

Beyond 'Exotic Groceries': Tapioca-Cassava, A Hidden Commodity of Empire

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This is a study of a commodity that has been largely overlooked in Empire histories, but which was an important element in the commerce, culture and constitution of the Portuguese, Brazilian, French, Belgian, Spanish and British Empires and their possessions in Africa, Asia and the Atlantic Islands. Instead of focussing on production, the export market and purely economic relations in the manner of classic economic histories, the paper uses tapioca-cassava and the anthropology of food to explore consumption, social relationships, and the workings of internal markets with the objective of better understanding the socio-cultural complexities of Empire trade, the cosmopolitan communities that emerged from it, and the ways in which local-national-global relations have articulated over time. In introducing the concept of ‘hidden’ commodities, the paper aims to show how a cultural approach can contribute to a more complete understanding of the processes of commodification, and to an assessment of the extent to which these are truly global.

Studies of imperial food commodities have concentrated on sugar, tea, coffee, chocolate, spices and tobacco – the first “exotic groceries”.¹ However, there were other ‘hidden’ commodities of empire, staples that were an essential part of Empire trade as a whole and in some cases sustained it. This work focuses on just such a hidden food commodity, one that moved between Empires over four centuries largely unremarked, although it was a part of both trans-Atlantic and trans-Pacific commerce. It is a food that was involved in imperial trade in three ways; as a plant cultivar, as a finished commodity, and as the substance that sustained the production of Empire goods and was the catalyst for the mass movement of people across continents and oceans. This food is arguably the most important food crop in the tropical and subtropical regions of the world,² but has been largely overlooked in Anglo-American food histories and studies of Empire trade for two reasons. First, it is a food that in many places was more important in the internal market than in the export trade to which it was essential, and therefore never figured in export figures. The second reason is a direct consequence of imperial history, for the food originated in and was most important to the Portuguese Empire, which in Anglophone studies has been eclipsed by the Spanish Empire and its maize-dominated colonial food regime, in the same way that Luso-Brazilian studies have been overwhelmed by Spanish/Latin American studies under the label ‘Hispanic’.³ The ‘hidden’ food commodity that is the focus of this paper is tapioca.

‘Tapioca’, also known as ‘cassava’ in Anglophone countries, ‘manioc’ in Francophone countries, and ‘yuca’ and ‘mandioca’ in Ibero-Hispanic countries, is a shrub (*Manihot esculenta*) with woody tuberous roots that are very rich in starch, producing a high yield of

¹ John Styles, ‘Product Innovation in Early Modern London’, *Past and Present*, 168 (2000), pp.124-69.

² Lorraine L. Niba & Fatimah L. C. Jackson, ‘Tapioca and Tapioca Flour: Consumption and Potential’, Paper given at the *Cultural and Historical Aspects of Food* Symposium, Oregon State University, 1999.

³ K. David Jackson, ‘History of the Future: Luso-Brazilian Studies in the New Millennium’, *Luso-Brazilian Review*, 40:2 (2003), pp.13-30.

calories per acre. It was the vital starch staple that provided the bulk of the daily diet for the people of the Neotropics in prehistoric times, and remains a staple food of Amerindians and peasants in the region today. The plant requires little attention in cultivation, grows well in poor soil, is resistant to drought and pests,⁴ and keeps well, both in the ground and after it has been processed. The roots mature in eight to twenty-four months, and the commercial crop, for tapioca, grows for two years.⁵ There are two varieties, sweet and bitter, the latter being more widely used. When raw, the roots have a high and potentially lethal content of hydrocyanic acid (cyanide), which is removed by boiling, fermentation and other methods. Once processed, the root is highly adaptable, lending itself to many cuisines because it can be prepared in a variety of ways, including baked as bread, chopped and used as a soup ingredient, boiled and eaten as an alternative to rice, mixed with liquid to make a gruel, pounded or mashed into a pulp to be eaten with relishes, shaped into cakes and fried, used as a thickening agent in sauces or drinks, sweetened for eating as a pudding, and many more. Being virtually tasteless adds further to its adaptability, since it can be easily flavoured with local ingredients. Virtually every part of the plant was used. Writing in the 1500s, Gonzalo Fernández de Oviedo wrote:

Cassava is: food that sustains life; sweet and sour liquids that serve as honey and vinegar; a stew that is eaten and enjoyed by the Indians; firewood from the branches when there is no other; and a potent and deadly poison ... in a certain region of the mainland, excellent wine is made from cassava bread.⁶

The leaves were also eaten, and as another early observer of the mandioca in South America pointed out, it played such a central role in diet that “it makes the people independent of the rest of the world for food”.⁷ Significantly, since it could be grown with scarcely any labour, it freed people for other forms of productive work.

Yet despite its usefulness, it has been the most overlooked of the New World plants in academic and popular studies, far overshadowed by maize and potatoes,⁸ although it is the dietary staple of one third of the world’s population, a lacuna to which this paper on tapioca/cassava/manioc in the Neotropics in the first contact and early colonial periods is a preliminary response. This is not an exercise in colonial culinary nostalgia. In the face of current growing concern about food security and the need to diversify away from ecologically harmful intensive cereal farming, roots and tubers like tapioca may well become key commodities and crops for the world market in the twenty-first century,⁹ as a food for humans and animals as well as a biofuel. In addition, the historical trajectory of tapioca/cassava makes an important contribution to understanding globalisation.

⁴ William O. Jones, ‘Manioc: An Example of Innovation in African Economies’, *Economic Development and Cultural Change* 5:2 (1957), p.98.

⁵ Clarence Jones, ‘Agricultural Regions of South America, Installment III’, *Economic Geography*, 4:3 (1928), p.292.

⁶ Diego Rivera and Concepcion Obon, ‘Bread made from Yuca: Selected Chronicles of Indo-Antillean Cultivation and Use of Cassava 1526-2002. *Economic Botany*, 60:1 (2006), p..93

⁷ Thomas Morong, ‘The Mandioca’, *Bulletin of the Torrey Botanical Club* 16:10 (1889), p.274.

⁸ See Alfred W. Crosby, *The Columbian Exchange; Biological and Cultural Consequences of 1492*, Westport, Connecticut: Greenwood Publishing Company, 1972.

⁹ Gregory J. Scott, Mark W. Rosegrant & Claudia Ringler, ‘Roots and Tubers for the 21st Century: Trends, Projections and Policy Options’, *Food, Agriculture and the Environment Discussion Paper* 31, Washington D.C.: International Food Policy Research Institute, 2000.

Although ‘globalisation’ is a contested term as regards definition, extent and consequences, there is general agreement that there is an urgent need to better understand the “diverse and specific circumstances of food production in local-national-global relations...emphasising various cultural and historical trajectories and the importance of networks and local/actor agencies rather than structures in the globalisation of specific commodities”,¹⁰ and in the emergence and development of globalisation generally. While agricultural economists and classic economic historians have long focussed on the economics of specific commodities, they have, as Friedland has noted:

been less interested in studying commodity systems, let alone social, political or cultural aspects of commodities...most commodity chain studies by economists are usually devoid of human beings.¹¹

These omissions have led to an incomplete understanding of globalisation and the complexities of connectedness across time and space. The anthropological approach adopted here restores human beings to a central position in the analysis, both as actors and through the human values embodied in material goods, using two main techniques. The first is the construction of a ‘cultural biography’ as developed by Kopytoff,¹² which follows changes in the human values and meanings that become embedded in particular commodities. The second is the multi-sited ethnography method espoused by Marcus, in which ‘following the thing’ allows a sense of process and interconnectedness to emerge through the circulation of goods.¹³ This method was devised to cut across interdisciplinary borders and dichotomies such as ‘lifeworld’ and ‘system’, and to “juxtapose phenomena that conventionally have appeared to be (or conceptually have been kept) ‘worlds apart’”,¹⁴ for example that between ‘external’ and ‘internal’ markets. Among the questions it seeks to illuminate are: how do ‘things’ become commodities; what influence do they have on human society and vice versa; and how do they connect different regions, cultures and historical periods – all fundamental to understanding globalisation.

Tapioca, the Portuguese Empire and Brazil

The cultural biography of tapioca begins in Brazil. Cassava is a New World plant, believed to have originated in what is now eastern Brazil. It was among the first plants to be used as food in Central and South America, and appears to have been an article of trade in northwestern South America as early as the second and third millennia BC.¹⁵ Permanent European settlement in Brazil and the subsequent development in the northeast of an export economy based on sugar could not have taken place without cassava. As a staple of the Brazilian diet in the sugar-producing region, cassava became the foundation upon which the Portuguese and then Brazilian Empire export trade was built but, equally importantly, it was the basis of an internal exchange economy that predated, supported and outlasted the great plantation period.

¹⁰ Lynne Phillips, ‘Food and Globalization’, *Annual Review of Anthropology* 35, (2006), p.. 39.

¹¹ William H. Friedland, ‘Reprise on Commodity Systems Methodology’, *International Journal of Sociology of Agriculture and Food* 9:1 (2001), p. 83.

¹² Igor Kopytoff, ‘The Cultural Biography of Things: Commoditization as Process’ in Arjun Appadurai (ed) *The Social Life of Things*, Cambridge and New York, Cambridge University Press, 1986.

¹³ George Marcus, ‘Ethnography In/Of the World System’, *Annual Review of Anthropology*, 24 (1995), p.107

¹⁴ Marcus (1995), p.102.

¹⁵ D. L. Jennings, ‘Cassava: *Manihot esculenta* (Euphorbiaceae)’, in N. W. Simmonds (ed.), *Evolution of Crop Plants*, London and New York: Longman, 1979, p.82.

'Brazilian Exchange'

Barickman, Gomes and Schwartz have noted the tendency in Brazilian historiography to ignore Amerindians after the first encounter with Cabral, pushing them to the margins of Brazilian life even in the early period; the same happened in histories of the Pacific and much of North America.¹⁶ Until recently, relatively little attention has been given to the interactions of Amerindians, Europeans and Africans during the imperial period outside the formal plantation context. This has been exacerbated by the inclination of colonial historians to focus on the external relations of colonies and on their export commodities, while neglecting internal networks and activities that supported the export trade in different ways. Usner has shown how in southern North America before the antebellum plantation era, there were flourishing regional internal markets – ‘frontier exchange economies’ – based on flexible cultural and economic relations between Amerindians, Europeans and African slaves and freemen.¹⁸ After 1783, these networks began to give way in America to the plantation regime that aimed to control both the economy and intercultural relations. In Brazil, a similar process took place nearly two centuries earlier, but a preliminary finding of my research is that in Brazil, despite the establishment of a strong plantation economy, the ‘frontier exchange’ economy never went away, developing into an internal market that was essential to the operation of the export economy and imperial trade. The material suggests that this persistence is a direct result of Brazil’s complex multi-ethnic population, many of whom operated outside the formal economy for essentially cultural reasons, in networks based on cultural as well as economic capital.

Internal trade networks operated throughout South America long before the European advent, and these exchanges were as important socially as they were economically and nutritionally. As Levi-Strauss put it, “exchanges are peacefully resolved wars, and wars are the result of unsuccessful transactions”.¹⁹ In addition to obtaining scarce and desirable goods, the Amerindian trade was operated as a means of maintaining peaceful relations. In indigenous systems, these interactions were reciprocal exchanges with well-defined cultural meanings, equivalences, obligations and limitations. This is the context within which two seemingly innocuous terms commonly used in connection with early contact need to be qualified before proceeding – ‘barter’ and ‘subsistence’. As used in a purely European context, ‘barter’ implies a shared system of values, albeit one within which there is some flexibility for negotiation. In contact situations, there were no shared values, in the sense of mutual meaningful understanding and agreement. ‘Barter’ also obscures the effect European trade goods had on Amerindian populations. Even on a one-off or occasional basis, the introduction of previously unknown European goods such as iron and woven cloth modified the value of all the other goods in circulation. Once they entered the system in substantial quantities and on a regular basis, European trade goods subverted Amerindian values and ultimately created dependence on non-Amerindian society.²⁰ ‘Barter’ was the way in which European economic values were introduced into indigenous societies; instead of being

¹⁶ B. J. Barickman, “‘Tame Indians’, “‘Wild Heathens” and Settlers in Southern Bahia in the Late Eighteenth and Early Nineteenth Centuries”, *The Americas*, 51:3 (1995), pp.325-68; Flavio dos Santos Gomes, “‘A Safe Haven’ – Runaway Slaves, Mocambos and Borders in Colonial Amazonia, Brazil”, *Hispanic American Historical Review*, 83:3 (2002), pp.469-98; and Stuart B. Schwartz, ‘Indian Labour and New World Plantations: European Demands and Indian Responses in Northeast Brazil’, *The American Historical Review* 83:1 (1978), pp.43-79.

¹⁸ Daniel H. Usner Jr., *Indians, Settlers and Slaves in a Frontier Economy: The Lower Mississippi Valley Before 1783*, Chapel Hill & London; University of North Carolina Press, 1992.

¹⁹ Cited in Usner (1992), p.26.

²⁰ Jacqueline Goodman-Draper, ‘The Development of Underdevelopment at Akwesasne: Cultural and Economic Subversion’, *American Journal of Economics and Sociology*, 53:1 (1994), p.42.

considered as unimportant encounters or banal exchanges, barter in the context of early contact was a highly significant and contested point of interaction.

Similarly, ‘subsistence’ properly means the minimum of food needed to maintain life, but in Western common usage it has come to mean a level of material existence below which it is undesirable to be. ‘Subsistence economy’, the description often applied to Amerindian societies during the contact period, is Eurocentric and relative. The material needs of these societies were fully satisfied in their own terms, and subsistence in the pejorative sense was an alien concept. According to the Tupinamba (the dominant group of indigenous peoples in northeast Brazil at the time of first European contact, hereafter ‘Tupi’), as Schwartz put it, “[o]nce a man had enough to eat and a few new tools and weapons, why should he work or want for more?”²¹ Deeply rooted in Amerindian culture, these values dissuaded many of the Tupi from entering the commercial export economy and ultimately provided the foundation for the internal market.

First Portuguese Contact with Cassava

The first Portuguese colonists were introduced to cassava by the Tupi. The Tupi occupied the Atlantic coast where they practiced tropical agriculture, and parts of the Amazonian rainforest where they gathered wild foods and hunted. They lived in communal longhouses, in locations chosen because of a sufficiency of wood, water, game and fish; when these resources were exhausted, the settlement would be relocated. Theirs was a collectivist society; there was no private property and several related families lived together in longhouses which were the social unit within which joint work was undertaken and food and other resources shared. The Tupi were not the only indigenous inhabitants of northeastern Brazil, but there were broad similarities in the foodways – hunting, fishing, ‘swidden’ gardening, gathering and food preparation – of the tribes of the contact region.²² ‘Swidden’ gardening, or slash-and-burn agriculture, was carried out by cutting back groundcover and felling trees. The cleared earth was left to dry, and then the remaining ground stubble was burned off. Once the ground was cool and rain had fallen, planting began using the simplest of techniques and tools; a digging stick was pushed into the earth to make a hole for seeds or cuttings. When the soil was exhausted, the Tupi would move on. The planting, harvesting and preparation of cassava, traditionally the work of women, was demanding and took up more time than all the other foods together. For their part, the men fished in streams or on the coast, and hunted in the forest for deer, wild pigs, agouti, armadillos, forest hens and other animals, and gathered fruits and nuts. The combination of cultivation and hunting/gathering gave the Tupi a good carbohydrate/protein balance: all early European accounts of the Tupi describe them as healthy and well-made.

As befitting its position as the most important staple in the daily diet, cassava was prominent in Tupi cosmology. Every plant, animal and place in the Tupi world had its own guardian spirit, and all foods were considered divine gifts. One Tupi tradition describes a demigod or Culture Hero,²³ who could appear as a young or old man, and who showed the people how to plant and prepare cassava before ascending to the sky to become the planet Venus.²⁴ Other traditions describe the first cassava as a plant that grew from the grave of a

²¹ Schwartz (1978), p.50.

²² William Balée, *Footprints of the Forest: Ka'apor Ethnobotany – the Historical Ecology of Plant Utilization by an Amazonian People*, New York: Columbia University Press, 1994, p.4.

²³ Mircea Eliade, ‘South American High Gods, Part II’, *History of Religions* 10:3 (1971), pp. 234-266.

²⁴ Charles Wagley, ‘World View of the Tapirape Indians’, *Journal of American Folklore*, 53:210 (1940), p.256.

child, linking death and life, just as the plant can preserve life but also kill through its poison. Sexual and reproductive imagery was closely entwined with the imagery of the cassava, the plant upon which life depended. The milky juice of the root was likened by many Amerindians to semen;²⁵ the shape of the root was compared to body parts, and the root itself to children. Cassava was also the basis of an intoxicating drink similar to the Polynesian *kava*, which played a central part in Tupi rituals and celebrations. At this remove, it is impossible to completely reconstruct the belief system of the Tupi, but as with other Amazonian peoples today, cassava would have been a central part of Tupi identity, spoken of as ‘our life’ and ‘our sacred plant’.

Brazil became part of the Portuguese Empire in 1500 when ships under the command of Pedro Alvarez Cabral made landfall, claimed the territory for Portugal, and sailed for India ten days later, after a brief encounter with the Tupi, and a cursory survey of the land from shipboard and the safety of the coast. Both the terrain and its inhabitants were described by Pero Vaz de Caminha, the expedition’s recorder, in a letter to King Manoel of Portugal. This was the first of the accounts of Brazil that were to have as profound an effect on the Hispanic and especially Lusitanic imaginary,²⁶ as the peoples of Polynesia had on the Anglophone and Francophone world,²⁷ giving rise to fierce intellectual debate about the nature of humanity. The scarlet-painted Tupi, wearing magnificent headdresses of parrot feathers and feather necklaces, bracelets and anklets,²⁸ were swiftly romanticised and incorporated into the iconography of the essentialised ‘Red Man’, a figure in the new humanist pantheon. Here, apparently, were true children of nature, innocent in their nakedness, living in an earthly paradise so luxuriant it defied description. This new Eden, it was reported, was blessed with soil so rich that food appeared to grow effortlessly. It was noted of the Tupi: “nor do they eat anything except these manioc, of which there is much, and of the seeds and the fruits which the earth and trees produce”.²⁹ The Tupi appeared peaceable and did not seem covetous of the possessions of the Europeans. When members of Cabral’s expedition offered them bread, wine and cakes, ‘gifts’ of civilisation and the products of superior technology, the Tupi initially refused them.³⁰ For their part, the Tupi saw the first Europeans as *maira* or *caraiba*: powerful shamans.³¹

Portugal’s original plan for Brazil was one of exploitation and extraction – to draw upon the existing natural resources of the new possession, rather than to establish a permanent colonial settlement in order to develop new sources of wealth.³² Disappointingly, they discovered that Brazil did not offer the accessible riches of the East or the gold and silver of

²⁵ Laura Rival, ‘Seed and Clone: The Symbolic and Social Significance of Bitter Manioc Cultivation’, in Laura M. Rival & Neil L. Whitehead (eds), *Beyond the Visible and the Material: The Amerindianization of Society in the Work of Peter Riviere*, Oxford: Oxford University Press, 2001, p73.

²⁶ Jerry M. Williams, ‘Pero Vaz de Caminha – The Voice of the Luso-Brazilian Chronicle’, *Luso-Brazilian Review* 28:2 (1991), pp.59-72; John Hemming, *Red Gold: The Conquest of the Brazilian Indians*, London: Macmillan, 1978.

²⁷ Neil Rennie, *Far Fetched Facts: The Literature of Travel and the Idea of the South Seas*, Oxford: Clarendon Press, 1998.

²⁸ Metraux, cited in Bernard G. Hoffman, ‘Account of a Voyage Conducted in 1529 to the New World, Madagascar and Sumatra, translated from the Italian with Notes and Comments’, *Ethnohistory* 10:1 (1963), p.59.

²⁹ In William Brooks Greenlee, *The voyage of Pedro Alvares Cabral to Brazil and India, from contemporary documents and narratives, translated by William Greenlee*, London: Hakluyt Society, 1938, p.29.

³⁰ Williams (1991).

³¹ Judith Shapiro, ‘From Tupa to the Land Without Evil: the Christianization of Tupi-Guarani Cosmology’, *American Ethnologist*, 14:1 (1987), p.128.

³² Richard R. Beeman, ‘Labour Forces and Race Relations: A Comparative View of the Colonization of Brazil and Virginia’, *Political Science Quarterly*, 86:4 (1971), pp.609-36.

the Spanish American possessions. Over the next thirty years, European contact with Brazil was minimal, consisting mainly of small parties of French and Portuguese traders in brazilwood, the first Brazilian export commodity. The brazilwood enterprise required labour and food, and both were supplied by the Indians willingly in exchange for trade goods,³³ especially iron in the form of knives and axes. The relative ease with which these exchanges took place can be attributed to the fact that, with the caveat above, they approximated to the pattern of existing trade relations between Indian groups, who exchanged fish, shellfish and agricultural produce for wild foods, feathers and other products extracted from the forest. As in South and Southeast Asia,³⁴ these extractive activities were well developed before European contact. The Portuguese established trading stations (factories) on the coast or on islands just offshore, where the logs and other forest products brought by the Indians could be collected; the French carried on their operations from ships as a safety measure against attack, not by the Indians but by the Portuguese. Trading from ships was also a useful way of keeping the crew from deserting to 'go native'. A number of French, English and Portuguese seamen did just this, taking native women and living with the Indians, but at this stage the indigenous culture was largely unaffected by the Europeans as traders' visits were relatively brief, lasting about three months, and their numbers small.

Portuguese settlement of the new colony did not begin in earnest until 1531-32, when Portuguese attention began to shift from the Asian arena to the Atlantic. The initial phase of colonisation was based on private enterprise and consisted of parties of Portuguese colonists, many under-capitalised, who were self-funding or backed by investors. The first land grants, all in the northeast, were organised following the *donatorial* system under a *donatario* or captain, in which land was divided into large sections running from the sea inland to the Torsedillas Line, providing each section with a variety of land and sea resources. Although twelve grants were made, only eight of the original captaincies were occupied: Tamaraca, Pernambuco, Bahia, Ilheos, Porto Seguro, Espirito Santo, Parahyba do Sul and Sao Vicente. The *donatorios* occupied the land on the King's behalf, but within it they had full political and economic control, including the right to sublease parts of the captaincy for settlers to develop, and the right to control trade with the Indians within their captaincies, which led to considerable variation in administration and development. Within each, settlements of simple log and thatch buildings were established on the coast, at locations with good anchorage for ships. The trade in brazilwood continued while new sources of wealth were sought. Few of the settlers had arrived with any idea of what the land was like or the challenges before them, but it was generally assumed that if their supplies ran out before they were able to plant and harvest crops of the European cultigens they had brought with them, they could rely on the assistance of the Indians, as the first brazilwood traders had done, in exchange for goods.³⁵

The Brazilian colony was under considerable economic pressure from the outset, as many of the *donatarios* and their investors had staked all their assets on the enterprise and needed to see a good and quick return. If Brazil was not productive of gold, silver and spices, they hoped it could at least generate agricultural commodities. Unfortunately for them, unlike the Spanish in Yucatan and the Andes, the Portuguese colonists on Brazil's northeast coast did not encounter land suitable for immediate cultivation in the European manner, or an

³³ Alexander Marchant, *From Barter to Slavery: The Economic Relations of Portuguese and Indians in the Settlement of Brazil 1500-1580*, Baltimore: The Johns Hopkins Press, 1942a.

³⁴ Katherine A. Spielman and James F. Eder, 'Hunters and Farmers: Then and Now', *Annual Review of Anthropology*, 23 (1994), pp.303-23.

³⁵ Marchant (1942a), p.69.

indigenous tradition of communal agriculture linked to a larger system.³⁶ The soil was not as rich as the lush vegetation had suggested, and the tropical conditions of the northeast did not suit key European plants, particularly cereals such as wheat, the basis of the European diet. Nor did the climate suit the constitutions of the colonists. Digestive ailments were common,³⁷ and these were often exacerbated rather than relieved by imported foodstuffs that had deteriorated due to poor conditions during transportation and storage. The heat and humidity made it difficult to keep foods from spoiling, and ants and other insects ravaged stored supplies. In any case, imported goods were scarce, expensive and uncertain of supply.

It is a curious feature of colonial and imperial studies that food security and details of food production, preparation and consumption, which contemporary documents show was the overriding concern of settlers' daily lives and the motivation for many of their relations with Amerindians and slaves, has been consistently overlooked or minimised in academic and economic histories of the period. A preoccupation with food and the dread of scarcity and famine runs through all the early European accounts of New World colonisation generally, beginning in Brazil with those of the brazilwood traders. As they became more familiar with the Tupi, the colonists grew scornful of their provisioning methods and practices, which were in fundamental opposition to their own. The colonists could not understand why the Tupi continued to hunt and gather rather than adopt a settled way of life; why they did not have proper fields but used rude clearings for their plantings; why they seemed to have no domesticated beasts for agricultural work or to serve as a food supply although they kept jungle animals and birds as pets; and why they had no thoughts of building up food surpluses, but were content to produce food as needed.³⁸ Some Tupi foods such as grasshoppers and snakes, the colonists considered inedible; the water was often bad, all the forest fruits were unfamiliar and they were particularly suspicious of cassava, whose poison they feared. Soon, however, the early settlers were obliged to adopt Tupi foodstuffs in order to survive. Ironically, the indigenous plant upon which the Portuguese colonists became most reliant was cassava. The root mirrored the early colonial experience; a potential source of plenty that had bitterness and poison at its heart.

One of the first detailed accounts by a European of Tupi cassava cultivation, processing and cookery based on close observation was given by Hans Staden, a German who was taken captive by the Amerindians in 1550. His description is quoted at length as it provides point of reference for later comparisons.

They use the roots in three ways. First they rub them against a stone and reduce them to small crumbs, after which they press out the juice with a thing made of palm branches, called *Tippiti*. When the crumbs are dry, they pass them through a sieve and make them into thin cakes. The utensil in which they dry the meal and bake it is made of burnt clay, shaped like a large dish.

They also take the fresh roots and soak them in water until they are rotten after which they place them over the fire and smoke them until they are dry. This dried root they call *Keinrima* and they preserve for a long time. When they want to use it they pound it in a mortar made of wood so that it becomes white like white meal, and from it they make cakes called *Byyw*.

³⁶ Schwartz (1978).

³⁷ Gilberto Freyre, *The Masters and the Slaves, translated from the Portuguese by Samuel Putnam*, revised second English language edition, New York: Alfred A. Knopf, 1966, p.52.

³⁸ Stuart B. Schwartz, *Sugar Plantations in the Formation of Brazilian Society in Bahia, 1550-1835*, Cambridge: Cambridge University Press, 1985.

Again they take rotten mandioca before it is dried and mix it with the dry and the green roots. From this they make a dry meal which can be kept for a year or eaten at once. This meal they call *Vy-than*.

They make also meal from fish and meat in this manner. They roast the flesh or fish in the smoke over the fire until it becomes quite dry. Then they pull it to pieces and dry it again over the fire in pots called *Yneppaun*. After this they pound it small in a wooden mortar and press it through a sieve, reducing it to powder. This keeps for a long time, for they do not salt their fish or meat. This meal they eat with the root-meal, and it is quite pleasant to the taste.

There are many tribes of savages who eat no salt. Some of those among whom I was a prisoner ate salt, which they had seen in use among the Frenchmen who traded with them...but the majority of the savages eat no salt. When they boil anything, whether fish or flesh, they generally put green pepper with it, and when it is well cooked they take it out of the broth and make of it a thin mixture which they call *Mingau*, and they drink it out of gourds which they use for vessels.³⁹

Cassava in the Early Colonial Period

Historians of Brazil have noted the scarcity of detailed accounts of economic relations between settlers and Amerindians in the colony's first years.⁴⁰ It is clear, however, that many of the first colonists – possibly not fully aware that Brazil had no mineral sources of easy wealth – were not committed to hard and sustained work,⁴¹ and quickly became reliant on the Amerindians. Supplies had not lasted as long as had been expected, and the crops settlers were familiar with and might have cultivated themselves would not grow in tropical terrain. Additional pressure on the settlers' time and attention arose from the need to produce profitable exports as soon as possible, and the only candidate was sugar, which called for more labour than they had foreseen or were willing and able to provide themselves. Therefore, instead of developing new methods of self-provisioning, for which they were in any case ill-prepared, they relied on the Amerindians to provide food. Initially the Amerindians supplied them with bags of prepared cassava flour, fruit and game. The colonists then prevailed on the Amerindians to clear land for the *fazendas*, where sugar would be cultivated.⁴² Initially, the Amerindians' labour was voluntary, and provided in return for goods, as the food provisions had been. Wishing to make their food supply more secure, the settlers then got the Amerindians to lay out and maintain garden clearings called *rocas* near to the settlements. The principal crop grown in the *rocas* was cassava; once mature the cassava had to be processed and then cooked, both traditionally the work of Amerindian women.

Women's labour is said to be invisible even now, and no more so than in colonial Brazil where morality was instrumental in obscuring their presence and importance to the colonial enterprise of Amerindian women. The industry of Tupi women, as of Amerindian women generally, was commented upon by early visitors. The Capuchin missionary Claude de Abbeville noted that Tupi women "had to prepare everything necessary for food", and also

³⁹ Hans Staden, *Hans Staden: The True Story of His Captivity 1557, Translated and edited by Malcolm Letts with an Introduction and Notes*, London, George Routledge, 1929, pp.137-9.

⁴⁰ Schwartz (1978 & 1985); and Barickman (1995).

⁴¹ Beeman (1971).

⁴² Marchant (1942a); and B. J. Barickman, "A Bit of Land Which They Call *Roca*": Slave Provision Grounds in the Bahian Reconcavo, 1780-1860', *The Hispanic American Historical Review*, 74:4 (1994), pp.649-87.

had to maintain the household.⁴³ Tupi women were called upon to provide these services to the colony's settlers who were mainly male. In the virtual absence of European women, liaisons between settler men and Amerindian women was part of the life of the colony from the outset. It was this concubinage, along with the reported traditional practices of the Amerindians, the questionable backgrounds of some of the settlers and a general laxity of behaviour that resulted from being beyond the direct control of church and state that led people in the Portuguese homeland to regard Brazil as a kind of immoral Purgatory,⁴⁴ and also led to certain aspects of colonial life being incompletely recorded, particularly economic and domestic relations with the Amerindians. The early accounts rarely included a description of Amerindians at work; it is as though the food that came to table had been prepared by invisible hands. This moral eclipse and literary denial of the Amerindians' importance in the daily life of the early colonists can also be seen as an example of the cultural imperialism of Western notions of gender. As in North America,⁴⁵ the high value and public esteem accorded to the productive activities of women in Amerindian societies was quickly replaced in Brazil by the relegation of Amerindian women and their work to the private and cloistered domestic arena.

Brazilian Foodways, Cassava and the Colonists

With no realistic alternative, the colonists consumed the cassava that the Amerindians initially provided in the form of *farinha* (flour), supplemented with other foods the Amerindians gathered, hunted or fished for them. Forest fruits were usually eaten raw, and forest game cooked very slowly over a fire in a technique that combined grilling with smoking. Smoking rather than salting was their way of preserving meat and fish. Accounts by travellers and colonists clarified and expanded on Staden's description of Tupi cassava preparation. In the most common method, the roots were soaked in water for several days, often until they fermented, in order to soften the thick bark-like skin sufficiently to allow it to be removed. The peeled tubers were then pounded in a trough, the tough fibres were removed, and the pulp was squeezed or pressed to extract moisture and prussic acid. Grating was an alternative method to pounding. Tapioca was made from the starchy residue that collected at the bottom of the liquid from the pressing. After being soaked to remove impurities, this fine and pale meal was dried and crumbled. Light in weight, it was used as 'war *farinha*',⁴⁶ a form of nourishment easily carried on war expeditions, like the pemmican (pounded dried meat and berries) and parched corn of North America. Cassava flour (*farinha*), heavier than tapioca, was made from the pulpy meal from which tapioca-bearing liquid had been extracted. The mealy cassava flour was dried by toasting over a fire, then stored until it was eaten, commonly in the form of *mingau*, a gruel of *farinha* mixed with water, to which other ingredients such as dried fish and meat, cashew or other nuts and fruits such as *acai* were sometimes added. The dried meal could also be eaten plain, like couscous. The tapioca was used to make wafers and cakes called *beiju*. A common way of taking nourishment, appropriate to the tropical heat, was in the form of starchy drinks, fermented and intoxicating to differing degrees, as had been noticed by Staden.⁴⁷

⁴³ Laura Fishman, 'Crossing Gender Boundaries: Tupi and European Women in the Eyes of Claude de Abbeville', *French Colonial History*, 4 (2003), pp.81-98.

⁴⁴ Elizabeth Anne Kuznesof, 'Sexuality, Gender and the Family in Colonial Brazil', *Luso-Brazilian Review*, 30:1 (1993), pp.119-32.

⁴⁵ Goodman-Draper (1994), p.44.

⁴⁶ Balée (1994), pp.70-1.

⁴⁷ Staden (1929).

No other European colony in the New World or elsewhere relied on cassava as its dietary staple. The fact that the Brazilian colonists were eating a root that was both poisonous and so peculiar in appearance that the flour made from it became known as *farinha de pao* – flour of wood - invited ridicule from Portuguese in the homeland as well as from Portugal's rivals. The English adventurer and explorer Richard Hawkins noted with amusement in 1593 that it was “the bread of Brazil”,⁴⁸ while the English botanist Joseph Banks scoffed “they call [it] *farinha de pao* or wooden flour, a very proper name for it which indeed tastes more like powdered chips than anything else”.⁴⁹ However, as prepared by the Amerindians, the colonists discovered that cassava had many desirable qualities. It was easily digestible, soothing and pleasant to eat, stored well and could be made quickly. The settlers were struck by the many different ways in which the Amerindians knew how to prepare cassava, similar to the many ways in which maize was prepared in North America,⁵⁰ demonstrating that a single staple was no barrier to variety. Among the Portuguese, many came to prefer cassava, even when supplies of wheat became more readily available. Gabriel Soares de Sousa, sugar planter and miller and author of a noted account of early colonial Brazil, wrote:

I still say that *manihot* (cassava) is more wholesome and better for you than good wheat, for the reason that it is more easily digested, and in proof of this I would cite the fact that the governors Thome de Sousa, D. Duarte and Mem de Sa did not eat wheat bread in Brazil because they found that it did not agree with them, and many other persons did the same.⁵¹

Prepared as a *mingau* with salt, water and pepper, settlers found cassava was all that was needed to sustain life.⁵² Its very success proved to be the true poison in the cassava, from the Tupi point of view.

Cassava's reliability as a crop and the fact that it made agricultural diversification unnecessary facilitated the growth of the fledgling sugar enterprise. As sugar activities expanded, the original large *donatarios* began to be parcelled out among settlers, to grow sugar for the Portuguese export trade.⁵³ When the first governor of Brazil, Thome de Sousa, arrived in 1549, he brought a thousand new settlers with him. Increasing economic pressures and growing numbers of settlers meant that the colonists required more food and labour from the Amerindians, who became progressively less willing to supply them. The French, who were attempting to establish a foothold in Brazil and who continued to ship brazilwood from the coast when they could elude the Portuguese coastal guards, offered the Tupi better rates of pay and working conditions, but in any case the work had become onerous. The Tupi were now realising the full implications for them of permanent European settlement, compared to the brief visits of the brazilwood traders. It was at this point that already-strained barter practices broke down and the Amerindian and European systems of value came into direct conflict.

As happened in the Pacific, closer acquaintance between colonists and indigenous peoples resulted in darkened mutual perceptions. For the settlers, growing awareness of Tupi

⁴⁸ Cited in Greenlees (1938).

⁴⁹ Cited in J.C. Beaglehole (ed), *The Endeavour Journals of Joseph Banks*, London, Angus & Robertson (1962), p.183.

⁵⁰ Usner (1992).

⁵¹ Cited in Freyre (1966), p.126.

⁵² Manoel Pinto de Aguiar, *Mandioca – pao do Brasil*, Rio de Janeiro: Civilizacao Brasileira, 1982, p.30.

⁵³ Alexander Marchant, 'Feudal and Capitalistic Elements in the Settlement of Brazil', *The Hispanic American Historical Review* 22:3 (1942b), p.493.

cultural practices notably cannibalism, the exact nature of which is highly contested;⁵⁴ a penchant for inter-tribal warfare; and what was seen as unbridled sexual license, altered initial impressions. From children of nature, the Tupi and other tribes were transformed in the eyes of many Europeans into ‘heathen savages’, a re-envisioning that was used to justify subsequent events. As relations worsened, the Amerindians withdrew supplies of food, leading to shortages and then famine. Colonists raided Amerindian settlements to steal food, and Amerindians attacked European settlements demanding the return of their land. Short of food and unable to expand their agricultural activities, colonists began to enslave Amerindians to work their land and provision them. Portuguese slave traders harried the coast in search of slaves, and wars broke out between the Amerindians and the colonists that continued for many years. These hostilities and increased contact with Europeans were ultimately disastrous for the Tupi and other contact tribes, who suffered the cultural, epidemiological and military onslaught common to early-contact scenarios. While numbers are contested, one source estimated that from a population of 2.4 million in 1500, the Tupi were reduced to 800,000 by 1870, a reduction of two thirds.⁵⁵

By 1549, the year that the Jesuits arrived in Brazil and only eighteen years after the arrival of the first Portuguese settlers, Amerindian slavery was firmly established.⁵⁶ In that same year, private enterprise and the old *donatario* system was replaced by royal government, which began to regulate labour more systematically and enforced Amerindian slavery through a variety of means as part of a new imperative to transform the still-struggling colony into an export economy based on sugar.⁵⁷

To escape slavery or unwanted labour even if paid, many Amerindians fled into the jungle. The Amerindians who remained behind found themselves caught between the competing interests of colonists and the church, as often happened in new colonies. Both groups, however, required the Amerindians to provide labour and produce food, the essential foundation for the secular and spiritual exploitation of Brazil. The missionaries were against Amerindian slavery, but for what they deemed to be the Amerindians’ own good, they kept them under a regime so strict they might as well have been slaves. Instead of relying on the goodwill of the Amerindians, the Europeans now aimed to control both people and product, employing their accustomed techniques of “enforced cultural assimilation and close supervision”.⁵⁸ As the Jesuit Father Manoel Nobrega wrote to the governor Tomé de Sousa in 1549,

You must make laws that prohibit them (the Amerindians) from eating human flesh and going to war without the permission of the governor; that permit them only one wife; that oblige them to wear clothing...; that outlaw their sorcerers...; that make them live in one place without moving around.⁵⁹

In addition to converting the Amerindians, the Jesuits’ objective in coming to the colony was to end the perceived moral laxity among the colonists; both were to be achieved through redemptive hard work. Cassava now became the object of moral opprobrium, both from the

⁵⁴ Neil L. Whitehead, ‘Hans Staden and the Cultural Politics of Tupi Cannibalism’, *Hispanic American Historical Review*, 80:4 (2000), pp 721-51.

⁵⁵ John F. Richards, *The Unending Frontier: An Environmental History of the Early Modern World*, Berkeley: University of California Press, 2003. See also Whitehead (2000).

⁵⁶ Marchant (1942a), p.73.

⁵⁷ See Jose Eisenberg, ‘Antonio Vieira and the Justification of Indian Slavery’, *Luso-Brazilian Review*, 40:1 (2003), pp.89-95.

⁵⁸ Barickman (1995), p.336.

⁵⁹ Leite II 66:11, cited in Shapiro (1987), p.128.

Jesuits and from the colony's investors and those responsible for its governing. From their point of view, the problem with cassava was that it was too easy. It could be stuck in the ground, and ignored until it had matured, when it simply had to be pulled out or left underground until required; a small plot of cassava could feed a family of six for a year. This ease encouraged what was perceived as 'idleness', 'laziness' and a lack of enterprise, both among the Amerindians and among the settlers who were reliant on Amerindian labour. As one early colonist wrote of Brazil in the 1570s, if a colonist had slaves:

...he then has the means for sustenance, because some fish and hunt, and others produce for him maintenance and crops, and so little by little the men grow rich and live honourably in the land with more ease than in the Kingdom.⁶⁰

Two or three Amerindians were sufficient to maintain a European family, and in the enervating conditions of the colony, many of the smaller settlers opted for the easy life, and did not exert themselves in the development of the sugar industry to the extent that investors wished. Cassava was not 'easy' from the viewpoint of the Amerindian and mestizo women who had to prepare it, but this was overlooked. The Jesuits always strove to establish varied horticulture, even against overwhelming odds, as a moral practice to accustom Amerindians to the discipline of hard and systematic work, and to set an example for settlers. They disapproved of the intoxicating drinks made from cassava. No doubt, had it been possible, they would have forbade the cultivation and use of cassava altogether. However, despite their persistent efforts to grow wheat on the northeast coast of Brazil, eventually even the Jesuits' sacramental wafers were made of cassava flour.

Tupi labour proved insufficient to the colony's needs due to death, disinclination and absconding. This led increasingly to the importation of slaves from Africa, a trade that Portugal dominated for some two hundred years from about 1500 onwards. During much of that time, cassava flour was the staple provision of the slave ships and bags of cassava flour was one of the currencies with which slaves were purchased in Africa.⁶¹ By 1584, the population of the colony was given by Barão do Rio Branco in *Informações e Fragmentos* as 57,000, for which the following breakdown was provided: whites, 25,000; 'tame' Amerindians, 18,500; and African slaves, 14,500.⁶² This can be regarded as the 'official' account; it does not mention people of mixed Amerindian and white descent, 'uncivilised' Amerindians, escaped African slaves, or people of mixed African and Amerindian descent, all of whom were emerging as groups within the total population, another example of 'editing out'. However, it does give an idea of the growing size of the population who were now reliant on cassava. In the division of labour between Amerindian and African slaves in the early period, the Africans worked on the sugar, and the Amerindians grew and processed cassava, in order to feed the Africans Europeans and themselves.

By the early seventeenth century, cassava had become established as the main sustenance of all of the people of Brazil – colonist, Amerindian and African alike – as made clear in *The Great Things of Brazil*, Ambrosio Fernandes Brandao's 1618 description of life in Brazil, a work which has been compared to the writings of Captain John Smith on the Virginia colony of North America and, like that account, was intended to interest potential settlers. Taking the form of a dialogue, this account allows Brandao, through the character of

⁶⁰ De Gandavo, cited in Metcalfe, Alida C., 'The *Entradas* of Bahia of the Sixteenth Century', *The Americas*, 61:3 (2005), p.373.

⁶¹ Hawkins, cited in Greenlee (1938).

⁶² In Alan K. Manchester, 'The Rise of the Brazilian Aristocracy', *The Hispanic American Historical Review*, 11:2 (1931), pp.147-8.

‘Brandonio’ to play advocate to the scornful ‘Alviano’, whose role is to express reservations that Brandao can then overcome:

Brandonio: The foodstuffs with which the inhabitants of Brazil – white men, Indians and Guinea slaves – sustain themselves are several, some three, and among them manioc occupies first place. This is the root of a stalk that is planted by sticking it into the ground. Within a year it is fully grown and can be eaten. Since this foodstuff is made from a woody root, in Portugal they call it “wood meal”.

Alviano: That is so, and when people want to heap scorn upon Brazil, the main thing they bring up against it is that there they eat meal made from wood.

Brandonio: Well, that meal is an excellent food and is so good that it deserves to be put in second place, right after wheat, for it surpasses all the other foods that are used throughout the world.⁶³

After describing the way in which cassava is processed, Brandao continues:

Brandonio: That is the way it is made into meal. But to make it really good they have to add tapioca to it, and the more tapioca they put in, the better the meal is.

Alviano: And what is that tapioca, which you say they add to the meal?

Brandonio: It is made from the water or juice that was pressed out of that same manioc. After it has stood in a bowl, a very white sediment forms on the bottom, like the flour in Alentejo. After the water on top has been thrown away, what is left is called tapioca, and it is this that I said they mix with the manioc meal. And for starched neck ruffs and other such things, it is better than any starch they make in Portugal...But there is a remarkable thing about this: the water or juice that is thrown away after the tapioca has (formed) is a very powerful poison. If any man or beast eats or drinks it, he dies without hope of cure.⁶⁴

Assuring Alviano that, when properly treated, cassava is harmless, Brandonio goes on to describe the many ways of preparing it. Fermented, then baked, it is greatly liked by “well-born and refined persons”. It can be made into a tapioca wafer called *beiju*; the meal can be dried and smoked to make *carima*. The flour can be made into a mush with chicken or fish broth, or with sugar: “Both of these dishes have a marvellous flavour and are very nourishing. They also give a similar kind of mush to sick people, for whom it is very good; and they call that *mingau*”.⁶⁵

The development of Brazilian cuisine and the role of cassava in the process – particularly in the sugar-producing centres of Bahia and Pernambuco – parallels the transformation of indigenous foods in other parts of the world under the influence of Empire, to which Brazil’s history has added certain unique features. In the discovery phase of Empire, new foods are described with exaggeration or inaccurately, and the indigenous foodways are not understood. In the next phase, early European settlers – more often in tropical climates with which they are unfamiliar – are forced to adopt indigenous foods, which they immediately attempt to adapt or ‘civilise’.

⁶³ Frederick Holden Hall *et al.*, *Dialogues of the Great Things of Brazil, attributed to Ambrosio Fernandes Brandao*, Albuquerque: University of New Mexico Press, 1987, p.193.

⁶⁴ Hall *et al.* (1987), pp.195-6.

⁶⁵ Hall *et al.* (1987), p.197.

Food has always been part of the ‘civilising process’ of empires,⁶⁶ a form of secular conversion. Describing the way the Romans introduced bathhouses, elegant banquets and other luxuries to the conquered Britons, the historian Tacitus wrote: “The Britons, who had no experience of this, called it ‘civilisation’, although it was part of their enslavement”.⁶⁷ The religious conversion of indigenous peoples involved parting them from their traditional culture. This included introducing new foods – not an easy option in early colonial Brazil – as well as new ways of eating and preparing indigenous foods. Just as native peoples had to be parted from their former lifeways in order to improve them, the colonists felt obliged to hang on to theirs, in order to maintain their identity and superiority. As with the Romans, perpetuating the culture of the homeland in the colonies was a first principal of Empire, and this showed itself in food. To Europeans, ‘bread’ was a powerful symbol of superiority, the defining artefact of civilised life, an emblem of the triumph of culture over nature. In addition, it was a vital element in Christian belief and iconography: “the wheat wafer at Mass, the priest’s blessing over it, its transubstantiation into the body of Christ, its ritual consumption by the faithful and its magical power to cleanse from sins”.⁶⁸ All these were meaningful to the first settlers in Brazil, who held fast to their European identity even as they clung to the edges of an unknown land that threatened to engulf them. What particularly appealed to the first colonists about cassava was that it could be made into bread, and it was this usage that they particularly encouraged the Amerindians to take up. The tremendous variety of pastries and breads that use cassava flour in Brazilian cookery today – favourites such as cheese bread (*pao de queijo*) and cassava cakes (*bolo de mandioca*) – are a legacy of this early phase.

However, it was not possible to live by bread alone, even cassava bread. As Freyre has described, it was through the influence of Amerindian women cooks and domestic servants that Amerindian foodways became part of Brazilian colonial life.⁶⁹ The comforting and restorative qualities of *mingau* and *beiju* as described by Brandao – the same Amerindian foods described by Staden – were quickly appreciated and appropriated, both by adults and later on by the children of the Big House and less wealthy establishments who grew up, as did similar children in other empires, surreptitiously eating native foods ‘behind the skirts’ of their native nursery maids and house servants, with whose children they played. In households comprised of a European man and an Amerindian woman, the influence was even more direct and swift. By the second and certainly the third generation, colonial children had become thoroughly acculturated to the locality of the colony, through food. One colonial spoke nostalgically of his family’s Amerindian cooks:

they were familiar with processes of fermentation by which they prepared excellent preserves that were very good for weak stomachs; among others, I will mention the *carima* cakes (sweet cakes made of manioc flour) upon which almost all of us were nourished during our infancy.⁷⁰

There was a whole repertoire of colonial *beiju* or tapioca dishes that were identifiably Amerindian in origin such as the *curada*, a thick moist tapioca cake with small pieces of raw cashew nuts, but cuisine also developed, and instead of the polarities of ‘European’ and ‘Indian’, new dishes evolved that contained elements of both and also incorporated new ingredients and methods. Freyre singled out one such dish for special attention:

⁶⁶ Norbert Elias, *The Civilising Process*, Oxford: Blackwell, 1994.

⁶⁷ Tacitus Cornelius, *Agricola*, Oxford: Oxford University Press, 1999.

⁶⁸ Brandes, Stanley, ‘Maize as a Culinary Mystery’, *Ethnology* 31:4 (1992), p.335.

⁶⁹ Freyre (1966).

⁷⁰ De Magalhaes, cited in Freyre (1966), p.127.

In coconut tapioca, known as ‘dipped’ (*molhada*) – spread out upon an African banana leaf, powdered with cinnamon, and seasoned with salt – is to be perceived the truly Brazilian amalgam of culinary traditions: native manihot, the Asiatic coconut, European salt, all fraternizing in a single and delicious confection upon the same African bed of banana leaves. It is my opinion that the northeast – that is to say the zone of Pernambucan influence – and, farther to the north, Maranhao are the two points of most intense cultural fraternization, a fraternization that is materialized in the regional cuisine....⁷¹

In Brazil the Portuguese were never able to impose a template of the Old World on their new surroundings, as the English did on the Atlantic seaboard of North America. The climate and terrain were too different and demanding, and the Portuguese settlers in Brazil ‘naturalised’ to a far greater extent than happened in other Empires, developing distinctive modes of architecture, dress and cuisine – both elite and non-elite – that took on an even stronger identity after Brazil declared independence from Portugal in 1822. Colonial born and bred, Brazil’s new aristocracy were antagonistic to much that was Portuguese by origin or tradition.⁷² Tapioca and cassava-based dishes became a symbol of the new Brazil and the Brazilians – from being a source of shame or embarrassment, the *farinha de Pao* became an object of pride. One common saying was: ‘We Brazilians do not need [wheat] bread’. The *farinha* houses, essentially unchanged since early times except for the occasional addition of a European wheel for crushing, were proudly pointed out to visitors, and the following passage gives insight into attitudes and perceptions in the mid-nineteenth century:

We follow, at a distance, to the little open shed where *farinha* is prepared. Half a dozen women and boys are cleaning the mandioca as it is brought in...the roots are piled in a great wooden trough, the half of a hollowed *itauba* log; here they are grated on a board covered with sheet copper full of nailholes. Francisca in her *vesta* dress may be pretty; but as she stoops over the grater with a root in each hand, she affords a too-powerful reminder of that detestable northern machine – the scrubbing board. Her bare arms and black dress are spattered with the whey-like juice; her rebellious hair is just falling away from the confining comb; her brown face, glowing with perspiration, gives the lie to our ideas of Indian laziness.⁷³

In northeast Brazil in the imperial period, everyone ate cassava, but not in the same way or quantities. The refined cassava preparations of the Big House and the metropole bore little relation to the gruels boiled up on the plantations of old, or today in the *favelas*. Yet cassava held Brazilians together, even as its different uses marked the distinctions between them. Of course, cuisine evolved as Brazil developed;⁷⁴ in the south, which was colonised later but where maize could be grown, it was used much as cassava was in the northeast. Beans and rice were added to the diet, and as commerce developed the population and cuisine polarised. The wealthy ate more imported foods including wheat, while the poor ate more cassava in the north and more maize in the south. There are now distinctive regional cuisines in Brazil, but because the northeast was the first to be colonised in the age of Empire, its foodways and cassava are associated with the origins of the nation. Still today, Brazil is the

⁷¹ Freyre (1966), p.129.

⁷² Manchester (1931), p.146.

⁷³ Herbert H. Smith, *Brazil: The Amazons and the Coast*, New York: Charles Scribner’s Sons, 1879, pp.381-2.

⁷⁴ Warren R. Fish, ‘Changing Food Use Patterns in Brazil’, *Luso-Brazilian Review*, 15:1 (1978), pp.69-89.

largest producer of cassava and tapioca in the world, and most of it is consumed internally, by the home market.

Cassava and the Export and Internal Markets in Brazil

The transformation of Brazil into a commercial plantation economy has been too well documented to require further rehearsal here, but two things have been largely overlooked until recently. First, the extent to which the export system was reliant on the internal market in cassava; and second, the complexity of the internal market, which went far beyond the simplistic two-class system that was long taken for granted. These lacunae have now been addressed by a number of pioneering studies that have overcome the considerable difficulties of missing and incomplete records; terminological difficulties such as the precise difference between freemen and tenants; variation between plantations; and in many cases the absence of women from enumerations. Writing against the ‘monoculture, latifundia and slavery’ approach to Brazilian history and focusing on Bahia between 1780 and 1860, Barickman demonstrated the existence and operation of a well-developed urban and rural internal market for essential foodstuffs, especially cassava flour.⁷⁵ Masters purchased cassava flour for slaves’ rations (*tasmína*), or allowed slaves to grow cassava themselves on garden plots or *roca*. In his study of Bahia plantations 1550-1835, Schwartz also threw light on the cassava consumption that underlay the operation of the plantations, giving the standard slave ration in the mid-eighteenth century as one bushel of cassava *farina* per slave every forty days, supplemented by salt fish and salt meat, and sometimes sugar and sugar cane spirit (*cachaca*), by-products of the plantation.⁷⁶ Anything the slaves could catch, gather or acquire by other means was added to their meals. This was important because eating cassava to the exclusion of other foods could lead to malnutrition. When the Amerindians were kept in permanent settlements without access to the forest and its products, their health declined. The high salt content of the diet as a result of salted meat and fish was also harmful. Because cassava was so easy to grow, there was always the temptation to over-rely on it.

Joao Fragoso showed that in the nineteenth century the value of the large internal market for food, in which cassava was the largest single commodity, often exceeded the value of the export market.⁷⁷ Mattos de Castro’s study of Rio de Janeiro province in the second half of the nineteenth century focused on the lives of poor free people, such as domestic servants, day labourers and artisans. Even after the formal cessation of slavery in 1888, cassava remained the basis of the everyday Brazilian economy and poor free people were able to scrape a precarious existence as small-scale farmers of cassava or as cassava processors, paying for the goods they purchased at general stores with bags of *farinha*, which were then traded on into the networks of the internal economy.⁷⁸ Willems’s study of the *capitania* of Sao Paulo between 1822 and 1824 revealed a highly differentiated society comprised of active local systems in which large sectors of the population “had developed a viable relationship with their habitat almost without participating in the existing money economy”, to which

⁷⁵ B. J. Barickman, *A Bahian Counterpoint: Sugar, Tobacco, Cassava and Slavery in the Reconcavo, 1780-1860*, Stanford: Stanford University Press, 1998.

⁷⁶ Schwartz (1985), p.138.

⁷⁷ In Stuart B. Schwartz, ‘Somebodies and Nobodies in the Body Politic: Mentalities and Social Structures in Colonial Brazil’, *Latin American Research Review*, 31:1 (1996), p.115.

⁷⁸ Hebe Maria Mattos de Castro, ‘Beyond Masters and Slaves: Subsistence Agriculture in Brazil in the Second Half of the Nineteenth Century’, *The Hispanic American Historical Review*, 68:3 (1988), pp.461-89.

cassava growing was central; in some of these locales, the system continued well into the twentieth century.⁷⁹ Taken together, these studies show that:

historically, in Brazil...provisioning and export agriculture were intimately related in a complex, multi-dimensional and historically changing relationship. They were, in effect, two faces of the same coin.⁸⁰

This is not to say that the internal and export markets always articulated harmoniously. As in the early days of the colony, planters were reluctant to sacrifice good growing land and labour to the cultivation of food, especially cassava. In Bahia, official edicts were issued in 1688 and again in 1701 ordering planters and slave merchants to set aside land to plant cassava to supply their plantations and slave ships, but these directives were consistently ignored. Planters and merchants preferred to purchase supplies covertly or let slaves grow their own food, thereby exposing themselves to periodic shortages and price profiteering, and also ensuring the operation of a hidden two-tiered system. The cultivation of cassava was undemanding and it did not even require good land to grow well, but these very things seemed to count against it in planters' eyes. The planters considered sugar 'the best agriculture in the world' and cassava 'the worst', demeaning to cultivate themselves even though they were reliant upon it.⁸¹ This is a paradigm example of cultural attitudes impacting on commercial decisions.

The above pioneering works in a field in which much remains to be done establish the vital importance to Brazilian and imperial trade of this hidden commodity. The endless peeling, pounding, grating, pressing, sieving and toasting of tapioca and cassava underpinned Brazilian economy and society from first contact. Instead of the familiar image of slaves labouring on sugar and tobacco plantations, nourished who knows how, a far more complex picture is emerging of a highly differentiated society, many of whose members operated outside the formal economy. They were therefore invisible in economic terms with regard to official scrutiny and enumeration and their staple diet was a commodity that was also invisible since it was that was not exported but traded internally, often informally and covertly. My preliminary conclusion is that in Brazil the internal market operated, like the old frontier economies, as a system of cultural exchange and an arena of cultural interaction in an ethnically complex society where the decision not to enter into the formal money economy was a positive element in sociocultural identity. The way in which the planters despised yet were reliant upon cassava was an exact parallel of the way in which they despised but were reliant upon slaves. In Brazil, the internal market also offered opportunities for the emerging cosmopolitan population to perform and realise the astonishing range of social difference and identities embodied in Brazilian terms for mixed-race phenotypes.

While the importance of cassava and cassava flour is beginning to be appreciated, one cassava product remains ignored and unexamined. In areas where plantations failed or where they had never taken root, a small extractive economy based on *drogas de certao* or 'drugs of

⁷⁹ Emilio Willems, 'Social Differentiation in Colonial Brazil', *Comparative Studies in Society and History*, 12:1 (1970), p.33.

⁸⁰ Stuart B. Schwartz, *Slaves, Peasants and Rebels: Reconsidering Brazilian Slavery*, Urbana & Chicago: University of Illinois Press, 1992, p.66.

⁸¹ Schwartz (1992), p.85.

the wilderness' was operated.⁸² These products included cocoa, vanilla, sarsaparilla, urucum, cloves, musk, amber and ginger, as well as tapioca. With cassava production for the cities being undertaken on a large scale, and with plantations being self-sufficient or supplied locally, those outside the system (initially Amerindians and escaped African slaves, and later the offspring of unions between the two along with others) refined the premier grade of cassava – tapioca – as an income-producing product intended for the export market. It was through the drug/medicinal channels rather than through the main food export routes that tapioca was exported from Brazil.⁸³ There appears to have been only a small export of cassava flour, to Africa in the early days of the slave trade and to Portugal especially in times of wheat shortages there. Only tapioca became a commodity in Brazil's international export trade.

The Brazilian tapioca trade is poorly recorded, but its trajectory can be traced by a close reading of shipping manifests, and the culinary and other uses to which it was put abroad. It had reached England by the mid-eighteenth century, and until Britain was able to establish her own tapioca plantations in Asia, regular shipments of tapioca arrived at British docks, either direct from Brazil or trans-shipped from Portugal. Another important early tapioca trade partner was the Russian Empire, which sought friendly relations with Brazil in order to freely access Brazilian ports on the Atlantic stages of Russian trading voyages to the Pacific and Alaska. Russia imported Brazilian sugar, coffee, cinnamon and tapioca as luxury goods destined for consumption by the Russian nobility recently Europeanised by Peter the Great.⁸⁴

Cassava and Identity in Brazil

In a literal reading of 'food as history', it is possible to see foods as cultural markers, as signposts to acculturation and contributions to the country's culinary stratigraphy. As regards the former, in the 1860s, after the American Civil War, there was a movement among Southerners who had been on the losing side of the conflict, to emigrate to Brazil in order to continue to operate plantations worked by slaves, which was no longer possible in the United States. On arriving in Brazil, these elite emigrants who became known as the *Confederados* were struck by the difference between Brazilian practices and their own. In Brazil, they found, fields were usually worked with a hoe, not a plough; land was still cleared by burning; there were few roads with only ox carts for transportation; and land was rarely properly surveyed or protected by formal land titles. As had the first Portuguese settlers, the North Americans looked at the green country, marvelled at the quality of cane already produced under these conditions, and fully expected to transform the landscape with superior technology. Like the early Portuguese, they too were 'Brazilianised', working the muddy ground in bare feet, living in palm-thatched houses, and eating cassava of which, as one North American emigrant wrote, "we have already learned to love it".⁸⁵ A visit to another North American emigrant family in Brazil was described in this way:

⁸² Gomes (2002), p.71; also A. J. R. Russell-Wood, *A World on the Move: The Portuguese in Africa, Asia and America, 1415-1808*, Manchester: Cancarnet Press, 1992.

⁸³ Russell-Wood (1992).

⁸⁴ Russell H. Bartley, 'The Inception of Russo-Brazilian Relations (1808-1828)', *The Hispanic American Historical Review*, 56:2 (1976), p.221.

⁸⁵ Cited in Jose Arthur Rios, 'Assimilation of Emigrants from the Old South in Brazil', *Social Forces* 26:2 (1947); p.148.

We are in time for breakfast...so we are regaled with [dried] fish and mandioca meal ...farmer's fare as the Amazon goes – with plenty of fruit after it, and bowls of delicious drink made from the acid copo-assu [*cupuacu*] fruit.⁸⁶

The *Confederados* claim to have introduced a number of 'typically Southern' foods to Brazil including watermelons and pecans, and favourite dishes of Southern cuisine including biscuits and fried chicken, which they prepared in Brazil using cassava flour. By contrast, the Japanese who first came to Brazil as agricultural contract workers in 1908 initially managed to resist Brazilianisation; they did not use 'fire agriculture', were instrumental in popularising the use of the plough,⁸⁷ and enjoyed great success in growing tea.⁸⁸ Devoted to rice which they managed to grow in Brazil, substantially reducing the country's imports of it, the Japanese never adopted cassava as a staple, but the Japanese contribution to Brazil's cassava cuisine can be seen in cassava tempura, which is often served accompanied by a Japanese shiso cocktail – a mixture of *cachaca* (sugar cane spirit), green tea, lime juice and gomme syrup, garnished with an aromatic Japanese shiso leaf, or with a caipirinha cocktail using Japanese sake instead of the usual *cachaca*.

One dish has a special significance for all Brazilians. *Feijoada* is widely considered the national dish of Brazil, the embodiment of the history of the country and its people.⁸⁹ Consisting of a dark stew of beans and meat served over rice, it combines the foodways of the north and the southern meat-producing region. Eaten with ritual regularly, usually on Saturdays, by people of all classes, it is thought of as 'plantation food', connecting Brazilian consumers to their roots. In fact, the meat-rich *feijoada* of today bears little relation to the original plantation food of the days of slavery. In the south slave food usually consisted of dried meat boiled with beans. In 1880, British Consul in Rio reported to the Foreign Office:

this dried meat...cooked with the black bean in Brazilian-fashion forms a most nutritive and sustaining diet, and might be used with advantage in many countries where the high price of fresh meat takes away from the poor the power of purchasing it.⁹⁰

In the north, the dried meat was boiled with cassava meal. The contemporary *feijoada* uses beans, but it is always served with a sprinkling of toasted cassava flour on the top, the unique mark of its 'Brazilian-ness', a culinary baptism. This is not 'poor food' but a re-invented tradition, a romanticisation of poverty and of the period of Empire that gave rise to Brazil's cosmopolitan population.

Food can draw people together and consolidate group identity, but can also be an arena in which differences and conflicts are contested and sensitive aspects of history brought to the surface. In Brazil, the most contested and contentious of foodways is the Afro-Brazilian cookery of Bahia. The master/slave dichotomy that long dominated Brazilian studies, and the tendency to assume that 'slave' referred only to Africans although Amerindian slavery

⁸⁶ Smith (1879), p.146.

⁸⁷ Y. Fuji & T. L. Smith, *The Acculturation of Japanese Immigrants in Brazil*, Gainesville: University of Florida Press, 1959.

⁸⁸ Emilio Willems, 'The Japanese in Brazil', *Far Eastern Survey* 18:1 (1949), pp.6-8.

⁸⁹ Kathryn S.Ochs, *et al.*, 'Social Status and Food Preference in Southern Brazil', *Ecology of Food and Nutrition* 42:4 (2003), pp.303-24.

⁹⁰ Santos, Eduardo, *Prince of the People: The Life and Times of a Brazilian Free Man of Colour*, London and New York: Verso, 1993, p.65.

persisted through various forms of coercion long after it was formally outlawed in 1570,⁹¹ has drawn attention from the complex relationships between Amerindians and Africans in Brazil, which, as Schwartz has pointed out, is one of the least and understood aspects of the history of the Americas in general and of Brazil in particular.⁹² As enslaved groups, Africans and Amerindians had common cause, but as happened elsewhere in the Americas, Europeans fostered hostility and rivalry between them. Even today, Afro-Brazilians feel they are not considered 'as Brazilian' as the Amerindians and that their contribution to Brazil is overlooked and minimised. In response, they assert their Afro-Brazilian identity through cultural channels including a distinctive style of cookery associated with Bahia, which with Pernambuco is where most of the African slaves were originally domiciled. Afro-Brazilian Bahia dishes are distinguished by heavy use of palm oil, and by an ongoing debate about who 'owns' cassava. Cassava was taken to Africa from Brazil early in the slave trade and was already established as a food crop in many of the African regions from which slaves were taken when the trade was at its height. As a result, in the latter period African slaves arrived in Brazil with their own ways of preparing cassava, which they considered an African rather than a Brazilian plant. Tensions between Amerindian and African identities continue to be played out in the culinary arena, through arguments about what the 'right', 'real' or authentic way to prepare cassava is.

Summary

In Brazil, cassava supported, defined and produced successive populations in different ways. First a staple of Tupi life, a key part of their cosmogony and identity, it became a bartered good and then a commodity produced by the Amerindians for the Portuguese colonists. Shorn of the full range of its Tupi cultural meanings, cassava became the medium through which Amerindian foodways, technology and values entered colonial society, and vice versa. Cassava grown and processed by the Tupi enabled the colonists to grow sugar and enter the imperial trade network. The success of Brazilian sugar led to increased demands for labour which the Tupi declined to provide. Cassava was now blamed for Amerindian 'laziness', and became associated with 'idleness'. Expansion of the sugar business and a shortage of Amerindian labour led to the import of slaves from Africa, who became reliant on cassava in their turn. Russell-Wood, in his study of the Portuguese Empire, concludes that its greatest contribution to the world's demographic history was the movement of several million persons of African origin to America.⁹³ This could not have been accomplished without cassava. The conflict between planters' desire to plant as much land as possible with sugar for export and the need to cultivate cassava to feed slaves and labourers led to the creation and operation of a thriving 'hidden' internal market in cassava on which the imperial export trade in sugar and, later, tobacco relied. This internal market, a cultural as well as a commercial arena, was operated not by the planters but by Brazil's growing cosmopolitan population – the children of cassava and of Empire.

Brazil provides the earliest example of the emergence of cassava as a commodity. Imperial trade networks were the channels through which cassava later spread to Africa and to Asia where it influenced local and regional societies and networks in very different ways. The global cultural biography of cassava from first contact in Brazil to multiple sites in the present

⁹¹ Schwartz (1978), 44.

⁹²Stuart B. Schwartz, 'Blacks and Indians: Common Cause and Confrontation in Colonial Brazil', at www.yale.edu/glc/maroon/Schwartz.pdf 1995. Accessed August 2008.

⁹³ Russell-Wood (1992), p.220.

is a larger project on which I am currently working. At this early stage, however, even on the basis of the preliminary work presented here, the Brazilian case establishes a number of points for future reference.

First, it demonstrates the importance of a cultural approach, one that examines the networks of social relationships that operate within a commodity complex, and ‘relates the relationships of production to non-agricultural aspects of life’: it is this, as Friedland⁹⁴ emphasises, that distinguishes a commodity study from a commodity systems analysis, the latter being essential to disentangling the complexities of local, regional, global and imperial connectedness.

Second, it highlights the importance of the gender factor in constructing a complete picture of commodities. The division of labour along gender lines is worldwide, varying by degree and by historical period, yet classic economic histories are invariably histories of male commodity production that only give a part of the total picture, and only examine some of the total segments in any one commodity chain. Gendered labour remains particularly strong in South America, where in the contact period the traditional distinction is between men/hunting and women/agriculture-cooking. Grafted onto the Ibero-Hispanic tradition of cloistered women, this helped to obscure the importance of cassava to the maintenance of the community as a whole, and to the development of export production. Anthropologists are now re-evaluating gendered labour. In the case of Amazonian tribes, the hunting/cooking men/women distinctions, once seen as oppositional, are now seen as complementary components of a more complex societal whole,⁹⁵ and studies which valorise hunting at the expense of gardening, previously regarded as definitive accounts of the way Amazonian societies worked, are now considered to be partial and unrepresentative. As indeed are studies that valorise the importance of sugar in Brazil’s economy and society, and ignore the role of cassava. As the case of cassava in Brazil shows – demonstrated also in Barndt’s study of tomatoes as a commodity –⁹⁶ it is necessary to look at commodities from the viewpoint of both genders, and to examine all segments of commodity chains.

This in turn leads to the third point established in this preliminary study: the importance of ‘following the thing’ in uncovering all the segments in a chain. ‘Things’ have a stubborn materiality. The very ubiquity of cassava roots and cassava flour in Brazilian markets and homes demonstrates an importance that challenges any attempts to overlook or dismiss it and demands further investigation, while literally following the tuber from the field, through processing, distribution, marketing, preparation and consumption allows – indeed *forces* – the analyst to identify all the segments of a commodity chain, segments which ordinarily have been treated as invisible. ‘Following the thing’ also allows important considerations specific to particular commodities to arise from the commodity itself; all too often, commodity analyses begin with particular research problems, which can distort findings and overlook significant factors.

‘Invisibility’ is the fourth point raised in this initial survey of cassava in Brazil – what makes a commodity invisible or ‘hidden’? Concealment for reasons of legality, as in the trafficking in drugs, is not a consideration. Gender factors have been referred to above; in the

⁹⁴ William H. Friedland, ‘Agrifood Globalization and Commodity Systems’, *International Journal of Sociology of Agriculture and Food*, 12 (2004), pp.3-16.

⁹⁵ S. L. Heckler ‘Tedium and Creativity: The Valorization of Manioc Cultivation and Piaroa Women’, *Journal of the Royal Anthropological Institute*, 10:2 (2004), pp. 241-259.

⁹⁶ Deborah Barndt, *Tangled Routes: Women, Work and Globalization on the Tomato Trail*, Maryland: Rowman and Littlefield, (2002).

case of cassava, the crop itself is somewhat fugitive, both because it grows and is kept for storage largely below ground, and because in earlier periods cassava fields were moved periodically as a result of swidden practices. However, in the case of cassava, it is value that determines visibility. In his actor-oriented approach to commodity systems analysis, Busch suggested eleven rules that should guide analysis:

there is nothing natural about nature; there is nothing natural about society either; production neither starts nor stops at the farm gate; commodity chains have values embedded in them; the weakest link in the chain will stop commodity production; science, technology and bureaucratic decisions can create and recreate commodity chains; commodity chains have histories; commodity chains have geographies; the power relations in commodity chains change when an actor in the chain attempts to modify it; and finally, commodity chains do not exist (they are conceptual creations)⁹⁷.

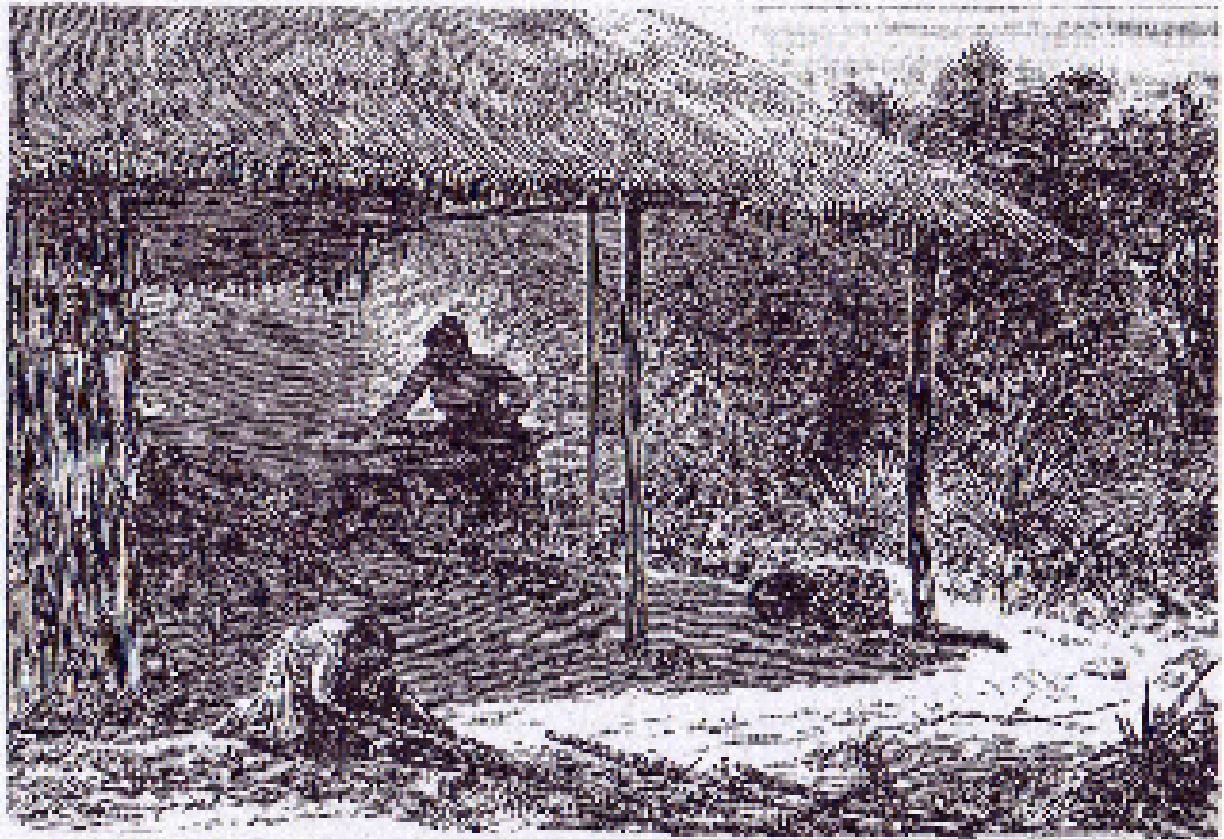
It is the values and histories embedded in commodities and chains that dictate perception, and make ‘things’ and products visible (even when they are not really there), or hide them (even though they are in plain sight). As the case of cassava and Brazil shows, what is hidden is as important as what is not, and ‘value’ is both economic and socio-cultural. The two cannot and should not continue to be treated as separate. The ramifications of this approach, and a full examination of all of the points proposed by Busch along with other considerations, will emerge in the larger study of cassava in Brazil and elsewhere of which this is a preliminary treatment.

⁹⁷ Lawrence Busch, ‘How to Study Agricultural Commodity Chains: A Methodological Proposal’, in Michael Griffon (ed.), *Economie des Filières en Régions Chaudes: Formation des Prix et Echanges Agricoles*, Paris: CIRAD, 1990, pp.13-24, Cited in Friedland (2001), p.84.

Illustrations



Harvesting cassava, from *Hans Staden: The True Story of His Captivity 1557*, Translated and edited by Malcolm Letts.



Roasting Farinha.

‘Roasting *Farinha*’, from *Brazil: The Amazons and the Coast* by Herbert H. Smith, 1879.



A contemporary brand of Brazilian *farinha de mandioca*.

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Commodities of Empire is a joint research collaboration between the Open University's **Ferguson Centre for African and Asian Studies** and London Metropolitan University's **Caribbean Studies Centre**. These two institutions form the nucleus of a growing international network of researchers and research centres.

The mutually reinforcing relationship between 'commodities' and 'empires' has long been recognised. Over the last six centuries the quest for profits has driven imperial expansion, with the global trade in commodities fuelling the ongoing industrial revolution. These 'commodities of empire', which became transnationally mobilised in ever larger quantities, included foodstuffs (wheat, rice, bananas); industrial crops (cotton, rubber, linseed and palm oils); stimulants (sugar, tea, coffee, cocoa, tobacco and opium); and ores (tin, copper, gold, diamonds). Their expanded production and global movements brought vast spatial, social, economic and cultural changes to both metropolises and colonies.

In the Commodities of Empire project we explore the networks through which such commodities circulated within, and in the spaces between, empires. We are particularly attentive to local processes – originating in Africa, Asia, the Caribbean and Latin America – which significantly influenced the outcome of the encounter between the world economy and regional societies, doing so through a comparative approach that explores the experiences of peoples subjected to different imperial hegemonies.

The following key research questions inform the work of project:

- 1) The networks through which commodities were produced and circulated within, between and beyond empires;
- 2) The interlinking 'systems' (political-military, agricultural labour, commercial, maritime, industrial production, social communication, technological knowledge) that were themselves evolving during the colonial period, and through which these commodity networks functioned;
- 3) The impact of agents in the periphery on the establishment and development of commodity networks: as instigators and promoters; through their social, cultural and technological resistance; or through the production of anti-commodities;
- 4) The impact of commodity circulation both on the periphery, and on the economic, social and cultural life of the metropolises;
- 5) The interrogation of the concept of 'globalisation' through the study of the historical movement and impact of commodities.

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