atlantic History*, eds. Bernard Bailyn and Patricia Denault. Cambridge, MA: Harvard university Press, 2011, 112-40.
- Hann, John. *Indians of Central and South Florida, 1513-1763*. Gainesville: University Press of Florida, 2003.
- _____. *The Native American World Beyond Apalachee: West Florida and the Chattahoochee Valley*
- Hantman, Jeffrey. "Monacan Archaeology of the Virginia Interior AD 1400-1700. Societies in Eclipse: Archaeology of the Eastern Woodlands Indians A 1400-1700 eds. David Brose, Wesley Cowan and Robert Mainfort Jr. Washington DC: Smithsonian Institution Press, 2001, 107-23.

- Harle, Michaelyn S. *Biological Affinities and the Construction of Cultural Identity for the Proposed Coosa Chiefdom*. Unpublished PhD dissertation, Department of Anthropology, University of Tennessee, Knoxville, 2010.
- Harley, J.B. "Silences and Secrecy: The Hidden Agenda of Cartography in Early Modern Europe". *Imago Mundi* 40 (1988), 57-76.
- Harrison, Mark. "Medicine and Orientalism: perspectives on Europe's Encounters with Indian Medical Systems". *Health, Medicine, and Empire: Perspectives on colonial India* eds. Bisowamy Pati and Mark Harrison. Hyderabad: Orient Longman, 2003, 37-87.
- Hatfield, April. *Atlantic Virginia: Intercolonial relations in the Seventeenth Century*. Philadelphia: Pennsylvania University Press, 2004.
- Haunted by Empire: Geographies of Intimacy in North American History* ed. Ann Laura Stoler. Durham: Duke University Press, 1995.
- Hauser, Raymond. "Warfare and the Illinois Indian Tribe during the during the Seventeenth Century: An exercise in Ethnohistory". *Old Northwest Journal of Regional life and Letters* 10, 4 (1984-5), 367-88.
- Heerman, Scott. " 'That A'cursed Illinois Venture': Slavery and revolution in Atlantic Illinois". *Journal of Illinois History* 13 (2010), 107-28.
- Heidenrieck, Conrad E. and Arthur Ray. *The Early Fur Trade: A Study in Cultural Interaction*. Toronto: McClellan and Stewart, 1976.
- Hemphill, C. Dallett. *Bowing to Necessities A History of Manners in America, 1620-1860*. Oxford: Oxford University Press, 1999.
- Hendrix, M. Patrick. *Down and Dirty: Archaeology of the South Carolina Low Country*. Charleston: The History Press, 2006.

Hero, Hawk, and Open Hand: American Indian Art of the Ancient Midwest and South ed.

Robert Sharp. New Haven: Yale University Press, 2004.

Herzog, Tamar. *Defining Nations: Immigrants and Citizens in early Modern Spain and*

Spanish America . New Haven: Yale University Press, 2003.

Higginbotham, Jay. *Old Mobile: Fort Louis De La Louisiana, 1702-1711*. Mobile: Museum of the City of Mobile, 1977.

Holland, C.G. *An Archaeological Survey of Southwest Virginia*. Washington, DC: Smithsonian Institution Press, 1970.

Hoppen, K.T. *The Common Scientist in the Seventeenth Century: A Study of the Dublin Philosophical Society, 1683-1708*. London: Routledge & Keagan Paul, 1970.

Hopper, Florence. "Clusius's World: The Meeting of Science and Art". *The Authentic Garden: A Symposium on Gardens*. Ed. Leslie Tjon Sie Fat and Erik de Jong Leiden. Clusius Foundation, 1991, 13-36.

Horner, F. *The French Renaissance: Baudin in Australia*. Melbourne: Melbourne University Press, 1987.

Hoskins, Janet. *Biographical Objects: How things Tell the Stories of People's Lives*. New York: Routledge, 1998.

Howard Rio. *La bibliothèque et le laboratoire de Guy de la Bosse au Jardin des plantès à Paris*. École pratique de Hautes Études, Histoire et civilisation du livre, 13. Geneva: Droz, 1983.

Howe, Daniel Walker. *American History in an Atlantic Context*. Oxford: Oxford University Press, 1993.

- Hudson, Charles, Marvin Smith, Chester B DePratter and Emilia Kellery. "The Tristán de Luna Expedition, 1559-1561". *Southeastern Archaeology* 8 (1989), 31-54.
- Hudson, Charles, Marvin T. Smith and Chester B. DePratter. "The Hernando de Soto Expedition: From Apalachee to Chiaha". *Southeastern Archaeology* 3, no. 1 (1984): 65-77.
- Hudson, Charles, Marvin T. Smith, Chester B. DePratter, and Emilia Kelley. "The Tristan de Luna Expedition, 1559-1561". *Southeastern Archaeology* 8, no. 1 (1989): 31-45.
- Hudson, Charles. "Juan Pardo's Excursion Beyond Chiaha". *Tennessee Anthropologist* 12, no. 1 (1987): 74-87.
- Hudson, Charles. *The Juan Pardo Expeditions: Explorations of the Carolinas and Tennessee, 1566-1568*. Washington, D.C.: Smithsonian Institution Press, 1990.
- Huisman, Frank. "Itinerant Medical Practitioners in the Dutch Republic: The Case of Groningen". *Tractix* 1 (1989), 63-83.
- Hunt, J.D. *Garden and Grove: The Italian Renaissance Garden and the English Imagination, 1600-1750*. Princeton: Princeton University Press, 1986.
- Hudson, Charles. *The Forgotten Centuries: Indians and Europeans in the American South, 1521-1704*. Athens: University of Georgia Press, 1984.
- Hutchinson, Dale. *Tatham Mound and the Bioarchaeology of Contact*. Gainesville: University Press of Florida, 2006.
- Images of the Other: Europe and the Muslim World before 1700*, ed. David Blanks. *Cairo: Papers in Social Science* 19, 2 (1997).

- Implicit Understandings: Observing, Reporting, and Reflecting on the Encounters between European Peoples and others in the Early Modern Era.* ed. Stuart B. Schwartz. Cambridge: Cambridge University Press, 1994.
- Indians, Animals, and the Fur Trade: A Critique of Keepers of the Game,* ed. Shepard Krech III. Athens: University of Georgia Press, 1981.
- Isaac, Rhys. *Landon Carter's Uneasy Kingdom: revolution and Rebellion on a Virginia Plantation.* Oxford: Oxford University Press, 2004.
- Jackson, Antoinette. "Shattering Slave Life Portrayals: Uncovering Subjugated Knowledge in U.S. Plantation Sites in South Carolina and Florida". *American Anthropologist* 113, no. 3, (2011), 448-62.
- Jackson, Robert H. *New Views of Borderland History.* Albuquerque: University of new Mexico Press, 1998.
- Jaenen, Cornelius. *Friend and foe: Aspects of French-Amerindian Cultural Contact in the Sixteenth and Seventeenth Centuries.* Toronto: University of Toronto Press, 1976.
- Jefferies, Richard. "Living on the Edge: Mississippian Settlement in the Cumberland Gap Vicinity". *Archaeology of the Appalachian Highlands* eds. Lynne P. Sullivan and Susan C. Prezzano. Knoxville: University of Tennessee Press, 2001, 198-221.
- Jennings, Matthew. *New World of Violence: Cultures and Conquests in the Early American Southeast.* The University of Tennessee Press, Knoxville, 2011.
- Johnson, Jay and John Sparks. "Protohistoric Settlement patterns in Northeastern Mississippi". *The Protohistoric Period in the Mid-South: 1500-1700.* eds. David Dye and Ronald Brister. Archaeological Report no. 18, Mississippi department of Archives and History, Jackson (1986), 64-81.

- Jones, B. Calvin, John Hann, and John F. Scarry. "San Pedro y San Pablo de Patale: A Seventeenth Century Spanish Mission in Leon County, Florida." *Florida Archaeology* 5 (1991).
- Jones, William M. "A Late Eighteenth Century Work Camp, St. Johns Bluff, Duval County". *Florida Anthropologist* 26 (1973), 139-42.
- John T. Jurich, *Endgame for Empire: British Creek Relations in Georgia and Vicinity, 1763 – 1776*, Gainesville: University Press of Florida, 2015.
- de Jussieu, Bernard. "*Quaestio medica cardinalitiis disputationibus mane discutienda in scholiis medicorum, die Jovis octava Martii 1725.*" Paris, 1725.
- Kapitzke, Robert. *Religion, Power, and Politics in Colonial St. Augustine*. (2001).
- Katzew, Ilona. *Casta Painting: Images of Race in Eighteenth Century Mexico*. New Haven: Yale University Press, 2004.
- Kelton, Paul. "The Great Southeastern Smallpox Epidemic, 1696-1700: The Region's First Major Epidemic?". In *The Transformation of the Southeastern Indians, 1540-1760*, edited by Robbie Ethridge and Charles Hudson. University Press of Mississippi, Jackson, 2002, 21-37.
- Kenny, Neil. *The Uses of Curiosity in Early Modern France and Germany*. Oxford: Oxford University Press, 2004.
- Kidwell, Clara. "Choctaw Women and Cultural Persistence in Mississippi". *Negotiators of Change: Historical Perspectives on Native American Women* ed. Nancy Shoemaker. New York: Routledge, (1995), 115-34.
- Kidwell, Clara, Homer Noley, and George E. "Tink" Tinker, *A Native American Theology* Maryknoll, NY: Orbis Books, 2001.

- Kilman, Grady. "Slavery and Agriculture in Louisiana, 1699-1731". *The French Experience in Louisiana*, ed. Glenn Conrad. Lafayette: Center for Louisiana Studies, 1995, 201-8.
- Kindscher, Kelly. *Edible Wild Plants of the Prairie*. Lawrence, University of Kansas Press, 1987.
- King, Adam and Jennifer A. Freer. "The Mississippian Southeast: A World-Systems Perspective". *Native American Interactions: Multiscalar Analyses and Interpretations in the Eastern Woodlands*, edited by Michael S. Nassaney and Kenneth E. Sassaman, University of Tennessee Press, Knoxville, 1995, 266-88.
- King, Adam. "Creek Chiefdoms at the Temporal Edge of the Mississippian World". *Southeastern Archaeology* 21 (2002): 221-227.
- King, Adam. "Creek Chiefdoms at the Temporal Edge of the Mississippian World". *Southeastern Archaeology* 21 (2002): 221-227.
- King, Adam, et al. "Cautionary Tales on the Identification of caffeinated beverages in North America," *Journal of Archaeological Science* 85 (2017), 30-40.
- King, James E. *Science and Rationalism in the Government of Louis XIV, 1661-1683*. The Johns Hopkins Studies in Historical and Political Sciences, ser. 66, no. 2. Baltimore: Johns Hopkins Press, 1949.
- Klatka, Thomas and Michael Klein. "Deciphering the Site Occupation History at the Graham-White Site (44RN21) *Journal of Middle Atlantic Archaeology* 14 (1998), 127-45.
- Klein, Herbert. *Slavery in the Americas: A Comparative Study of Virginia and Cuba*. Chicago: University of Chicago Press, 1967.
- Klein, Laura and Lillian Ackermann. *Women and Power in Native North American*. Norman: University of Oklahoma Press, 1995.

- Klein, Michael, Kate Martin, and Josh Duncan. "Analysis of Ceramic from selected Contexts at the Trigg Site (44MY3)." Report on File with the Virginia Department of Historic Resources, Richmond, 2003.
- Klooster, Wim. *Illicit Riches: Dutch Trade in the Caribbean, 1648-1795*. Leiden KITLV Press, 1998.
- Koerner, Lisbet. *Linnaeus: Nature and Nation*. Cambridge, MA: Harvard University Press, 2000.
- Krippner-Martinez, James. *Rereading the Conquest*. College Park: Penn State University Press, 2003.
- Kulikoff, Allan. *Tobacco and Slaves: The Development of Southern Cultures in the Chesapeake, 1680-1800*. Chapel Hill: University of North Carolina Press, 1986.
- Kupperman, Karen Ordahl. *Indians and English: Facing Off in Early America*. Ithaca: Cornell University Press, 2000.
- La Salle and his Legacy: Frenchmen and Indians in the Lower Mississippi Valley*, ed. Patricia Galloway. Jackson: University of Mississippi Press, 1982.
- Laissures, (Lassius)?Yves and Anne-Marie Monseigny. "Les Plantes du Roi: note sur un grand ouvrage de botanique préparé au XVIIe siècle par l'Académie royale des sciences". *RHS* 22 (1969), 193-236.
- Lamann, Kristof. "European Trade 1500-1750". *Fontana Economic History of Europe: The Sixteenth and seventeenth Centuries*. Glasgow: Collins/ Fontana Books, 1974.
- Landers, Jane. *Black Society in Spanish Florida*. Urbana: University of Illinois Press, 1999.
- Lane, Kris. *Pillaging the Empire: piracy in the Americas, 1500-1750*. Armonk, NY: M.E. Sharpe, 1998.

- Langer, William. "American Foods and Europe's Population Growth, 1750-1850". *Journal of Social History*. Winter (1975): 51-66.
- Langlois, Gilles-Antoine. *Des villes pour la Louisiane française: Théorie et pratique de l'urbanistique coloniales au 18e siècle*. Paris: L'Harmattan, 2003.
- Lankford, George. "Was there a Moundville Medicine Society?" *Rethinking Moundville and its Hinterland* eds. Vincas Steponaitis and C. Margaret Scarry. Gainesville: University Press of Florida, 74-98.
- Lanning, John Tate. *The Spanish Missions of Georgia*. Chapel Hill: University of North Carolina Press, 1935.
- Lapham, Heather. *Hunting for Hides: Deerskins, Status, and Cultural Change in the protohistoric Appalachians*. Tuscaloosa: University of Alabama Press, 2005.
- Larsen, Clark Spencer, Dale Hutchinson, Margaret Schoeninger, and Lynette Norr. "Food and Stable Isotopes in la Florida: Diet and Nutrition before and after Contact". *Bioarchaeology of Spanish Florida: The Impact of Colonialism* ed. Spencer Clark Larsen. Gainesville: University Press of Florida, 2001, 52-81.
- Larson, Lewis H. "Cultural Relationships between the Northern St. Johns area and the Georgia Coast". *Florida Anthropologist* 10 (1958), 11-22.
- Larson, Lewis H. "Functional Considerations of Warfare in the Southeast during the Mississippi Period". *American Antiquity* 37 (1972): 383-392.
- Larson, Lewis H. *Aboriginal Subsistence Technology on the Southeastern Coastal Plain during the Late Prehistoric Period*. Gainesville: University of Florida Press, 1980.

Laughran, Michelle A. "Medicating with or Without 'Scruples': the 'Professionalization' of the Apothecary in Sixteenth Century Venice". *Pharmacy in History* 45 (2003), 95-107.

Leacock, Eleanor. "Women's Status in Egalitarian Society: Implications for Social Evolution". *Current Anthropology* 19, no. 2 (1978), 247-75.

Leadership and Polity in Mississippian Society, edited by Brian Butler and Paul Welch, Southern Illinois University Press, Carbondale, 2006, 264-85.

Leavelle, Tracy Neal. *The Catholic Calumet: Colonial Conversions in French and Indian North America*. Philadelphia: University of Pennsylvania Press, 2011.

Le Clerc de Milford, Louis, *Memoir*, trans. Geraldine de Courcy, ed. John McDermott, Santa Barbara, CA: The Narrative Press, 2000.

Lee, Wayne and Howard Raynesford. *Trails of the Smoky Hill: From Coronado to the Cowtowns*. Caldwell, ID: Caxton Printers, 1980.

Leeson, Peter. *The Invisible Hook: The Hidden Economics of Pirates*. Princeton: Princeton University Press, 2009.

Lefebvre, Jean-Jacques. "Charles Le Moyne de Longueuil et Châteauguay". *The Dictionary of Canadian Biography*, vol. 1, Toronto: University of Toronto Press, 1970.

Lemmon, K. *The Golden Age of Plant Hunters*. New York: A.S. Barnes, 1969.

Leonard, Irving A. *Spanish Approach to Pensacola, 1689-1693*. Albuquerque: Quivira Society, 1939.

Lewis, Clifford M. and Albert J. Loomie. *The Spanish Jesuit Mission in Virginia, 1570-1572*. Chapel Hill: University of North Carolina Press, 1953.

- Lewis, Gordon K. *Main Currents in Caribbean Thought: The Historical Evolution of Caribbean Society in its Ideological Aspects, 1492-1900*. Baltimore: Johns Hopkins University Press, 1983.
- Lewis, R. Barry and Charles Stout. "The Town as Metaphor". *Mississippian Towns and Sacred Spaces: Searching for an Architectural Grammar*, edited by R. Barry Lewis and Charles Stout, pp. 227-242. University of Alabama Press, Tuscaloosa, 1998, 221-242.
- Libby, David. *Slavery and Frontier Mississippi, 1720-1835*. Jackson: University of Mississippi Press, 2004.
- Light on the Path: The Anthropology and History of the Southeastern Indians*, edited by Timothy J. Pluckhahn, and Robbie Ethridge, pp. 26-42. University of Alabama, Tuscaloosa, 2006, 26-42.
- Lightfoot, Kent G. "Culture Contact Studies: Redefining the Relationship between Prehistoric and Historical Archaeology". *American Antiquity* 60, no. 2 (1995):199–217.
- Lindemann, Mary. *Medicine and Society in Early Modern Europe*. New York: Cambridge University Press, 2010.
- Linebaugh, Peter. "The Tyburn Riot against the Surgeons". *Albion's Fatal Tree: Crime and Society in Eighteenth Century England* eds. Douglas Hay, Peter Linebaugh, John G. Rule, E.P. Thompson, and Cal Winslow. New York: Pantheon, 1975, 65-117.
- The Liturgy of the Medieval Church*, eds. Thomas Heffernan and E. Ann Matter. Kalamazoo, MI: Medieval Institute Publications, 2005.
- Local Religion in Mexico* ed. Martin Nesvig. Albuquerque: University of New Mexico Press, 2006.

- Lockheart, James. *Of Things of the Indies: Essays old and New in Early Latin American History*. Stanford: Stanford University Press, 1999.
- Lockheart, James. *The Men of Cajamarca: A social and Economic History of the Conquerors of Peru*. Austin: University of Texas Press, 1972.
- Lords of the Southeast: Social Inequality and the Native Elites of Southeastern North America*. eds. Alex W. Barker and Timothy Pauketat. Washington, D.C.: American Anthropological association, 1992, 99-110.
- Loren, Diana DiPaolo. *In Contact: Bodies and Spaces in the Sixteenth- and Seventeenth-Century Eastern Woodlands*. New York: Alta Mira Press, 2008.
- Loucks, Jill. "Political and Economic Interactions between Spaniards and Indians: Archaeological and Ethnohistorical Perspectives from the Florida Mission System", Unpublished PhD Dissertation. University of Florida, 1979.
- Lux, David S. *Patronage and Royal Science in Seventeenth Century France: The Acaadémie de Physique in Caen*. Ithaca: Cornell University Press, 1989.
- Lynch, John. *The Hispanic World in Crisis and Change: 1598-1700*. Oxford: Oxford University Press, 1992.
- Lyon, Elijah. *Louisiana in French Diplomacy, 1759-1804*. Norman: University of Oklahoma Press, 1934.
- Lyon, Eugene. *St. Elena: A Brief History of the Colony, 1566-1587*. Columbia, SC: Institute of Archaeology and Anthropology, 1976.
- Lyon, Eugene. *The Enterprise of Florida: Pedro Menendez de Aviles and the Spanish Conquest of 1565-1568*. University Press of Florida, Gainesville, 1983.

- Lyon, John and Phillip R. Sloan. *From Natural History to the History of Nature: Readings from Buffon and his Critics*. Notre Dame: University of Notre Dame Press, 1981.
- Lyte, Charles. *Sir Joseph Banks: 18th Century Explorer, Botanist and Entrepreneur*. London: David & Charles, 1980.
- MacCord, Howard. "The Contact Period in Virginia. *Journal of Middle Atlantic Archaeology*. 5 (1986), 121-8.
- MacCord, Howard. "Trade Goods from the Trigg Site, Radford, VA". *Conference on Historic Site Archaeology papers* 10 ed. Stanley South. Columbia: University of South Carolina Press, 1977, 60-68.
- MacCormack, Sabine. *Religion in the Andes: Vision and Imagination in Early Colonial Peru*. Princeton: Princeton University Press, 1992.
- Mallios, Seth. "In the Hands of 'Indian Givers': Exchange and Violence at Ajacan, Roanoke, and Jamestown". PhD dissertation. Charlottesville: Department of Anthropology, University of Virginia, 1998.
- Mann, Kristin. "Shifting Paradigms in the Study of the African Diaspora and of Atlantic History and Culture". *Slavery and Abolition* 22, 1 (2001): 3-21.
- Marcoux, Jon Bernard. "Cherokee Households and Communities in the English Contact Period, A.D. 1670-1740". PhD Dissertation. University of North Carolina, Chapel Hill, 2008.
- _____. *Pox, Empire, Shackles, and Hides: The Townsend Site, 1670-1715*. The University of Alabama Press, Tuscaloosa, 2006.

- Marquardt, William and Laura Kozuch, "The Lightning Whelk: An Enduring Icon of Southeastern North American Spirituality," *Journal of Anthropological Archaeology* 42 (2016).
- Martin, Joel. *Sacred Revolt: The Muskogee Struggle for a New World*. Boston: Beacon Press, 1991.
- Martínez-Serna, Gabriel J. "Procurators and the making of the Jesuits' Atlantoc Network". *Soundings in Atlantic History*, eds. Bernard Bailyn and Patricia Denault. Cambridge, MA: Harvard University Press, 2011, 181-209.
- Martinez, Maria-Elena. *Limpieza de Sangre, Religion, and Gender in Colonial Mexico*. Stanford: Stanford University Press, 2008.
- Matar, Nabil. *Turks, Moors, and Englishmen in the Age of Discovery*. New York: Columbia University Press, 1999.
- Matory, Lornad. *Black Atlantic Region: Tradition, Transnationalism, and Matriarchy in the Afr-Brazilian Candomblé*. Princeton: Princeton University Press, 2005.
- Matter, Robert A. "Missions in the Defense of Spanish Florida, 1566-1710". *Florida Historical Quarterly* 54 (1975), 18-38.
- McClellan, James E and François Regourd. *The Colonial Machine: French Science and Overseas Expansion in the Old Regime*, Brepolis, 2011.
- McConville, Brendan. *The King's Three Faces: The Rise and Fall of Royal America, 1688-1776*. Chapel Hill: University of North Carolina Press, 2006.
- McCusker, John and Cora Gravesteijn. *The Beginnings of Commercial and Financial Journalism: The Commodity Price Currents, Exchange Rates Currents, and Money currents of early Modern Europe*. NEHA, 3rd series, 11, Amsterdam: NEHA, 1991.

- McDavid, Carol. "Beyond Strategy and Good Intentions: Archaeology, Race, and White Privilege". *Archaeology as a Tool of Civic Engagement*. eds. Barbara J. Little and Paul A. Shackel. Lanham, MD: Altamira, 2007, 67-88.
- McDowell, W.L. *Journals of the Commissioners of the Indian Trade, September 20, 1710-August 29, 1718*. South Carolina Archive Department, Columbia.
- McEwan, Bonnie. "San Luis de Talimali: The Archaeology of Spanish-Indian Relations at a Florida Mission". *Historical Archaeology* 25, no.3 (1991) 36-60.
- McFarlane, Anthony. "Identity, Enlightenment, and Political Dissent in Late Colonial Spanish America". *TRHS* 6th series, 8 (1998), 309-35.
- McGovern, Patrick. "Chemical and Archaeological Evidence for the earliest Cacao Beverages". *Proceedings of the National academy of Sciences* 104 (2007), 18937-18940.
- McKendrick, Neil, John Brewer, and J.H. Plumb. *The Birth of a Consumer Society: The Commercialization of Eighteenth Century England*. Bloomington: University of Indiana Press, 1982.
- McKivergan, David A. Jr. "Balanced Reciprocity and Peer-Polity Interaction in the Late Prehistoric Southeastern United States". *Native American Interactions: Multiscalar Analyses and Interpretations in the Eastern Woodlands*, edited by M. Nassaney and K. Sassaman, pp. 229-246. The University of Tennessee Press, Knoxville, 1995, 229-46.
- McMullin, E. "The development of philosophy of science 1600-1900". *Companion to the History of Science* eds. R.C. Olby, G.N. Cantor, J.R.R. Christie, and M. J. S. Hodge. New York: Routledge, 1990, 816-52.

- McNeil, John Robert. *Atlantic Empires of France and Spain: Louisbourg and Havana, 1700-1763*. Chapel Hill: University of North Carolina Press, 1985.
- The Medical Renaissance of the Sixteenth Century* eds. Andrew Wear, Roger K. French, and Ian Lonie. Cambridge: Cambridge University Press, 1985, 100-17; 303-12.
- Meinig, D.W. *The Shaping of America: vol. 1 Atlantic America, 1492-1800*. New Haven: Yale University Press, 1986.
- Melzer, Sara E. "The Magic of French Culture: Transforming 'Savages' into French Catholics in Seventeenth Century New France". *The Meanings of Magic: from the Bible to Buffalo Bill*, ed. Amy Wygant. New York Berghahn, 2006, 136-60.
- Merchants and Marvels: Commerce, Science, and Art in Early Modern Europe* eds. Paula Smith and Paul Findlen. New York: Routledge, 2002.
- Merrell, James. *The Indians New World: The Catawbas and their neighbors from European Contact through the Era of Removal*. Chapel Hill: University of North Carolina Press, 1989.
- Merrell, John. *Into the American Woods: Negotiators on the Pennsylvania Frontier*. New York: Norton, 1991.
- Merritt, Jane. *At the Crossroads: Indians and Empires on a Mid-Atlantic Frontier, 1700-1763*. Chapel Hill: University of North Carolina Press, 2003.
- Metcalf, Peter and Richard Huntington. *Celebrations of Death: The Anthropology of Mortuary Ritual*. Cambridge: Cambridge University Press, 1991.
- Meyers, Maureen. "The Mississippian Frontier in Southwestern Virginia". *Southeastern Archaeology* 21, no. 2 (2002), 178-91.

- Milanich, Jerald and Susan Milbrath. *First Encounters: Spanish Explorations in the Caribbean and the United States*. (1989).
- Milanich, Jerald T. "Tacatacuru and the San Pedro de Mocamo Mission", *Florida Historical Quarterly* 50 (1972), 283-91.
- Milanich, Jerald T. *Florida Indians and the Invasion from Europe*. Gainesville: University Press of Florida, 1995.
- _____. *Laboring in the Fields of the Lord: Spanish Missions and Southeastern Indians*. Washington, DC: Smithsonian Institution Press, 1999.
- Miller, Nancy. *The Commerce of Louisiana during the French Regime, 1699-1763*. New York: Longmans, Green, 1916.
- Miller, Peter N. *Peiresc's Europe: Learning and Virtue in the Seventeenth Century*. New Haven: Yale University Press, 2000.
- Mintz, Sidney. *Sweetness and Power: The Place of Sugar in Modern History*. New York: Viking Press, 1985.
- Mitchel, Faith. *Hoodoo Medicine: Gullah Herbal Remedies*. Columbia, SC: Summerhouse, 1999.
- Mitchem, Jeffery M. and Bonnie G. McEwan. "New Data on Early Bells from Florida". *Southeastern Archaeology* 7, no. 1 (1988): 39-49.
- Moore, David G., Robin A. Beck, Jr. and Christopher B. Rodning. "Afterword: Pardo, Joara, and Fort San Juan Revisited." *The Juan Pardo Expeditions: Explorations of the Carolinas and Tennessee, 1566-1568* (Revised Edition), edited by Charles M. Hudson, pp. 343-349. University of Alabama Press, Tuscaloosa, 2005, 343-49.

Moran, Bruce. *Distilling Knowledge: Alchemy, Chemistry, and the Scientific Revolution*.

Cambridge, MA: Harvard University press, 2005.

Morgan, Jennifer L. “ ‘Some could Suckle over their Shoulder’ ”: Male Travellers, Female Bodies, and the Gendering of Racial Ideology”. *WMQ*, 3rd series, 54 (1997), 167-92.

Morgan, Phillip D. “Virginia’s Other Prototype: The Caribbean”. *The Atlantic World and Virginia, 1550-1624* ed. Peter Mancall. Chapel Hill: University of North Carolina Press for the Omohundro Institute, 2007.

Mowatt, Charles L. *East Florida as a British Province, 1763-1796*. Berkeley: University of California Press, 1947.

Mt. Pleasant, Alyssa, Caroline Wigginton and Kelly Wisecup, “Materials and Methods in Native American and Indigenous Studies: Completing the Turn,” *The William and Mary Quarterly*, 75, no. 2 (April 2018), 207-236.

Muller, Jon “Mississippian Specialization and Salt”. *American Antiquity* 49 (1984): 489-507.

Mundy, Barbara. *The Mapping of New Spain: Indigenous Cartography and the Maps of Relaciones Geográficas*. Chicago: University of Chicago Press, 2001.

Mungello, D.E. *Curious Land: Jesuit Accommodation and the Origins of Sinology*. Honolulu: University of Hawaii Press, 1989.

Murdoch, Richard. *The Georgia-Florida Frontier, 1793-1796: Spanish Reaction to French Intrigue and American designs*. Berkeley: University of California Press, 1951.

Nash, Gary. *Race, Class and Politics: essays on Colonial and revolutionary Society*. Urbana: University of Illinois Press, 1986.

Nassaney, Michael S. “Communal Societies and the Emergence of Elites in the Prehistoric American Southeast”. *Lords of the Southeast: Social Inequality and the Native Elites of*

- Southeastern North America*, edited by Alex W. Baker and Timothy R. Pauketat.,
Archaeological Papers of the American Anthropological Association, Number 3.,
1992, 111-44.
- Nassaney, Michael. "Archaeology and Oral Tradition in Tandem: Interpreting Native-
American Ritual, Ideology and Gender Relations in Contact period Southeastern
New England". *Interpretations of Native North American Life: Materials Contributions
to Ethnohistory* eds. Michael Nassaney and Eric Johnson. Gainesville: University of
Florida Press, 2000, 412-31.
- Neveu, Bruno. "La vie erudite à Paris à la fin du XVIIe siècle, d'après les papiers du P.
Léonard de Sainte-Catherine, 1695-1706". *Bibliothèque de l'École des Chartes* 124
(1996), 432-511.
- Nietzel, Robert. *Archaeology of the Fatherland Site: The grand Village of the Natchez*. New
York: American Museum of Natural History, 1965.
- Nissen, Charles. *Die botanische Buchillustration. Ihre Geschichte und Bibliographie*. 2d ed. 3
vols. in. 1 Stuttgart: A. Hiersemann, 1966.
- Noël Hume, Ivor. "An Indian Ware of the Colonial Period. *Quarterly Bulletin of the
Archaeological Society of Virginia* 17, 1 (1962).
- Norton, Mary. *Sacred Gifts, Profane Pleasures: A History of Tobacco and Chocolate in the
Atlantic World*. Ithaca: Cornell University Press, 2010.
- O'Brien, Patrick K. "European Economic Development: the Contribution of the Periphery".
Economic History Review 35 (1982), 1-18.
- O'Shaughnessy, Andrew. *An Empire Divided: The American Revolution and the British
Caribbean*. Philadelphia: University of Pennsylvania Press, 2000.

- Offutt, William M. "The Atlantic Rules: The Legalistic Turn in Colonial British America". *The Creation of the British Atlantic World*. Baltimore: Johns Hopkins University Press, 2005.
- Old Trails and New Direction: Papers of the Third North American Fur Trade Conference* eds. Carol M. Judd and Arthur Ray. Toronto: University of Toronto Press, 1980.
- Oldenburger-Ebbers, Carla. "Notes on Plants used in Dutch Gardens in the Second Half of the Seventeenth Century". *The Dutch Garden in the Seventeenth Century* ed. John Dixon Hunt. Dumbarton Oaks Colloquium on the History of Landscape Architecture, 12. Washington, D.C. Dumbarton Oaks Research library and Collection, 1990, 159-73.
- Olson, Alison G. *Making the Empire Work: London and American Interest Groups, 1690-1790*. Cambridge: Harvard university Press, 1992.
- Olwell, Robert. *Masters, Slaves, and Subjects: The Culture of Power in the South Carolina Low Country, 1740-1790*. Ithaca: Cornell University Press, 1998.
- Opsomer, J.E. "Un botaniste trop peu connu: Willem Quackelbeen (1527-1561)." *Bulletin de Société royale de Botanique de Belgique* 93 (1961), 113-30.
- Osner, Charles. *The Archaeology of Race and Racialization in Historic America*. The American Experience in Archaeological Perspective series. Gainesville: University Press of Florida, 2007.
- Otto, John. *The Southern Frontier, 1607-1860: The Agricultural Evolution of the Colonial and Antebellum South*. New York: Greenwood Press, 1989.
- Pagden, Anthony. *Lords of all the World: Ideologies of Empire in Spain, Britain, and France, c.1500-c.1800*. New Haven: Yale University Press, 1995.

- Pagden, Anthony. *The Fall of Natural Man: the American Indian and the Origins of Comparative Ethnology*. Cambridge: Cambridge University Press, 1983.
- Palmer, Colin. *Slaves of the White God: Blacks in Mexico, 1570-1650*. Cambridge: Harvard University Press, 1976.
- Palmer, Richard. "Medical Botany in Northern Italy in the Renaissance". *Journal of the Royal Society of Medicine* 78 (1985), 149-57.
- Parker Susan R. "Men without God or King: Rural Settlers of East Florida, 1787-1790". *Florida Historical Quarterly* 69 (1990), 135-55.
- Parry, John H. "Early European Penetration of Eastern North America.". *Alabama and the Borderlands: From Prehistory to Statehood*, edited by R. Reid Badger and Lawrence A. Clayton, pp. 83-95. The University of Alabama Press, Tuscaloosa, 1985, 83-95.
- Pauketat, Timothy R. "The Reign and Ruin of the Lords of Cahokia: A Dialectic of Dominance". *Lords of the Southeast: Social Inequality and the Native Elites of Southeastern North America*, edited by Alex W. Baker and Timothy R. Pauketat, pp 31-51. Archaeological Papers of the American Anthropological Association, Number 3, 1992, 31-51.
- _____. *Ancient Cahokia and the Mississippians*. Cambridge: Cambridge University Press, Cambridge, 2004.
- _____. *Chiefdoms and Other Archaeological Delusions*. Lanham, MD.: Alta Mira Press, 2007.
- Peabody, Sue. "A Nation Born to Slavery: Missionaries and Racial Discourse in Seventeenth Century French Antilles". *Journal of Social History* 38, 1 (2004): 113-26.
- Lamar Pearson, Fred. "Spanish – Indian Relations in Florida: A Study of Two Visitas, 1657 and 1678." Unpublished PhD Dissertation, University of Alabama, 1968.

- Perdue, Theda. *Cherokee Women, Gender and Culture Change, 1700-1835*. Lincoln: University of Nebraska Press, 1998.
- Pestana, Carla. *Protestant Empire: religion and the Making of the British Atlantic World*. Philadelphia: University of Pennsylvania Press, 2009.
- Peterson, Mark. "The City-State of Boston, the Republic of Letters, and the protestant International, 1689-1739." *Soundings in Atlantic History*, eds. Bernard Bailyn and Patricia Denault. Cambridge, MA: Harvard University Press, 2011, 329-70.
- Philippe Couplet, S.J. (1623-93): *The Man Who Bought China to Europe*. ed. Jerome Heyndrickx. Nettetal: Steyler Verlag, 1990.
- Piñero, José María López and José Pardo Tomás. *La influencia de Francisco Hernández (1515-1587) en la constitución de la botánica y la material médica modernas*. Valencia: Instituto de Estudios Documentales e Históricos sobre la Ciencia, 1996.
- Piker, Joshua. *Okfuskee: A Creek Indian Town in Colonial America*. Cambridge: Harvard University Press, 2004.
- Piñero, José María López. "The Medical Profession in Sixteenth Century Spain". *The Town and State Physician in Europe from the Middle Ages to the Enlightenment* ed. A.W. Russel. Wulfenbuttel: Herzog August Bibliothek, 1982, 85-98.
- Piracy, Slavery, and Redemption: Barbary Captivity Narratives from Early Modern England*, ed. Daniel Vitkus. New York: Columbia University Press, 2001.
- Plane, Ann Marie. *Colonial Intimacies: Indian Marriage in Early New England*. Ithaca: Cornell University Press, 2000.
- Pocock, J.G.A. "British History: A Plea for a New Subject". *Journal of Modern History* 47 (1975), 601-21.

- Postma, Johannes. "Surinam and its Atlantic Connections, 1667-1795". *Riches from Atlantic Commerce: Dutch Transatlantic trade and shipping, 1585-1817* eds. Johannes Postma and Victor Enthoven. Leiden: Brill, 2003, 287-322.
- Potter, Stephen. *Commoners, Tribute, and Chiefs: The Development of Algonquian Culture in the Potomac Valley*. Charlottesville: University of Virginia Press, 1993.
- Prest, John. *The Garden of Eden: The Botanic Garden and the re-Creation of Paradise*. New Haven: Yale University Press, 1981.
- Prévost, Anne-Marie. "Sémantique de 'herbe' et 'plante': Pierre Belon (1555) et Tournefort (1708). Référence aux *Éléments de Botanique* (1694)". *CRA* 258 (1964), 5697-5700.
- Price Jacob M. "Economic Function and the Growth of American Port Towns in the Eighteenth Centuries". *Perspectives in American History* 8 (1974), 123-86.
- Price, Jacob M. and Paul G.E. Clemens. "A Revolution of Scale in Overseas Trade: British Firms in the Chesapeake Trade, 1675-1775". *Research in Maritime History* 47 (1987), 1-43.
- Quimby, George I. "Natchez Social Structure as an Instrument of Assimilation". *American Anthropologist* 48, 1 (1946), 134-37.
- Ramenofsky, Ann F. *Vectors of Death: The Archaeology of European Contact*. Albuquerque: University of New Mexico Press, 1987.
- Reddy, William. *The Negotiation of Feeling: A Framework for the History of Emotions*. Cambridge: Cambridge University Press, 2001.
- Rediker, Marcus. *Between the Devil and the Deep Blue Sea: Merchant Seamen, Pirates, and the Anglo-American Maritime World, 1700-1750*. Cambridge: Cambridge University Press, 1987.

- Reeds, Karen. "Renaissance Humanism and Botany". *Annals of Science* 33 (1976), 519-42.
- Reents-Budet, Doire. "The Social Contexts of Kakaw Drinking among the Ancient Maya". *Chocolate in Mesoamerica*, ed. Cameron McNeil. Gainesville: University Press of Florida, 2006, 202-23.
- Rees, Mark A. "Historical Science or Silence? Toward a Historical Anthropology of Mississippian Political Culture". *Archaeology of Traditions: Agency and History Before and After Columbus*. edited by Timothy R. Pauketat, pp.121-140. University Press of Florida, Gainesville, 2001, 121-140.
- Reitz, Elizabeth J. "Spanish and British subsistence strategies at St. Augustine, Florida and Frederica, Georgia, between 1565 and 1783". Ph.D. Dissertation, University of Florida, 1979.
- Restall, Matthew. *Seven Myths of the Spanish Conquest*. Oxford: Oxford University Press, 2003.
- Richter, Daniel. *Facing East from Indian Country: A Native History of Early America*. Cambridge: Harvard University Press, 2001.
- Ritterbush, Phillip C. *Overtures to Biology: The Speculations of Eighteenth Century Naturalists*. New Haven: Yale University Press, 1964.
- Rodning, Christopher B. "Mortuary Ritual and Gender Ideology in Protohistoric Southwestern North Carolina". *Archaeological Studies of Gender in the Southeastern United States*, edited by Jane M. Eastman and Christopher B. Rodning, pp. 77-100. University Press of Florida, Gainesville, 2001, 77-100

- Rodning, Christopher B. and David G. Moore. "South Appalachian Mississippian and Protohistoric Mortuary Practices in Southwestern North Carolina". *Southeastern Archaeology* 29, no. 1 (2010): 81-100.
- Rodning, Christopher. "William Bartram and the Archaeology of the Appalachian Summit". *Between Contacts and Colonies: Archaeological Perspectives on the Protohistoric Southeast*, edited by Cameron B. Wesson and Mark A. Rees, pp. 67-89. The University of Alabama Press, Tuscaloosa, 2002, 67-89.
- _____. *Center Places and Cherokee Towns: Archaeological Perspectives on Native American Architecture and Landscape in the Southeast*, Tuscaloosa: University of Alabama Press, 2015, 60 – 2.
- Rodríguez, Jamie E. "La naturaleza de la representación en Nueva España u México". *Secuencia* 61 (2005), 7-32.
- Rogers, Daniel J. and Samuel Wilson. *Ethnohistory and Archaeology: Approaches to Postcontact Change in the Americas*. New York: Plenum Press, 1993.
- Rogers, J. Daniel. "The Archaeological Analysis of Domestic Organization. *Mississippian Communities and Households*, edited by J. Daniel Rogers and Bruce D. Smith, pp. 7-31, University of Alabama Press, Tuscaloosa, 1995, 7-31.
- Rogers, Rhea J. "Tribes as Heterarchy: A Case Study from the Prehistoric Southeastern United States". *Archeological Papers of the American Anthropological Association* 6 (1995): 7-16.
- Romano, Ruggiero. *Conjonctures opposes: La 'Crise' di XVIIe siècle en Europe et en Amérique ibérique*. Genenva: ???, 1992.

- Romero Cabot, Ramón. "Los últimos años de la soberanía española en la Florida, 1783-1821". Tesis doctoral, Universidad de Sevilla, 1983.
- Ross, Mary. "French Intrusions and Indian Uprisings in Georgia and South Carolina, 1577-1580". *Georgia Historical Quarterly* 7 (1923), 251-81.
- Rothschild, Emma. "The Atlantic Worlds of David Hume". *Soundings in Atlantic History*, eds. Bernard Bailyn and Patricia Denault. Cambridge, MA: Harvard university Press, 2011, 404-50.
- Rountree, Helen. "Powhatan Indian Women: The People John Smith Barely Saw". *Ethnohistory* 41, no. 1 (1998), 1-29.
- Saadani, Khalil. "Colonialisme et stratégie: Le rôle des forces militaires en Louisiane, 1731-1743." *France in the New World Proceedings of the 22nd Annual Meeting of the French Colonial Historical Society*, ed. David Buisseret. East Lansing: University of Michigan Press, 1998, 203-24.
- Sacks, David Harris. *The Widening Gate: Bristol and the Atlantic Economy, 1450-1700*. Berkeley: university of California Press, 1991.
- Saler, Michael. "Modernity and Enchantment: A Historiographic Review". *AHR* 111 (June 2006), 692-716.
- Sanz Tapía, Angel. "Relaciones entre Cuba y los Indios de la Florida oriental durante el dominio Inglés (1763-1783), in *La Influencia de España en el Caribe, La Florida, y la Luisiana, 1500-1800*. Madrid: Instituto de Cooperación Ibero Americana, 1983, 231-308.
- Saunt, Claudio. *A New Order of Things: Property, Power, and the Transformation of the Creek Indians, 1733-1816*. New York: Cambridge University Press, 1999.

- Sayre, Gordon. *Les Sauvages Américains: Representations of Native Americans in French and English Colonial Literature*. Chapel Hill: University of North Carolina Press, 1997.
- Scarry, C. Margaret. "The Use of Plant Foods in Sixteenth Century St. Augustine". *Florida Anthropologist* 38 (1985) 74-79.
- Scarry, John. "Elite Identities in the Apalachee province: the Construction of Identities and Cultural Change in a Mississippian Polity." *Materials: Cultural and Economy in Prehistory* ed. John Robb. Occasional paper no. 26, Center for archaeological Investigations, Southern Illinois university, Carbondale, 1999, 342-61.
- Scarry, Margaret. (ed.) *Forging and Farming the Eastern Woodlands*. (1993).
- Schafer, Daniel L. "Yellow Silk Ferret tied round their Wrists': African-Americans in British East Florida, 1763-1764." ed. David Colburn and Jane L. Chambers. Gainesville: University Press of Florida, 1995, 71-103.
- Schivelbusch, Wolfgang. *Tastes of Paradise: A Social History of Spices, Stimulants, and Intoxicants*. trans. David Jacobson. New York: Vintage Books, 1992.
- Schmidt, Benjamin. *Innocence Abroad: the Dutch Imagination and the New World, 1570-1670*. Cambridge: Cambridge University Press, 2001.
- Schnell, Frank, Vernon Knight, and Gail Schnell, *Cemochechobee: Archaeology of a Mississippian Ceremonial Center on the Chatahoochee River*. Ripley P. Bullen Series ed. Jerald T. Mialnich, 1981.
- Schroedl, Gerald F. "Mississippian Towns in the Eastern Tennessee Valley". *Mississippian Towns and Sacred Spaces: Searching for an Architectural Grammar*, edited by R. Barry Lewis and Charles Stout, pp. 64-92. University of Alabama Press, Tuscaloosa, 1998, 64-92.

- Schroedl, Gerald F. "Toward an Explanation of Cherokee Origins in East Tennessee". *The Conference on Cherokee Prehistory*. Papers presented at the Conference on Cherokee Prehistory: The Archaeology of an Appalachian Culture. Warren Wilson College, Swannanoa, 1986, 122-38.
- Schroedl, Gerald. and Emanuel Breitburg. "Burials". *Overhill Cherokee Archaeology at Chota-Tanasee* ed. Gerald Schroedl. Report of Investigations 38. Publications in Anthropology, 42. University of Tennessee, Knoxville, 1986, 175-96.
- Londa Schiebinger, *Plants and Empire: Colonial Bioprospecting in the Atlantic World*. Cambridge: Harvard University Press, 2004.
- Scott, Elizabeth. "Food and Social Relations at Nina Plantation". *American Anthropologist* 103, 3 (2001), 671-691.
- Seed, Patricia. *Ceremonies of Possession in Europe's Conquest of the New World, 1492-1640*. New York: Cambridge University Press, 1995.
- Sensbach, John. *A Separate Canaan: The making of an Afro-Moravian World in North Carolina, 1763-1840*. Chapel Hill: University of North Carolina Press, 1998.
- Seth, Vanita. *Europe's Indians: Producing Racial Difference, 1500-1900*. Durham: Duke University Press, 2010.
- Sex, love, Race: Crossing boundaries in North American History*, ed. Martha Hodes. New York: New York University Press, 1999.
- Sexuality and Marriage in colonial Latin America*. ed. Lavrín Asunción. Lincoln: University of Nebraska Press, 1989.
- Shammas, Carole. *The Pre-Industrial Consumer in England and America*. Oxford: Oxford University Press, 1990.

- Shapin, Steven. *A Social History of Truth: Civility and Science in Seventeenth Century England*. Chicago: university of Chicago Press, 1994.
- Shapiro, Gary. "Ceramic Vessels, Site Permanence, and Group Size: A Mississippian Example." *American Anthropologist* 49, 4 (1984), 696-712.
- Shapiro, Gary. *Archaeology at San Luis: Broad-scale Testing, 1984-1985*. Florida Archaeology no. 3. Florida bureau of Archaeological Research, Department of State, Tallahassee, 1987.
- Sherman, William. *Used Books: Marking Readers in Renaissance England*, Philadelphia: University of Pennsylvania Press, 2008.
- Shoemaker, Nancy. *A Strange Likeness: Becoming Red and White in Eighteenth Century North America*. Oxford: Oxford University Press, 2004.
- Sidnell, Jack. "The Missing Spanish Creoles: Recovering the Birth of Plantation Contact Languages". *Journal of Linguistic Anthropology* 13, 2 (2003, 258-260.
- Silver, Timothy. *A New Face on the Countryside: Indians, Colonists, and Slaves in the South Atlantic Countryside, 1500-1800*. New York: Cambridge University Press, 1990.
- Singleton, Theresa and Mark Bograd. "Looking for the Colono in Colonoware." *Lines That Divide: Historical Archaeologies of Race, Class, and Gender*. eds. James A. Delle, Stephen A. Mrozowski, and Robert Paynter, Knoxville: The University of Tennessee Press, 2000, 3-21.
- Singleton, Thersea. *Archaeology of Slavery and Plantation Life: Studies in Historical Archaeology*. Orlando: Academic Press, 1985.
- Siraisi, Nancy. *Medieval and Early Renaissance Medicine: An Introduction to Knowledge and Practice*. Chicago: University of Chicago Press, 1990.

- Slavery and the Development of the Americas*. eds. David Eltis, Frank Lewis, and Kenneth Sokoloff. Cambridge: Cambridge University Press, 2004.
- Slaves, Subjects, and Subversives: Blacks in Colonial Latin America* eds. Jane Landers and Barry Robinson. Albuquerque: University of New Mexico Press, 2006.
- Sleeper-Smith, Susan. *Indian Women and French Men: rethinking Cultural Encounter in the Western Great Lakes*. Amherst: University of Massachusetts Press, 2001.
- Sloan, P.R. "John Locke, John Ray, and the problem of the Natural System". *Journal of the History of Biology* 5 (1972), 1-53.
- Smith, Mark. "Remembering Mary, Shaping revolt: Reconsidering the Stono Rebellion". *Journal of Southern History* 67, 3 (2001): 1101-13.
- Smith, Marvin T. and David J. Hally. "Chiefly Behavior: Evidence from Sixteenth Century Spanish Accounts". *Lords of the Southeast: Social Inequality and the Native Elites of Southeastern North America*, edited by Alex W. Baker and Timothy R. Pauketat, Archaeological Papers of the American Anthropological Association, Number 3, 1992, 99-100.
- Smith, Marvin. *Coosa: The Rise and Fall of a Southeastern Mississippian Chiefdom*. Gainesville: University of Florida Press, 2000.
- Smith, Robert Sidney. "Sales Taxes in New Spain, 1575-1770". *HAHR* 28 (1948), 2-37.
- Smith, Woodruff. "Complications of the Commonplace: Tea, Sugar, and Imperialism". *Journal of Interdisciplinary History* 23 (1992), 259-78.
- Smith, Woodruff. *Consumption and the Making of Respectability, 1600-1800* New York: Routledge, 2002.

Smits, David. " 'Abominable Mixture': Toward the Repudiation of Anglo-Indian marriage in Seventeenth Century Virginia". *The Virginia Magazine of History and Biography*. 95 (1987), 1-32.

Snyder, Christina. "Conquered Enemies, Adopted Kin, and Owned People: The Creek Indians and their Captives". *Journal of Southern History* 73, 2 (2007), 255-58.

Socolow, Susam. *The Women of Colonial Latin America*. Cambridge: Cambridge University Press, 2000.

Southeastern Ceremonial Complex: Chronology, Content, Context, edited by Adam King, pp. 1-14. University of Alabama Press, Tuscaloosa, 2007.

Spary, E.C. *Eating the Enlightenment: Food and the Sciences in Paris: 1670 – 1760*. Chicago: University of Chicago Press, 2013.

_____. *Nature's Utopia: French Natural History from the Old Regime to the Revolution*, (Chicago: University of Chicago Press, 2000),

Spike, Tamnara. "To Make Graver this Sin: Concepts of Purity and Pollution among the Timucua of Spanish Florida," Unpublished Master's Thesis. Tallahassee: Florida State University, 2006.

The Spanish Missions of La Florida ed. Bonnie McEwan. Gainesville: University Press of Florida, 1993.

Spanish Pathways in Florida, 1492-1992. eds. A. Henderson and G. Mormino. Sarasota, FL: Pineapple Press, 1992.

Spear, Jennifer. *Race, sex, and Social Order in Early New Orleans*. Baltimore: Johns Hopkins Press, 2009.

- Spellman, Charles. "The Agriculture of Early North Florida Indians". *Florida Anthropologist* 1(1948), 37-48.
- Stahle, David W., Edward R. Cook, Malcolm K. Cleaveland, Matthew Therrell, David Meko, Henri Grissino-Mayer, Emma Watson, and Brian Luckman. Tree-ring Data Document 16th Century Megadrought over North America. *Eos: Transactions of the American Geophysical Union* 81, no. 21 (2000): 121-125.
- Stanwood, Owen. "The Protestant Moment: Antipopery, the Revolution of 1688-89 and the Making of an Anglo-American Empire". *Journal of British Studies* 46, 3 (2007): 481-508.
- Starr, Rebecca. *A School for Politics: Commercial Lobbying and Political Culture in Early South Carolina*. Baltimore: Johns Hopkins University Press, 1998.
- Steele, Colin. *English Interpreters of the Iberian New World from Purchas to Stevens, 1603-1726*. Oxford: Oxford University Press, 1975.
- Steele, Ian. "Empires of Migrants and Consumers: Some Current Atlantic Approaches to the History or Colonial". *Virginia Magazine of History and Biography* 99 (1991), 489-512.
- Stein, Robert L. *The French Slave Trade in the Eighteenth Century: An Old Regime Business*. Madison: University of Wisconsin Press, 1979.
- Stemerding, D. *Plants, Animals, and Formulae*. Twente: Universiteit Twente, 1991.
- Stern, Jessica. *The Lives in Objects: Native Americans, British Colonists, and Cultures of Labor and Exchange in the Southeast*. Chapel Hill: University of North Carolina Press, 2017.
- Stern, Mark Abbott. *David Franks: Colonial Merchant*. University Park, PA: Pennsylvania State University Press, 2010.

- Sternheimer, Patricia. "Classification and Analysis of the Grave Goods from the Trigg Site: A late Woodland-Contact Period Burial Site in Southwestern Virginia. Master's thesis, department of Anthropology, University of Virginia, Charlottesville, 1983.
- Stevens, P.F. *The Development of Biological Systematics: Antoine-Laurent de Jussieu, Nature, and the Natural System*. New York: Columbia University Press, 1994.
- Steward, L. *The Rise of Public Science: Rhetoric, Technology and Natural Philosophy in Newtonian Britain*. New York: Cambridge University Press, 1993.
- Stojanowski, Christopher M. *Biocultural Histories in La Florida*. Tuscaloosa: University of Alabama press, 2005.
- Stoye, John. *English Travellers Abroad, 1604-1667: Their Influence in English Society and Politics*, rev. ed. New Haven: Yale University Press, 1998.
- Strangers Within the Realm: Cultural Margins of the First British Empire* eds. Bernard Bailyn and Phillip D. Morgan. Chapel Hill: University of North Carolina Press, 1991.
- Stroup, Alice. *A Company of Scientists: Botany, Patronage, and Community at the Seventeenth-Century Parisian Royal Academy of Scientists*. Berkeley: University of California Press, 1990.
- Stuart, David. *Plants that Shaped our Gardens*. London: Francis Lincoln, 2002.
- Studnicki-Gizber, Daviken. "From Agents to Consulado: Commercial Networks in Colonial Mexico, 1520-1590 and Beyond". *Anuario de estudios Americanos*. 57 (2000), 41-68.
- Sturtevant, William C. "Spanish-Indian relations in Southeastern North America". *Ethnohistory* 9 (1962), 41-94.
- Sturtevant, William C. "The Mikasuki Seminole: Medical Beliefs and Practices". Unpublished Ph.D. dissertation, Department of Anthropology, Yale University, 1954

- Sullivan, Lynne P. "The Mouse Creek Phase Household". *Southeastern Archaeology* 6 (1987):16-29.
- Sullivan, Lynne P. and Christopher B. Rodning . "Gender, Tradition, and the Negotiation of Power Relationships in Southern Appalachian Chiefdoms". *Archaeology of Traditions: Agency and History Before and After Columbus*. edited by Timothy R. Pauketat, pp.107-120. University Press of Florida, Gainesville, 2001, 107-20.
- Sullivan, Lynne P. and Michaelyn S. Harle . "Mortuary Practices and Cultural Identity at the Turn of the Sixteenth Century in East Tennessee, *Mississippian Mortuary Practices: Beyond Hierarchy and the Representationist Perspective*, edited by Lynne P. Sullivan and Robert C. Mainfort Jr., University Press of Florida, Gainesville, 2010, 234-49.
- Sullivan, Lynne P. and Susan C. Prezzano. "A Conscious Appalachian Archaeology." *Archaeology of the Appalachian Highlands*, edited by Lynne P. Sullivan and Susan C. Prezzano, University of Tennessee Press, Knoxville, 2001, 323-31.
- Super, John. *Food, Conquest, and Colonization in Sixteenth-Century Spanish America*. Albuquerque: University of New Mexico Press, 1988.
- Swan, Claudia. *The Clutius Botanical Watercolors: Plants and Flowers of the renaissance*. New York; Harry N. Abrams, 1998.
- Swanton, John R. *The Indians of the Southeastern United States*. Bureau of American Ethnology Bulletin, no. 137. Government Printing Office, Washington, DC, 1946.
- TePaske, John J. *The Governorship of Spanish Florida, 1700-1763*. Durham: Duke University Press, 1974.

- Tesar, Louis. *The Leon County Bicentennial Survey Report: An Archaeological Survey of Selected Portions of Leon County, Florida*. Bureau of Historic Sites and Properties Miscellaneous Project Site reports Series 49. Florida Department of State, Tallahassee, 1980.
- The Archaeology of Traditions: Agency and History before and after Columbus*, ed. Timothy Pauketat, 2001.
- The Forgotten Centuries: Indians and Europeans in the American South*. eds. Charles S. Hudson and C. Chavez Tesser. Athens: University of Georgia Press, 1994.
- The Low Countries and the New World(s): Travel, Discovery, Early Relations*. Lanham =, MD: University Press of America, 2000.
- The Medical Revolution of the Seventeenth Century* eds. Roger French and Andrew Wear. Cambridge: Cambridge University Press, 1989.
- The Social life of Things: Commodities in Cultural Perspective* ed. Arjun Appadurai. Cambridge: Cambridge University Press, 1986.
- The Space and Place of Death*, eds. Helaine Silverman and David B. Snell. Archaeological Papers no. 11 American Anthropological Association, Arlington, VA, (2002) 27-54.
- The Spanish Missions of La Florida*. ed. Bonnie McEwan. Gainesville: University Press of Florida, 1993.
- Specialization, Exchange and Complex Societies*, edited by E. Brumfiel and T. Earle, pp. 10-21. Cambridge University Press, Cambridge, U.K., 1987, 10-21.
- The Story of Tea: An Exhibition of Tea and Coffee Ware: 1700-1900*. South African Cultural History Museum, Cape Town, 1957.

- The Task of Healing: Medicine, Religion and Gender in England and the Netherlands, 1450-1800.* eds. Hilary Marland and Margaret Peeling. Rotterdam: Erasmus, 1996, 253-70.
- The Toqua Site: (40MR6): A Late Mississippian Dallas Phase.* ed. Richard Polhemus. Report of Investigations no. 41. Department of Anthropology, University of Tennessee, Knoxville, 1987.
- Theories of Empire, 1450-1800.* ed. David Armitage. Aldershot, 1998.
- Thomas, Daniel H. *Fort Toulouse: the French Outpost at the Alabama on the Coosa.* Tuscaloosa: University of Alabama Press, 1989.
- Thomas, Nicholas. *Entangled Objects: Exchange, Material Culture, and Colonialism in the Pacific.* Cambridge: Harvard University Press, 1991.
- Thomson, Janice. *Mercenaries, Pirates, and Sovereigns: State-building and extraterritorial violence in early modern Europe.* Princeton: Princeton University Press, 1994.
- Thorne, Tanis. *The Many Hands of My Relations: French and Indians on the Lower Missouri.* Columbia: University of Missouri Press, 1996.
- Thornton, John. *Africa and Africans in the Making of the Atlantic World, 1400-1800.* 2nd ed. Cambridge: Cambridge University Press, 1998.
- Timberlake, Henry. *The Memoirs of Lieutenant Henry Timberlake* ed. Duane King. Cherokee, NC: The Museum of the Cherokee Indian Press, 2007.
- Tobacco Use by Native North Americans.* ed. Joseph Winter. Norman: University of Oklahoma Press, 2000.
- Todorov, Tzvetan. *The Conquest of America: The Question of the Other*, trans. Richard Howard. New York: Harper and Row, 1984.

- Transferring Wealth: and Power from the Old to the New World: Monetary and Fiscal Institutions in the Seventeenth through the Nineteenth Centuries* eds. Michael D. Bordo and Roberto Cortés-Conde. Cambridge: Cambridge University Press, 2001.
- The Transformation of the Southeastern Indians, 1540-1760*, edited by Robbie Ethridge and Charles Hudson, pp. 155-175. University Press of Mississippi, Jackson, 2002, 155-75.
- Travel Knowledge: European "Discoveries" in the Early Modern Period* eds. Ivo Kamps and Jyotsna Singh. New York: Palgrave Macmillan, 2001.
- Travel Narratives from the Age of Discovery: An Anthology*. ed. Peter Mancall. New York: Oxford University Press, 2006.
- Trigger, Bruce. "Maintaining Economic Equality in Opposition to Complexity: A Iroquoian Case Study. *The Evolution of Political Systems: Sociopolitics in Small-Scale Sedentary Societies*, ed. Steadman Upham. Cambridge: Cambridge University Press, 1990, 119-45.
- Trubitt, Mary B. "Mound building and prestige goods exchange: Changing strategies in the Cahokia chiefdom". *American Antiquity* 65 (2000): 669-690.
- Turgeon, Laurier. "The Tale of the Kettle: Odyssey of a Multicultural Object". *Ethnohistory* 44 (1997), 1-29.
- Twinam, Ann. *Public lives, Private secrets: Gender, honor, Sexuality, and Illegitimacy in Colonial Spanish America*. Stanford: Stanford University Press, 1999.
- Usner, Daniel. *Indians, Settlers, and Slaves in a Frontier Exchange Economy: The Lower Mississippi Valley before 1783*. Chapel Hill: University of North Carolina Press, 1992.
- Van Kirk, Sylvia. *Many Tender Ties: Women in Fur-Trade Society, 1670-1870*. Norman: University of Oklahoma Press, 1983.

- Vary, Simon and Rafael Chabrán. "Medical Natural History in the Renaissance: The strange Case of Francisco Hernández". *Huntington Library Quarterly* 57 9(1994), 124-51.
- Vidal, Cécile. "Francilée et situation coloniale: Nation, empire et race en Louisiane française (1699-1769)". *Annales, HSS* 64, 5 (2009), 1019-50.
- Vines, S.H. and G. Claridge Druce. *An account of the Morisonian Herbarium in the Possession of the University of Oxford together with Bibliographical and Critical Sketches of Morison and the two Bobarts and the works of the early history of the Physic Garden 1619-1720*. Oxford: Clarendon Press, 1914.
- Vlach, Michael. *Back of the Big House: The Architecture of Plantation Slavery*. Chapel Hill: The University of North Carolina, 1993.
- von Gernet, Alexandria. "Nicotian Dreams: The Prehistory and Early History of Tobacco in eastern North America". *Consuming Habits: Drugs in History and Anthropology* eds. Jordan Goodman, Paul E. Lovejoy, and Andrew Sherratt. London: Routledge, 1995.
- Vos, Paule de. "The Science of Spices: Empiricism and Economic Botany in the Early Spanish Empire". *Journal of World History* 17 (2006), 399-427.
- Wake, C.H.H. "The Changing Pattern of Europe's Pepper and Spice Imports, ca. 1400-1700". *Journal of European Economic History* 8 9(1979), 361-403.
- Walker, P.L. "Bioarchaeological Ethics: A Historical Perspective on the Value of Human Remains". *Biological Anthropology of the Human Skeleton*, ed. M.A. Katzenberg and S.R. Sanders. New York: Wiley-Liss, 2000, 3-39.
- Wall, Robert and Heather Lapham. "Material Culture of the Contact Period in the Upper Potomac Valley: Chronological and cultural Implications. *Archaeology of Eastern North America* 31 (2003), 151-77.

- Wallace, Amelia. *African Americans at Mars Bluff, South Carolina*. Baton Rouge: Louisiana State University Press, 1993.
- Wallerstein, Emmanuel. *The Modern World System: Capitalistic Agriculture and the Origins of the European World Economy in the Sixteenth Century*. New York: Academic Press, 1974.
- Walsh, Lorena. *From Calabar to Carter's Grove: The History of a Virginia Slave Community*. Charlottesville: University of Virginia Press, 1997.
- Walters, S.M. *The Shaping of Cambridge Botany: A Short History of the Whole-Plant Botany from the Time of Ray into the Present Century*. Cambridge; Cambridge University Press, 1981.
- Ward, Trawick and R.P. Stephen Davis, Jr. *Indian Communities on the North Carolina Piedmont, AD 1000-1700*. Monograph no. 2. Research Laboratories of Anthropology, University of North Carolina, Chapel Hill, 1993.
- Waselkov, Gregory. "The Macon Trading House and early European-Indian Contact in the Colonial Southeast" *Ocmulgee Archaeology, 1936-1986* ed. David Hally, Athens: University of Georgia Press, 1994, 190-5.
- Waselkov, Gregory. *The Archaeology of French Colonial North America: English-French Edition*. Guides to Historical Archaeological Literature 5. Tucson, AZ: Society for Historical Archaeology, 1997.
- Weber, David. *The Spanish Frontier in North America*. New Haven: Yale University Press, 1992.
- Webster, Charles. "The Recognition of Plant Sensitivity by English Botanists in the Seventeenth Century". *Isis* 57 (1966), 96-107.

- Weddle, Robert S. "Soto's Problems of Orientation: Maps, Navigation, and Instruments in the Florida Expedition". *The Hernando de Soto Expedition: History, Historiography, and "Discovery" in the Southeast*, edited by Patricia Galloway. Lincoln: University of Nebraska Press, 1997, 219-33.
- Weisman, Brent R. *Excavations on the Franciscan Frontier: Archaeology at the Fig Springs Mission*. Ripley P. Bullen Series, 1992.
- Wenhold, Lucy. "The First Fort San Marcos de Apalache". *Florida Historical Quarterly* 34 (1956), 301-14.
- Wesson, Cameron B. "Mississippian Sacred Landscapes: The View from Alabama". In *Mississippian Towns and Sacred Spaces: Searching for an Architectural Grammar*, edited by R. Barry Lewis and Charles Stout, University of Alabama Press, Tuscaloosa, 1998, 93-122.
- Wesson, Cameron B. and Mark A. Rees. "Protohistory and Archaeology: An Overview". *Between Contacts and Colonies: Archaeological Perspectives on the Protohistoric Southeast*, edited by Cameron B. Wesson and Mark A. Rees, The University of Alabama Press, Tuscaloosa, 2002, 1-11.
- West, Elliot. *Contested Plains: Indians, Goldseekers, and the Rush to Colorado*. Lawrence: university of Kansas Press, 1998.
- White, Bruce. "The Women who Married a Beaver: Trade Patterns and Gender Roles in the Ojibwa Fur Trade". *Ethnohistory* 46, no. 1 (1999), 110-47.
- White, Richard. *The Middle Ground: Indians, Empires and Republics in the Great Lakes Region, 1650-1815*. New York: Cambridge University Press, 1991.

- White, Sophie. *Wild Frenchmen and Frenchified Indians: Material Culture and Race in Colonial Louisiana*. Philadelphia: University of Pennsylvania Press, 2012.
- Whitehead, Neil. "The Crises and Transformations of Invaded Societies: The Caribbean". *The Cambridge History of the Native peoples of the Americas*, vol. 3, *South America*. eds. Frank Salomon and Stuart B. Schwartz. New York: Cambridge University Press, 1999, 864-903.
- Wickman, Patricia. "The Spanish Colonial Florida". *New Views of Borderland History* ed. Robert Jackson. Albuquerque: University of New Mexico, 1992.
- _____. *Osceola's Legacy: Man vs Myth*. Tuscaloosa: University of Alabama Press, 2007.
- Wilbert, Johannes. *Tobacco and Shamanism in South America*. New Haven: Yale University Press, 1987.
- Wilcox, Michael. *The Pueblo Revolt and the Mythology of Conquest*, Berkeley: University of California Press, 2009.
- Wilkie, Laurie. *Creating Freedom: Material Culture and African American Identity at Oakley Plantation, Louisiana, 1840–1950*. Baton Rouge: Louisiana State University Press, 2000.
- Wilkie, Mary E. "Colonials, Marginal, and Immigrants: Contributions to a Theory of Ethnic Stratification". *Comparative Studies in Society and History* 19 (1977): 67-95.
- Williams, Mark. "Chiefly Compounds". *Mississippian Communities and Households*, edited by J. Daniel Rogers and Bruce D. Smith, University of Alabama Press, Tuscaloosa, 1995, 124-34.
- Williams, Mark. "Indians along the Oconee after De Soto: The Beginning of the End. *Early Georgia* 101, 1-2 (1982), 27-39.

- Williams, Samuel Cole (editor). *Adair's History of the American Indians*. The Watauga Press, Johnson City, Tennessee. Reprinted by National Society of the Colonial Dames of America, Nashville, Tennessee, 1953 (reprint).
- Wing, Elizabteh and Antoinette Brown. *Paleonutrition: Method and Theory in Prehistoric Foodways*. New York: Academic Press, 1979.
- Winks, R. "Science and the European Empires". *JICH* 23 (1995), 503-10.
- Withers, C.W.J. "The Rev. Dr. John Walker and the Practice of Natural History in late eighteenth century Scotland". *Arch. Nat. History* 18 (1991), 201-20.
- Wolfe, Eric. *Europe and the People without History*. Berkeley: University of California Press, 1982.
- Wood, P.H. "Indian Servitude in the Southeast". *Handbook of North American Indians, 4, History of Indian-White Relations*. ed. W.C. Sturtevant. Washington, D.C Smithsonian Institution Press, 1988, 107-9.
- Wood, Peter. *Black Majority: Negroes in Colonial South Carolina from 1670 through the Stono Rebellion*. New York: W.W. Norton, 1974.
- Woods, Patricia. "The French and the Natchez Indians in Louisiana, 1700-1731". *The French Experience in Louisiana*. ed. Glenn Conrad. Lafayette: Center for Louisiana Studies, 1995, 278-95.
- Worth, John E. "Late Spanish Military Expeditions in the Interior Southeast, 1597-1628". *The Forgotten Centuries: Indiana and Europeans in the American South 1521-1704*, edited by Charles Hudson and Carmen Chaves Tesser. Athens: The University of Georgia Press, 1994, 104-22.

Worth, John. *The Timucuan Missions of Spanish Florida and the Rebellion of 1656*. PhD.

Dissertation, Gainesville: University Press of Florida, 1992.

_____. *The Timucuan Chiefdoms of Spanish Florida*. Gainesville: University Press of Florida, 1998.

Wright, Leitch. *Anglo-Spanish Rivalry in North America*. Athens: University of Georgia Press, 1971.

Wright, Leitch. *Anglo-Spanish Rivalry in North America*. Athens: University of Georgia press, 1971.

Wright, Moira H. "A Metrical Analysis of the Morphological Relationship between Prehistoric Dallas and Historic Cherokee Skeletal Populations in East Tennessee". Unpublished Master's thesis, Department of Anthropology, University of Tennessee, 1974.

Wrightson, Keith. *Earthly Necessities: Economic Lives in Early Modern Britain*. New Haven: Yale University Press, 2000.

Yarnell, Richard A., and M. Jean Black. "Temporal Trends Indicated by a Survey of Archaic and Woodland Plant Food Remains from Southeastern North America". *Southeastern Archaeology* 4, 2 (1985): 93-10

Yates, F. *The Art of Memory*,

Yeager, T.J. "'Encomienda' or Slavery? The Spanish Crown's Choice of Labor Organization in Sixteenth Century Spanish America". *Journal of Economic History* 55 (1995), 842-60.

Zitomersky, Joseph. "The Form and Function of French-Native Relations in Early Eighteenth Century French colonial Louisiana". *Proceedings of the Fifteenth Meeting of the*

French Colonial Historical Society Martinique and Guadeloupe, May 1989. eds. Patricia Galloway and Phillip Boucher. Lanham MD: University Press of North America, 1992.

Zubillaga, Felix. *La Florida: La mission jesuítica (1566-1572) y la colonización española.* Roma: Institutum Historicum S. I., 1941.

Zuckerman, Michael. "Identity in British America: Unease in Eden". *Colonial Identity in the Atlantic World* eds. Nicholas Canny and Anthony Pagden. Princeton: Princeton University Press, 1987.

Vita

Steven Carriger was born and spent the first twenty-four years of his life in Kingsport, TN, rambling along the banks of what are today called the Holston River and Bays Mountain. Wallowing in the grandeur of nature he developed a curious and thoughtful sense of place that led him to first learn about European history and now Native American history. After high school at Dobyns-Bennett, he attended East Tennessee State University where he began to learn the skills of a historian. In 2004 he met his future wife Jessica Dalton, in that program, when he gave her some gum in a World History class. In 2005 he graduates with his Bachelor of Arts in History, with a minor in Appalachian Studies and in 2007 he earned his Master's degree (also at ETSU) in European history. In that same year he moved to Knoxville to join his wife as she pursued her Master's and Doctor of Philosophy degrees in Anthropology at the University of Tennessee-Knoxville. In 2013 he was hired by Roane State Community College and earned tenure in 2019. Finally, at long last, he earned his Doctor of Philosophy in 2020. He now lives in the woods of Morgan County, TN, with his lovely and loving wife and his two best little doodle dog friends in the whole world, Rosie and Dude Bro (Saoirse).