University of New Mexico UNM Digital Repository

Latin American Studies ETDs

Electronic Theses and Dissertations

5-1-2015

A Tropical Flour: Manioc in the Afro-Brazilian World, 1500-1800

Joseph Leestma

Follow this and additional works at: https://digitalrepository.unm.edu/ltam_etds

Recommended Citation

Leestma, Joseph. "A Tropical Flour: Manioc in the Afro-Brazilian World, 1500-1800." (2015). https://digitalrepository.unm.edu/ltam_etds/13

This Thesis is brought to you for free and open access by the Electronic Theses and Dissertations at UNM Digital Repository. It has been accepted for inclusion in Latin American Studies ETDs by an authorized administrator of UNM Digital Repository. For more information, please contact disc@unm.edu.

Joseph Clifford Leestma Candidate

Latin American Studies

This thesis is approved, and it is acceptable in quality and form for publication:

Approved by the Thesis Committee:

Dr. Chris S. Duvall, Geography and Environmental Sciences Department, Chairperson

Dr. Judy Bieber, History Department

Dr. Suzanne Oakdale, Anthropology Department

A TROPICAL FLOUR: MANIOC IN THE AFRO-BRAZILIAN WORLD, 1500-1800

BY

JOSEPH C. LEESTMA BACHELORS OF ARTS AQUINAS COLLEGE GRAND RAPIDS, MI

THESIS

Submitted in Partial Fulfillment of the Requirements for the Degree of

Master of Arts Latin American Studies

The University of New Mexico Albuquerque, New Mexico

May, 2015

A Tropical Flour: Manioc in the Afro-Brazilian World, 1500-1800

By

Joseph C. Leestma

B.A., History, Aquinas College, Grand Rapids, MI, 2009 M.A., Latin American Studies, University of New Mexico, Albuquerque, NM, 2015

ABSTRACT

This research follows the diffusion of the American tropical root crop manioc [Manihot esulenta] throughout the Afro-Brazilian world between ca. 1500 to ca.1800. In addition to tracing the spatial movement of the plant, this thesis will also show how manioc was culturally redefined as an African crop and how this effected its reception and meaning upon returning to the New World from Africa in a secondary diffusion. In tracking the geographical diffusion of the plant from the Americas to Africa, this research relies upon primary sources on the exploration of Brazil and Africa by European travelers and accounts of the early era of the slave trade, a dynamic system which allowed for the diffusion of plants, such as manioc, throughout the Atlantic basin. The second part of the research combines primary accounts speaking of manioc's importance to African populations, both free and enslaved, in the New World and secondary literature on the importance of food plants and cuisine in the later formation of Latin American and Caribbean identities. In following the spatial movement of the root and examining how the African associations attached to manioc were repeatedly renegotiated and redefined, this research shows the importance that food crops, and the cuisines derived therefrom, have played in the development of individual and national identities throughout the Atlantic world.

TABLE OF CONTENTS

CHAPTER 1 INTRODUCTION	1
Introduction	1
Sources	6
A Description of Manioc	8
CHAPTER 2 MANIOC IN BRAZIL	11
Brazil before 1500	11
Europeans and Manioc	19
Colonial Appropriation	24
CHAPTER 3 MANIOC IN ATLANTIC AFRICA	29
Westward Diffusion	29
Use in the Atlantic Slave Trade	36
Agricultural Appropriation	44
Cultural Appropriation	48
CHAPTER 4 MANIOC RETURNS TO THE AMERICAS	52
Back to the Beginning	52
Maroon Settlements, <i>Mocambos</i> , and <i>Quilombos</i>	54
The Recôncavo	57
Manioc, Diasporic Cuisine, and Identity	61
CHAPTER 5 CONCLUSION	69
REFERENCES	71

Chapter 1

Introduction

From America to Africa to America

The exchanges that took place between the Old World and New in the wake of Christopher Columbus' first voyage in 1492. The constant movement of plants, animals, and ideas came to completely redefine the natural and cultural landscapes of both continents. As Alfred Crosby once wrote, "The connection between the Old and New Worlds... became on the twelfth day of October in 1492 a bond as significant as the Bering land bridge had once been. The two worlds, which God had cast asunder, were reunited, and the two worlds, which were so very different, began on that day to become alike."¹ In this new Atlantic world and the unprecedented movement of things that was soon to follow, the 'alikeness' that Crosby wrote of also served to obscure and confuse the origins and roots of the plants, and the food they provide, that would journey through that ocean.

Food and memory are explicitly connected.² But what occurs when one or other is changed, forgotten, or remade? As scholar John Elliot phrased it, the study of the Atlantic world involves the study of "the creation, destruction, and re-creation of communities as the result of the movement across and around the Atlantic basin, of people, commodities,

¹ Alfred Crosby, *The Columbian Exchange: Biological and Cultural Consequences of 1492* (Westport, Connecticut: Greenwood Publishing Company, 1969), 3.

² David E. Sutton, *Remembrances of Repasts: An Anthropology of Food and Memory* (New York: Berg, 2001), 1.

cultural practices, and values.³ At the intersection of people, commodities, cultural practices, and values lie foods and the plants from which they come. As botanicals were constantly moved throughout the Atlantic basin beginning in 1492, they acquired new importance and meanings wherever they landed and remained. One of these plants, manioc, began its existence in the swidden gardens and plots of indigenous Americans, but, over the span of three centuries, it became a crop explicitly tied to Africa.

In the mid-17th century, Spanish Florida began to offer asylum to enslaved Africans owned by British interests in the continental Anglophone colonies. The enslaved men, women, and children that sought their freedom often flew from regions that would later be the American states of Georgia, South Carolina, Tennessee, Alabama, and Louisiana. For them, the peninsula of Florida offered a chance, albeit a precarious one, to escape their bondage and begin lives of their own making. ⁴ While Spanish colonial figures liked to highlight Catholic and humanitarian considerations for offering British slaves sanctuary, it was, in reality, population to hold the border that Spanish Florida wanted. And for many the Spaniard's offer was indeed too good to be true, with many Africans experiencing Floridian freedom as simply swapping one European master name for another. Indeed, many were simply re-enslaved upon reaching to Florida. Perhaps even worse, some families where separated as men were granted their freedom while their wives and children and relations were sold and sent back.⁵

³ John Elliott, "Afterward. Atlantic History: A Circumnavigation," in Dave Armitage and Michael J. Braddick, eds., *The British Atlantic World*, 1500-1800 (New York: Palgrave, 2002), 239.

⁴ Tolagbe Ogunleye, "The Self-Emancipated Africans of Florida: Pan-African Nationalists in the "New World," *Journal of Black Studies* Vol. 27, No. 1 (1996): 24.

⁵ Jane Landers, "Gracia Real de Santa Teresa de Mose: A Free Black Town in Spanish Colonial Florida," *The American Historical Review* Vol. 95, No.1 (1990): 9-30.

Yet there were Africans who successfully reached Florida and managed to avoid the machinations of the Spanish crown. These individuals, defined by historian Tolagbe Ogunleye as "self-emancipated Africans,"⁶ sought to form autonomous communities based on a pan-African identity serving to bind them together:

[T]he self-emancipated Africans who dwelled in the wildernesses of Florida established numerous successful liberated and self-sustaining environs, and they did whatever was necessary to attempt to keep them that way. They resurrected their African personalities and lived according to the tenets of an African-centered perspective and worldview using Pan-African social, religious, political, and military strategies to thrive and reign victoriously against their former enslaver.⁷

In seeking to maintain their emancipated status as well as nurture their identity as Africans, self-sufficiency was of the utmost importance. This attitude permeated not only economics and politics, but also influenced their agricultural practices. The selfemancipated Africans of Spanish Florida, who "were exceptional farmers who understood the importance of being able to supply food for their nation," fed their sovereign communities with maize, squash, peas, watermelons, and sweet potatoes.⁸ The Africans in Florida attempted to recreate an 'African' diet by growing the foods associated with Africa or foods quite similar to them. For example, these communities grew legumes that may have been brought directly from Africa or were at least quite similar to a species of legume found in West Africa.

Most interestingly, Ogunleye continues to explain that "[s]ome of their foods, especially the cassava [manioc], were even prepared in the same or a very similar manner that they were prepared and eaten in Africa."⁹ Curiously enough, manioc is not a crop

⁹ Ibid.

⁶ Ogunleye, "The Self-Emancipated Africans of Florida," 35.

⁷ *Ibid*, 25.

⁸ *Ibid*, 31.

native to Africa, but to South America.¹⁰ To most, this line would not warrant extra investigation or analysis. However, placed within the context of the cultural and agricultural diffusion that occurred in the early Atlantic world, the fact that both Ogunleye and the Africans in Florida put manioc in a central position leaves several questions unanswered. As Portugal began to expand its colonial project across West Africa and Brazil in the 16th century, the native inhabitants of South America, European sailors, and enslaved Africans bound for New World plantations became agents in the trans-oceanic diffusion of numerous plants, of which manioc was one. The relationship between Africans and manioc began centuries prior to the events that took place in Florida. Long before this large, fibrous root served as an agricultural and culinary link to a long-lost home far across an ocean, manioc played an important role in the development of the Afro-Brazilian world: the southern Atlantic Ocean and the bordering coasts. The importance that both Ogunleye and these free African communities placed on manioc show the deep cultural connection with this food despite that it was a relatively new arrival to African continent.

In attempting to recreate a culture based on memories and ideas of Africa, particularly those pertaining to food and crops, the self-emancipated slaves of Spanish Florida inadvertently completed a pan-Atlantic process often left vague in the literature of, for lack of a better term, the Colombian Exchange. Coined by historian Alfred Crosby, the term Colombian Exchange, in short, refers to the biological exchange between the American and the Afro-Eurasian hemispheres following Christopher Columbus's seminal voyage in 1492.¹¹ In its broadest definition, the Columbian

¹⁰ Harold McGee, On Food and Cooking (New York: Scribner, 2004), 305.

¹¹ Crosby, *The Columbian Exchange*.

exchange refers not only to crops and to animals, such as maize from the Americas or ungulates – such as cattle, sheep, and horses – from Afro-Eurasia, but pathogens, bacteria, and microorganisms.¹² These organisms, however, did not move themselves, but where transplanted by human agency. Necessity, curiosity, and profit expedited the movement of plants and animals across the Atlantic and beyond. In turn, this transcontinental exchange dramatically altered the physical, economic, nutritional, and gastronomic landscapes of geographies and peoples incorporated within the Atlantic world. The affinity felt with manioc by the self-emancipated slaves of Spanish Florida represents a process in which a crop departed the Americas, was assimilated and transformed by Africans, and then returned to the Americas as a culturally African crop and food sometimes bereft of its original Amerindian roots.

This process, of multi-continental exchange and alteration, is regrettably underrepresented in the literature dealing with the Columbian Exchange and the early Atlantic world as a whole. In this thesis, I will trace this particular pan-Atlantic journey of manioc from 1500 to 1800. I will begin by looking at the cultural, historical, and biological beginnings of this root and continuing by describing the journey that manioc took from America aboard Portuguese slave ships. I will then look at how and why West Africans transformed the cultural importance and origin of the tuber as well as analyzing its place in West Africa's culinary zeitgeist. Finally, I will recount the journey that manioc, at this point well integrated into West African agriculture and cuisine, took in returning to the new world, in as it did in Florida and other parts of the Americas. I will

¹² Nathan Nunn and Nancy Qian, "The Colombian Exchange: A History of Disease, Food, and Ideas," *The Journal of Economic Perspectives* Vol. 24, No. 2 (2010): 164.

use this thesis to shed light on the transformative, multi-stage journeys that many foods and crops took across the Atlantic world in the colonial period.

Sources

In looking to track the diffusion of manioc from the Americas to Africa as well as how Amerindian technique and agricultural knowledge was adopted and assimilated by Europeans and Africans, this thesis will approach sources in two ways. Firstly, this work will attempt to synthesize pre-existing literature that concerns itself with manioc, its spread, and use. There are certainly dozens of articles and books written on the agricultural, nutritional, and developmental aspects of the root, but these works tend to come from disciplines such as agricultural science, botany, or nutrition, and, unsurprisingly, take little note of the greater history of manioc. As an important staple in the modern Global South, a majority of literature concerning manioc focuses on contemporary production and issues.

The amount of works that deal with manioc in the realm of history are fewer. Furthermore, there exist very few secondary sources that focus explicitly on the history of manioc. William O. Jones' *Manioc in Africa* is not only one of the most succinct and thorough works on manioc and its history in the Americas and Africa, but, despite being published in 1959, also one of the most recent. Notwithstanding, roughly half of Jones' *Manioc in Africa* is concerned with modern, as of 1959, applications and uses of the tuber. Another historical study of manioc is Bert Barickman's *A Bahian Counterpoint: Sugar, Tobacco, Cassava, and Slavery in the Recôncavo, 1780-1860.* Barickman's work, while an excellent study, is narrow in both its chronological and spatial scope, looking only at the history of a small region in Brazil over less than a century. Moreover, the crop serves as a foil for his overall arguments concerning labor and economics, not as an historical agent in its own right.¹³ These two works are not alone in focusing on manioc, directly or indirectly, but they are not numerous. As such, this thesis relies on many disparate secondary sources, such as agricultural, anthropological, historical, or economic monographs and articles to create a complete picture of manioc. Many of the secondary sources used only mention manioc in passing, as an interesting anecdote, or as minor evidence to support a larger argument.

This thesis will also use an eclectic mix of primary sources to trace, as best as possible, the trajectory of manioc from the Americas to Africa and back again to the Americas. These first-hand accounts include such sources as slave accounts, travel journals, cookbooks, ship manifests, and folklore. Additionally, the authors of these accounts are not all Portuguese, as there are English, German, and French accounts of early Brazil as well. Similar to the secondary sources, there are few primary accounts that speak solely of manioc. The root is often mentioned as part of a larger narrative. Because of manioc's sparse distribution within varying strands of literature, the primary and secondary sources used in this thesis are by nature eclectic and broad.

¹³ Bert Barickman, A Bahian Counterpoint: Sugar, Tobacco, Cassava, and Slavery in the Recôncavo, 1780-1860 (Stanford: Stanford University Press, 1998).

A Description of Manioc

Manioc (*Manihot esculenta*) is a New World tuber most likely native to the either the Caribbean basin¹⁴ or west-central Brazil and eastern Peru.¹⁵ Manioc consumption and cultivation formed an important part of many pre-Colombian societies throughout the Americas. Archaeological and botanical evidence purports that manioc was cultivated as early as 7000 BCE in west-central Brazil, 6000 BCE in the Andes and Central America, and 4500 BCE in Mesoamerica.¹⁶

The manioc plant is a woody shrub that, under cultivation, can grow to a height of 5 to 12 feet. When left to its own devices, it may reach a height of 18 feet. The leaves are large, and fan out in sets of 5 to 7 lobes that are akin in appearance to fingers on a hand. The leaves only grow from the end of branches, which continually split into more branches as the plant grows.¹⁷ The roots of manioc, historically the more important of the edible parts of the plant, grow to be between 1 and 2 feet long, 2 to 6 inches in diameter, and anywhere from 1 to 10 pounds in weight.¹⁸ With pale, fibrous flesh and brown, woody skin they are similar in appearance to the African yam or a white-fleshed sweet potato.

Manioc is a hardy crop, and as such, it is resilient to drought, defoliation, and competes well with weeds. This results in a crop that requires relatively little attention

¹⁴ Guy Henry and Clair Hershey, "Cassava in South America and the Caribbean," *Cassava: Biology, Production and Utilization*, eds. R.J. Hillocks, J.M. Thresh, and Anthony Bellotti (New York: CABI Publishing, 2002), 17-40.

 ¹⁵ Kenneth M. Olsen and Barbara A. Schaal, "Evidence on the Origin of Cassava: Phylogeography of *Manihot esculenta*," *Proceedings of the National Academy of Sciences* Vol. 96, No. 10 (1999): 5586-5591.
 ¹⁶ Christian Isendahl, "The Domestication and Early Spread of Manioc (*Manihot esculenta* Crantz): A Brief Synopsis," *Latin American Antiquity* Vol. 22, No. 4 (2011): 464.

 ¹⁷ William O. Jones, *Manioc in Africa* (Stanford: Stanford University Press: 1959), 5.
 ¹⁸ *Ibid*.

once planted.¹⁹ Additionally, the leaves of manioc can be eaten and are a source of vitamins and minerals not found in the tuber.²⁰ Despite these benefits, however, manioc contains high levels of *cyanogenic glycosides*, and, thusly, requires a particular knowledge in order to render the plant safe for consumption. *Cyanogenic glycosides* are sugar-bounded molecules that can lead to the development of the inorganic compound *Hydrogen cyanide* that is extremely poisonous: *hydrogen cyanide* is the scientific name of the cyanide used in execution chambers. It should also be noted that there are two broad varieties of manioc, sweet and bitter. While the sweet varieties contain lower amounts of *cyanogenic glycosides*, they not produce as high a yield as the bitter varieties and are, as some have argued, more susceptible to pests, disease, and perishing. As such, the sweet variety is not as popular as one would imagine a less poisonous variety to be.²¹ Regardless of its potent toxicity, the benefits of manioc cultivation outweighed the negatives and became an important part of diets across the American tropics.

Etymologically, manioc is a Francophone form of a term derivative from the Tupí word *maniot*, first recorded on the eastern Brazilian coast and noted in records in the 1550s.²² The etymological relation between the word manioc and the Tupí people does not necessarily mean that manioc was native to the areas populated by Tupí peoples. Manioc, goes by many names and misnomers. Aside from manioc, cassava, yuca, mogo, mandioca, and tapioca root, are the most common names. These names vary from continent to continent and even from locale to locale. Even in contemporary Brazil, there

¹⁹ Isendahl, "The Domestication and Early Spread of Manioc," 454.

²⁰ C.J.A. Terra, "The Significance of Leaf Vegetables, Especially of Cassava, in Tropical Nutrition," *Tropical Geographical Medicine* No. 16 (1964): 97-100.

²¹ Warren M. Wilson and D.L. Dufour, "Why 'Bitter' Cassava? Productivity of 'Bitter' and 'Sweet' Cassava in a Tukanoan Indian Settlement in the Northwest Amazon," *Economic Botany* Vol. 56, No. 1 (2002): 49.

²² Isendahl, "The Domestication and Early Spread of Manioc," 453.

still many different names for this single root – *aipi, aipim, castelinha, macaxeira, mandioca-doce, mandioca-mansa, maniva, maniveira, pão-de-pobre.* These names are often used within specific geographies. *Aipim* is common in the state of Bahia, while in Sergipe and Alagoas, two states directly north of Bahia, *macaxeira* is the more commonly used name. While not all these names are derived from an indigenous Brazilian language, the range of names used exhibits the crops importance in both pre-and post-Columbian Brazil. Additionally, the words *tapioca, manipuera,* and *tucupí* are secondary products derived from the processing of manioc, all derive from the Tupí language as well.²³ However, for both simplicity's sake and per Daniel W. Gade's recommendation that "manioc" be consistently used in academic works, I will use the term manioc throughout this paper.²⁴

The following chapter, "Manioc in Brazil," will follow the development and use of manioc agriculture and processing among indigenous groups as well as how and why Portuguese settlers so quickly adopted the root to serve as their most important staple.

 ²³ Daniel W. Gade, "Crops and Boundaries: Manioc at its Meridional Limits in South America," *Revista Geográfica* No. 133 (2003): 103-106
 ²⁴ *Ibid*, 105.

Chapter 2

Manioc in Brazil

Brazil before 1500

In giving an historical account of manioc, it would be imprudent to exclude a description of environment – both physical and human – prior to European arrival. The particular environments of Brazil enabled not only the cultivation of the crop, but also the physical parameters that would shape subsequent technological and culinary techniques in preservation and consumption. In speaking of the physical environment of 'Brazil,' we must keep in mind that, for the timespan of this thesis, Portuguese influence barely reached beyond the littoral band that separated the Atlantic and the seemingly-endless jungles, scrublands, mountains, and plains that extended west from the coast and that even the faintest idea of a tangible Brazil was still nonexistent. Alexander Marchant, a mid-20th century historian of Brazil eloquently described the continent as such:

As might be expected, so long a stretch of coast shows great variations in scenery. In the southern region, and especially around Rio de Janeiro and Cape Frio, coastal ranges in all their magnificence parade down to the sea. The hills and mountains of varying heights and forms, of a reddish but mainly neutral color, appear gloomy and forbidding when seen from some miles as sea. From close at hand, the heavy appearance is relieved by the sight of masses of greenery at the bases of the mountains and on every tenable slop. Small trees, creeping plants, and bushes for a green mantle over all but the most precipitate and broken faces of the mountains. In Espirito Santo, where the edge of the plateau beings to retreat from the sea, the coastal plain commences to take form. As the plain widens towards the north, less and less of the edge of the plateau may be seen from sea. At some points a great peak or two may be sighted from far off, but even these soon are lost to view. At first, along the shore itself, even in Espirito Santo, squat hills lie behind the beach, but become interspersed with low cliffs of red earth, and finally disappear. From then on, the bluffs alternate with broad white beaches, which, with rolling dunes, are from

Bahia northward all that meets the eye... In the sixteenth century, the coastal plain was the most important part of Brazil.²⁵

While Marchant's description of Brazil on the eve of European arrival conveys a lush and virginal land, we should not mistake vast expanses of forested land and endless white beaches with an uninhabited and unmodified land. When the first Portuguese carracks reached land, they found a continent already inhabited and manipulated. As geographer William M. Denevan has argued, "The tropical rainforest has long had a reputation for being pristine... There is, however, increasing evidence that the forests of Amazonia and elsewhere are largely anthropomorphic in form and composition."²⁶

Of the most importance were the Tupí and the Guaraní, two subgroups that, despite geographical disparity, were "culturally and linguistically quite homogeneous." The Tupí, of which the Tupinambá were the most famous in the colonial era, inhabited the littoral belt between the modern day states of Ceará in the north and São Paulo in the southeast. The Guarani lived in the basin of the of the Paraguay and Paraná rivers in the south, equitable to the modern states of Rio Grande do Sul, Santa Catarina, Paraná, and São Paulo.²⁷ In addition to the Tupí and the Guaraní, the Atlantic coast was interspersed with many other groups: the Tremembé in Ceará and Maranhão, the Aimoré in Bahia and Espírtito Santo, and the Goitacá in Paraíba. The Tupí and Guaraní called these other groups Tapuia, a reference to Amerindians who spoke a language other than Tupí or Guaraní.

²⁵ Alexander Marchant. From Barter to Slavery: The Economic Relations of Portuguese and Indians in the Settlement of Brazil, 1500-1580 (New York: Ams Press Inc., 1942), 26-27.

²⁶ William M. Denevan "The Pristine Myth: The Landscape of the Americas in 1492" Annals of the Association of American Geographers Vol. 82, No. 3 (1992): 369-385.

²⁷ Boris Fausto, A Concise History of Brazil (Cambridge: Cambridge University Press, 1999), 7-8.

The various indigenous groups supported themselves by hunting game, fishing, and gathering fruits. Hunting parties most likely sought out fowl, such as the Brazilian pigeon or mallard, small mammals, or several types of larger herbivores native to South America, including the *queixada* (collared peccary) which can weigh up to one hundred pounds, the *cateto* (white-lipped peccary), and the *paca*. Indeed, these are still-hunted and prized in modern Brazil. To this day, the *paca* in particular is considered "the most coveted wild delicacy among natives and *caboclos*."²⁸ Meat as such was most likely smoked, dried, and pounded into a fine powder to increase its shelf life and efficiency of storage.²⁹ This "meat flour," called *paçoca de carne*, is still eaten in modern Brazil.³⁰

The numerous rivers and thousands of miles of coast also provided indigenous communities other resources from which to tap. In addition to the seemingly countless species of fish that inhabit the rivers and lagoons of Brazil, there also exist several species of native, easy-to-harvest mollusk. *Sururu* (small coastal mussels), *maçunim* (a brackish-water cockle), and *lambretas* (a relative of the clam that is found in the mangrove swamps of Bahia) all could have been collected as a food source as well as for the superb fertilizer mollusk shells become.^{31,32} In addition to the bounty of the seas and forests, Brazil is home to such exceptional fruits and nuts that many do not have a ready translation to English, or any other language for that matter. *Cupuaçu, bacuri, pequi, pitanga, jabuticaba, caju* (cashew, nut and fruit), *cambuci,* and *jambul* are just a handful

²⁸ Alex Atala, D.O.M. Rediscovering Brazilian Ingredients (London: Phaidon, 2013), 62.

²⁹ Hans Staden. *Hans Staden's True History: An Account of Cannibal Captivity in Brazil* (Durham: Duke University Press, 2008), 115.

³⁰ Cristiane Murayama, and Marcelo Yamashita Salles, *Dona Benta: Comer Bem* (São Paulo: Companhia Editora Nacional, 2013), 536, and Margarette de Andrade, *Brazilian Cookery* (Rio de Janeiro: Editora Record, 2005), 391.

³¹ de Andrade, *Brazilian Cookery*, 104.

³² Warren Dean, *With Broadax and Firebrand*, (Berkeley: University of California Press, 1995), 30.

of the exotic fruits that grow alongside better-known fauna such as coconuts, a South American species of vanilla orchid, cocoa, and the nominal brazil-nut.

Most groups also practiced swidden, or slash-and-burn, agriculture to one extent or another.³³ This type of practice, called *coiva*, is still used in parts of Brazil today.³⁴ Semi-permanent villages would use a plot of land, burnt to place nutrients into to soil and to make labor easier, until its yield began to fail. They would then move on to a new plot and apply *coiva* agriculture again. Sometimes communities would return to previously farmed land called *capoeira*, now covered in secondary forest, and repeat the process.³⁵ Communities most likely grew the crops well known to American and European audiences, such as maize, manioc, squash, peppers, and sweet potatoes. Additionally, they may have also grown indigenous crops still known only in their respective regions, such as the flesh and sprouts, called *cambuquira*, of the *abóbora-de-pescoço*, the *batatabaroa* or *mandioquinha*, *mangarito*, and *priprioca*, an aromatic tuber.³⁶ However, the most important of their crops was manioc.

While European accounts sometimes tend towards the fabulous and cannibalistic, there should be little doubt that the indigenous peoples of the Atlantic coast and forests had developed what we could call a cuisine – a set of preferred tastes and techniques that develop within particular cultural and environmental limits. To imagine that Amerindians did not develop their own flavor profiles or favored combinations of ingredients is to agree with the Portuguese and the Spanish in seeing the native peoples of the Americas as

³³ Dean, With Broadax and Firebrand, 26-27.

³⁴ Stuart B. Schwartz, "Indian Labor and New World Plantations: European Demands and Indian Responses in Northeastern Brazil" *The American Historical Review* Vol. 83, No. 1 (1978): 46.
³⁵ Dean, *With Broadax and Firebrand*, 27.

³⁶ Atala, D.O.M. Rediscovering Brazilian Ingredients, 134-186.

savages, noble or otherwise. In particular, the Amerindian system processing of manioc and the adaptation of the secondary products shows a technical and culinary complexity on par with the Mesoamerican nixtamalization of maize, Arabic distillation, or European cheese making.

The first manner in which Amerindian populations consumed manioc is as the starchy tuber itself, eaten as a cooked vegetable or as a base for myriad dishes. Boiling or roasting large portions of the root is a simple process that requires a minimal input of labor. Entire roots were also boiled or soaked and subsequently left to dry. After drying, the roots were pounded into a course flour. Additionally, in reference to the consumption of large pieces of the root, and in spite of its inherent toxicity, there have been several accounts of a few ethnic groups in South America which eat the manioc root, of the sweet variety, raw, supposedly as "a snack while harvesting or peeling the roots, or when travelling."³⁷ The use of whole roots, despite the lower cost of labor, was infrequent compared to perhaps the most common form of manioc processing; that of grating pressing, and drying.

The process of grating and pressing manioc is more labor intensive then using larger pieces of the root. However, this process also yields additional byproducts that cannot be achieved by simply boiling or roasting the tuber. The technique of grating the roots varied throughout South America. Certain peoples inhabiting northwestern South America and east and south of the Amazon basin used the bark of the prickly palm or spiny palm trunks to achieve such ends. These peoples would then expel the excess liquid

³⁷ Jones, *Manioc in Africa*, 30.

by hand and prepare the pulp as bread, boiled dumplings, or as gruel.³⁸ More common, however, was the production of manioc flour, or farinha, in a more elaborate version of the previous process. The traditional production of *farinha* begins in one of two ways: using un-soaked or soaked roots. In the case of the un-soaked roots, they are grated, either by using natural abrasives, such as the spiny or prickly palm, or by using specialized tools to achieve the same manner. These manioc graters sometimes consisted of a piece of wood studded with stone or quartz teeth embedded in resin.³⁹ Others used a piece of stone or wood covered in shark skin or, as has also been argued, the scales of certain types of South American river fish.⁴⁰ At this stage, the grated mass is very wet and must be squeezed, manually or mechanically, to expel residual liquid, which is quite poisonous in its raw form. Left overnight, to further separate the liquids and solids, the pulp is then pressed through a sieve and cooked in one of two ways depending on whether bread or flour is required. To prepare bread, the 'dough' is placed on a hot clay or stone griddle, pressed and toasted on each side.⁴¹ To prepare flour, the pulp is place into a shallow pan, likely of clay, and stirred until it is dried and toasted. Prepared as such, the resulting *farinha* keep for several months. Another way to produce *farinha* is to let the manioc roots ferment in water and producing the resulting mass, broken down as if grated, as either bread or flour. This type of flour, farinha d'água, has a softer texture and

³⁸ P. A. Lancaster, J. S. Ingram, M. Y. Lim and D. G. Course, "Traditional Cassava-Based Foods," *Economic Botany* Vol. 36, No. 1 (1982): 22.

³⁹ Edward Bancroft, An Essay on the Natural History of Guiana, in South America. Containing a Description of Many Curious Productions in the Animal and Vegetable Systems of that Country. Together with an Account of the Religion, Manners, and Customs of Several Tribes of Its Indian Inhabitants. Interspersed with a Variety of Literary and Medical Observations. In Several Letters from a Gentleman of the Medical Faculty During His Residence in that Country... (London: T. Becket and P.A. de Hondt, 1769), 279.

⁴⁰ Lancaster, Ingram, and Course, "Traditional Cassava-Based Foods," 26-27.

⁴¹ *Ibid*, 23.

blander taste, which may have been favored by certain segments of the indigenous Brazilian population.⁴²

A secondary product which can result from the processing of *farinha* is *tapioca*. *Tapioca* is the settled starch that remains in liquid expressed from grated or fermented manioc. This residual starch, once rinsed, can be prepared in one of several ways. It can be dried in the sun and eaten as is, baked into crisp cakes called *sipipa*, or, if still moist, heated on a griddle where the starch bursts and forms lumps or flakes similar to modern tapioca pearls.⁴³ Several authors claim that these tapioca pearls where combined with milk and sugar, spices such as cinnamon or nutmeg, or mixed with fruit or berries, in order to make a sweet dessert.^{44,45} This, however, is quite impossible, as milk, sugar, nutmeg, and cinnamon are all products of Eurasia. The settled starch is also used as a thickener called *goma*.⁴⁶

The final product, called *tucupí*, or sometimes *manipuera*, is the result of boiling and fermenting the residual liquid in which the manioc was initially processed and from where the tapioca sediments were taken.⁴⁷ This bright yellow liquid is commonly used as a meat preserver or as a seasoning, in which it is boiled with chile peppers, herbs, and spices after it is left to stand for several days.⁴⁸ The fermentation resulting from this time eliminates much of the remaining toxicity in the liquid, the later boiling removes any lingering amounts of cyanide. An alcoholic drink can also be brewed by fermenting the

⁴² Jones, *Manioc in Africa*, 30.

⁴³ Lancaster, Ingram, and Course, "Traditional Cassava-Based Foods," 24.

⁴⁴ A.P. Hanson, "Notes on Cassava," Jamaica Agricultural Society Vol. 43 (1939): 602-603.

⁴⁵ I. Goldman, "Tribes of the Uapes-Caqueta Region," in *Handbook Of South American Indians*, ed. J. H. Steward (New York: Cooper Square, 1963), 3.

⁴⁶ Jane Fajans, *Brazilian Food: Race, Class and Identity in Regional Cuisines* (New York: Berg, 2013), 45-46.

⁴⁷ Jones, *Manioc in Africa*, 30-31.

⁴⁸ Fajans, *Brazilian Food*, 45.

manioc juice: the fermentation is commonly initiated by mastication, because of the particular enzymes in saliva that convert starches to sugars.⁴⁹ Edward Bancroft, an American physician, speaking of Guiana in 1769, described the process thusly:

Also a large jar, for making a drink called *Piworree*. The jar is made from the same materials as the pots. The *Piworee* is made from the bread of *Cassava*, or *Manioc*, fermented with water. To promote fermentation, the females usually chew a part of the bread, and mix it with water, and when it begins to ferment they add the remainder. When the fermentation is completed, the liquor is decanted from the subsiding bread, and drank. It is inebriating, and has somewhat the taste of ale, tho' less agreeable.⁵⁰

The fermentation of cassava for beverages, such as *cauim*, *caixira*, and *yakupa*, serves as another way to reduce the toxicity of the root and render it edible.⁵¹

As noted, bitter manioc in its raw form is poisonous to humans and therefore requires particular preparation in order to be safe for consumption. In observing the diffusion of manioc throughout the Afro-Brazilian Atlantic, it is important to recognize the importance of the indigenous peoples of Brazil. The agency of the Amerindian in this history goes much deeper than the simple exchange of goods on a tropical beach, with a European ship bobbing in the background. The exact history of the development of manioc from a poisonous, wild-growing tuber to the cornerstone of the South American diet will most likely never be clear. Nevertheless, regardless of the details, what is clear is that the indigenous peoples of the Americas independently developed the technological and agricultural sophistication needed to support manioc cultivation and consumption. At

⁴⁹ Lancaster, Ingram, and Course, "Traditional Cassava-Based Foods," 24-25.

⁵⁰ Bancroft, An Essay on the Natural History of Guiana, 278-279.

⁵¹ Alejandra de Moreno de LeBlanc, Svetoslav D. Todorov, Graciela Vignolo, Graciela Savoy de Giori, and Jean Guy LeBlanc. "Indigenous Fermented Foods of Latin America" in *Microorganisms and Fermentation of Traditional Foods*, eds. Ramesh C. Ray and Montet Didier (London: Francis & Taylor Group, 2014), 312-324.

the turn of the 16th century, when the Portuguese and Tupí would first meet, manioc culture served as one of the most important pillars in indigenous life. Soon, with the development of colonial interests and later the expansion of the trade in enslaved Africans in the Atlantic, manioc would serve not just a staple for indigenous populations, but European and African alike.

Europeans and Manioc

Portuguese carracks under the command of Pedro Alvarez Cabral encountered Brazil in 1500. Intending to travel to the East Indies, Cabral's fleet, thirteen ships in total, were pushed west by oceanic currents and sighted the dark green coast of Brazil on the 21st of April. While Alvarez Cabral and his men may have not been the first Europeans to sight Brazil, their voyage was to initiate the growth and development of the future Portuguese empire in the Americas.⁵² When Portuguese colonists began settling in earnest in 1531, few of these Iberians had any clear idea of the geographical, agriculture, and climatic difficulties that awaited them. Initially, the Portuguese were baffled why the Tupí peoples of littoral Brazil did not practice agriculture. The thin, tropical soils of northeast Brazil were ill suited for the cultivation of European crops, especially temperate cereals such as wheat. Furthermore, gastrointestinal problems were common amongst the Portuguese and importing European foods was expensive, time-consuming, and unreliable. Like the indigenous Tupí, European settles and explorers soon became familiar with manioc. During the 16th century, many Europeans, Portuguese and non-Portuguese alike, plied the coasts of Brazil in search of land and wealth, which at that

⁵² Fausto, A Concise History of Brazil, 6.

time derived mostly from the *pau-brasil* trade, valued for its use as a dye in Europe. The accounts of these explorers readily reveal a complex and efficient manioc culture already present in the Americas.

Hans Staden, the German explorer famed for his account as a captive of the Tupí from 1552 to 1554, paid particular attention to the eating and cooking habits of his captors, especially with concern to manioc. Whether or not Staden's interest in the food of the Tupinambá was due to his own status as just that, his account gives a clear and well-detailed description of Amerindian eating habits at the onset of European colonization. Staden explains three ways in which the Tupinambá transformed manioc into an edible product. Firstly, he describes the process of pressing the grated mass in a *tipití*, a long woven basket that is not unlike a Chinese finger-trap in its workings. "The *tipitís* are a yard and a half to two yards or so in length and, after they have been well filled, are suspended from the ridgepole of the house, being weighted down at the bottom by a large stone."⁵³ The released liquid is often captured and used to produce other manioc-based products. As explained by Staden:

First of all, they grind them [manioc] to very small crumbs against a stone. Then they press out the juice from the crumbs with a thing called a *tippiti*, which is made from the peel of palm branches. When the crumbs are dry, they pass them through a sieve and use the flour to bake thin cakes.⁵⁴

The particular technique, of grating and either straining or pressing the resulting mass, seems to be one of the most, if not the, most common modes of not only rending manioc edible but also in transforming the root into its flour form, as several other accounts will soon show. Staden continues in his account, elaborating on a process in which the native

⁵³ Gilberto Freyre, *The Masters and the Slaves* (Berkeley: University of California Press, 1986), 126.

⁵⁴ Staden, Hans Staden's True History, 114.

Brazilians ferment the root in water and subsequently dry-smoke and grind the result into

a fine, long-keeping flour:

The thing [container] in which their flour is dried and baked is made of burnt clay and shaped like a large bowl. They also, [secondly], take the fresh roots and place them in water; there they let them rot. They then take them out and place them over the first and let them dry in the smoke. They call this root *keinrima*, and it keeps for a long time. When they want to use it, they pound it is a mortar made of wood. It then becomes as white as wheat flour, and with this, they make cakes called *byyw* [beijú].⁵⁵

Staden concludes by expanding on additional techniques used by the Tupinambá in

preserving manioc, and food in general, within a cuisine that used little if any salt and

certainly did not use, or even have access to, sugar:

They also take a well-fermented *mandioka* and instead of drying it, they mix it with dry roots and green roots. They dry this into flour, which keeps for a year and is just as good to eat. They call this flour *uiatán*.

They also make flour out of fish and meat. They do so in the following manner: They roast the flesh or fish in the smoke over the fire and let it become quite dry. They pluck it into pieces, and then dry it once again over the fire in pots called *inhêpoan*. After this, they pound [the bits of] it with a wooden mortar and press it through a sieve, reducing it to flour. This keeps for a long time. They are, after all, not accustomed to salt their fish or meat. They eat this flour together with the root-flour [of manioc], and it tastes quite good.⁵⁶

In addition to Staden, Englishman Roger Barlow recounted the indigenous process of

making manioc edible in his 1541 work, A Brief Summe of Geographie, which is

considered to be among the earliest British world geographies. In describing manioc

processing, he writes that:

[They] rubbe it on a stone and so it turneth to curdes, which thei take and put in a long, narowe bagge made of ryndes of tress, and so press out the liquor and gather it in a vessel, and when the iuce is out ther resteth in the bagge the floure as fine and white as the snowe, wherof thei make cakys and bake them upon the fier in a panne, and after this be bakyn it is a very

⁵⁵ Staden, Hans Staden's True History, 114-115.

⁵⁶ *Ibid*, 115-116.

good brede, holsome and medecinable, and will endure a yere without corrupting. And likewise thei take the liquor and seethe it over the fyre and after that it is a good drynke and of grete sustenaunce and strength, but and if one should drinke it before it were boiled over the fire, and the quantite as wold into a nuttys shelle, thei shuld die incontinent.⁵⁷

The process described by Barlow is nearly identical to that explained by Staden. The native Brazilians began by grating the root, and then proceed to expel the liquid from out from the resulting mass. The now-drier mass is further dried and pounded to become flour and from the expelled liquid the remaining silt-like particles are made into a super-fine flour and the left-over liquid fermented or cooked. Barlow's account is also interesting in that it refers to the poisonous nature of manioc if poorly processed, causing one to "die incontinent" if the expelled liquid is drank in a crude, raw form.

Jean de Léry, a Frenchman who travelled to Brazil in 1578, also recounts his experience in seeing the systematic processing of manioc among the indigenous communities he saw. De Léry's account is perhaps the most detailed and, in a certain sense, progressive. De Léry takes time to correct previous errors in the perceptions of the Brazilian natives and how and what they ate. As it pertains to manioc, he clarifies European assumptions that the Tupinambá "lived on bread made of wood shavings," arguing that this wood bread was made of manioc instead.⁵⁸ De Léry's account is as follows:

In their country our American have two kinds of root, which they call *aypi* and *maniot*... Once they pull them up, the women – for the men don't conern themselves with this – dry these roots over a fire on the *boucan* [a wooden grill], or else sometimes take them green, and grate them on a flat piece of wood in which certain little pointed stones have been set, just as we grate cheese and nutmet; thus they reduce them to a flour as white as

⁵⁷ Roger Barlow and Martin Fernández de Enciso. *A Brief Summe of Geographie*, ed. Eva Germaine Rimington Taylor (London: Kraus Reprint, 1967), 70.

⁵⁸ Jean De Léry. *History of a Voyage to the Land of Brazil*. (Berkeley: University of California Press, 1993), 70.

snow. This raw flour, like the white juice that comes of it has the fragrance of starch made of pute wheat soaked a long time in water, when it is still fresh and liquid...

To prepare it [manioc flour], the Brazilian women then take big earthen pots that hold more than a bushel each, which they themselves make very skillfully for this use, and put them on the fire, with a quantity of flour in them; while it cooks, they stir it continually with split gourds, which they use as a we use dishes. As it cooks this way the flour forms something like little hailstones, or apothecary's pills.⁵⁹

In the excerpt, de Léry is describing the same process mentioned by both Staden and

Barlow, in which the grated root is soaked, pressed, and dried in order to render farinha

In the second excerpt, de Léry is most likely describing the production of tapioca, the

"little hailstones," one of many secondary products that result from manioc processing.

De Léry also records that there are indeed two types of manioc, aypi and maniot. Aypi is

most likely the root of one of the modern names for manioc, *aipim*, that is still frequently

used in parts of Brazil, particularly the state of Bahia, and is more commonly used to

describe manioc in an unaltered form, usually fried or boiled. This seems to be similar to

what de Léry observed in 1578.

The *aypi* root is grated not only for its flour, but also when cooked whole on the ashes or in front of the fire; when it gets tender and splits and becomes floury, you can it like a chestnut roasted on hot coals, which is what it tastes like. However, this is not the same with the *maniot* root, for that is only good as a well-cooked flour, and it is poisonous if it is eaten any other way.⁶⁰

Lastly, de Léry also describes something similar to an omelet, which, in technique and

ingredient, seems to be the same as Staden's byyw or, as they are called today, beiju:

After these *aypi* and *maniot* roots are grated green [fresh], in the way I have described to you, the women will sometimes make big balls of the fresh, damp flour that comes from them; squeezing them and pressing them hard between their hand, they will extract from them a juice almost

⁵⁹ De Léry, *History of a Voyage to the Land of Brazil*, 69-70.

⁶⁰ *Ibid*, 71.

as white and clear as milk. This they catch in earthen plates and dishes and put it out to warm in the sun, which makes it close and congeal like curds. When they want to eat it they pour it into other earthen pans, and in those they cook it over the fire as we do omelettes; it is very good prepared in that way.⁶¹

The many detailed accounts of manioc cultivation and processing given by explorers reveals how important manioc was both to indigenous Brazilians, but also to European colonists and adventures, desperate for a somewhat familiar food in a very unfamiliar land.

Colonial Appropriation

Portuguese colonists began settling the Brazilian coast in earnest around 1531. Few of these Europeans had any clear idea of the geographical, agriculture, and climatic difficulties that awaited them in the tropical Americas. Early settlers soon found that had to depend on trade with the native Brazilians to maintain their food supply, as many of the initial Portuguese colonists and planters wanted nothing to do with the cultivation of such a crop.⁶² According to Gilberto Freyre:

The conditions of climate and soil being unfavorable to the cultivation of wheat, the fathers of the Society of Jesus were practically the only ones who insisted upon raising it [wheat], for the preparation of the Sacred Host. As for [manioc], employed in the place of wheat, the sugar-cane planters abandoned it to the undependable *caboclos*.⁶³

Freyre's negative attitude towards *caboclos* aside, he is not incorrect in stating that much of early Portuguese exploration depended heavily upon the ability to obtain manioc, most commonly as *farinha*. The importance of manioc and food barter was apparent even in

⁶¹ De Léry, *History of a Voyage to the Land of Brazil*, 71.

⁶² Jones, *Manioc in Africa*, 32.

⁶³ Freyre, *The Masters and the Slaves*, 45-46.

the early years of social and economic Brazilian history. Alexander Marchant, in 1942, stated:

The first instance in which barter was used to obtain food, however, comes not from the evidence of the coastguard or the brazilwood traders, but, entirely accidently, from the account of a ship that stopped in Brazil when detached from the India fleet of 1519. The *São Hieronimo*... entered stormy weather in the south Atlantic and, breaker her rudder, decided to make for Brazil. Finally reaching the coast, she searched for a harbor where wood was available of a size sufficient to allow repairs, and anchored in what may have been Bahia de Todos os Santos. The Indians of the place were not entirely friendly, but permitted some of the sailors to go even to a village inland. The natives, too, gave the Portuguese what food the land offered in exchange for fishhooks, pins, and other cheap articles.⁶⁴

While Marchant makes no direct reference to manioc or farinha in particular, he does go

on to detail the inventory of a Portuguese factory in 1529 Pernambuco. Marchant

explains that:

A factor and five other Portuguese were living on an island where they had a group of buildings. In these were stored several thousand quintals of brazilwood, a few hundred of cotton and native grains, and small amounts of miscellany.⁶⁵

The native grains in Marchants description are most likely *farinha*, in one form or another. Though the source says grains, it's reasonable to assume that this was *farinha* due to the pervasive nature of manioc agricultural along the Brazilian littoral and the lack of frequent references to other grains, such maize, in the historical evidence. Manioc flour, for the Portuguese, also presented a food source that was both secure and cheap in cost. The Tupinambá, with which Portuguese frequently bartered with, placed little value in surplus and readily traded *farinha* for European trinkets and gewgaws.⁶⁶ As such, the

⁶⁴ Marchant. From Barter to Slavery, 44.

⁶⁵ Ibid, 39.

⁶⁶ Schwartz, "Indian Labor and New World Plantations," 47.

Portuguese originally found a market amicable to their interests. They were able to rid themselves of common European goods for labor, brazilwood, and, perhaps most importantly, food.

Like the indigenous Brazilians, Portuguese settles and explorers soon became dependent on manioc. Unlike the indigenous Brazilians, however, Portuguese settlers were also dependent on the proclivity and willingness of native communities to barter their excess *farinha* for whatever baubles and trade goods the colonists could muster. Moreover, this dependence on native willingness to trade was a vulnerability. The Brazilian barter system began to collapse in the 1530s. Marchant argued that this collapse was caused by a "glut on the 'trinket' market," with once novel items becoming mundane. Additionally, the Amerindian demands shifted away from cheap gewgaws to more expensive firearms and ironware, thus increasing the cost for the Portuguese to obtain *farinha*, in addition to labor and other goods.⁶⁷ Schwartz goes farther to mention that the new good obtained through barter with the Portuguese, such as iron axes, knives, or cooking pots, allotted the Amerindians more "free time" to engage in ceremonies and make war.⁶⁸ As the indigenous supply of *farinha* became unstable, due to their own indifference to colonial needs and increasing violence committed amongst and against them, Brazil's colonial society began to take it upon themselves to cultivate and process manioc, soon to become the staple of Portugal's largest colony.

Sources on early colonial Brazilian agriculture, as they pertain to staple crops, says little about the transition to manioc cultivation. Manioc was likely adopted by *engenhos*, early sugar plantations, by enslaved Amerindians, with agricultural techniques

⁶⁷ Schwartz, "Indian Labor and New World Plantations," 48.

⁶⁸ Ibid, 49.

being passed on to similarly enslaved Africans or white laborers.⁶⁹ Manioc proved to be a crop well-suited to plantation life. The roots can be left in the ground and do not require harvesting at a particular time. Sugar cane, on the other hand, has a very short window in which it can be harvested to maximize both yield and quality. The picking of manioc would in no way impede the cane harvest. As mentioned, the dried *farinha* was well-suited to the humid, hot climates of Brazil. Unlike wheat flour, which was expensive and moldered in the tropics, *farinha* kept well for months at a time. Outside of the *engenhos*, manioc was frequently farmed by poor *caboclos*, mulattoes, and free blacks, who were sometimes ex-slaves. Manioc cultivation was a humble occupation and many of these farm, called *roças*, were often insecure and dependent on the benevolence of large landowners.⁷⁰ Most of these *roças* produced for a large commercial market that supported urban populations as well as enslaved populations on *engenhos* that were not self-sufficient.⁷¹ But manioc was not adopted only by plantations and the poorest, but by the colonial society as a whole, from the lowest to highest classes. According to Freyre:

[Manioc] flour was adopted by the colonists in place of wheat bread, the rural proprietors preferring it fresh-baked every day. "And," says Gabriel Soares, "I will say that Manihot is more wholesome and better for you than good wheat, for the reason it is more easily digested, and in proof of this I would cite the fact that the governors Thomé de Sousa, D. Duarte, and Mem de Sá did not eat wheat bread in Brazil because they found that it did not agree with them, and many other persons did the same.

Thanks to the native preference, the victory of [manioc] was complete and it, instead of wheat, became the basis of the colonists' diet.⁷²

⁶⁹ Jones, *Manioc in Africa*, 32.

⁷⁰ James Lockhart, *Early Latin America: A History of Colonial Spanish America and Brazil* (Cambridge: Cambridge University Press, 1983), 214.

⁷¹ *Ibid*, 214-215.

⁷² Freyre, *The Masters and the Slaves*, 126.

As colonial Brazil grew, manioc, and *farinha* in particular, came to be the tropical "staff of life," readily replacing the wheat that dominated European agriculture.⁷³ Manioc became so integral to colonial life that Europeans began telling a legend of St. Thomas, the wandering apostle, who had taught the Amerindians the technique and practices of growing manioc. The Amerindians, taught by St. Thomas, in turn taught the first Portuguese settlers.⁷⁴ Furthermore, two parishes in the Bahia, *Nossa Senhora de Nazaré das Farinhas* (Our Lady Nazareth of the Flours) and *São Felipe das Roças* (Saint Phillip of the Manioc Farms) attest to the importance of the crop in colonial Brazil.⁷⁵ With the Portuguese explorers and colonists in Brazil soon acquiring a taste and appreciation for manioc, the plain-looking root soon left its native Americas and headed westward towards Africa.

The following chapter, "Manioc in Africa," will historically trace the spread of manioc to Africa, its use in the Atlantic slave trade, and the cultural and agricultural adoption and assimilation of the root by the peoples of West and Central Africa.

⁷³ Lockhart, *Early Latin America*, 214.

⁷⁴ Barickman, A Bahian Counterpoint, 164.

⁷⁵ *Ibid*, 14.

Chapter 3

Manioc in Atlantic Africa

Westward Diffusion

The story of manioc in the Atlantic world is inherently tied to the story of both the early Portuguese empire and the slave trade in Africa. The Portuguese had been exploring trades routes and slowly tracing the north-west African coast since the 14th century.⁷⁶ The island of Madeira was encountered in 1420, and by 1424 sailors had begun conducting slave-raiding excursions against the inhabitants of the nearby Canary Island. The nascent Portuguese empire incorporated the Azores in 1427, Cape Verde in 1460, and São Tomé in 1471.77 In 1444, the Portuguese reached the coast of Senegal, the "River of Gold."78 Between the initial Atlantic voyages of the mid-15th century and the sighting of Brazil in 1500, the Portuguese established a permanent presence along the African Atlantic coast. While this phase of building an Atlantic world was not without its failures – such as Nuno Tristão's crushing defeat at the hands of Senegambians in 1446 – Europeans had firmly, if sparsely, entrenched themselves along the West and Central African coasts by the end of the 16th century.⁷⁹ It was these initial forays and expeditions made by Europeans, mostly the Portuguese and Spanish, that would construct the geographical and commercial routes that would support biological diffusion within the Atlantic world, beginning with the Iberian discoveries of the Americas at the very end of the 15th century.

⁷⁶ John Thornton, *Africa and Africans in the Making of the Atlantic World* (Cambridge: Cambridge University Press, 1988), 30.

⁷⁷ Fausto, A Concise History of Brazil, 5.

⁷⁸ Thornton, Africa and Africans, 30-34.

⁷⁹ Ibid, 37.

Furthermore, the integration of European and African economies created the groundwork for the Luso-Atlantic slave trade that would persist until 1850, when the Brazilian Empire passed the Eusébio de Queirós Law, prohibiting the slave trade. However, in terms of biological diffusion, the system was only of secondary importance, as the primary agents of the dispersal of crops over the Atlantic were the enslaved Africans themselves.⁸⁰However, before the wide-spread use of manioc flour in the Atlantic slave trade, there was the event of original introduction of the root to Africa. This is a point in the history of manioc that is unfortunately unclear. The difficulty in deducing when, where, and by whom manioc was introduced as a crop is due to the fact that primary sources of this era, from approximately 1520-1700, tend to lack specificity in regards to manioc; whether it was an imported good, part of an African industry, or a rural staple.

There exist several accounts relating to manioc and Africa as early as the late 16th century. The accounts of Duarte Lopes, who set sail for Luanda in April of 1578 makes no explicit reference of manioc consumption or production. Similar to Bettell, Lopes makes several observations on what is grown and eaten, but manioc, as flour or as bread, is never mentioned:

The whole plain is fruitful and cultivated, having verdant meadows and large trees, and produces grain of various kinds. The best grain is called *Luco* [likely millet or sorghum], which is like mustard seed, but larger. This is ground in a handmill, and from the white flour excellent bread is made, and such as is not even inferior to corn [wheat], although the latter is used is the celebration of mass.

... There is also the best white grain, called *mazza di Congo*, that is, grain of Congo, and maize, which is of so little value they give it to pigs, rice

⁸⁰ Judith A. Carney, *In the Shadow of Slavery, Africa's Botanical Legacy in the Atlantic World* (Berkeley: University of California Press, 2009), 66.

being likewise little thought of. Maize is known as *mazza Manputo*, that is, Portugal grain.⁸¹

Lopes mentions most, of the primary staples produced and consumed in Loanda at the time of his journey, namely, millet, sorghum, wheat, rice, and maize. However, like Battell's account, we shouldn't confuse an absence in the records and absence in the history. Duarte simply could have resided in a region that seldom used manioc. Considering his description of verdant and fruitful plains, perhaps manioc was not adopted there simply because it was not needed. Additionally, Duarte, being an emissary of Portugal, may not have been exposed to manioc because it was not befitting of the social class with whom he travelled. Like manioc, neither yams not ground-nuts are mentioned, key and common staples in West Africa. Duarte may not have eaten or seen manioc simply because he didn't have access. Nevertheless, no clear record of manioc exists in either Duarte's account or contemporaneous works, leading us to the conclusion that presence of manioc was sparse or even non-existent in Africa before the later years of the 16th century.

There is, however, one line Duarte's account that is interesting in regard to the diffusion of manioc. During a stop on the island of St. Helena, he describes, among other crops, "Radishes grow wild, and as large as a man's leg, being useful as food."⁸² Considering the size of this "radish" and the location of St. Helena, geographically in the center of the South Atlantic, it is possible that manioc was

 ⁸¹ Duarte Lopes and Filippo Pigafetta. A Report of the Kingdom of Congo: And of the Surrounding Countries; Drawn Out of the Writings and Discourses of the Portuguese, Duarte Lopez (London: John Murray, 1881), 67.
 ⁸² Ibid. 8.
planted on the island to provision Portuguese ship sailing between Brazil and Africa. However, this is only a hypotheses.

In 1593, the British admiral Sir Richard Hawkins captured a Portuguese slave ship from Brazil bound for the West African coast. According to Hawkins, "The loading of this ship was meale of cassavi [manioc] which the Portingals call Farinha de Paw. It serveth for the marchandise in Angola, for the Portingals food in the ship, and to nourish the Negroes they shall carry to the River of Plate."83 However, considering the date and origin of the captured ship, the *farinha* mentioned was most likely Brazilian in origin. While surplus flour from ships like Hawkins' Portuguese prize, we can only speculate who deep, both culturally and geographical, the food would have penetrated West Africa. Andrew Battell, who explored Angola in 1603, detailed the food crops of the area around Luanda. Within his account, he makes references of corn, which at this point was a catchall term for any grain such as millet or sorghum, ground-nuts and peas, plantains and bananas, and the palm, which "beareth a fruit good for the stomach and for the liver, and most admirable."⁸⁴ The absence of manioc in Battell's account does not disprove the presence of manioc in Africa at the turn of the 17th century. Instead, we can see that while manioc was diffused, it did not spread at an even pace, even within the same region, such as Angola.

While the two above sources make no mention of manioc, one of Bettell's companions did. Anthony Knivet, a fellow traveler, recounts his interaction with an

⁸³ Richard Hawkins *The Observations of Sir Richard Hawkins, Knt., in his Voyage into the South Seas in the Year 1593*, ed. C.R.D. Bethune (London: 1847), 95.

⁸⁴ Andrew Battell, Samuel Purchas, and Anthony Knivet, *The Strange Adventures of Andrew Battell of Leigh, in Angola and the Adjoining Regions*, ed. E.G. Ravenstein (London: Hakluyt Society, 1901), 67-69.

African ship that docked in the Angolan port of "São Paulo de Loanda" and looked to purchase cassava meal:

When I heard that there were ships of the River of Ienero [Rio de Janeiro], I durst not go ashore for fear of being known of some of the Portugals. [As Knivet was a fugitive of the Portuguese at that time.] The next day after that we came into the harbour, there came a great boat aboard us, to ask if we would sell any Cassava [manioc] meal. We told them we would, and asked them whither they went with their boat. They answered, that they tarried for the tide to go up to the River of Guansa [Kwanza] to Masangano. Then I thought it a fit time for my purpose, and so embarked myself in the bark [boat]. The Portugals marveled to see me go willingly to Masangano; for there men die like chickens, and no man will go thither if he can chose.⁸⁵

This account by Knivet shows that not only did the sale, and, presumably, manufacture of manioc flour occur in Angola at the turn of the 17th century. While the "great boat" Knivet mentioned could have been European or African, it still demonstrates that merchants and sailors operating in the Atlantic and along the river ways of Africa expected, if not planned on, purchasing manioc meal when they made port. Even more to the point, Knivet makes no account of the "great boat" asking for any other type of provision, such as the ground-nuts or peas mentioned in Battell's account. Interpreting the account thusly gives credence to the idea that not only was manioc, and manioc flour in particular, readily available as a food, but that it was also a food that sailors along the African coast adopted as perhaps their primary staple.

After boarding his great boat and travelling up the River of Guansa to Massango, Knivet writes of the "Moors of Angola" and of the bread they eat, more than likely made of manioc flour:

The country is champaign plain, and dry black earth, and yieldeth very little corn; the most of anything it yieldeth is plantons [plantains], which the Portugals call *baynonas* [bananas], and the Moors call them *mahonge*,

⁸⁵ Battell, Purchas, and Knivet, *The Strange Adventures of Andrew Battell of Leigh*, 92.

and their wheat they call *tumba*, and the bread *anou*, and if you will buy any bread of them, you must say, *Tala cuna auen tumbola gimbo*; that is, *Give me some bread, here is money*. Their money is called *gullginbo* [cowrie-shell], a shell of a fish that they find by the shore-side; and from Brazil the Portugals do carry great store of them to Angola.⁸⁶

According to E.G. Ravenstein, the editor of the 1901 edition of Battell and company's accounts, "*Mtumbo* is the flour from which cassava-bread is made." Additionally, Ravenstein explains that "The name for bread, both in Kimdundu and Kishikongo, is *mbolo* (derived from the Portuguese word for cake or *bolo*). *Anou* or *auen* may stand for *mwam*, a cassava-pudding."⁸⁷

However, it should be noted that manioc's spread in Africa was sporadic and uneven. Manioc's inherit toxicity may have served to "retard the adoption and spread of manioc in West Africa." Manioc, if prepared like the yam, for instance, would have been apt to harbor significant traces of prussic acid. As such, contact between Africans and the Portuguese and Brazilian colonists, who would have had knowledge, to some extent, of how to render manioc safe and edible, would have facilitated the spread of the tuber. It is important to keep this in mind, as it, to a part, explains the seemingly erratic diffusion of manioc across Africa. Indeed, it was only in the late 1700s that manioc was introduced to "Guinea," likely the lands along the north side of the Bight of Benin. Indeed, by this time, manioc was introduced not by the Portuguese, but the "Brasilias" who "brought with them many practices learned in the New World, including knowledge of the preparation of manioc meal and of tapioca. This later introduction of the manioc complex was undoubtedly responsible for the widespread use of manioc meal, called *gari* in West

⁸⁶ Battell, Purchas, and Knivet, *The Strange Adventures of Andrew Battell of Leigh*, 95-96.

⁸⁷ Jones, *Manioc in Africa*, 96.

Africa, as contrasted with its only sporadic occurrence in the Congo Region.³⁸⁸ Furthermore, manioc was only notably grown in East Africa, even in Portuguese Mozambique, at around the turn of the 19th century, some 300 years after it was first introduced to West Africa. This leads to the argument, put forth by such academics as Joseph Miller, Bert Barickman, and Christopher Ebert, that the diffusion of manioc to and through Africa, and West Africa in particular, was inherently dependent upon the Atlantic slave trade.

The accounts of Lopes, Hawkins, Battell, and Knivet give us useful insights on the role of manioc during the early years of its diffusion in Africa. Lopes' account gives weight to the idea that manioc had not yet established itself permanently until the waning vears of the 16th century. From there, Hawkins' writings reveal that manioc, as early as 1593, was an important staple in the maritime world of the Atlantic, particularly amongst ships sailing between West Africa and Brazil. This is not surprising, considering farinhas ability to keep for long periods of time. Battell's account shows that while manioc was present in West Africa as a whole, its diffusion was not complete, and that possible production, consumption, and trade in the root was localized and varied. Lastly, Knivet's description of Angola and of the "Blackmoors" gives us several references direct references to the consumption and production of manioc as flour, bread, and pudding at the end of the 16th century. While the exact details of maniocs diffusion to Africa will likely never be known, the historic accounts left to us say several things. Firstly, it would be safe to assume that manioc became present in Africa no sooner than the 1570s. Secondly, in its movement eastward, manioc eventually become an important staple

⁸⁸ Jones, *Manioc in Africa*, 78.

amongst certain groups, such as sailors, and in particular regions, such as Portuguese strongholds. Lastly, the acceptance of manioc may have been localized and scattered, dependent on growing conditions, pre-existent agricultural structures, and simple need. And while the 16th century marked maniocs movement from the Americas to Africa, it was the 17th and 18th centuries when the root became and focal point in the Atlantic slave trade.

Use in the Atlantic Slave Trade

The slave trade, against how it is popularly portrayed, was a complex, multipowered system in which Europeans and Africans collaborated as frequently as they found themselves in conflict. The African slave trade was not created by Europeans. It was an institution well situated within the religious, political, cultural, and ethnic realities of Africa. What Europeans did, however, was open up this trade to the greater Atlantic world. Historian John Thornton, amongst others, has argued that a well-entrenched and systemic slave economy not only existed in Africa long before the arrival of European, but that Africans were not under any direct political or commercial pressure to deal in slaves.⁸⁹ Thornton continues to explain that the European and African modes of slavery were also markedly different. African legal systems were based on labor, whereas European labor systems were based on land. Additionally, African notions of privately owned property were absent, with land often under corporate ownership. African slavery, thusly, was more reminiscent of the feudal European relationship of landlords and tenants

⁸⁹ Thornton, Africa and Africans, 72-74.

and was perhaps as widespread.⁹⁰ By approximately 1570, the Portuguese colonists' attempt to enslave the native population of Brazil had failed: virgin soil epidemics had decimated coastal populations, native culture was not compatible with intensive and relentless toil, and Brazil was simply so vast that those who wished to escape European encroachment were often successful in fleeing west into the interior.⁹¹ In order to nurture the burgeoning sugar industry and find a suitable labor force, the Portuguese looked west across the ocean to Africa.

At this point, the Iberians were familiar with the West African world; it was only practical that this was where they turned to procure labor for their nascent colony across the ocean. While the trans-Atlantic slave trade had yet to grow to its horrifying pinnacle of the 19th century, it was into this system that early European explorers and merchants initially tapped. While the human cost and unfathomable suffering experienced by those subjugated by the Atlantic slave trade should never be ignored, these concerns often overshadow some of the more mundane aspects of this particular history. Yet the works that do manage to shed light on features of this history, at the admitted risk of glossing over the human element in the slave trade, succeed to simultaneously illuminate marginal parts of this history as well as bring concepts and actors otherwise left out into the fold of Atlantic world historiography.

Perhaps the most important work that has successfully tracked the logistical aspects of the Atlantic slave trade is Joseph C. Miller's *Way of Death: Merchant Capitalism and the Angolan Slave Trade, 1730–1830.* Miller's work explores the interconnectivity between the economies – particularly the food economies – of Central

⁹⁰ Thornton, Africa and Africans, 98.

⁹¹ Fausto, A Concise History of Brazil, 15-17.

Africa, Iberia, and Portuguese Brazil that mutually buttressed the Atlantic slave trade. Of particular note is Miller's argument that the introduction of manioc seems to have produced an increase in population, as the tuber:

[added] calories to the diet (if at the expense of nutritional balance, reduce infant mortality, increase survival rate during droughts, permit occupation of areas previously too marginal to inhabit on a continuous basis, and this stabilize general population levels even in areas giving up many of their inhabitants to the slave trade.⁹²

This boom in population would have been of great benefit to the slave trading complex as a whole. Moreover, the ease and versatility in which manioc is planted would have dramatically changed labor systems in African communities and regions.

Helen Clifford's "Patents for Portability, Cooking aboard Ship 1650-1850" explores how problems characteristic in cooking *in transit* at sea were solved.⁹³ In particular, Clifford looks at a wide variety of patents and inventions that sought to solve the inherent conundrums involved with cooking at sea: primarily fuel conservation, efficiency, and the maximum utilization of small ship-bound spaces.⁹⁴ Clifford's study of what would seemingly be the mundane and joyless requirement of cooking on a ship brings up other questions concerning biological exchange if approached from a certain angle. For instance, how did cooking techniques and concerns over cargo space shape what crops were diffused due to the fact that they may have been nutrient dense, easy to keep, and easy to prepare? How did nautical concerns shape processing techniques – such as transforming the manioc root to *farinha* or drying meat, vegetables, and fruits – and

⁹² Joseph Calder Miller, *Way of Death: Merchant Capitalism and the Angolan Slave Trade*, 1730–1830. (Madison: University of Wisconsin Press, 1997), 20.

⁹³ Helen Clifford, "Patents for Portability, Cooking Aboard Ship 1650-1850," in *Food on the Move, Proceedings of the Oxford Symposium on Food and Cookery 1996*, ed. Harlan Walker (London: Prospect Books, 1997), 52-63.

⁹⁴ Ibid, 52.

how did this in turn affect the reception and interpretation of these foods once they arrived at their destination? If we approach the history of the Atlantic slave trade through this lens, it substantially explains why manioc was so important in maritime commerce and movement between ports in Brazil, Africa, and Portugal.

The production and rationing of food was perhaps the most basic and important function upon a slave ship. Each slave ship required a large amount of provisions to make the Middle Passage. One French slave ship, the *Diligent*, estimated one ton of foodstuffs for every ten captives.⁹⁵ In 1694, English captain Thomas Phillips bought five tons of rice along the Rice Coast for his pending voyage. Samuel Gamble, captain of the *Sandown*, purchased upwards of eight tons of rice for 250 enslaved Africans bound for Jamaica. In 1750, Captain John Newton purchased nearly eight tons of rice and cowpeas for 200 captives. Brazilian slave ships commonly purchased and stocked provisions at two points in their voyage: once upon leaving Brazil and again when purchasing slaves and goods in Africa. It was through Brazilian ports that manioc flour became so integral to trans-Atlantic travel and trade.

Farinha serves as an efficient maritime staple. As previously mentioned, manioc flour does not molder in the tropics like wheat flour. Within the self-contained world of an ocean-going vessel in the 16th, 17th, and 18th centuries, knowing that your rations would remain edible between ports-of-call would have heavily influenced what that particular ration was. Additionally, as opposed to maize or wheat flour, *farinha* does not need to be cooked, although it may have been regardless. Manioc flour was also the cheapest option in Brazilian ports, especially Salvador in the northeast. Due to the

⁹⁵ Robert Harms, *The Diligent: A Voyage through the Worlds of the Slave Trade* (New Haven: Yale University Press, 2002), 280.

counterclockwise direction of the south Atlantic gyre, importing wheat or grain from the more temperate Brazilian south or from the Rio de la Plata, importing maize or wheat to the northeast of Brazil was terribly expensive and sporadic.⁹⁶ Brazilian ports also had more goods to offer on a regular basis than African ports, where supplies of particular items would frequently vary. Moreover, the unreliability of African ports in their ability to restock slave ships meant many captains took care to stock their vessels for both the voyage to Africa and for as much of the return voyage to Brazil as they could. These ships would carry *farinha* as a provision as well as a trade good along with tobacco, sugar, and spirits.⁹⁷ Yet extra trade goods were of little importance if the crew did not arrive at their destination. Brazilian historian Katia M. de Queirós Mattoso gives a somewhat rose-colored account of the stocking of Africa-bound slave ships in Brazilian ports:

Then the supplies were brought on board: the indispensable fresh water was carried in "pipes" – one pipe contained five to six hundred liters, and at least twenty-five were required for every hundred captives. But many captains, eager to save space, sought to cut down on the amount of water loaded. The ships' carpenter-cooper was responsible for checking the condition of the barrels: a shortage of water was worse than a shortage of food. Besides the pipes of water, the ship took on wood for heating the stew of rice, dried vegetables, and manioc that was fed to the captives. A Portuguese law of 1684 required that captives be given three meals a day together with a *canada* of water. The law also required loading of medications needed for care of the sick and stipulated that a chaplain be taken along to say mass... Food for the crew consisted mainly of flour, biscuits, fowl, and fruits, mainly bananas, and lemons, which were necessary to counter the danger of scurvy.⁹⁸

⁹⁶ Christopher Ebert, "From Gold to Manioc: Contraband Trade in Brazil during the Golden Age, 1700–1750," *Colonial Latin American Review* Vol. 20, No. 1 (2011): 121.

⁹⁷ Katia M. de Queirós Mattoso, *To Be a Slave in Brazil, 1550-1888* (New Brunswick: Rutgers University Press, 1986), 27.

⁹⁸ *Ibid*, 33-34.

Unfortunately, de Queirós Mattoso does not clarify precisely what type of flour and biscuits were loaded. It is possible that the flour and biscuits mentioned were indeed wheat, as she does mention manioc in regard to slave rations. Conversely, the flour and biscuits could just have easily been *farinha* and manioc cakes. De Queirós Mattoso's mention of fruit and scurvy also raises an interesting point. Manioc, as a cooked tuber, contains a surprisingly high amount of vitamin C. Scurvy, being caused by a lack of vitamin C, may have been held at bay by consuming the root. A hundred grams of unprocessed manioc contains half as much vitamin C as an orange, for instance.⁹⁹ How frequently whole manioc may have been eaten at the outset of voyages while it was fresh, if only for a short period, as a way to ration citrus and fight off scurvy for as long as possible. Regardless, there are many other examples of manioc's importance in the Atlantic slave trade.

In an article tracing the history of manioc shortages in colonial Brazil, historian Christopher Ebert argues that the chronic food shortages experienced in Bahia and its capital of Salvador were not a result of poor farming or state planning, but by the drain Atlantic shipping placed on *farinha* stockpiles as well as the high prices the meal garnered in distant markets such as Angola.¹⁰⁰ Manioc flour was such an integral part to Portugal's Atlantic project that an entire industry of *farinha* smuggling grew up in the city of Salvador. As Ebert states, "Manioc was in demand not only in Salvador's market, but on local plantations, in the southern Brazilian capitaincies, on slave ships, and in

⁹⁹ "United States Department of Agriculture - Agricultural Research Service," *United States Department of Agriculture*, accessed February 25, 2015. <u>http://www.ars.usda.gov/main/site_main.htm?modecode=80-40-05-25</u>.

¹⁰⁰ Ebert, From Gold to Manioc, 111-112.

urban markets in Portuguese Africa." At the turn of the 18th century, captains were accustomed to loading their ships with enough manioc flour for the trip to Africa and the return voyage. However, *farinha* was in such demand in African markets that these captains would often sell extra flour.¹⁰¹

While the physical treatment of enslaved Africans varied from ship to ship, the primary goal for every captain was to sell their human cargo for the highest price wherever their destination may have been. While this is not to suggest that the majority of slave captains sincerely cared about the condition of their cargo, these captains were nevertheless economic creatures with the goal of profit forward in their minds. The highest price paid, not coincidently, went to the enslaved Africans in the "best possible physical and even moral condition."¹⁰² Enslaved women in particular were involved in ship-bound food preparation. They were responsible for familiar duties, such as hulling rice, grinding corn, and pounding yams or perhaps cassava into an edible mass.¹⁰³ There was also the prevailing belief that slave mortality could be reduced by providing traditional African foods, such as yams, millet, and later on manioc.¹⁰⁴ Nonetheless, we should not see the presence of culturally appropriate foods as a sign of kindness from slave ship captains. Slave ships frequently restocked in African ports, buying African staples not because they cared for about the tastes of their human cargos, but simply because these staples were available for sale. Additionally, if enslaved African women were responsible for feeding their male counterparts, it is not hard to imagine that the food would have been prepared in a traditional African fashion.

¹⁰¹ *Ibid*, 124.

¹⁰² de Queirós Mattoso, *To Be a Slave in Brazil*, 52.

¹⁰³ Marcus Rediker, The Slave Ship: A Human History (New York: Penguin, 2007), 267.

¹⁰⁴ Carney, In the Shadow of Slavery, 68-69.

Another work in this same vein is Stephen D. Behrendt's article "Ecology, Seasonality, and the Slave Trade." This particular monograph looks at the effect that seasons, particularly how the Atlantic winds were either a boon or nuisance depending on the time of year and what direction a ship wanted to go and, additionally, how the yam planting and harvest in West Africa caused drastic fluctuations in the number of enslaved men, women, and children exported.¹⁰⁵ Behrendt compares the number of exported enslaved Africans – principally from the polities bordering the Bight of Biafra in the 18th century – with histories recording yam harvests.¹⁰⁶ What this article shows, similar to Clifford's, is how something like harvesting and planting yams can have wide-ranging consequences. The simple yam may have played a role in determining which Africans were enslaved, at what time, and where they ended up in the Americas.

Manioc flour was presumably one, if not the, staple provision for westbound ships leaving from Brazil to Africa. As Judith Carney states, "[t]he institutional apparatus that cumulatively removed millions of Africans from the continent depended critically on the availability of food."¹⁰⁷ European cereals like wheat, oats, or rye did not grow well in Brazil. Processed manioc flour, however, had the capacity to stay edible for long periods in tropic climates and amid the humid conditions of nautical life. Furthermore, we will most likely never know the precise details surrounding manioc's arrival to Africa. We, though, can comfortably assume that it was Portuguese sailors bringing Brazilian goods and materials to one of their *feitorias* along the coast of the Congo or Upper Guinea in

¹⁰⁵ Stephen D. Behrendt, "Ecology, Seasonality, and the Transatlantic Slave Trade," in *Soundings in Atlantic History, Latent Structures and Intellectual Currents, 1500-1830*, eds. Bernard Bailyn and Patricia L. Denault (Cambridge: Harvard University Press, 2009), 44, 65.

¹⁰⁶ *Ibid*.

¹⁰⁷ Carney, In the Shadow of Slavery, 46.

the late 16th century.¹⁰⁸ Moreover, upon its arrival, manioc quickly found a place in both West Africa's ecology and the cuisine of its myriad peoples.

Agricultural Appropriation

Africa before 1492 was by no means a continent lacking in both native and foreign crops. The continent is the native home of more than two thousand grains, tubers and roots, fruits, vegetables, legumes, and oil-producing crops. Of these, around one hundred currently contribute to the global food and foodstuff supply, some of which are pearl millet, sorghum, coffee, okra, watermelon, black-eyed pea, palm oil, tamarind, hibiscus, and the kola nut.¹⁰⁹ On the eve of the trans-Atlantic slave trade, West African peoples alone grew at least ten separate stable crops: African rice, millet, sorghum, fonio, yam bean, black-eyed peas, plantains, Bambara groundnut, Guinea yam, taro, and pigeon pea.¹¹⁰ Africa was by no means in dire need of foreign crops to fill vital niches in its agricultural and culinary zeitgeist. The Portuguese merchant Francisco de Lemos Coelho, who traded along the Gambia River in the early 17th century, wrote that:

The blacks have many foodstuffs such as [guinea] hens, husked rice (all high-quality and cheap), plenty of milk, and excellent *manteiga* [fat]... This is because the whole kingdom of Nhani [Ghana] is full of villages of Fulos, who have these foodstuffs in abundance. A cow costs only a *pataca* or its equivalent... Thus everything necessary for human existence is found in this land in great plenty and sumptuousness.¹¹¹

By the time that the trans-Atlantic slave trade began in earnest, was in no apparent need for additional crops. West African cultures and societies had established, developed, and

¹⁰⁸ Jones, *Manioc in Africa*, 60.

¹⁰⁹ Carney, In the Shadow of Slavery, 7.

¹¹⁰ *Ibid*, 44.

¹¹¹ Francisco de Lemos Coelho, *The Discovery of the River Gambia, 1623*, eds. David P. Gamble and P.E.H. Hairs (London: Haklyut Society, 1999), 299-300.

advanced agricultural systems well suited to the particularities of the local climate and geography. Nonetheless, manioc still took root, so to speak. I argue that West African societies readily accepted manioc for several reasons. First, it is easily grown and harvested, and the flexible harvest time of the root allowed it to fill gaps between other harvests, such as millet, sorghum, or African rice. Secondly, it was, most likely, fairly disease and pest resistant upon its initial arrival as there would have been no organisms in West Africa specially designed to prey upon the plant. Thirdly, as a foodstuff, it had many benefits, particularly a long shelf life, its flexibility as an ingredient, and its ability to fit in easily in with pre-existent culinary techniques.

As mentioned, the primary staples of West Africa on the eve of the trans-Atlantic were primarily millet, sorghum, and yams.¹¹² Millet refers to a broad family of different grains, all of which have very small seeds. It is native to both Africa and Asia and has been cultivated for more than 6,000 years. Sorghum is also a small-seeded cereal like millet, but native strictly to Africa, were it was domesticated as early as ca. 2000 BCE. It is prepared much like rice – either boiled, brewed into beer, pounded into porridge, or milled and turned into unleavened flatbreads. As an aside, if allowed to sprout and germinate, sorghum produces a protective cyanide-generating system, forming toxins very similar to those found in manioc. Yams, not to be confused with the orange, sugary-sweet potatoes American markets often label as yams, are starchy tubers native to Asia where they were first cultivated as early as ca. 8000BCE. True yams can grow to one hundred pounds or more, and are often several feet in length.¹¹³

¹¹² Carney, In the Shadow of Slavery, 44.

¹¹³ McGee, On Food and Cooking, 482.

Agriculturally, millet has been valued, historically and contemporarily, due to its high productivity and short growing season under dry, hot conditions. Millet, however, also responds well to fertile soil and moisture and can significantly increase productivity. Most varieties of sorghum as well are drought- and heat-tolerant. Yams can grow in wetter climes; however, they are labor intensive, perishable, and susceptible to a range of pests, fungal and viral diseases, and nematodes. Furthermore, the combination of size and perishability made raw yams difficult to transport and store. While millet, sorghum and yams were crops suitable to the different climates of West Africa, their relatively low yields, labor intensity, and seasonality still left room for manioc in West African agriculture. Manioc is a flexible and forgiving crop. It can grow from the latitudes of the southern United States to northern Argentina. It can grow at altitudes of up to 2,000 feet in the tropics and is tolerant of poor soils. Manioc grows best with abundant rainfall, but still grows well in drier climes and can withstand prolonged periods of drought. The only drawbacks of the plant are its natural toxicity and poor tolerance to cold: frost will kill it.¹¹⁴ In short, manioc represented a crop that did not need land already occupied by other crops due to its subterranean nature and flexibility in varying climates.

However, it should also be noted that manioc's inherit toxicity may have served as "retard the adoption and spread of manioc in West Africa." Manioc, if prepared like the yam, for instance, would have been apt to harbor significant traces of prussic acid. As such, contact between Africans and the Portuguese and Brazilian colonists, who would have had knowledge, to some extent, of how to render manioc safe and edible, would have facilitated the spread of the tuber. It is important to keep this in mind, as it, to a part,

⁴⁶

¹¹⁴ Jones, Manioc in Africa, 15.

explains the seemingly erratic diffusion of manioc across Africa. Indeed, it was only in the late 1700s that manioc was introduced to "Guinea," likely the lands along the north side of the Bight of Benin. Indeed, by this time, manioc was introduced not by the Portuguese, but the "Brasilias" who "brought with them many practices learned in the New World, including knowledge of the preparation of manioc meal and of tapioca. This later introduction of the manioc complex was undoubtedly responsible for the widespread use of manioc meal, called *gari* in West Africa, as contrasted with its only sporadic occurrence in the Congo Region."¹¹⁵

While it is entirely plausible, if not likely, that pests and infections could have impacted manioc in 16th and 17th century West Africa, the lack of mention in the literature and primary sources points to the conclusion that, even if they did exist, these problems did not impact manioc culture at that period of time. There are several possible explanations for this. The first would be the lack of intense international interconnectivity at that point in time. The greater distances and time requirements for travel would have severely curtailed the rapid spread of such negative biological components. Another would be the more isolated and diverse nature of agriculture at that time. Unprocessed or unrefined food crops in particular would not have travelled as far in this period, in effect serving as a natural quarantine. If pests, blight, or bacteria did manage to damage a particular localized crop, the diseased and infected plants would not have the opportunity to reach other untouched locales and risk spreading whatever it was that was damaging the crop.¹¹⁶

¹¹⁶ Ibid, 76.

¹¹⁵ Jones, *Manioc in Africa*, 78.

Cultural Appropriation

Furthermore, the culinary attributes of manioc would have made it especially appealing in West Africa. As previously mentioned, millet, sorghum, and yams were among the primary staples before and up to the arrival of New World crops in Africa. Taking advantage of the starchy nature of these staples, West Africans, particularly those in modern-day Nigeria and Guinea, they were frequently pounded and processed into *fufu*. Manioc, being similarly starchy, was quickly fashioned in the same manner as native staples. In addition, as mentioned, the tuber can be eaten by itself or used to produce other food products such as manioc flour, tapioca, and the fermented 'whey' left over from processing the plant.¹¹⁷ John Barbot, Agent General of the Royal Company of Africa, accounts his experience seeing African styles of manioc preparations in São Tomé in 1682:

...*Mandioca* or *Cassabi*, is cultivated here as in Brazil, but differs from it: for besides its growing here as big as a man's leg, and very lofty, it has not the poisonous juice as what grows there, and at *Angola*. Many here, as well as at *Prince's* island [Principe], make bread of it, first rasping and drying the meal in the air; and it is much better food than that of *Brazil* or *Angola*.¹¹⁸

While it does have a longer shelf life, millet and sorghum may be easier to transport as they are smaller and can fit into a variety of containers, manioc is the only one of these crops that provide such flexibility and products in its productions.¹¹⁹

It became so ingrained that origin legends quickly sprouted up around Atlantic

Africa. Once such myth is of the King of Bushongo, Sambe Mikepe, in the Congo:

¹¹⁷ *Ibid*, 30-31.

¹¹⁸ John Barbot, "A Description of the Coasts of North and South Guinea; and of Ethiopia Inferior, vulgarly Angola," in *A Collection of Voyages and Travels* (London: 1752), 409.

¹¹⁹ McGee, On Food and Cooking, 305-306.

There was once a King Bushongo who was called Samba Mikepe (or Shamba Bolongongo), who was the wisest man who had ever lived. Before he mounted the throne, he made long voyages toward the west; no one knows to what distance to the other side of the Kasai River he went, and it was from this that he acquired his wisdom,... During one season of his reign the harvests of Boshongo were completely destroyed by locusts and the people were in imminent danger of perishing from hunger. But they were saved by Samba Mikepe who showed them the use of manioc which could not be easily destroyed by any amount of locusts.¹²⁰

Regardless of whether this legend is rooted in fact or not, it still shows that manioc

became so important so fast in West Africa as garner creation myths soon after its arrival.

Another example of the assimilation of manioc into the folklore of West Africa is

revealed in a letter written by Mary H. Kingsley in 1897, which recounts the previous

research done by Edward Dennett, and English trader operating out of the Congo at the

turn of the 20th century. In this account, Dennett explains his translation of the origin

myths of the Fjort people of the Congo:

I have translated Nzambi as the Spirit of the Earth or the Old Mother Earth. But *Anza* is the River Congo, and so Anzambi might well be translated the River-Spirit; but this does not fit with the Fjort's explanation of Nzambi, who figures in their folklore as the Great Princess, the mother of all animals, etc., the real truth being that *Anza*, the river, comes out of the earth, *Nsi*. In Fjort legends the river-spirits are legion, the name of the river and the spirit being one, Anzambi then is the spirit of the River Congo. All river-spirits appear to teach some lesson, physical or moral. In one story you will see the river-spirit taught the Fjort to plant bananas and manioc, to forge iron and so; and I have given you the real etymology of the word Nzambi and its real meaning, which fits in with the ideas, with the love of the Mother Earth (Nzambi, mother earth) and this knowledge of the Anzambi, River-Spirit.¹²¹

¹²⁰ E. Torday and T.A. Joyce, *Notes ethnographiques sur les peuples communément appelés Bakuba, ainsi que sur les peuplades apparentées – Les Bushongo*, Tome II, Fasc. 1 (Tervuren: Musée du Congo Belge, 1911), 249. Translation from French by William O. Jones.

¹²¹ Richard Edward Dennett, *Notes on the Folklore of the Fjort* (Alexandria: Library of Alexandria, 1967), 118-119.

Similar to the myth regarding King of Bushongo, the placement of manioc deeply within traditional folklore reveals that the root became so important, both culturally and agriculturally, that entire origin myths grew up and around the humble root.

In addition to African legends, John Matthews, in his 1791 account of a voyage along the West African coasts, recalls the words of an Abbe Raynal, who advanced the idea that "African manioc, as it is eaten raw... [is]...the cause of the black colour of the natives of Africa."¹²² While Matthews is quick to denounce Abbe Raynal's idea that the consumption of raw African manioc is the cause of "the black colour of the natives," this interaction shows how deep manioc had entered not just West Africans' ideas of selfidentity, but also in how Europeans began to reshape their own perceptions of Africa in the wake of the Columbian Exchange. Indeed, John Payne, in his 1796 work Geographical Extracts, Forming a General View of Earth and Nature, who also references Raynal, writes the following: "This root [manioc] has long been cultivated in the West India islands, where a great number of the native white people refer to it as the best wheat. 'It is,' says Raynal, 'the most valuable present the Antilles have received from Africa."¹²³ Raynal's own work, A Philosophical and Political History of the Settlements and Trade of the Europeans in the East and West Indies, from which Payne quoted, continues even further:

The most valuable present, however, which the islands have received from Africa, is the manioc. Most historians have considered this plant as a native of America, though pretty generally received. But were the truth of it demonstrated, the Caribbee Islands would yet stand indebted for the manioc to the Europeans, who imported it thither along with the Africans,

¹²² John Matthews. A Voyage to the River Sierra-Leone, on the Coast of Africa: Containing an Account of the Trade and Productions of the Country, and of the Civil and Religious Customs and Manners of the People; in a Series of Letters to a Friend in England (London: B. White and Son, 1791), 57.
¹²³ John Payne. Geographical Extracts, Forming a General View of Earth and Nature... Illustrated with Maps (London: GG and J. Robinson, 1796), 355.

who fed upon it... It is certain, however, that the savages who offered our first navigators bananas, yams, and potatoes, offered them no manioc... In short, it is beyond a doubt that the use of the manioc was not known till after the arrivals of the Negroes; and that from time immemorial it hath constituted the principal food of a great part of Africa.¹²⁴

Aside from Raynal's racist hypothesis that the consumption of raw manioc is the cause for Africans' darker skin, his accounts do, however, show how central, by the late 1700s, that manioc had become to Western perceptions of Africans and African culture. By the end of the 18th century, African, American, and European discourse on what Africa meant began to include, to one extent or another, the centrality of manioc as one of the cornerstones of "African-ness." While the accounts we have, especially Western accounts, lack particular nuance, those accounts, as well as the independently created origin myths all demonstrate that in the parts of Africa where manioc was grown and consumed the tuber became part of an "organic" zeitgeist.

The next chapter, "Manioc Returns to the Americas," explains how manioc affected the experiences of enslaved Africans in the Americas, particularly in how it may have shaped maroonage and subsequent Afro-Latino cuisine, which would later form as one of the cornerstones of African-descendent identity in the Americas. As the trans-Atlantic slave reached its terrifying peak in the years after the 17th century, the West Africans caught in this human trade brought with them this cultural, gastronomic, and agricultural affinity for manioc with them to the Americas.

¹²⁴ Abbé Raynal. A Philosophical and Political History of the Settlements and Trade of the Europeans in the East and West Indies, translated by J. Justamond (1770), 157-158.

Chapter 4

Manioc Returns to the Americas

Back to the Beginning

By the end of the 17th century, American crops, transplanted by Europeans, were already plentiful and familiar in Africa. Manioc, maize, sweet potatoes, pineapples, papayas, coconuts, and guavas, to name only a few, were now grown in a wide area of Africa, including the littoral regions of the Bight of Benin, Kongo, and Angola.¹²⁵ When the Atlantic slave trade and European colonies in the Americas began to grow and expand, the agricultural and technical knowledge required for the cultivation of manioc was well known in certain parts of Africa, particularly those with intense Portuguese contact. As hundreds of thousands of Africans were enslaved and sold in the Americas, it is impossible to believe that none of them would have carried with them cultural and agricultural knowledge through the Middle Passage and into chattel slavery. Geographer Judith Carney has written extensively on the role of enslaved Africans in disseminated agricultural knowledge across the Atlantic world. They carried with them technical understanding on the production of myriad crops. As Carney states, "...Africans were heirs to a body of knowledge that included tropical agriculture, animal husbandry, and the skills to recognize wild plants of food and medicinal value."¹²⁶ Carney, along with other academics and writers, have revaluated and called attention to the importance that

¹²⁵ Jose Honorio Rodrigues, "The Influence of Africa on Brazil and of Brazil on Africa." *The Journal of African History* Vol. 3, No. 1 (1962): 65.

¹²⁶ Carney, In the Shadows of Slavery, 2.

enslaved Africans had on affecting botanical diffusion throughout the Atlantic. In these works, Africans, both and slaved and free, served as the primary agents in "the fusion of two tropical farming systems, one with roots in Africa and the other in the Americas."¹²⁷ However, even within this growing field, there is little consideration given to botanical diffusion as a multistage journey.

Botanical diffusion is often seen as a static event, when in reality it is a continual, dynamic process. As such, there exists lacunae in the literature on the secondary and even tertiary diffusions of certain crops. There has been little work on the histories pertaining to the return of crops to autochthonous geographies. How did Africans familiar with manioc in the Old World react when they saw it again in the Americas? Was familiarity with manioc a consideration in the purchasing of enslaved Africans? How would Africans unfamiliar with manioc fair differently than African familiar with the root? Answering these questions, however, seems as much hinged on the unavailability of primary sources as a lack of interest. Accounts by enslaved, manumitted, or free Africans in the Americas are not rare, yet only a very few mention agricultural practices and relationships to particular foods.

Nonetheless, there are places where we can see, or at least theorize, where Africans and their knowledge of manioc was interpreted in the Americas. As with the self-emancipated slaves who sought to re-create Africa in Spanish America, the histories and records of maroon communities make multiple references in regard to food production and agricultural importance.

¹²⁷ Carney, In the Shadow of Slavery, 4.

Maroon Settlements, Mocambos, and Quilombos

Formed by escaped Africans, maroon settlements across the Americas and the *mocambos* and *quilombos* of Brazil were a constant factor in the colonial Americas. The vast and porous frontier of Brazil provided a means of permanent or temporary escape for many slaves. Once free, these former slaves, many born in Africa, were forced by circumstances to find water, shelter, and food. Potable water could be found in the numerous streams and rivers that crisscross Brazil and in the tropical warmth, the foliage of the jungle canopy could serve as improvised shelter. Food also may have been easy to find, but only for an individual or small groups. As mentioned, Brazil teems with native fruit. But as escaped slaves began to coalesce and form static communities, the need for a steady food source quickly became apparent.

Removed from familiar landscapes, whether that was a plantation in Brazil's Northeast or a village in Angola, escaped slaves had to create new societies based on the knowledge they carried with them. Many enslaved Africans, originating from regions in Africa with Portuguese contact, were already familiar with the cultivation of American crops such as manioc and maize.¹²⁸ Indeed, a large number of slaves were taken from Kongo and Angola, regions that quickly adapted manioc as a staple.¹²⁹ Some scholars, such as Carney, vehemently argue that enslaved Africans brought with them prior knowledge of agriculture, including knowledge of manioc.¹³⁰ Other scholars, however, have not given enslaved Africans the same degree of agency. Richard Price in his

¹²⁸ Carney, In the Shadow of Slavery, 88.

¹²⁹ Simon Ottenberg and Phoebe Ottenberg, *Cultures and Societies of Africa* (New York: Random House, 1960), 8.

¹³⁰ Carney, In the Shadow of Slavery, 85-90.

introduction to Maroon Societies: Rebel Slave Communities in the Americas, writes the

following:

I would suggest, however, that a good deal of maroon technology must have been developed on the plantations during slavery. Throughout Afro-America, Indians interacted with slaves, whether as fellow sufferers, as trading partners, or in other capacities. Indian technologies – from pottery making and hammock weaving to fish drugging and manioc processing – were taken over and often further developed by the slaves, who were so often responsible for supplying the bulk of their own daily needs. Life as maroons meant numerous new challenges to daily survival, but it was on a base of technical knowledge developed in the interaction between Indians and blacks on plantations that most of the remarkable maroon adaptations were build.¹³¹

Price's argument, however, lack several considerations. First, early plantations in Brazil were manned primarily by enslaved Amerindians, who already had knowledge of manioc cultivation and production. In the 1550s and 1560s there were virtually no enslaved Africans laboring on sugar mills in Brazil's northeast.¹³² As Portugal's attempt to enslave native Brazilians proved unsuccessful, settlers began the heavy importation of enslaved Africans during the late 16th century. While the early arrivals may have had some interaction with Amerindians on the sugar plantations of northeast Brazil, as the 17th century progressed, the chances of African-Amerindian interaction on plantations would have fallen dramatically, suggesting a lack of knowledge exchange between the two.

Additionally, the late 16th century also marks the period in which manioc began to quickly spread throughout parts of Africa closely linked to the Atlantic world. This in turn would suggest that more and more arriving Africans would bring with them previous knowledge of manioc production and cultivation. To suggest that "a good deal of maroon

¹³¹ Richard Price, "Introduction: Maroons and Their Communities," in *Maroon Societies: Rebel Slave Communities in the Americas*, ed. Richard Price (Baltimore: JHU Press, 1996), 12.

¹³² Schwartz, "Indian Labor and New World Plantations," 73.

technology must have been developed on the plantations during slavery" is to ignore both the greater trajectory and influence of manioc in the Afro-Brazilian Atlantic as well as to diminish African agency as it pertains to agricultural ingenuity and adaptation. The aforementioned Africans in Spanish Florida attest to this, as manioc at this time was not grown on the peninsula. According to Daniel Gade:

No archaeological evidence yet confirms that manioc had passed to Florida from the Caribbean where Columbus discovered its use everywhere he went. Nor did Florida Indians grow the plant after Spaniards arrived from the Caribbean presumably with manioc cuttings on board. Spaniards had earlier learned to make the flatbread *casabe* on Hispaniola.¹³³

Not only was manioc not present on the Florida peninsula during the 16th century, but there is also no mention of indigenous peoples that used the root. The fact that the self-emancipated Africans that escaped to Spanish Florida in the 17th century not only planted manioc as a staple, but planted it as a cultural link to Africa shows that by this time, manioc agriculture and culture had made significant headway in certain regions of Africa.¹³⁴

Price's contribution to *Maroon Socieities* also makes mention of the agricultural techniques used by escaped Africans. Price states that maroon communities across the Americas practiced similar forms of agriculture and, more interestingly, grew a similar range of crops:

Swidden [slash and burn] horticulture was the mainstay of most maroon economies, with a similar list of cultigens appearing in reports from almost all areas – manioc, yams, sweet potatoes, and other root crops, bananas and plantains, dry rice, maize, groundnuts, squash, beans, chile, sugar cane, assorted vegetables, and tobacco and cotton. These seem to have been planted in a similar pattern of intercropping – for example,

¹³³ Gade, "Crops and Boundaries," 133.

¹³⁴ Ogunleye, "The Self-Emancipated Africans of Florida," 31.

vegetables scattered in a field of rice – from one end of the hemisphere to the other. 135

Assuming Price's assertion that enslaved Africans learned most of their technological understanding on plantations, it seems very unlikely, considering the diverse and heterogeneous nature of Amerindian societies, that previous knowledge gained in Africa did shape maroon settlements and *quilombos*, particularly considering the strong similarities across the continent. Furthermore, the inclusion of indigenous African crops such yams, groundnuts, plantains and bananas, and, depending on the specifics, cotton, rice, and beans, again signifies that Africans brought with them agricultural knowledge of crops native and introduced to Africa. In addition to the positive evidence given by scholars such as Carney, the negative evidence and fragile arguments put forth by others also suggest an African familiarity with New World crops, such as manioc, and technical and agricultural knowledge they require.

The Recôncavo

The intense relationship between manioc and maroon settlements does not end there. In the Recôncavo, the immediate area surrounding the Bay of All Saints in the Brazilian state of Bahia, numerous maroon settlements thrived throughout the 17th and 18th centuries.¹³⁶ The Recôncavo, centered on the first Brazilian capital, Salvador, was an area of thriving sugar production and an early importer of large numbers of enslaved Africans. It is not surprising that during the two hundred years of the 17th and 18th century, numerous maroon settlements, *mocambos*, were established in the hinterlands of

¹³⁵ Price, "Introduction: Maroons and Their Communities," in *Maroon Societies*, 10.

¹³⁶ Stuart B. Schwartz, "The *Mocambo*: Slave Resistance in Colonial Brazil," in *Maroon Societies: Rebel Slave Communities in the Americas*, ed. Richard Price (Baltimore: JHU Press, 1996), 203.

the Recôncavo. Many of these communities were located no more than 20 miles from Salvador itself. The physical proximity of these *mocambos* to plantations and European settlements demonstrates the fragile hold Portuguese authorities had on their largest colony as well as the propinquity of the Brazilian frontier. Between 1591 and 1797, maroon communities were founded in Jaguaripe, Rio, Itapicurú, Rio Real, Cairú, Camamú, Sanot Amaor, Itapoã, and Cachoeira. All of these communities exist within a dozen miles of the Atlantic or the Bay of All Saints.¹³⁷ Even with such widespread maroonage in the Recôncavo, several regions in particular had a high incident of runaways and *mocambos* and *quilombo* formation. These regions, in particular Cairú, Camamú, and Jaguaripe all, coincidently, were key manioc and *farinha* producing regions in Bahia in the 17th and 18th centuries.¹³⁸

The southern districts of Cairú and Camamú had, on average, and equal number of free and enslaved inhabitants, and, unsurprisingly, constant problems concerning maroon settlements. Throughout the early colonial period, these two districts were especially troubled with African resistance and maroon settlements. So menacing was the threat of *mocambos* and *quilombos* to the Portuguese authorities that military expeditions were organized in 1663, 1692, 1697, and 1723. It should be noted that the frequency of these campaigns suggest a recurrent lack of success. While not singular among other Bahian districts, maroon communities in these two southern regions seemed to have a higher occurrence of settlement and success in surviving. What makes the case of Cairú and Camamú distinctive, however, was the nature of the local economies. Unlike most of the Recôncavo, which depended on sugar and tobacco, Cairú and Camamú specialized in

¹³⁷ Schwartz, "The Mocambo: Slave Resistance in Colonial Brazil," in Maroon Societies, 209-210.

¹³⁸ Barickman, A Bahian Counterpoint, 12-14.

the growing of manioc and the production of *farinha* for sale in the communities of the Bay of All Saints and beyond.¹³⁹ Whether or not there is a direct relationship between the cultivation of manioc and the propensity towards maronage and revolt is admittedly debatable. Nonetheless, Cairú and Camamú were not the only regions of the Recôncavo to demonstrate a link between areas that grew manioc and prolonged African resistance. While manioc doubtfully incited any revolts or uprisings, Africans' imported knowledge of the root and its cultivation may have aided in sustaining and extending acts of resistance.

In the late 1580s, rumors of a new religion began to spread through the communities, farmlands, and plantations of the Recôncavo. Caught up in this religious fervor, a "state of holiness known as *santidade*," scores of Amerindians, *mestiços*, and many enslaved Africans began to congregate in the hinterlands of Salvador.¹⁴⁰ This millenarian movement originated in the manioc producing district of Jaguaripe, and, among their tenants, believers "proclaimed that on earth their crops would grow on their own accord, their vegetables would be bigger than those of others, and they would not want for food or drink."¹⁴¹ The motivations of this movement, the Santidade de Jaguaripe, are described as such by historian Alida C. Metcalf:

I maintain that the Santidade de Jaguaripe is more fully understood as the impulse of the dominated in an alien colonial environment to create a new world and new identities for themselves, appropriating not only their own cultural traditions abut also syncretic beliefs, language, and rituals drawn from their immediate experience in colonial society.¹⁴²

¹³⁹ Barickman, A Bahian Counterpoint, 12-14.

¹⁴⁰ Alida C. Metcalf, "Millenarian Slaves? The Santidade de Jaguaripe and Slave Resistance in the Americas," *American Historical Review* Vol. 104, No. 5 (1999): 1531.

¹⁴¹ Ibid.

¹⁴² *Ibid*, 1534.

At the time of the Santidade de Jaguaripe, 1585, marked the years when the intensive importation of enslaved Africans began as well as when the decline in the use and labor of enslaved Amerindians began to decline. According to a Jesuit, the enslaved population of Bahia at this time was comprised of approximately 2,500 enslaved Amerindians and 3,000 enslaved Africans.¹⁴³ Aside from the chance that some of these enslaved Africans may have been creoles born in Afro-Portuguese ports, the vast majority would have been born in Africa and held with them agricultural knowledge.

Connecting the African resistance in the districts of Cairú, Camamú, and Jaguaripe to manioc production is not to suggest that other districts did not experience revolts. Additionally, there are many other reasons that may have contributed to these regions witnessing high rates of maronage. Such factors could be the peripheral location of these regions, the distance from the military garrison in Salvador, or the additional threat of Amerindian raids. Furthermore, the system of slavery used on manioc plantations and sugar plantations differed drastically, with security and discipline varying. Manioc plantations, being smaller and less wealthy than sugar plantations may have provided more chances for escape and resistance. We should not, however, over look how manioc, as a cultural anchor and nutritional staple, may have influenced and direct the resistance of enslaved Africans in Brazil, particularly those who brought knowledge of the root with them through the Middle Passage and its accompanying horrors.

¹⁴³ Metcalf, "Millenarian Slaves," 1542.

Manioc, Diasporic Cuisine, and Identity

As the slave ships brought their human cargo from Africa to the Americas, so too did enslaved Africans bring with them their own culture and traditions, of which cuisine played an important part. For the Africans that survived the hellish Middle Passage and subsequently encountered a measure of autonomy in the regimented world of plantation life, small garden plots, which grew foods they were familiar with, were quickly raised. The produce of these small gardens supplemented an otherwise meagre diet marked by nutritionally poor foods such as salt cod or salt beef, corn meal, or *farinha*. These plots also allowed enslaved Africans to grow familiar plants that would be used in the creation of "memory dishes."¹⁴⁴ Archeological evidence, in the form of pots, pans, and other cooking utensils, has supported the idea that many plantations replicated familiar West African cuisine.¹⁴⁵ These memory dishes, based on African culinary tradition, would later serve not only as the base for African diasporic cuisine, but indeed as the base for much of the cuisine that is now seen as distinctly "American." The use of greens and okra in the cooking of the US South and Brazil, the popularity of hibiscus tea in Mexico, and the centrality of rice and beans throughout Latin America and the southern United States all attest to African culinary influence. The trans-Atlantic slave trade brought with its human cargo numerous flowers, fruits, vegetables, herbs, seeds, and spices that would not only find niches in the Americas, but, though the agency of Africans, become central to the botanical and gastronomic landscape of the New World. The majority of these plants, such as sesame, watermelon, and black-eyed peas, were indigenous to Africa. Others,

¹⁴⁴ Carney, In the Shadow of Slavery, 177.

¹⁴⁵ Patricia Samford, "The Archeology of African-American Slavery and Material Culture," *The William and Mary Quarterly* Vol. 53, No. 1 (1996): 96.

however, such as the peanut and manioc, were plants that had been acculturated by Africa and returned to the Americas, in many cases, as thoroughly African crops.¹⁴⁶ As Fran Osseo-Asare writes about Ghanaian cuisine: "The Portuguese, along with the later Spanish explorers, introduced tomatoes, pineapples, sweet potatoes, corn, cassava, avocados, and papayas, but after over five hundred years these foods are as integral to Ghanaian cooking as the indigenous African yams, cowpeas, rice, sesame, pumpkins, melons, okra, eggplant, palm oil, and mangoes, or the onions and citrus fruits that migrated south from the North African trade routes."¹⁴⁷ While Osseo-Asare speaks only of Ghanaian cuisine, it would be reasonable to assume that the Columbian Exchange would have had the same effect on other cuisines throughout Africa as well.

Throughout the Americas there are examples of the re-introduction of manioc, agriculturally and gastronomically, as an African staple. One instance lies in the diffusion of the African practice of pounding starches into a thick, congealed paste. This glutinous mass, called *fufu* along the Bight of Benin, *fungi* in Nigeria, or *nfundi* in Kongo, was prepared with variety of starchy staples such as bananas, plantains, yams, maize, rice, millet, sorghum, taro, and manioc.¹⁴⁸ The preparation of starchy staples, which provided the vast majority of calories on New World plantations, in the manner of *fufu* became important throughout the Americas.¹⁴⁹ In many locations *fufu* and *fufu*-descended dishes became linked with a particular starch. Invariably, some of these places used manioc. Brazilian *angú* and Jamaican *foo-foo* are two examples where manioc became

¹⁴⁶ Samford, "The Archeology of African-American Slavery and Material Culture," 96.

¹⁴⁷ Fran Osseo-Asare, "We Eat First With Our Eyes': On Ghanaian Cuisine," *Gastronomica: The Journal of Critical Food Studies* Vol. 2, No. 1 (2002): 54.

¹⁴⁸ Jessica Harris, *The Africa Cookbook* (New York: Simon & Schuster, 1998), 276-285.

¹⁴⁹ Carney, In the Shadow of Slavery, 180.

intrinsically linked to African cooking and eating traditions. The discovery of manioc growing in the Americas may or may not have surprised recently arrived Africans. Regardless, the presence of the tuber in the New World apparently did little to diminish the cultural connection enslaved Africans had with the plant and foods prepared from it. This idea is further strengthened by the manner in which this manioc paste was eaten. The early 19th century artist Jean Baptiste Debret, in one of his painting, depicts a group of women vendors, *quitandeiras*, serving manioc-based *angú* with greens and okra.¹⁵⁰ The serving of a starchy porridge or mash with greens and other relishes is the foundation of many a meal in West and Central Africa.¹⁵¹

The perception of manioc as an inherently African crop also appears later with the development of the independent Latin American state and its attempt to construct national identity. In addition to music, art, literature, and religion, the embryonic nationstates of Latin America also used cuisine to create a coherent national identity. Historian Jeffrey Pilcher, in his work *Que Vivan Los Tamales!: Food and the Making of Mexican Identity*, argues that food is deeply ingrained in perceptions of nationality. Pilcher states that "cuisine and other seemingly mundane aspects of daily life compose an important part of the cultures that bind people into national communities."¹⁵² In nations with a strong African presence, such as Cuba and Brazil, diasporic cuisines were variably exalted or hidden, depending on the circumstances. In addition to the cuisines themselves, particular ingredients associated with the poor or African-descendants, such

¹⁵⁰ Carney, In the Shadow of Slavery, 180.

¹⁵¹ James C. McCann, *Stirring the Pot: A History of African Cuisine* (Athens: Ohio University Press, 2009), 145.

¹⁵² Jeffrey Pilcher, *Que Vivan Los Tamales!: Food and the Making of Mexican Identity* (Albuquerque: University of New Mexico Press, 1998), 2.

as plantains and manioc, also experienced different treatment depending on the circumstances. For instance, in Pilcher's work little is mentioned on the African influence in parts of Mexico. There is, however, an entire historiographical branch devoted to this topic. The absence of Africans in a history on the formation of a Mexican national cuisine and identity is reflective of general trends in Latin America where sites of "Africanness," such as cuisines and foods like manioc, were often down-played and relegated to the margins. This is seen clearly in the development of a Cuban national cuisine at the end of the 19th century.

From Christine Folch, in "Fine Dining: Race in Prerevolution Cuban Cookbooks," explains that, despite proud modern portrayals of Cuban food as "a blend of European, African, Native American, and Asian cuisines," for much of Cuban culinary history, the African influence has been severely downplayed and even ignored.¹⁵³ Folch's work traces the contents of cookbooks written between 1857 and 1959 as they attempted to condense centuries of Cuban culinary history into individual volumes. Additionally, these cookbooks were frequently written by elite white women who did not represent the majority of the population. Regardless, in the construction of national identity building, elites often shaped the discussion. One of the trends among these cookbooks was the appearance of Afro-Cuban recipes and ingredients from the mid-19th century forward:

Over time, the recipes considered sufficiently archetypal of Cuban cuisine to be put in 'Cuban' cookbooks evolved. Through these is a remarkable stability in the continuity of specific recipes across time, there is a notable difference in which recipes were included in the books. We see this specifically as we follow the presence (and absence) of recipes marked as Afro-Cuban by name or by ingredients – (e.g., those including *viandas* – starchy root vegetables such as *ñame* (yam), *boniato* (sweet potato),

¹⁵³ Christine Folch, "Fine Dining: Race in Prerevolution Cuban Cookbooks," *Latin American Research Review* Vol. 43, No. 2 (2008): 205.

malanga, yucca [manioc], and potatoes, which, in addition to plantains, had served as the staple foods for Cuba's slaves.¹⁵⁴

There is a clear connection drawn between these *viandas*, the starchy staples that sustained the plantation system, and Africa and African-descendants. However, as period progressed, there became a notable decline and, at times, disappearance of Afro-Cuban recipes and ingredients, including manioc. One book, *Cocinera catalane*, from 1858, featured three different versions of *fufu*. In 1862, *El cocinera de los enformos* added another iteration of *fufu*, this one topped with toasted peanuts, another American crop that later became associated with Africa. Even a cookbook published in 1903, *Cocinero criollo*, featured three *fufu* recipes. However, at the turn of the 20th century, the *viandas*, the staples of enslaved Africans and the poor, began to disappear from these cookbooks. At first, preparations of plantains and manioc, for instance, ceased to be treated as individual recipes and were relegated as mere ingredients. The shift away from traditional African foods and preparations mirror general societal shifts away from sites of Africanness. As Folch explains: "The differentiation between recipes and mere ingredients attempts to obscure the presence of (especially) Afro-Cubans."¹⁵⁵

Brazil, however, serves as an example to the contrary. As political power began to centralize in the early 20th century, certain aspects of African-ness began to be articulated to describe and exalt the nation as a whole. For example, the *Correio da Manhã* for September 12, 1922, wrote:

The fisherman from the Northeast have just arrived in Rio. We should think of them as the authentic representatives of our [Brazilian] race, one

 ¹⁵⁴ Folch, "Fine Dining: Race in Prerevolution Cuban Cookbooks," 214.
 ¹⁵⁵ *Ibid.*

that resulted from the melding of black, Indian, and civilized men. They are the true sons of the Brazilian nation.¹⁵⁶

While this rosy interpretation of Brazilian race relations is substantially over-simplified, it does reflect the outward importance of African influence and heritage in the formation of a national Brazilian identity. Gilberto Freyre, while often derided, takes great pains in his seminal *Casa-grande e senzala* to extoll the importance that African cooking techniques and ingredients contributed towards the formation of a national Brazilian cuisine, which, as argues Pilcher, is synonymous with a national identity. As Freye wrote:

There is one important aspect of the infiltration of Negro culture into the domestic life and economy of the Brazilian that remains to be stressed, and that is the culinary aspect... In connection with the Brazilian diet, the chief contributions of the African were the following: the introduction of oil of the dendê palm and malagueta pepper, so characteristic a constituent of the Bahian cuisine; the introduction of the quiabo, or okra plant; greater utilization of the banana; a greater variety in the preparation of poultry and fish. A number of Portuguese or native dishes were modified in Brazil by the Negro mode of spicing food or by African culinary technique; some of those that are most typically Brazilian are the result of that technique, such as *farofa*; *quibebe*, or gourd paste; and *vatapá*, a manihot [manioc] paste with oil and pepper and fish or meat.¹⁵⁷

In addition to Freyre's outright admiration of African influenced food, it should also be noted how manioc-based dishes factor into this part of his work. *Farofa* is a preparation of *farinha* cooked in some kind of fat, such as butter, and mixed with whatever may be laying around the kitchen, such as eggs, meat, dried fruit, or onions.¹⁵⁸ *Vatapá*, especially in its traditional Bahian form, is a thick paste made with dried shrimp, peanuts, coconut, dendê oil, malagueta pepper, and cashews, all ingredients emblematic of African

¹⁵⁶ Correio da Manhã, September 12, 1922, quoted in Lourdes Martinez-Echazabal, "Mestizaje and the Discourse of the National/Cultural Identity in Latin America, 1845-1959," Latin American Perspectives, Vol. 25, No. 3 (May, 1998): 33.

¹⁵⁷ Freyre, *The Masters and the Slaves*, 459-460.

¹⁵⁸ de Andrade, *Brazilian Cookery*, 50-52.

cuisines, as well as *farinha*, tomatoes, and wheat bread.¹⁵⁹ And even though in Brazil manioc never was transformed, or never arrived, as an African crop, as it had been consistently consumed since well before the first Portuguese colonists arrived, it was still heavily and prominently associated with Afro-Brazilian cuisines and ingredients. Regardless, Freyre never hesitates to openly and proudly extoll "the Brazilian cuisine with its predominant African influence."¹⁶⁰

While of Cuba and Brazil are only two examples of how African foods and cuisine where utilized, or not utilized, in the formation of national identity, they do highlight opposite ends of the same spectrum. In the development of an independent Cuban identity, elite literally wrote out the influence of Africa and Africans by slowly excluding the presence of crops such as manioc and plantains and foods like *fufu* in cookbooks that sought to describe what it meant to be Cuban through food. From what these cookbooks tell us, to be Cuban was not to be African, and to be African was not to be Cuban. Brazil, on the other hand, actively embraced certain aspects of its Africanness, at least superficially. Like Afro-Brazilian music, Afro-Brazilian cuisine was embraced to thoroughly through Brazilian society that it was transform from a thing of *mestiçagem* to a thing that represented Brazil as a whole.

By looking at how manioc was received once it returned to the New World, we can see how its cultural connotations were changed as it was adopted and adapted by Africans. In some instanced, where manioc was not present before the establishment of plantation slavery, as in Cuba and the islands of the Caribbean, or where it was a cornerstone of the colonial diet, as in Brazil, it nonetheless became a crop and food

¹⁵⁹ Murayama and Salles, Dona Benta: Comer Bem, 607.

¹⁶⁰ Freyre, The Masters and the Slaves, 466.
deeply associated with Africa. While this associated would variably be seen as positive, negative, or irrelevant, the fact of the matters is that from the time that manioc was first embraced in Africa, it would continue to carry connotations of that continent with it as it eventually travelled back to the Americas.

Conclusion

Ira Berlin, in his monograph *Many Thousands Gone*, states that "Black life on mainland North America originated not in Africa or America but in the netherworld between the two continents. Along the periphery of the Atlantic – first in African, then Europe, and finally in the Americas – it was a product of the momentous meeting of Africans and Europeans and then their equally fateful rendezvous with the peoples of the New World."¹⁶¹ While African life in the Americas did indeed originate first in Africa, the components of this life sometimes did not. No different than what tomatoes did to Italian life or potatoes to Irish life, the New World manioc, an unassuming root, impacted parts of West African life so profoundly, that it was transformed from a foreign crop to something, if not biologically, culturally native. Anthropologist David E. Sutton wrote that "if 'we are what we eat' then 'we are what we ate' as well."¹⁶² Yet this doesn't seem to be the case with manioc and enslaved and free Africans, both in the New World and the Old. Manioc was not always eaten by Africans, yet, somehow, it came to define how certain groups of them were.

In their attempt to create a new Africa in the Americas, enslaved Africans recollections and remembrances of a far-away home nonetheless were influenced by the Atlantic world as a whole. This example merely sheds light on a larger trend that took place within the early Atlantic world. As peoples and ideas moved across the ocean, so did foods, plants, and animals. Some were seen merely as novelties or luxuries: for

¹⁶¹ Ira Berlin, *Many Thousands Gone: The First Two Centuries of Slavery in North America* (Cambridge: Harvard University Press, 1998), 17.

¹⁶² Sutton, *Remembrance of Repasts*, 7.

instance sugar and cocoa. Yet others were readily accepted into societies and cultures thousands of miles from their native soils. Despite the being foreign and alien, peoples across the Atlantic world readily embraced them, and, in turn, naturalizing them in their mind's eye.

In this instance, the diffusion and cultural appropriation of manioc within the Atlantic world reveals even broader trends across the globe and history. Despite what modernity may tell us, food and food production are still extremely important markers of identity. The goal of this this is not represent the self-emancipated Africans of Florida as foolish for believing that manioc was originally an African crop or that they may have not understood where it came from. Instead, I hope it shows that the many parts of the Atlantic world, so frequently divided and sub-divided into empires, states and nationality, may have had more in common than history would make us believe.

References

Atala, Alex. D.O.M. Rediscovering Brazilian Ingredients. London: Phaidon, 2013.

- Bancroft, Edward. An Essay on the Natural History of Guiana, in South America. Containing a Description of Many Curious Productions in the Animal and Vegetable Systems of that Country. Together with an Account of the Religion, Manners, and Customs of Several Tribes of Its Indian Inhabitants. Interspersed with a Variety of Literary and Medical Observations. In Several Letters from a Gentleman of the Medical Faculty During His Residence in that Country... London: T. Becket and P.A. de Hondt, 1769.
- Barbot, John. "A Description of the Coasts of North and South Guinea; and of Ethiopia Inferior, vulgarly Angola," in *A Collection of Voyages and Travels*. London: 1752
- Barickman, Bert. A Bahian Counterpoint: Sugar, Tobacco, Cassava, and Slavery in the Recôncavo, 1780-1860. Stanford: Stanford University Press, 1998.
- Barlow, Barlow and Martin Fernández de Enciso. *A Brief Summe of Geographie*, Editor Eva Germaine Rimington Taylor. London: Kraus Reprint, 1967.
- Battell, Andrew, Samuel Purchas, and Anthony Knivet, *The Strange Adventures of Andrew Battell of Leigh, in Angola and the Adjoining Regions*, Edited by E.G. Ravenstein. London: Hakluyt Society, 1901.
- Behrendt, Stephen D. "Ecology, Seasonality, and the Transatlantic Slave Trade," in Soundings in Atlantic History, Latent Structures and Intellectual Currents, 1500-1830, Edited by Bernard Bailyn and Patricia L. Denault, 44-85. Cambridge: Harvard University Press, 2009.
- Berlin, Ira. *Many Thousands Gone: The First Two Centuries of Slavery in North America* (Cambridge: Harvard University Press, 1998.
- Carney, Judith A. *In the Shadow of Slavery, Africa's Botanical Legacy in the Atlantic World*. Berkeley: University of California Press, 2009.
- Clifford, Helen. "Patents for Portability, Cooking Aboard Ship 1650-1850," in *Food on the Move*, *Proceedings of the Oxford Symposium on Food and Cookery 1996*, Edited by Harlan Walker, 52-63. London: Prospect Books, 1997.

- *Correio da Manhã*, September 12, 1922, quoted in Lourdes Martinez-Echazabal, "Mestizaje and the Discourse of the National/Cultural Identity in Latin America, 1845-1959," *Latin American Perspectives*, Vol. 25, No. 3 (1998): 21-42.
- Crosby, Alfred. *The Columbian Exchange: Biological and Cultural Consequences of 1492*. Westport, Connecticut: Greenwood Publishing Company, 1969.
- de Andrade, Margarette. Brazilian Cookery. Rio de Janeiro: Editora Record, 2005
- de Lemos Coelho, Francisco. *The Discovery of the River Gambia, 1623*, Edited by David P. Gamble and P.E.H. Hairs. London: Haklyut Society, 1999.
- De Léry, Jean. History of a Voyage to the Land of Brazil. Berkeley: University of California Press, 1993.
- de Moreno de LeBlanc, Alejandra, Svetoslav D. Todorov, Graciela Vignolo, Graciela Savoy de Giori, and Jean Guy LeBlanc. "Indigenous Fermented Foods of Latin America" in *Microorganisms and Fermentation of Traditional Foods*, Edited by Ramesh C. Ray and Montet Didier, 312-340. London: Francis & Taylor Group, 2014.
- de Queirós Mattoso, Katia M. *To Be a Slave in Brazil, 1550-1888*. New Brunswick: Rutgers University Press, 1986.
- Dean, Warren. With Broadax and Firebrand, (Berkeley: University of California Press, 1995.
- Denevan, William M. "The Pristine Myth: The Landscape of the Americas in 1492." Annals of the Association of American Geographers Vol. 82, No. 3 (1992): 369-385.

Dennett, Richard Edward. Notes on the Folklore of the Fjort. Alexandria: Library of Alexandria, 1967.

- Ebert, Christopher. "From Gold to Manioc: Contraband Trade in Brazil during the Golden Age, 1700–1750," *Colonial Latin American Review* Vol. 20, No. 1 (2011): 109-130.
- Elliott, John. "Afterward. Atlantic History: A Circumnavigation," in *The British Atlantic World, 1500-1800*, Edited by Dave Armitage and Michael J. Braddick, 233-249. New York: Palgrave, 2002.

Fajans, Jane. Brazilian Food: Race, Class and Identity in Regional Cuisines. New York: Berg, 2013.

Fausto, Boris. A Concise History of Brazil, Cambridge: Cambridge University Press, 1999.

Folch, Christine. "Fine Dining: Race in Prerevolution Cuban Cookbooks." *Latin American Research Review* Vol. 43, No. 2 (2008): 205-223.

Freyre, Gilberto. The Masters and the Slaves. Berkeley: University of California Press, 1986.

- Gade, Daniel W. "Crops and Boundaries: Manioc at its Meridional Limits in South America." *Revista Geográfica* No. 133 (2003): 103-126.
- Goldman, I. "Tribes of the Uapes-Caqueta Region," in *Handbook Of South American Indians*, Edited by J. H. Steward. New York: Cooper Square, 1963.

Hanson, A.P. "Notes on Cassava." Jamaica Agricultural Society Vol. 43 (1939): 602-603.

Harms, Robert. *The Diligent: A Voyage through the Worlds of the Slave Trade*. New Haven: Yale University Press, 2002.

Harris, Jessica. The Africa Cookbook. New York: Simon & Schuster, 1998.

- Hawkins, Richard. The Observations of Sir Richard Hawkins, Knt., in his Voyage into the South Seas in the Year 1593, Edited by C.R.D. Bethune. London: 1847.
- Henry, Guy and Clair Hershey. "Cassava in South America and the Caribbean," in *Cassava: Biology, Production and Utilization*, Edited by R.J. Hillocks, J.M. Thresh, and Anthony Bellotti, 17-40. New York: CABI Publishing, 2002.
- Isendahl, Christian. "The Domestication and Early Spread of Manioc (*Manihot esculenta* Crantz): A Brief Synopsis." *Latin American Antiquity* Vol. 22, No. 4 (2011): 452-468.

Jones, William O. Manioc in Africa. Stanford: Stanford University Press, 1959.

- Lancaster, P. A., J. S. Ingram, M. Y. Lim and D. G. Course. "Traditional Cassava-Based Foods," *Economic Botany* Vol. 36, No. 1 (1982): 12-45.
- Landers, Jane. "Gracia Real de Santa Teresa de Mose: A Free Black Town in Spanish Colonial Florida." *The American Historical Review* Vol. 95, No.1 (1990): 9-30.
- Lockhart, James. *Early Latin America: A History of Colonial Spanish America and Brazil.* Cambridge: Cambridge University Press, 1983.
- Lopes, Duarte and Filippo Pigafetta. A Report of the Kingdom of Congo: And of the Surrounding Countries; Drawn Out of the Writings and Discourses of the Portuguese, Duarte Lopez. London: John Murray, 1881.
- Marchant, Alexander. From Barter to Slavery: The Economic Relations of Portuguese and Indians in the Settlement of Brazil, 1500-1580. New York: Ams Press Inc., 1942.
- Matthews, John. A Voyage to the River Sierra-Leone, on the Coast of Africa: Containing an Account of the Trade and Productions of the Country, and of the Civil and Religious Customs and Manners of the People; in a Series of Letters to a Friend in England. London: B. White and Son, 1791.
 McCann, James C. Stirring the Pot: A History of African Cuisine. Athens: Ohio University Press, 2009.

McGee, Harold. On Food and Cooking. New York: Scribner, 2004.

- Metcalf, Alida C. "Millenarian Slaves? The Santidade de Jaguaripe and Slave Resistance in the Americas," in *American Historical Review* Vol. 104, No. 5 (1999): 1531-1559.
- Miller, Joseph Calder. *Way of Death: Merchant Capitalism and the Angolan Slave Trade, 1730–1830.* Madison: University of Wisconsin Press, 1997.
- Murayama, Cristiane and Marcelo Yamashita Salles. *Dona Benta: Comer Bem.* São Paulo: Companhia Editora Nacional, 2013.
- Nunn, Nathan and Nancy Qian. "The Colombian Exchange: A History of Disease, Food, and Ideas." *The Journal of Economic Perspectives* Vol. 24, No. 2 (2010): 163-188.

- Ogunleye, Tolagbe. "The Self-Emancipated Africans of Florida: Pan-African Nationalists in the "New World." *Journal of Black Studies* Vol. 27, No. 1 (1996): 24-38.
- Olsen, Kenneth M. and Barbara A. Schaal, "Evidence on the Origin of Cassava: Phylogeography of *Manihot esculenta.*" *Proceedings of the National Academy of Sciences* Vol. 96, No. 10 (1999): 5586-5591.
- Osseo-Asare, Fran. "We Eat First With Our Eyes': On Ghanaian Cuisine." *Gastronomica: The Journal* of Critical Food Studies Vol. 2, No. 1 (2002): 49-57.
- Ottenberg, Simon and Phoebe Ottenberg. *Cultures and Societies of Africa*. New York: Random House, 1960.
- Payne, John. *Geographical Extracts, Forming a General View of Earth and Nature… Illustrated with Maps.* London: GG and J. Robinson, 1796.
- Pilcher, Jeffery. *Que Vivan Los Tamales!: Food and the Making of Mexican Identity*. Albuquerque: University of New Mexico Press, 1998.
- Price, Richard. "Introduction: Maroons and Their Communities," in *Maroon Societies: Rebel Slave Communities in the Americas*, Edited by Richard Price. Baltimore: JHU Press, 1996.
- Raynal, Abbé. A Philosophical and Political History of the Settlements and Trade of the Europeans in the East and West Indies, Translated by J. Justamond. 1770.

Rediker, Marcus. The Slave Ship: A Human History. New York: Penguin, 2007.

- Rodrigues, Jose Honorio. "The Influence of Africa on Brazil and of Brazil on Africa." *The Journal of African History* Vol. 3, No. 1 (1962): 49-67.
- Samford, Patricia. "The Archeology of African-American Slavery and Material Culture." *The William and Mary Quarterly* Vol. 53, No. 1 (1996): 87-114.
- Schwartz, Stuart B. "Indian Labor and New World Plantations: European Demands and Indian Responses in Northeastern Brazil." *The American Historical Review* Vol. 83, No. 1 (1978): 43-79.

- Schwartz, Stuart B. "The *Mocambo*: Slave Resistance in Colonial Brazil," in *Maroon Societies: Rebel Slave Communities in the Americas*, Edited by Richard Price. Baltimore: JHU Press, 1996.
- Staden, Hans. *Hans Staden's True History: An Account of Cannibal Captivity in Brazil*. Durham: Duke University Press, 2008.
- Sutton, David E. Remembrances of Repasts: An Anthropology of Food and Memory. New York: Berg, 2001.
- Terra, C.J.A. "The Significance of Leaf Vegetables, Especially of Cassava, in Tropical Nutrition." *Tropical Geographical Medicine* No. 16 (1964): 97-100.
- Thornton, John. *Africa and Africans in the Making of the Atlantic World*. Cambridge: Cambridge University Press, 1988.
- Torday, E. and T.A. Joyce. *Notes ethnographiques sur les peuples communément appelés Bakuba, ainsi que sur les peuplades apparentées Les Bushongo*, Tome II, Fasc. 1. Tervuren: Musée du Congo Belge, 1911.
- "United States Department of Agriculture Agricultural Research Service," United States Department of Agriculture. Accessed February 25, 2015. http://www.ars.usda.gov/main/site_main.htm?modecode=80-40-05-25.
- Wilson, Warren M. and D.L. Dufour. "Why 'Bitter' Cassava? Productivity of 'Bitter' and 'Sweet' Cassava in a Tukanoan Indian Settlement in the Northwest Amazon." *Economic Botany* Vol. 56, No. 1 (2002): 49-57.