



(IN)EDIBLE NATURE

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To cite this article: Zilkia Janer (2007) (IN)EDIBLE NATURE, Cultural Studies, 21:2-3, 385-405, DOI: [10.1080/09502380601162597](https://doi.org/10.1080/09502380601162597)

To link to this article: <https://doi.org/10.1080/09502380601162597>



Published online: 03 Apr 2007.



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Nature is the source of human subsistence but the transformation of nature into food is a cultural process that is not independent of power relations. The colonization of America comprised the systematic repression of indigenous ways of knowing and even after the elimination of political colonialism the relationship between European cultures and the others is still one of colonial domination (Quijano 1992, p. 438) The colonial repression of different knowledges also affects the culinary epistemology that informs food preparation and consumption. Three instances in which the effects of coloniality in the food cultures of the New World can be observed are: (1) the degradation of indigenous culinary knowledge as a response to the challenge that American nature and indigenous culinary practices posed to Europe, (2) the enduring hegemony of French cuisine as the highest standard of European culinary modernity-rationality against which all other cuisines are measured and (3) the practice of a fusion cuisine structured by European culinary values and that incorporates other cuisines only to reduce them to sources of natural ingredients devoid of a culture of their own. I finish with a consideration of what the decolonization of culinary knowledge might entail.

The colonization of indigenous culinary epistemology

The colonization of Mesoamerica by the Spanish led to the confrontation of different discourses regulating cooking and eating practices. Such discourses classify foods into categories according to hegemonic social, religious and medical knowledge. Whether a food is considered edible or inedible, high or low status, festive or appropriate for fasting, good or bad for health, has more cultural than natural explanations. Amerindians received a number of new foods from Europe and resisted the subordination of their culinary ideas to the colonizers'. The Spanish, on the other hand, had to do without some of the food items and practices they were used to and struggled to insert New World foods into their established categories. Below I analyze how the confrontation of Spanish and Amerindian culinary practices in the colonial context resulted in the partial suppression of the Amerindian systems of knowledge that regulated

food production and consumption, and in a conceptual challenge and eventual adaptation of European religious and medical discourses.

Bread was the staple at the base of Spanish cuisine for centuries and it was present at all meals from breakfast to dinner and in all courses from main dish to dessert (González Turmo, 1999). No part of the bread was wasted: soft crumbs were scraped from the table and harder ones shaven from stale loaves to become the main ingredient in many traditional Spanish dishes like soups, fritters, *ajos* and *gazpachos* among others. Oftentimes bread also substituted for flatware helping to carry food to the mouth. The centrality of bread in Spanish diet is still present in popular expressions like *es más bueno que el pan* to refer to something that is really good as being better than bread, and *ganarse el pan* which equates making a living to earning your bread.

The Catholic calendar of feasts and fasts regulated what and when people ate. Feasts involved all kinds of excess, particularly the day before Ash Wednesday which started the forty days of abstinence culminating with the celebration of Christ's resurrection. The feast of the Eucharist, which is performed every Sunday during mass, is a practice that makes Spanish culture closer to Amerindian cultures than to European ones. The Eucharist involves the transformation of bread and wine – the staples of Spanish cuisine – into the body and blood of Christ. According to the Catholic doctrine of transubstantiation, this transformation is not symbolic but literal by virtue of a miracle. The Eucharist gave the common act of eating ordinary food a transcendental quality by turning it into a communion with Christ and a requirement for the salvation of the soul. It is also a sublimated version of ritual anthropophagy. The Spanish colonizers condemned the ritual anthropophagy of Amerindians without making a connection with their own practices which were under attack by dissenters.

Fasting was another practice through which the Catholic church structured the consumption of food. Fasting required the limitation of meals to one a day and the abstention from eating meat and animal products such as milk and eggs during the 40 days of Lent between Ash Wednesday and Easter and many other days throughout the year. Ritualized fasting has been considered a way of imposing the Christian cognitive system from Rome. Fasting contributes to the adaptation of individuals to the system of values and social interactions desired by ecclesiastical hierarchies, it establishes the public values of the community and mediates the experience of individuals (García Aranda 1996, p. 82). An infraction of the rule resulted in an impure status for both the individual and the community. The feast of the Eucharist and the fasting calendar thus determined membership in the community and the welfare of individuals and the community in this and the afterlife.

Medicine, particularly humoral physiology and dietary theory, authorized another theoretical food system that affected Spanish food culture. This system, first sketched by Galen in ancient Greece and elaborated upon by

many Arab and European writers, dominated medicine and dietetics in the Old World for centuries. According to humoral theory, four major fluids or humors dominate the human body: blood, phlegm, cholera and black bile. Each of these humors is composed of two basic elements: heat and moisture make up blood, cold and moisture constitute phlegm, heat and dryness form cholera and cold and dryness constitute melancholy (Albala 2000, p. 1205). For the body to be in good health, all four humors need to be in balance. Individuals were supposed to have their own constitutions in which a particular humor dominated. Foods were also supposed to have their own natural humor and thus they spoke of hot, cold, dry and moist foods. For good health, individuals were recommended to eat foods that would help them balance their natural constitution. Somebody with a choleric character, the one in which heat and dryness dominates, was advised to eat moist and cold foods like cucumbers or melon. To correct an excessively wet food like melon, it was served with cured ham which was considered hot and dry. Humoral theory is still at the base of many classic dishes like 'melon and prosciutto'.

Catholicism and humoral physiology provided the guidelines for what was considered the natural and right way to eat but when the Spanish arrived in America, they were forced to confront the constructed character of their culinary thought. Indigenous systems of knowledge are obviously hard to investigate since we do not have access to any sources unmediated by European categories and interpretation. Nevertheless a careful analysis of the available sources reveals that, at the very least, Amerindian culinary thought was structured by categories other than the European. A different set of available foods and a different culture account for a different way of categorizing, preparing and consuming food. A review of the uses of maize, cacao and chile illustrates this point.

Maize is a plant that originated in the Americas and it was the main staple in all Amerindian cuisines. Nixtamalization, the process of cooking maize with mineral lime, was developed in Mesoamerica. This process enhances the protein value of the maize for human beings and it has been suggested that the rise of Mesoamerican civilization was made possible by its invention (Coe 1994, p. 14). Nixtamalized maize is used to form a dough which is the base of indigenous Mesoamerican cuisine. The importance of maize is most noticeable in the central role it has in the Mayan creation narratives as recorded in the *Popol Vuh*. According to these narratives, the gods created the flesh and blood of humans out of maize after a few unsuccessful attempts using other materials. Eating is at the center of the relationship between the Maya and the gods. The gods were looking for subjects who would feed them and so they created humans using an edible and nutritious substance (Recinos 1960, p. 103–04). The Maya then ate maize to renew life and offered it in plant and human form to the gods in gratitude. An elaborate system of human sacrifice and a

sophisticated maize gastronomy were engendered and authorized by the religious discourse of the Popol Vuh.

The Franciscan Friar Bernardino de Sahagún, who wrote the monumental *Historia general de las cosas de la Nueva España* based on years of research aided by members of the indigenous intelligentsia, allows us to admire the complexity of the practice of human sacrifice. The selection of the subject and the rituals before and after the sacrifice varied according to the specific festival or deity being honored. Although with less detail, Sahagún also lists the many different ways in which maize was consumed: tortillas varied in shape, size, flavoring, filling and accompaniments according to the event and social status of the diners. Tamales, thick maize dough with a meat and/or vegetable filling, are the dish that bridges the gap between cuisine and human sacrifice. According to Claudia Alarcón (1999), tamales are a metaphor for creation since they are made much in the same way that humans were made. When offered to the gods, she considers tamales a symbolic representation of human sacrifice. It is not hard to see the structural similarity between this use of maize and the role of wheat bread in Spanish cuisine and religion. They share the use of food as a mediation between gods and humans and as sublimation of anthropophagy. It is harder to establish whether that similarity was already there and facilitated the integration of the two cultures, or whether it was imposed by Spanish narratives.

Cacao, the seeds of the fruit of a plant which originated in the Amazon region, is another food that played an important role in Mesoamerican culture. Mayans were the first to cultivate the seeds and transform them into a highly prestigious chocolate drink. Contending Amerindian nations fought either for control over the richest cacao-producing lands, or for the establishment of beneficial trading relationships with those who controlled them. By the late Post-Classic period, commerce meant mostly the cacao trade (Coe & Coe 1996, pp. 58–59). Cacao as a drink was enriched by the addition of many different flavorings like vanilla, chile, honey, flowers and anatto or achiote. The last flavoring also dyed the drink a deep red which made it look like blood. Aside from its economic and social importance, the cacao pod also had some ritual uses as a symbol of the human heart torn out in sacrifice (Coe & Coe 1996, p. 101).

Chiles are another fruit native to the Americas the traditional use of which allows us to appreciate how culinary practices are affected by discourses specific to different cultures. In the case of chiles, we do not have much information about how they were related to religion, medicine or any other discipline. However, their uses in Mesoamerican cuisines are so strikingly different from the way in which the rest of the world uses them nowadays that we can only conclude that the categories regulating their use came from a system of knowledge that is lost or at least misunderstood. Sahagún specifies the different chiles that were used in each dish. It is also known that fasting for

Amerindians meant abstaining from eating chiles and salt. Chiles as indispensable and versatile rather than as one-dimensional condiment is a characteristic of Mesoamerican cuisine that has neither been adopted by other cultures nor suppressed by more powerful ones. In the use of chiles we can still appreciate the trace of a different rationality even if we cannot fully grasp it.

The sixteenth century witnessed a true revolution concerning food cultures on both sides of the Atlantic, but the exchange of flora, culture and agriculture was asymmetrical. In terms of biodiversity, the asymmetry is considerable: out of 250,000 major plant species on the planet known today, 100,000 live in the Americas and only 12,000 in Europe (Hernández Bermejo & Lora González 1996, pp. 178–79). Produce now considered essential in European cuisine like tomatoes, potatoes, cacao, maize, and vanilla among many others, are native to America. In spite of the larger number and diversity of produce cultivated and consumed by Amerindians, newly arrived Spaniards experienced difficulty finding something to eat. Father Serra (cited in Coe 1994, pp. 27–28), an eighteenth century Franciscan missionary, explained it:

At midday they brought us a meal of stewed and roast fowl. They brought *arepas* [thick maize tortillas], roast plantains, sweet manioc, sweet potatoes, etc. But we did not know how to eat without bread. Then I realized that bread was sustenance to someone who was brought up like me, and I remembered that when I was in Cádiz about to leave, a brother said to me, ‘Brother John, you are going to the Indies: God keep you from losing sight of bread’.

According to the Spanish, lack of wheat bread was equal to lack of food in spite of the abundance of produce.

Not only the numerical proportion but also the cultural impact of the transatlantic exchange of food was unbalanced. The impact in the New World was already noticeable in the sixteenth century and it unequally affected the different social groups configured by the colonial system while the impact in Europe and the rest of the world was much slower (Garrido Aranda 1999, p. 198). Edible plants from the New World crossed the Atlantic without the indigenous knowledge about their cultivation, preparation and consumption. They were planted in scientific botanical gardens and many of them changed their use from nutritional to decorative (Garrido Aranda 1999, p. 205). Maize, like many new world foods, suffered a change in social status. As Amerindians were subjugated and their gods discredited, the importance of maize diminished. In Europe maize was adopted as food for the poor or as animal feed. Maize and potatoes have an important role in European history since they put an end to famine in the seventeenth and eighteenth centuries. However,

because the process of nixtamalization was not learned by Europeans, maize did not provide adequate nutrition.

Chiles also suffered a drastic change in their use when incorporated into European food culture. In the nineteenth century the use or avoidance of chiles almost became a moral issue (Coe 1994, p. 64). Outside of Mexico, they have been reduced to providers of 'heat' without attention to their different tastes, colors, textures and preparations. Chiles have acquired importance as decorative element and some of the indigenous medicinal uses are only now being validated by modern medicine. Capsaicin, the pungent alkaloid in chiles, is being used to treat pain and respiratory disorders and research on other uses is still ongoing (Andrews 2000, p. 287). The case of maize and chiles makes clear that the suppression of Amerindian knowledge was a regrettable loss for humanity.

Mesoamerican cuisines adopted the use of lard, meat and other animal products from the Spanish. The maize dough for tortillas and tamales is enriched and softened by lard and animal broth. The Mesoamerican diet, originally sparse in the use of meat, became more dependent on it. The heavy consumption of beef by colonial society has a material rather than a taste-related origin. Amerindians were displaced from maize producing lands to give place to the raising of cattle: cattle and a meat-based culinary culture literally colonized maize and a vegetable-based culinary culture. The cultivation of maize became increasingly difficult because of displacement and because of the destructive behavior of wild cattle. As a result the prices of maize became prohibitive and Spanish and Amerindians alike grew fond of beef which was plentiful (Romero de Solís 1996, p. 248).

A new culinary culture emerged in colonial Mexico as the repertory of available foods changed and as Creoles and Amerindians adapted some of each other's culinary practices. The creation of a new culinary culture required the revision of the systems of knowledge that authorized Spanish culinary practices according to the possibilities of food production and consumption in the colony. The Catholic practice of fasting had to be adapted to the new natural and social reality, and humoral theory had to be updated to include the new foods which sometimes seemed to challenge or escape its categories.

Chocolate, the foamy drink made with cacao seeds, was enthusiastically embraced by the Spanish after some initial hesitation. Before chocolate could become fully incorporated into Spanish and Creole food culture a few theoretical questions had to be sorted out. How does chocolate fit into humoral theory? Is it hot or cold? Is it healthy? Is chocolate appropriate for fasting? In 1570, Philip II sent his Royal Physician Francisco Hernández to the New Spain to classify the plants of Mexico as either hot or cold, and wet or dry (Coe & Coe 1996, pp. 122–23). His conclusions regarding cacao and chocolate were quite accommodating. He considered cacao leans to the cold and humid, making drinks made from it good in hot weather and to cure fevers but because the spices added to it are hot, it warms the stomach, perfumes the

breath and combats poisons. Chocolate could be adjusted to the needs of people with all kinds of humoral constitutions. This conclusion allowed the Spanish to continue enjoying chocolate without undermining the authority of the humoral system.

After gaining medical legitimacy, chocolate had to be conciliated with the fasting demands of the Catholic church. For centuries there was a theological controversy over whether chocolate was just a drink or a nourishing food that could not be taken during the fast. The controversy did not stop the practice of drinking chocolate during the fast and many arguments were developed to justify it: from the perspective that nothing liquid breaks the fast, to the point that it broke the fast if taken as food but not if taken as medicine. Chocolate was not the only Mesoamerican food that prompted an adaptation of Christian doctrine. Creoles demanded and acquired certain exemptions from fasting arguing a scarcity of appropriate foods in America. Because of the lack of olive oil they argued it would be impossible to cook without lard. Creoles were also in the habit of consuming milk products during the fast, which was not formally allowed by the church except with the purchase of a special dispensation. They argued that fish, a favorite food during Lent in Europe, was either of bad quality or too expensive and that other traditional Lenten foods like chestnuts, almonds and raisins were totally unavailable (Grupo Interdisciplinario de Cultura Alimentaria Andalucía-América 1996, pp. 168–72). Creoles had adapted to a different set of foods and successfully used the European bias against New World nature to help change fundamental religious tenets to accommodate their new food culture.

The food revolution prompted by the colonization of America had long lasting consequences not only in terms of the variety of foods available but also regarding the major discourses and disciplines that categorize foods and regulate their consumption. Unequal power relations resulted in the loss of some biodiversity – because the cultivation of many plants was abandoned – and in the loss of indigenous knowledge regarding the uses of native American plants. European systems of knowledge, particularly religious and medical, faced the challenge of a nature and culture that was organized independently of them. Some changes were performed in the European way of classifying the world but without breaking the overall cognitive systems that were supposed to give legitimacy to the colonial enterprise in the first place.

Cooking Eurocentrism: a critical assessment of the hegemony of French cuisine

The subordination of indigenous and many other culinary knowledges made possible the establishment of the superiority of French cuisine as the culinary expression of European modernity-rationality. According to the official

website of the Cordon Bleu (2005) academy of culinary arts their instructors 'teach the techniques and methods of cuisine, pastry and bread baking which have been codified in France over the last 500 years, and which are applicable to any world cuisine'. The belief that knowledge of French technique enables cooks to prepare any world cuisine is based on the assumption that other cuisines lack their own techniques or that such techniques are expendable. Academics, cooks and diners alike seem resistant to revise the myth of the superiority of French cuisine in spite of the influence of postcolonial and postmodern analyses and their critique of Eurocentric metanarratives.

Based on the current popularity of a variety of national cuisines and of fusion or world cuisine we might feel tempted to argue that the French no longer have the monopoly of fine dining. However, the structure of the relationship between different cuisines in culinary schools curricula and in restaurant cooking reveals that French cuisine is still considered the superior one. The curriculum of schools with a general focus like the prestigious Culinary Institute of America (CIA) and the more up-to-date Institute of Culinary Education (ICE) is remarkably similar to the curriculum of schools that specialize on French cuisine like the Cordon Bleu or the French Culinary Institute. In spite of their claim to train generalist cooks, their instruction is almost exclusively French-style with some token additions from other cuisines.

The textbook used at the CIA is titled *The Professional Chef* (2002) but the qualifier 'French-style' should be added to the title since the book does not seriously engage any other cuisines. The textbook is organized by categories that are apparently not specific to any cuisine, but the contents reveal the biases of this structure. Out of seven parts, one is entirely devoted to stocks, sauces and soups. Stocks and sauces are fundamental to French cuisine but are almost irrelevant to many other. In Indian cuisine, for example, dependence on stocks and sauces is the mark of an incompetent cook. CIA graduates are likely to know dozens of sauces while being unable to distinguish a *khorma* from a *khalia*, or a *mole poblano* from a *mole oaxaqueño*. The other parts of the CIA course focus mostly on ingredients and techniques specific to French-style cooking. Students learn all about egg-based breakfasts, yeasted breads, and the use of the French knife but remain ignorant of the many sophisticated ways to use spices and chiles and of the advantages of using grinding stones. They will also not learn meat, poultry, fish and shellfish fabrication techniques that are essential for dishes other than French-style. How fish is cut up in India, for example, has more to do with creating pieces with the right degree of fattiness or leanness for specific preparations than with the creation of boneless fillets. It is understood that choices need to be made when putting together a curriculum but making a regional tradition of cooking pass as a globally valid one should not be acceptable.

The ICE (2005) divides its curriculum for the culinary arts diploma into six modules. The first four modules follow more or less the same structure as

the CIA textbook, and module 6 is an externship. What stands out is Module 5 which attempts to account for the actual variety of global culinary knowledges. The module is divided into four courses: (1) Cuisine of France, (2) Cuisine of Italy, (3) Cuisine of Asia and (4) Advanced culinary applications. There are two courses on European cuisines but only one to account for the varied cuisines of the Asian continent. The third course at least opens a window into other culinary systems which might allow students to realize the limits of their training. However, the ICE's description of their curriculum undermines the importance of that window: 'You will begin by creating classical, technique-driven dishes and progress to discovering the foods and flavors of global, ethnic, and contemporary American cuisines'. This statement implies that only French-style dishes are classical and technique-driven while dishes from other culinary systems are just an appendix that contributes foods and flavors, i.e. raw nature, but not culture or technique.

The belief in the technical, if not overall, superiority of French cuisine is carried into the restaurant business which results in the homogenization of high cuisines worldwide. Chefs that are trained in the French style prepare dishes from all kinds of cuisines using French techniques convinced that by doing so they are actually improving what they call traditional recipes. The effect of this is that when we dine in their 'Mexican' or 'Indian' restaurants we are still eating French-style dishes. Fusion or world cuisine restaurants which are not trying to conform to any single culinary system also relegate cuisines other than French-style to sources of 'exotic' ingredients or inspiration but rarely as a solid foundation of culinary technique and knowledge. A world cuisine determined by one local tradition passing as universal is the high-brow version of the McDonaldization of the world. I am not talking about the need to preserve so-called local traditions as if they were somehow frozen in a distant past. What I think is needed is the recognition of cuisines other than French as equal partners in the world of fine dining. All cuisines should be respected as living contemporary culture with their own rules, techniques and epistemology.

The hegemony of French cuisine can only be understood in the context of the modern/colonial world system and the cognitive framework that it created. Modern epistemology gave Europe the privilege of being the center of enunciation (Mignolo 2002). It established Europe as the model and point of view from which all other histories and epistemologies are evaluated. This epistemic privilege is also at work in historicist narratives that take the 'first in Europe and then elsewhere' structure of time (Chakrabarty 2001, p. 7). In the field of culinary history, the modern/colonial cognitive system has established the regional conceptual framework of French cuisine as the highest point of culinary development for the rest of the world to follow. Culinary conceptual frameworks alien to the French model have been labeled as 'ethnic' or 'traditional'.

The standard narrative of French culinary history is summarized by Neirinck and Poulain (2001). The starting point is the Middle Ages when spices were used liberally and cooking was determined by the principles of alchemy, humoral medicine and religion. The publication in 1651 of *Le cuisinier François* by Pierre La Varenne is considered the turning point that marks the beginning of French and modern cuisine. The use of spices was minimized in favor of local herbs, and sweet dishes were confined to the end of the meal. Carême and Escoffier, who are the main heroes of this narrative, continued the task of codifying the cuisine in writing with formulas that are considered to be rational and perfected over time. The codified culinary system has been exported worldwide through a genre of writing about food from the French perspective and through restaurants which are considered to be a unique French creation. A cycle of declines and nouvelle cuisines is acknowledged which is taken as a sign of the vitality of the cuisine.

Aside from the modern/colonial cognitive system that allows European culture to establish itself as the measure of everything human, the authority of French cuisine depends on three modern phenomena: the printed letter, standardization, and the restaurant. Alphabetic writing and the printed letter have been tools in the colonization of subaltern languages, memories and epistemologies (Mignolo 1995, p. 204). Modernity delegitimized knowledges that are not in writing as limited, variable and unimportant. Cultures that put their cognitive systems in print, like those with access to gunpowder or the atomic bomb, have been able to impose their views on the others. We can understand what French cuisine is all about after reading a few books, but understanding the cuisine of Nagaland in India, among many others, implies travels, interviews and challenging the very categories on which European culinary knowledge is based. All that work is considered unnecessary since modern narratives assure us that what Europe and the United States offer is already the best. The proliferation of cookbooks does not solve this problem since the genre itself imposes the categories and structures of European cooking failing to grasp the epistemologies that shape different culinary systems. We are impoverished by the modern bias in favor of the printed word.

Science, rationalization and standardization was the modern faith that French/European cooking counterpoised to cuisines that were regarded as guided and limited by religion and magic. But instead of creating a truly universal and constraint-free cuisine, the French created a cuisine driven by the need for efficiency in the restaurant kitchen. By limiting the number of dishes and creating a system in which many steps can be performed ahead of time, like the making of stocks and the *mise en place*, a very exportable and learnable cuisine was created. The system of French cuisine is ironically in a continuum with the system of fast food restaurants. The success of both has more to do with ease of production and predictability than with taste.

Restaurants are generally not considered 'proper modern restaurants' unless they conform to the model of French restaurants which are a result of a local history. The dominance of French-style restaurants is not related to taste. French-style restaurants exist all over the world because in the modern/colonial cognitive system they are considered a mark of civilization and development, but also because they are relatively easy to set up. Even with the increasing interest in other cuisines it is much easier to become a French cook than any other kind. Six months at the Cordon Bleu guarantee a successful career whereas there is no neatly packaged way to become an expert on cuisines like Mexican or Thai. Cuisines that have not codified their culinary knowledge in a way that makes it easy for outsiders to learn and efficient for a restaurant kitchen are dismissed. In the same way, other kinds of eating out establishments are considered as not quite restaurants instead of taken as alternative models of conviviality outside of the home.

When cuisines are described and hierarchized using French cuisine as a standard, those that are somehow sauce-based and that follow rules that are easy to understand using European concepts get a high mark, whereas cuisines that use spices or follow rules that are not easily translatable into French ones, are put down. If French cuisine was not backed-up by the prestige and power of modernity/coloniality it would be easier to accept it as what it is: one cuisine among many determined by its regional history. The assessment of French food given by two different visitors illustrates this point. Kosa Pan, the first Thai ambassador to France, visited Paris in 1686 when the culinary revolution started by La Varenne was already a few decades old. With his confidence as a representative of the flourishing kingdom of Siam he stated that wine 'helps give taste to the food which otherwise be insipid to our palates; here are few spices and much meat, and an attraction of quantity replaces piquant wholesomeness' (cited in Thompson 2002, p. 16). While remarking that abundance of meat and emphasis on quantity are contrary to the culinary system of Siam which emphasizes quality and in which meat is not given a central role, Kosa Pan does not fail to grasp the importance of wine in the French culinary experience. Muhammad As-Saffar (cited in Parkhurst Ferguson 2004, p. 185), a Moroccan scholar who visited Paris in the 1840s, offers another critical view of French cuisine: 'They are not creative in varying their menus with different things. Even if they have just eaten [something], they bring it on the next time. In general, their food lacks flavor, and even salt and pepper'. Similar opinions are shared by many people today but they are too often silenced by the weight of the modern/colonial cognitive system. Accepting the authority of French cuisine is not only to perpetuate a colonial legacy, but also an impoverishing provincialism.

Cooking the Caribbean: fusion cuisine and transmodern epistemology

These days fusion cuisine, or the mix of ingredients and cooking techniques from different traditions, is often associated with the phenomenon of globalization. However, it is necessary to historicize the process of globalization and to acknowledge that its origins are not exclusively Western (Hopkins 2002). The Caribbean has played an important part in the early stages of globalization and has had a fusion cuisine ever since the sixteenth century. In the following pages I discuss the long history of fusion cuisine in the Caribbean and compare it with the more recent Caribbean fusion cuisine developed in metropolitan restaurants in terms of their potential to contribute to a transmodern epistemology.

I define Caribbean fusion cuisine widely in terms of time and space to include the cuisine practiced in the greater Caribbean since the sixteenth century and that continues developing today in the region as well as in the major cities where Caribbean peoples have migrated in large numbers. In contrast, I call metropolitan restaurant fusion the more limited but influential practice of professional chefs catering primarily to a non Caribbean clientele. The purpose of the comparison of these two systems of fusion is not to naively try to establish degrees of authenticity but rather to examine the political effects of cooking as social practice. Fusion, I argue, has been the way through which different cuisines were created before being codified as national cuisines and not a recent phenomenon that threatens the identity of regional traditions as some critics have suggested. However, the practice of fusion is not free from power relations as it establishes hierarchies between the different traditions that it merges. In this analysis of the history of Caribbean cuisine I seek to clarify the power structure that has shaped Caribbean and Metropolitan fusion practices and analyze their political implications.

When looking at Caribbean dishes designed by metropolitan chefs it seems like many of them have a naive vision of culinary traditions in which people simply eat what is locally produced. The abundance of fresh fish and the use of fruits in savory dishes so common in metropolitan restaurant Caribbean dishes have been the exception rather than the norm in dining tables across the Caribbean. Salted codfish from cold northern waters has been a more steady staple than fresh fish, and fresh fruits are eaten but are not routinely put into savory dishes. To account for the difference between the Caribbean cuisine of the metropolitan imagination and the cuisine actually developed and practiced in the Caribbean we need a more complex notion of culinary cultures. Aside from local ingredients a cuisine is determined by markets, social structures and systems of cultural values.

'This is what the ship brought in' is an old expression still used in parts of the Caribbean to express the need to work within the constraints of what is

available. Historically, the use of land and other natural resources has been determined by external market demands because of the logic of plantation agriculture. What is available for local consumption has been mostly imported, not locally produced. I use the expression to characterize Caribbean cuisine as a phenomenon which is neither national nor local. It is a cuisine created in the Caribbean region with elements from four continents and which extends across the Caribbean islands and many parts of the eastern littoral of the Americas. The ship brought in new ingredients and peoples together with the subordination or partial erasure of their culinary cultures. In other words, I see Caribbean cuisine as the result of the diasporic and genocidal history of the Caribbean. With the following account of the interactions between different ingredients and cooks in the Caribbean kitchen I want to conceptualize Caribbean cuisine as performance following the definition given by Joseph Roach (1996) of performance as a process of surrogation through which circum-Atlantic societies invented themselves.

Colonization and the plantation system changed the repertoire of available foods and brought together peoples with different culinary values and techniques. New World foods arrived in the rest of the world as exotic curiosities and it took a long time to incorporate them into the established culinary and dietary traditions. In contrast, in the Caribbean ingredients from Europe, Asia, Africa and the Americas were quickly incorporated because they arrived with people who presumably carried some of the knowledge about their possible uses. However, the fusion did not happen in a vacuum: socioeconomic hierarchies and the subordination of the islands as European overseas colonies were structuring constraints. For all the peoples involved, this culinary fusion has been a process of transculturation, defined as a process that includes the partial loss of a culture, the partial acquisition of another culture, and the eventual creation of a new one (Ortiz 1978, pp. 92–97). This is an ongoing process that continues today most notably with the incorporation and transformation of processed and fast foods.

Before the arrival of Europeans, Caribbean aboriginal diet was based on fish and shellfish, small game, tropical fruits, yucca, sweet potatoes, corn, beans, peppers, squashes and avocado. When the Spanish arrived, they tried unsuccessfully to cultivate their staple foods (wheat, olives and grapes) but they were extremely successful with the introduction of hogs. Some of the Lesser Antilles became mostly populated by wild hogs as the native peoples were wiped out by slave catching expeditions (Watts, 2000, p. 140). For some time colonists depended on imports and on the Indian *conucos*, or cultivation plots, for their food. However, hogs eventually destroyed the *conucos* and with the extermination of the native population that way of cultivation almost disappeared. Yucca is the ingredient that survived the longest and remained as a staple for a long time.

To solve the food crisis, colonists successfully introduced ingredients from the Americas (anatto, tomatoes, potatoes, vanilla, cacao), Europe (aromatic herbs, cabbage) and Africa (okra, ñames). They also brought ingredients from Europe that originally came from Asia (garlic, rice, eggplant, onions, citrus fruits, spices, apples, peaches, lettuce, cucumber, carrots) and ingredients from Africa that originally came from Asia as well (sugarcane, coconuts, bananas, cambur). In the nineteenth century additional ingredients were brought from Africa (akee, breadfruit) and Asia (mango, nutmeg, tamarind) (Lovera 1991). Thus, ingredients from all over the world constitute the base of traditional Caribbean cuisine since its early beginnings.

Who was doing most of the cooking and under what conditions? According to Spanish chronicles, the indigenous peoples and the colonists reacted to each other's food with repulsion. Out of necessity both groups ended up trying, adapting and liking unfamiliar foods. During the early phase when the colonists depended on indigenous *conucos* for their survival their taste was partially transformed. In free settlements of surviving indigenous peoples and free or escaped Africans some of the aboriginal cooking knowledge was probably acquired by the Africans. The first cooks in the Caribbean kitchen were the indigenous peoples and their cuisine survived their extermination in the food habits of the rest of the population. The next important group in charge of cooking, and therefore with the most impact in shaping the cuisine, were primarily Africans.

In the plantation system slaves were to a surprising degree in charge of food supply. They were assigned a ration of food normally consisting on manioc flour, rice or corn, and salt cod or beef. Plantation owners initially resisted but finally tolerated and even encouraged the practice of slaves cultivating small plots with subsistence crops during their 'free' time as a way to supplement and sometimes substitute for the ration. By the 1830s subsistence plots had become a space of relative slave autonomy in many islands. Some slaves produced a surplus to take to the market and colonies like Martinique became dependent upon slave produce for a substantial portion of their food (Tomich 2000). Jamaica is another example of a colony in which white society became dependent upon slaves' produce (Beckles 2000, p. 733).

Plantation agriculture, geared towards export, left the production of food for local consumption mostly in the hands of slaves. It follows that Caribbean eating patterns were to some extent determined by what slaves were able and willing to produce. Fruits and vegetables were understandably more common than seafood given that slaves had limited access to the sea which would have provided them with opportunities to escape. This would explain why a great number of traditional Caribbean dishes feature salt cod, which was standard food in the transatlantic voyage and part of the ration, rather than fresh fish.

Slaves were also in charge of food preparation working as cooks in the plantations. They had to cater to the taste memories of the masters: diverse

European tastes in some cases modified by indigenous eating habits. However, cooks had a certain level of space for creativity applying what they remembered from African cooking and inventing new recipes. Considering the resulting cuisine as just European or African cuisine adapted to the constraints of a new environment would be to deny the cook's agency in the process but also to overestimate the cooking knowledge carried by colonists and slaves. Diasporic peoples carry taste memories of dishes they have eaten but not necessarily know how to prepare them. Even in the case of those with cooking knowledge there were serious limitations because not all ingredients were available to reproduce the remembered dishes. Caribbean cuisine was invented primarily by African cooks who made choices in terms of how to recreate and create dishes and techniques based on a considerably large but new pool of ingredients and a number of imperfectly remembered traditions. In the substitution of ingredients and flavors in the attempt to recover remembered dishes Caribbean cuisine is constituted as performance in the sense that it 'stands in for an elusive entity that it is not but that it must vainly aspire both to embody and to replace' (Roach 1996, p. 3). Cuisine as performance is an attempt to cope with unspeakable loss. The creation of Caribbean cuisine was a first step in the quest for freedom. As Sidney Mintz (1996, p. 37) has argued, 'the taste of freedom was around before freedom itself'.

It is possible to talk about a cuisine shared by the whole Caribbean region in spite of the obvious and meaningful differences according to patterns of colonization, immigration and national histories. Mintz (1974), pp. xvii–xviii) has established the social and cultural integrity of the region based on shared features like its ecology, the extermination of its native populations, the plantation system, the successive introduction of massive new populations, and the persistence of colonialism. He explains that the combined effects of these points have been somewhat different and therefore he conceived the various societies of the Caribbean in terms of a continuum rather than in terms of a single abstract model.

Such cultural continuum has been observed by scholars of Caribbean music and languages. Kenneth Bilby (1985) has explained the Caribbean as a musical region which emerges in the middle ground between African and European cultures. Each island stands at a different point in the continuum, some closer to European music and some closer to African music, but still sharing some common characteristics. Mervin Alleyne (1985) illustrates the point in the case of the linguistic landscape of the Caribbean. The region presents a wide range of ways in which European and Creole languages are related, from islands that are multilingual, bilingual or monolingual to those characterized by diglossia and by the existence of different graded levels of language between Creole and European languages. In terms of culinary culture, the way in which

ingredients and techniques from four continents are combined varies while at the same time displaying some common characteristics.

There are a few techniques that give Caribbean cuisines a sense of unity. One of them is the generalized use of a paste of ground seasonings like *sofrito* in the Spanish speaking Caribbean and the *marinades* of the English speaking islands. The use of the African grinding stone to make dough from plantains and root vegetables is another technique central to the cuisine. In the areas that received a large number of Indian immigrants a distinctively Caribbean curry powder has been developed. What all these techniques have in common is that they ensure a consistency in the taste of the final dishes even when the ingredients are varied according to availability or preferences. As new ingredients and dishes as diverse as pasta and processed meats are incorporated into the Caribbean diet, the use of these techniques in their preparation gives them an unmistakable Caribbean character.

Probably the most salient Caribbean culinary technique is improvisation just like in salsa or jazz. Such music balances a fixed structure with an open one which is completed with individual and collective improvisation. Recipes for Caribbean dishes can only provide a basic structure that allows for considerable changes and substitutions. Caribbean cookbooks seem more arbitrary than cookbooks for more codified and standardized cuisines like the French or Chinese because they attempt to reproduce a performance which was already an attempt to recreate a memory. In Caribbean cooking, like in performance art, to repeat dishes in exactly the same way is not highly valued: fluidity, flexibility and creativity are defining characteristic of this culinary culture.

Puerto Rican *pasteles* – savory pies made with a dough of ground plantains and tubers, stuffed with pork, garbanzos and olives, wrapped in banana leaves and boiled – exemplify the centrality of improvisation in Caribbean cuisine. The dough can be made with plantains and green bananas and any or none of the following: calabaza pumpkin, potatoes, yucca, yautía, ñame and malanga. The ideal proportion between these ingredients has never been established and is subject to much discussion among proud cooks who claim their version is the best. The filling is equally variable and can be made with pork, chicken and more recently canned corned beef. *Pasteles* can finally be wrapped in plantain leaves, paper or aluminum foil, and boiled in a pot or in the microwave oven. The origin of such openness comes from the need to cook with whatever is available, yet all different versions of *pasteles* are recognizable as such. The openness of dishes like *pasteles* has been embraced as an opportunity for experimentation and innovation.

The radical variability of a single dish can also be observed across the Caribbean. Salt cod fritters are popular in all the islands although with different names: *accra* in Trinidad, *codfish cakes* in Barbados, *stamp and go* in Jamaica, *bacalaítos* in Puerto Rico, *acrats de morue* in Martinique and Guadalupe, and *marinades* in Haiti (Lambert Ortiz 1973, p. 16). All the recipes share salt cod,

flour and water as the indispensable ingredients. Differentiation comes from the kind and proportion of flavorings and from the use or exclusion of leavening agents. In spite of the wide range of differences they all are still identifiable as Caribbean salt cod fritters. The transformation of salt cod from basic ration food into a beloved snack is remarkable. The recurrence of salt cod in fritter form rather than in a stew or some other preparation makes one wonder what previous dish it was meant to replace.

Creatively designed to cope with the loss of culinary knowledge and ingredients, and to provide consistency even in cases of scarcity and unpredictable availability, cuisine provided Caribbean peoples with the first shared language across cultures. Evolutionary biology argues that cooking – the need to communicate new knowledge on how to transform nature into food – gave birth to language and it is the first activity that distinguished hominids from humans (Cordón 1980). I would argue that fusion cuisine was the founding stone on which Caribbean cultures were built.

Caribbean fusion cuisine enables the creativity of all cooks and its development contributed to the creation of a free Caribbean by providing the opportunity to practice freedom. In contrast, metropolitan restaurant fusion while constituting a tasty cuisine is also reinstating the hierarchies that have relegated the Caribbean to a position of subordination. The following examination of the definition of fusion given by experts and practitioners allows us to see the colonialist presuppositions of the fusion cuisine that is practiced today.

In the *Encyclopedia of Food and Culture*, Julie Locher (2003) defines contemporary fusion cuisine as different from the historical combinations of cuisines characterizing the former as proactive and the latter as reactive. This is a false opposition. On the one hand, it reduces the fusion cooks of the past to passive subjects that merely reacted to changes brought about by forces alien to them. In the case of the Caribbean I have explained that, even in the case of the slaves, cooks managed to create opportunities for creativity to the point that letting the initiative of the cook run free became a landmark of the cuisine. On the other hand, Locher's definition of contemporary fusion cuisine as proactive idealizes contemporary fusion cooks as agents free of constraints. In spite of the resources of metropolitan upscale restaurants the creativity of the chef is limited by the only slightly adventurous palate of most customers, their misconceptions about regional cuisines and the bias in favor of French technique.

Another problem with the above definition of fusion is that it inserts cuisine into a narrative of progress in which the new is more highly valued than the old. This is also evident in the use of the term 'Nuevo Latino' to refer to the contemporary fusion performed by restaurant chefs. There is a presupposition that cuisine in the Caribbean and Latin America is frozen in an old tradition and that innovation is the monopoly of upscale metropolitan

restaurants. The old/new and reactive/proactive oppositions are finally joined by the ethnic/French binary when Locher (2003) argues that French cuisine, which dominates in fusion cuisine, mainstreams ethnic ingredients, gives opportunities to immigrant and minority chefs and elevates the status of ethnic and regional cuisines. This comment takes the point of view of those who ignore the global wealth of ingredients and techniques, assumes that immigrant and minority chefs cannot cook cuisines other than the one of their countries of origin and takes for granted that ethnic and regional cuisines are essentially of low status without acknowledging the role of global relations of power in that hierchization. Restaurant fusion is supposed to rescue ethnic cuisines from their low position by inserting them into the matrix of French cuisine which is uncritically considered the highest form of culinary expression. Subordination to metropolitan taste and denial of the value of their culinary systems is the price so-called ethnic cuisines are paying to be known outside of their communities.

Another telling definition of culinary fusion comes from Norman Van Aken, an award-winning Florida chef and cookbook author. Van Aken (c.1988) states that his interest is on 'diving deeply back down in time to salvage the golden treasures and vibrant calypso flavors of old Key West and fusing them with a contemporary sensibility and an individual personality. The foundation must be the bedrock honesty of Conch, Black, Spanish and Cuban regional cooking'. According to Van Aken, Caribbean flavors are some pure 'honest' essence of the past that needs to be updated and rescued. This implies that Caribbean cooks have not developed the cuisine in centuries as if they were stuck in the past and not active agents in the constant reinvention of the cuisine. Van Acken further defines fusion as an interplay 'between regionalism and restaurant technical know how'. The presupposition of this statement is that regional cuisines lack their own techniques. The recipes produced by Van Acken and other fusion chefs more often than not consist on the application of French technique to a Caribbean dish or the addition of Caribbean ingredients to a continental dish. What is rarely seen is the application of a Caribbean technique to a continental dish. The role of the Caribbean in metropolitan restaurant fusion cuisine seems to be limited to the contribution of ingredients and of a few dishes in need of improvement. This hierarchization is reminiscent of the one that has relegated the Caribbean to a source of primary materials in the world economy. In both cases the Caribbean is valued for its raw nature while its culture is consistently undervalued.

Many metropolitan restaurant fusion chefs have a more personal relationship to the different culinary traditions that feed their fusion. However, they are also reinforcing the same old hierarchies whether they realize it or not. Douglas Rodríguez (1995), a star chef whose Cuban family moved him to New York before the revolution, often travels to Latin America looking for ideas and a creative connection with his heritage. He mentions that he likes to ask

questions to his staff about their native dishes and that such conversations gave way to new ideas constantly. In his travels and his conversations with his staff Rodríguez is feeding from the anonymous know-how of other cooks. For 'Nuevo Latino' restaurant customers the chefs are like cult figures but this does not necessarily translate into a better appreciation of Caribbean or Latin American culinary cultures. The above examples illustrate how metropolitan restaurant fusion treats the Caribbean as a source of underdeveloped ingredients and ideas, and does not consider Caribbean chefs as creators. This is no small irony considering that, as I have argued, cuisine was one of the first domains in which Caribbean peoples asserted their agency and exercised freedom.

Dussel (1993, p. 76) has proposed a transmodern liberation project in which both modernity and its negated alterity co-realize themselves in a process of mutual creative fertilization. Such a project should include a fusion cuisine different from the currently dominant one. A transmodern fusion cuisine would go beyond the inclusion of a few 'ethnic' dishes into a 'Non-Western' culinary hall of fame. It would value all culinary epistemologies equally, making French cuisine lose its privileged position. More importantly, it would allow all cuisines to develop according to their own logic and to challenge and transform the way in which global culinary knowledge is currently being produced.

References

- Alarcón, Claudia (1999) 'Tamales in Mesoamerica: Food for Gods and Mortals', *Petits Propos Culinaires*, 63. London: Prospect Books.
- Albala, Kenneth (2000) 'Southern Europe', in *The Cambridge World History of Food*, eds Kenneth F. Kiple and Kriemhild Cone Ornelas, Vol 2, Cambridge: Cambridge University Press.
- Alleyne, Mervin C. (1985) 'A Linguistic Perspective on the Caribbean', in *Caribbean Contours*, ed. Sidney W. Mintz, Baltimore: Johns Hopkins University Press.
- Andrews, Jean (2000) 'Chilli Peppers', in *The Cambridge World History of Food*, eds Kenneth F. Kiple and Kriemhild Cone Ornelas, Vol 1. Cambridge: Cambridge University Press.
- Beckles, Hilary McD. (2000) 'An Economic Life of Their Own: Slaves as Commodity Producers and Distributors in Barbados', in *Caribbean Slavery in the Atlantic World*, eds Verene A. Shepherd and Hilary McD. Beckles, Kingston: Ian Randle.
- Bilby, Kenneth M. (1985) 'The Caribbean as a Musical Region', in *Caribbean Contours*, ed. Sidney W. Mintz, Baltimore: Johns Hopkins University Press.
- Chakrabarty, Dipesh (2001) *Provincializing Europe: Postcolonial Thought and Historical Difference*. New Delhi: Oxford University Press.
- Coe, Sophie D. (1994) *America's First Cuisines*. Austin: University of Texas Press.

- Coe, Sophie D. & Michael, D. Coe (1996) *The True History of Chocolate*. London: Thames and Hudson.
- Cordon Bleu (2005) 'About the Cordon Bleu', viewed 23 November 2005, <<http://cordonbleu.com/International/English/cm1.cfm?fid=13>> .
- Cordón, Faustino (1980) *Cocinar hizo al hombre*. Barcelona: Tusquets Editores.
- Culinary Institute of America (2002) *The Professional Chef*. 7th ed. New York: Wiley.
- Dussel, Enrique (1993) 'Eurocentrism and Modernity (Introduction to the Frankfurt Lectures)', *boundary 2*, The Postmodernism Debate in Latin America, vol. 20, no. 3, pp. 65–76.
- Garrido Aranda, Antonio *et al.* (1999) 'La revolución alimentaria del siglo XVI en América y Europa', in *Los sabores de España y América*, ed. Antonio Garrido Aranda, Huesca: La Val de Onsera.
- Grupo Interdisciplinario de Cultura Alimentaria Andalucía-América (1996) 'El ayuno como ritual de paso: El ayuno eclesiástico en España y América', in *Cultura alimentaria Andalucía-América*, ed. Antonio Garrido Aranda, Mexico: UNAM.
- González Turmo, Isabel (1999) 'El pan: del plato al mantel', in *Los sabores de España y América*, ed. Antonio Garrido Aranda, Huesca: La Val de Onsera, pp. 59–92.
- Hernández Bermejo, Esteban & González, Angel Lora (1996) 'El transporte recíproco entre América y Andalucía de especies agrícolas de interés alimentario', in *Cultura alimentaria Andalucía-América*, ed. Antonio García Aranda, México: UNAM.
- Hopkins, A.G. (2002) 'Introduction: Globalization: An Agenda for Historians', in *Globalization in World History*, ed. A.G. Hopkins, London: Pimlico.
- Institute of Culinary Education (2005) 'Culinary Arts Diploma Program Curriculum', viewed 23 November 2005, <http://www.iceculinary.com/career/culinary_outline.shtml> .
- Lambert Ortiz, Elisabeth (1973) *The Complete Book of Caribbean Cooking*. New York: Ballantine Books.
- Locher, Julie L. 2003. 'Fusion Cuisine' in *Encyclopedia of Food and Culture*, ed. Solomon H. Katz, New York: Thomson Gale.
- Lovera, José R. (1991) *Gastronomía caribeña: Historia, recetas y bibliografía*. Caracas: CEGA.
- Mignolo, Walter (2002) 'The Enduring Enchantment (Or the Epistemic Privilege of Modernity and Where to Go from Here)', *SAQ*, vol. 101, no. 4, pp. 927–54.
- (1995) *The Darker Side of the Renaissance*. Ann Arbor: University of Michigan Press.
- Mintz, Sidney W. (1996) *Tasting Food, Tasting Freedom: Excursions into Eating, Culture, and the Past*. Boston: Beacon Press.
- ed. (1974) *Caribbean Transformations*. New York: Columbia University Press.

- Neirinck, E. & Poulain, J. P. (2001) *Historia de la cocina y de los cocineros: Técnicas culinarias y prácticas de mesa en Francia de la Edad Media a nuestros días*. Barcelona: Editorial Zendera Zariquiey.
- Ortiz, Fernando (1978) *Contrapunteo cubano del tabaco y el azúcar*. Caracas: Biblioteca Ayacucho.
- Parkhurst Ferguson, Priscilla (2004) *Accounting for Taste: The Triumph of French Cuisine*. Chicago: University of Chicago Press.
- Quijano, Aníbal (1992) 'Colonialidad y modernidad-racionalidad' Cap 14 in *Los conquistados: 1492 y la población indígena de las Américas*, ed. Heraclio Bonilla, Ecuador, FLACSO, Tercer Mundo Editores and Ediciones Libri Mundi.
- Recinos, Adrián (trans.) (1960) *Popol Vuh: Las antiguas historias del Quiché*. México: Fondo de Cultura Económica.
- Roach, Joseph (1996) *Cities of the Dead: Circum-Atlantic Performance*. New York: Columbia University Press.
- Rodríguez, Douglas (1995) *Nuevo Latino: Recipes that Celebrate the New Latin American Cuisine*. Berkeley: Ten Speed Press.
- Romero de Solís, Pedro (1996) 'Cultura bovina y consumo de carne en los orígenes de la América Latina', in *Cultura alimentaria Andalucía-América*, ed. Antonio García Aranda, México: UNAM.
- Sahagún, Fray Bernardino de (2001) *Historia general de las cosas de la Nueva España* Vol I. Ed. Juan Carlos Temprano, Madrid: Dastin.
- Thompson, David (2002) *Thai Food*. Berkeley and Toronto: Ten Speed Press.
- Tomich, Dale W. (2000) 'The Other Face of Slave Labour: Provision Grounds and Internal Marketing in Martinique', in *Caribbean Slavery in the Atlantic World*, eds Verene A. Shepherd and Hilary McD. Beckles, Kingston: Ian Randle.
- Van Aken, Norman (c.1988) 'Fusion', viewed 23 November 2003, <<http://normans.com/index2.htm>> .
- Watts, David (2000) 'Early Hispanic New World Agriculture, 1492 to 1509', in *Caribbean Slavery in the Atlantic World*, eds Verene A. Shepherd and Hilary McD. Beckles, Kingston: Ian Randle.