Sugar and livestock: Contraband Networks in Hispaniola and the Continental Caribbean in the Eighteenth Century¹

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Resumo

No século XVIII duas partes do leste da Espanhola (Santo Domingo Espanhol) fornecia carne e animais para o trabalho nos engenhos de açúcar da colônia francesa ao oeste da Ilha de Saint Domingue, a mais rica produtora de açúcar do mundo. Saint Domingue também comerciava ativamente com a costa de Venezuela que lhe fornecia animais como força de tração para os engenhos de açúcar. Esse comércio, foco do circuito do contrabando de animais entre as colonias españolas, francesas, inglesas e holandesas, foi muito ativo. Essas interações sugerem uma estrutura para a história caribenha, ausente nas interpretações sobre a plantação escravista. Meu estudo vai além do arquipélago antilhano, até o litoral de Sul América. Finalmente, o artigo ilumina o rol desempenhado pelos animais no comércio e cuja importância tem sido subestimada na história caribenha.

Palavras-chave: Caribe, Sur América, comercio de animales de trabajo

Resumen

En el siglo XVIII las dos partes del este de la Española (Santo Domingo Español) abastecía de carne, animales de trabajo a la parte oeste de la Isla, la colonia francesa de Saint Domingue, la más rica colonia azucarera del mundo. Saint Domingue también comerciaba activamente con la costa de Venezuela, que le suministraba mulas para tracción en los ingenios azucareros. Ese comercio también rigió el circuito de contrabando entre las colonias españolas con la colonias francesas, inglesas y holandesas. Esas interacciones sugieren una estructura para la historia caribeña ausente en las interpretaciones sobre la plantación esclavista. Mi estudio se extiende más allá del archipiélago antillano, hasta el litoral de Sur américa. Finalmente el artículo ilumina el rol de los animales, cuya importancia ha sido subestimada en la historia caribeña.

Palabras claves: Caribe, Sur América, comercio de animales de trabajo

Abstract

In the eighteenth century, Hispaniola's eastern two-thirds (Spanish Santo Domingo) supplied beef cattle. work animals, and timber for the western third of the island, French Saint Domingue... the richest sugar colony in the world. Saint Domingue also traded actively with the Venezuelan coast, which supplied mules for powering the colony's sugar mills. A focus on these major contraband circuits foregrounds the Spanish Caribbean's interactions with the French, English, and Dutch Caribbean. These interactions suggest a framework for Caribbean history where sugar plantation slavery remains a key component yet does not govern analysis and concept-formation. My framework also goes beyond the Antillean archipelago, which still bounds most studies on the region, to encompass the Caribbean littoral of South America. Finally, the article highlights the role of animals, in this case livestock, whose importance has been underestimated in Caribbean history

Keywords: Caribe, South America, animals trade

In the 1780s, the French colony of Saint Domingue was the wealthiest slave-plantation economy in the world. Over 450,000 slaves of a total population of 520,000 toiled in its 8,000 plantations (MOREAU DE ST. MÉRY, 1795, I, p. 5). Saint Domingue was a major producer of coffee and indigo, but sugar cane was the source of the colony's greatest riches, and its 800 sugar plantations had the largest number of slaves and highest profits. "Hundreds of huge sugar-factories", as James wrote, covered the North Plain of Saint Domingue, the Plaine du Nord. As CLR James memorably described it: "Field upon field, the light green sugar cane [...] continually rippled in the breeze, enclosed the factory and the dwelling houses like a sea". There, "gangs of hundreds of workers" working and living together "were closer to a modern proletariat than any group of workers in existence at the time" (JAMES, 1963, p. 86) The canefields and sugar factories (sucreries) of the Plaine du Nord were concentrated in a 250-km2 zone just south of Cap François (Le Cap), a zone that was about the size of the island of Antigua.

The plantations (*habitations*) of the Plaine du Nord were linked by a network of roads and drainage channels. Le Cap, the colony's capital on the edge of the Plaine du Nord, was an attractive port town on a hillside, with amenities ranging from

renowned eateries to learned societies. The Plaine du Nord (*Plèn dinò* in creole) was known by the Spanish as *la llanura del Guarico*, and Guarico was the name (probably of the Taínos) for the northeastern region of Hispaniola. The Plaine du Nord was the heartland of the Saint Domingue sugar production and a pivot of the Atlantic economy. Not incidentally, this would also be the heartland of the slave revolution.

East of Le Cap, the Plaine du Nord becomes the Valle del Cibao, a major region of the neighboring Spanish colony of Santo Domingo. The Spanish two-thirds of Hispaniola was strikingly different from Saint Domingue. Three mountain chains straddle Hispaniola, but on the Spanish side the mountains are taller, their heights covered with dense forest and watered by copious rainfall brought by northeast winds. The tallest mountain range, the Cordillera Central (or Massif du Nord) rises over 3 000m in Santo Domingo and borders the Cibao valley on the south. The Cibao extends eastward all the way to the Bay of Samaná. The valley of the Plaine du Nord/Cibao, 225-km long, attains its greatest breadth in Santo Domingo and was favored by rainfall and river basins

Towards the east, the Cibao Valley becomes the Plaine du Nord, the axis of colonial Saint Domingue's plantation economy. (*Plèn dinò* in creole; *llanura del Guarico* (SÁNCHEZ VALVERDE, 1947, p. 100) About 30 kms wide near the present-day border with Santo Domingo, the Plaine du Nord narrows down toward the east. The plain is no more than 18 kms wide at Cap Haitien, and at times less than ten. The Massif du Nord crosses diagonally just south of the Plaine du Nord, and several rivers that flow from that mountain chain alternately irrigated and flooded the plain (DUTRÔNE DE LA COUTURE, 1790, 344-5).

Writing from the Spanish side, Sánchez Valverde in the late eighteenth century described the Cibao valley as "a plain without interruption or significant elevations, that ends in the plain occupied by the French, called the Guarico, and which is watered by innumerable rivers, creeks, and streams". (SÁNCHEZ VALVERDE, 1947, p. 6).² On the whole, the western, leeward side of Hispaniola was/is drier, less forested, its rivers fewer and

less predictable. Moreau de St. Méry wrote that Saint Domingue "is hotter and more exposed to droughts", which, he noted, had become "more frequent and longer with deforestation" (MOREAU DE ST. MÉRY, 1795, I, p. 4). While Hispaniola is one fourth smaller than Cuba, but has averages greater north-south widths (170 kms. compared to Cuba's average width of 100 kms) and has significantly taller mountains. Hispaniola thus has a more "continental" ecology, if that term may be applied to a Caribbean island, and is the only Caribbean island with all types of tropical climates (BLUME, 1974, p. 214).

In the valleys and savannahs of Spanish Santo Domingo, there were some 200,000 corralled or penned head of cattle. There were also, Moreau estimated, 50,000 more in the wild throughout the Spanish colony's thick ecology of *montes* (rugged, forested terrain); plus 50,000 donkeys and horses, wild and otherwise, for a total livestock population of 300,000. Livestock far outnumbered the Spanish colony's population, about 180,000 in 1780. Twice as large as Saint Domingue, Santo Domingo had only a third of its population (GUTIÉRREZ ESCUDERO, 1985). While St. Domingue had five African slaves for every free white, Santo Domingo had just the opposite proportion (CASSÁ, 1982-3, p. 8).

Despite their differences, indeed *because* of them, the eastern and western parts of Hispaniola did not exist in isolation from each other. Indeed, an old and active livestock trade linked the Spanish and French sides of Hispaniola. Saint Domingue purchased cattle both for meat and as work animals, as oxen. Mules turned the colony's sugar mills and transported people and goods. Pigs from the Spanish colony were also in demand in Saint Domingue, especially for making lard, widely used in the local cuisine. The importance of Spanish cattle imports had been recognized already in a 1762 treaty where the cattle trade between the two parts of the island was authorized for the first time (MOREAU DE ST. MÉRY, 1944, p. 374-75; SEVILLA SOLER, 1980). Under the treaty, Spain agreed to provide the French at least 800 head per month (600 of those for Le Cap) at a fixed price of 35 pesos per pair [mancuerna] of three-year olds.

The livestock trade was so important to Saint Domingue that a long-standing boundary dispute between the Spanish and French colonies was finally resolved in 1773 in part under threat by the Spanish that they would stop the recently-legalized trade in cattle to the French side (a rather empty threat, actually, given the former's virtual dependence on that commerce). Well-informed observers in the French and Spanish colonies recognized the importance of Hispaniola's east-west interactions. Antonio Sánchez Valverde and Moreau de St. Méry wrote extensively on the importance of Saint Domingue's cattle trade with Santo Domingo (MOREAU DE ST. MÉRY 1944; SÁNCHEZ VALVERDE 1947).

Contemporary Dominican historians have also recognized these interactions. Frank Moya Pons notes: "This cattle trade between the French and the Spanish in the island of Santo Domingo marked the relations between both colonies during the entire eighteenth century and was one of the supports (*soportes*) of the sugar revolution of St Domingue in the eighteenth century" (MOYA PONS, 2008, p. 141). Franklyn Franco has characterized the relationship between the two colonies as one of "juxtaposition and interaction" (FRANCO, 2007); and Roberto Cassá even affirms that the Spanish and French colonies in Hispaniola configured "a model of a division of labor" and Santo Domingo was an economic "subcolony" of Saint Domingue. (CASSÁ, 1982-3, p. 113-114)

Livestock from Santo Domingo and from other Spanish colonies was a key dimension of Saint Domingue's explosive success as a slave-plantation colony. At the same time, Spanish Santo Domingo was the Achilles heel of its neighboring colony, as it was the major base for 2,000 or 3,000 maroons, many of whom played a major role in the Haitian Revolution (FICK, 1990; FOUCHARD, 1981).

Yet the full implications for Caribbean historiography of the close interactions between east and west Hispaniola and its wider significance in Caribbean history have remained less visible, perhaps hiding in plain sight. One difficulty has been the largely illegal nature of the island's east-west livestock trade, which generated scant documentation. A more important obstacle

to our understanding may be the ways in which Caribbean historiography has envisaged relations between the Spanish Caribbean and the non-Hispanic Caribbean in the seventeenth and eighteenth centuries.

Two contrasting models have prevailed. One model posts a single, largely uniform plantation economy model for the Caribbean defined by flat coastal ecologies; large-scale slave plantation production; dense, overwhelmingly slave populations; racially, sharply polarized societies; and monocrop export, principally sugar, all as a consequence of a local "sugar revolution" (CURTIN, 1998; HIGMAN, 2000). Caribbean societies that do not correspond to the plantation model in the seventeentheighteenth centuries such as the Spanish Antilles are deemed to have been on its way, sooner or later, to a "sugar revolution". In the meantime, those Hispanic Caribbean societies are seen as rather formless "backwaters", "dormant" (RICHARDSON, 1992, 36), in line for the "relay race" of Caribbean plantations (until they joined the "relay race" of Caribbean sugar plantation development (MINTZ 1974, p. 150, after WILLIAMS, 1944, p. 7). Or to return to the race, so to speak, as the Spanish Antilles did have an early sugar/slavery epoch in the sixteenth century.

Sidney Mintz, who has often been read as assuming an overarching plantation model for the seventeenth and eighteenth century Caribbean, offered a contrasting historical account of the three Spanish Antilles as significantly highland, forested ecologies, thinly-populated, cattle-based, smallholder economies, and mixed race "creole" societies, as they have been called, with a specific historical trajectory (MINTZ 1971, 2010). Harry Hoetink, based on his work on the Dominican Republic, contrasted these models for the Caribbean as a whole and developed them as "two variants" in race relations (HOETINK 1967, 1985). Also from the standpoint of Dominican history, Richard Turits (TURITS, 2003) and Lauren Derby (DERBY, 1994) have demonstrated the depth and complexity of interactions between the two parts of Hispaniola, extending to our own time.

Recent perspectives on the Caribbean in the seventeenth and eighteenth centuries suggest that these twin models of

Caribbean historical development do not sufficiently allow for interaction, especially through contraband trade between the territories characterized by each model (RUPERT, 2012; SCARANO, 2012; MINTZ, 2010; YACOU, 2007; ANDREWS, 1998; AIZPURÚA, 1988, 1993; DACHARY, 1998; GIUSTI-CORDERO, 2009). Indeed, the sharpness with which the two models are generally drawn virtually excludes the possibility of interaction, let alone of a reciprocal shaping of the models through that interaction. The contrasting sugar/cattle, plantation/hinterland models are all the more limited because they tend to consider only the archipelago and sidestep the Caribbean coastal regions of the Spanish colonies in Central and South America, a point to which I shall return.

Background of the sociedad ganadera in Spanish Hispaniola

Hispaniola (La Española) was Spain's first colony in the New World and, for almost three decades, the axis of the planetary transformation that was 1492. Hispaniola was the springboard of Spanish conquest in the Antilles and the continent, and Spain's major gold producer from 1492 to the onset of the Spanish conquest of Mexico in 1521. It also had the Americas' premier sugar industry, with over thirty mills in production at one time.

The island was also the site of massive annihilation through disease, conquest, and forced labor of perhaps a half-million Taínos, of whom just 20,000 remained two decades after conquest. Early imports of cattle, donkeys, horses, pigs, and goats as well as dogs soon multiplied astonishingly in the verdant, predator-free ecology of the island. The cattle ravaged remaining Taino cropland and multiplied prodigiously in the vast, humid, rugged mountain country of the island.

Scattered settlements took shape, especially along the north coast: principally Puerto Plata, Monte Christi, and Ballajá. These settlements were linked through mountain passes with the vast and fertile interior valley of the Cibao valley and its mineral-rich uplands. There was frequent communication between Puerto Plata, which was the port of the Cibao Valley, and the drier west coast, leeward of the island's mountains, where settlements

grew in Maguana (later Léogane) and Gonabo (later Gonaïves). *Tangomangos*, who were often slaves, served as intermediaries between local producers and the contrabandists, usually known as *rescatistas*; the *rescate* (ransom) was "payment" in contraband goods for a feigned abduction by a pirate or corsair (DEIVE, 1996; ANDREWS, 1978).⁴

In the early seventeenth century, and in a virtual state of panic due to the rapid growth of contraband with Dutch, French, and English "interlopers", the Spanish authorities carried out the *devastaciones* of Hispaniola's north and west littoral regions (1605-1606). These were, quite literally, "devastations": scorchedearth military campaigns aimed at depopulating the target zones of both people and animals. The *devastaciones* were only partly successful. It was impossible to round up thousands of head of cattle in those regions, including many who lived in the wild; many were killed outright. The inhabitants of the two regions proved even less tractable, to the point of rebellion.

In Cuba, there were similar confrontations between creoles and government officials in Bayamo, in Oriente (eastern Cuba), whose port town of Manzanillo was a contraband paradise. In 1603, just before the *devastaciones* in Hispaniola, Havanabased colonial authorities attempted to carry out the *devastación* of the Bayamo region. The colonial government intended to capture the entire population of Bayamo and to march them to Havana, hundreds of kilometers west. The civil and ecclesiastical authorities responded by jailing the government's envoy. When Havana sent reinforcements the *bayameses* took to the hills. Subsequently, Bayamo townsmen paid *rescate* for the bishop of Havana, who had been captured by a French pirate (largely with contraband goods, to be sure) and a truce of sorts was achieved.

In the 1620s, French and English settlers who had been expelled from St. Christopher/St. Kitts in a *devastación* of sorts relocated to the island of Tortuga, just off the northwest coast of Hispaniola. There they remained, by and large, for decades despite repeated Spanish attempts to oust them. These were the buccaneers, so named for their practice of *boukan*, smoking and salting leather and drying meat over a wooden grill; but also, it seems, because of

their freewheeling lifestyle (*boucan* in French also means "place of debauchery"). The buccaneers made a living from hunting and also sold leather and smoked meat to passing ships. After one of their evictions from Tortuga, the buccaneers began settling on the mainland of what would become Saint Domingue. Hunting wild cattle several months of the year on the mainland gradually became permanent settlement, especially for the French, and the first *habitations* or sugar plantations began. The last buccaneers would become the first *habitants* and sugar, coffee, and indigo planters. Hence the very origins of the French colony of Saint Domingue were closely linked to the island's ecology, a cattle economy, contraband, and the eastern side of the island.

The Cibao/Plaine du Nord and the livestock trade

The Cibao/Plaine du Nord was the key corridor of Hispaniola's cattle economy. As early as 1700, the inhabitants of the interior of Santo Domingo (Santiago, La Vega, Azua, Hincha) had established an active communication with the French colony, which they supplied with livestock, mules for the mills, etc. in exchange for liquor [aguardiente, probably rum], textiles and clothes (GUTIÉRREZ ESCUDERO, 1985, p. 160.

Attempts to limit or tax the cattle trade were never quite successful. A tax on cattle exports to the French colony in 1720 sparked the Tumultos de Santiago, an armed confrontation between cattle raisers of Santiago and authorities from the capital (MOREAU DE ST. MÉRY, 1944, p. 368). The capital, also called Santo Domingo, had chronic shortages of meat; yet selling cattle to the capital involved a longer and more difficult journey than across the Cibao Valley to the French. "Sending cattle to [the city of] Santo Domingo was not good business for the livestock raisers of the interior" (GUTIÉRREZ ESCUDERO, 1985, p. 149, 154). The Dominican creoles "would not stop the trade nor were the colonial authorities inclined to consent it, or they would lose their economic protagonism" (which they had probably lost already!). The rural, creole population of the cattle country of Eastern Hispaniola -- descendants of runaway Tainos, African slaves, and Spanish outcasts -- were the *hateros* and *monteros*. They, too, were "feral" of sorts, and indeed were called orejanos, the name that was also applied to wild, unmarked cattle. The Dominican creoles were, according to Moreau, indifferent to the riches of nature that surrounded them. They went barefoot in the *monte*, the soles of their feet protected by thick layers of skin. The *hateros* held nominal titles to land and forest in common with near and distant family members, but often went hunting themselves, with a lance and dogs (MOREAU DE ST. MÉRY, 1944, p. 104) *Orejanos* "is the name that is given in Santo Domingo to all the inhabitants of its settlements in the interior, who make a living raising livestock, and hunting wild cattle in the forest, which they call *montear*" (SANCHEZ VALVERDE, 1947, p. 97).

In the late seventeenth and early eighteenth century, Sánchez Valverde wrote, hunting of cattle for their hides (corambre) was "incomparably greater", on account of their sale or barter in the contraband trade. In connection with this commerce, a large population of feral dogs [perros alzados, xibaros] developed in the forests, feeding principally on newborn cattle (SÁNCHEZ VALVERDE, 1947, p. 61). The feral dog population had however declined by the 1780s. The number of cattle and pigs was "incomparably larger" than wild donkeys and horses, and corralled cattle prevailed in the later part of the century. Smoked meat, sacks made of plant fiber or leather, as well as mules, horses, and some tobacco were regular items in the contraband trade (MOREAU DE ST. MERY 1944, p. 390).

The Spanish colony's fecund ecology was associated with a markedly open system of land rights where commons over land, water, and forest prevailed, in contrast with the elaborately framed and notarized juridical landscape of Saint Domingue; and where rights of use and possession were far more prevalent than fee-simple or absolute property rights. Moreau de St. Méry, a Martinican creole who was a veteran barrister in Le Cap, was particularly struck by this property regime.

The pastures, the mountains and waters are common, in general, beyond a certain distance from the cities. Each hato obtains a league of circumference if the hato has two thousand head; another league if it has six thousand head and a third league if it has ten thousand head and nobody may obtain more

than those three leagues. Wild fruits are in common; the waters that may used in agriculture are in the public domain and the president and the Audiencia are charged with regulating the use of the common things (MOREAU DE ST. MÉRY, 1944, p. 348; translation supplied).⁶

Cattle and mule raising were most widespread in the areas closest to the French colony (MOREAU DE ST. MÉRY, 1944, p. 62). Some large livestock holdings developed there. For the most part, the livestock went to "sustain the French and to provision their manufactures with mules and oxen, whether for moving machinery or for transport" (MOREAU DE ST. MÉRY, 1944, p. 238).

Even the eastern Cibao known as La Vega, which lay at a greater distance from Saint Domingue, was largely devoted to cattle raising, even though it was an extraordinarily fertile area with great agricultural potential. Sánchez Valverde lamented in the 1780s that La Vega was,

of no use at present for us but to sustain the French, and to provide them with mules, beasts and oxen to move the machinery of their sugar mills, and to carry their product. This is why they call us their herdsmen but this is also why they are our dependents; lacking as they do breeding places [criaderos], they would necessarily abandon their numerous and extensive plantations, and would be forced to evacuate the island, were we to cease to contribute for them with such assistance (SÁNCHEZ VALVERDE, 1947, p. 28-29).

Actually the full term used elsewhere by Sánchez Valverde was *pastores poltrones*, i.e. "lazy herdsmen" (SÁNCHEZ VALVERDE, 1947, p. 102). A Dominican creole Sánchez Valverde was an ecclesiastical official and traveled throughout the Spanish colony, had among his major sources "the monteros of all the island who make a living from penetrating the most remote areas to find the hunt" and have been most useful given that it is an "occult [oculto], and almost inaccessible terrain (SÁNCHEZ VALVERDE, 1947, p. IV).

Moreau de St. Méry blamed the French colonists themselves for their early shift away from raising their own livestock, which led them to "absolute dependence" for meat supplies on purchases from the Spanish colony. Moreau saw this as "inexcusable negligence that has now become almost impossible to reverse" (MOREAU DE ST. MÉRY, 1944, p. 106). The French set apart little land for cattle raising and, apart from the original habitants, refrained from livestock-related activity generally as being a low-status occupation (in a curious reversal of Spanish cultural attitudes toward cattle ranching vs. agriculture, although here of course the counterpoint was slavebased plantation agriculture). Indeed, the small cattle sector that remained in Saint Domingue was often at odds with the planters (MOREAU DE ST. MÉRY, 1944, p. 106). In a sense, the French did indeed rely on a "division of labor" in the island and devoted their efforts to the more lucrative, prestigious line of plantation production.

The scope and volume of the cattle trade between the French and Spanish colonies was staggering. In 1780, four-fifths of the 15,000 head of cattle that were purchased annually by Saint Domingue (that is, 12,000) originated in Santo Domingo. Cattle sold at an average of 30 pesos in St. Domingue, thus gross annual revenues for the Santo Domingo cattle raisers may be estimated at 360,000 pesos. Marketing expenses were minimal. While roads and communications were difficult in Santo Domingo, livestock has a singular characteristic: the commodity transports itself over terrain (and through streams!) that would be impossible for wheeled transport. Livestock's self-transport is actually done with a minimum of sustenance; fattening pens at the destination restored the cattle and mules to market readiness

A "maritime trail" also linked Puerto Rico with Santo Domingo. Cattle and mules were transported from Puerto Rico probably from Aguada on Puerto Rico's west coast, to the Plaine du Nord, which Fray Iñigo Abbad called *el Guarico*, following Spanish usage, in his 1773 account. Puerto Rico's cattle trade with Saint Domingue crossed the Mona Passage and disembarked at the Bay of Samaná on the east end of the Cibao Valley (from Aguada to Samaná, 265 kms, and a further 280 km to Le Cap).

An alternate route through Punta Cana, on the eastern point of Santo Domingo, involved a shorter sea route (117-km) but a longer land journey (over 425 km) to *el Guarico*. Perhaps the full sea journey from western Puerto Rico to Cap Haitien was also carried out. The price for cattle in Puerto Rico was almost half of that sum: 16 pesos (O'REILLY, 1969, p. 401). This price difference evidently made the trip worthwhile.

Other contraband routes connected Saint Domingue with the Thirteen Colonies/U.S. and the Caribbean littoral of Spanish colonies on the mainland, particularly –for the livestock trade--the Caribbean coast of New Spain and Venezuela. Cattle from Santo Domingo remained quite preponderant in Saint Domingue, but the Spanish mainland colonies became the main mule exporters to Saint Domingue by the mid-eighteenth century, coinciding with a rise in mule prices (MOREAU DE ST. MÉRY, 1795, p. 233). Livestock from the Thirteen Colonies/U.S. was imported to Saint Domingue but its prices tended to be higher and would have greater difficulty in acclimation.

All about mules

According to Dutrône de La Couture, writing in the 1780s, in animal-powered mills in Saint Domingue, only mules were used; an eighty-mule pack was average in the larger *sucreries* (DUTRÔNE DE LA COUTURE, pp. 105-6; for Martinique, see TOMICH, 1990, pp. 148-9) There were a number of water-powered mills in the Plaine du Nord, but river flows were highly variable; and information on them is fragmentary, even in the classic works by Moreau and Dutrône.

Mules were a significant export from Santo Domingo to Saint Domingue earlier in the eighteenth century and continued to figure in the commerce between the two colonies. Sánchez Valverde indicates that wild donkeys were so numerous in Santo Domingo since the sixteenth century that they were hunted extensively and sold at very low prices. Herds of wild donkeys roamed the *montes* of Santo Domingo towards 1700, and to some extent still did when Sánchez Valverde wrote in the 1780s (SÁNCHEZ VALVERDE, 1947, p. 60). Thomas Roughley,

author of *The Jamaica planter's guide* (1823) was a sugar planter in Jamaica for twenty years. In the book he refers on multiple occasions to mules, suggesting widespread use in Jamaica into the 1820s. "The choice of stock (such as cattle and mules), either for work or breeding, is a leading feature in the principle of good plantership." Interestingly, Roughley distinguishes between "creole" and "Spanish" mules (ROUGHLEY, 1823, p. 128, 136)

Mules are the offspring mainly of male donkeys (asnos, burro hechor, bour) and female horses, i.e. mares. Mules are more difficult to breed and to raise than cattle, and are comparable to horses in this regard. They have long gestation periods and single-offspring births; they also tend to have a high mortality rate before their third year, and their life-span was usually no more than eight years. Breeding mules thus requires large herds of donkeys and (especially) mares. Mules are almost invariably sterile and there was no question of breeding mules with mules (which is why in Spanish something outlandish or unacceptable is described as *¡parió la mula!*) This is also, it should be noted, why mulato, mulatto, and mulâtre derive from "mule" and why those words are especially offensive, though they were widely used at the time and still current in some contexts in the Spanish Antilles.

Despite their drawbacks, mules —whether male or female, it seems—were highly valued because of their strength and endurance, similar to donkeys, an intelligence and sure-footedness similar to horses, and a longer average life span than oxen (20-30 years). Mule upkeep is easier than horses or oxen, and they suffer less in dry periods. Mules were widely used in the Caribbean for turning sugar mills (WRAY, 1848, p. 61). As Linda Rupert writes in *Creolization and contraband*, mules were the "motor of choice"—and a self-energized one at that—in Caribbean sugar mills (RUPERT, 2012, p. 170). Wray underscores that even the manure and urine of mules, as well as the other work animals, were also valued in a highly calculating political economy.

In Saint Domingue, mules were favored as energy sources for sugar mills, where, like oxen, they turned sugar mills blindfolded. In St. Croix and in several of the British and French

islands, sugar mills were also known as "mule mills" (also animal mills or, in French, *moulin à betes*). Mules were used in most mills in Saint Domingue and they were one of the costliest plantation inputs. A good mule mill using relay teams produced about 500 gallons of juice per hour, or 10,000 gallons in a day if the mill ran more or less around the clock. ⁷ In Saint Domingue, mules were the leading engine of the sugar mill engine.

In the seventeenth century, the Leeward Islands imported mules from mainland South America and Puerto Rico, and from as far away as England and the Barbary Coast (WATTS, 1987. pp. 408-9; PARES, 1968). Yet mules fell ill in the sea voyage, like other livestock brought from afar, and often had "severe acclimatization problems" (WATTS, 1987, p. 429). In much of the Eastern Caribbean, including both British and French islands, windmills were the primary power source; but animal mills remained by far predominant in Martinique (TOMICH, 1990, p. 155); the opposite was other Lesser Antilles, where windmills were the predominant source of energy for sugar mills until the nineteenth century. Jamaica, with much less wind power at its disposal, was another matter. "Mule-powered mills were especially common too in the early days of sugar production in Jamaica" (WATTS, 1987, p. 429). At least one planter's guide suggests that mules—probably bred in Cuba-- remained important in Jamaica into the early nineteenth century. Watts believes that mules were readily available in Jamaica, as were descended from horses and asses left by the Spanish".

Oxen were sometimes preferred elsewhere in the Caribbean because, as a general rule, the slower the rate of movement of the animal, the greater the rate of extraction; hence oxen were regarded as more efficient than mules, and mules more so than horses (WATTS, 1987, p. 422). Yet Dutrône writes, from his own experience, that mules were preferred because oxen were too slow. Sugar mills in Saint Domingue were probably built stronger and were more efficient than in the Lesser Antilles and worked well at higher speeds. Dutrône's celebrated planter's guide includes a drawing of a *parc a mulets* next to the sugar mill (DUTRÔNE DE LA COUTURE, 1790, p. 260). Ironically, another sort of mule at the time gained strategic importance in

that other hothouse of the Industrial Revolution: spinning mules or mule jennies (1779), which were thus named because they were a hybrid (no less) of a water frame and a spinning jenny.

Broader circuits

Mules were a leading component of intra-Hispaniola trade until St. Domingue's mule trade with the Spanish American mainland became paramount, probably in the 1740s. These mules were shipped from the contraband ports of Venezuela along that colony's generally tranquil Caribbean coastline. The Venezuelan seaports were linked by long-established trails to the interior of the colony, the vast Llanos. Mules were exported from the Venezuelan coast in astonishing numbers, often through credit facilities provided by the merchants of Curaçao; and Saint Domingue was their single most important customer. In the past, reports Moreau, mules were imported to Saint Domingue occasionally from the U.S. state of Georgia, and had become quite well acclimated, but their price was too high; probably due to transport costs (MOREAU DE ST. MÉRY, 1944, p. 397).

By the 1780s, the mule population in Santo Domingo had dwindled, due to disinterest, inadequate raising methods in, and a broad shift to the easier, lucrative activity of cattle raising and selling to the French. Mules from Santo Domingo were smaller than imports from the continent, and if they "grew up in the wild, mixed together with wild cattle and horses, they tended to be quite unruly, as did the others (SÁNCHEZ VALVERDE, 1942, p. 396). However, mules from Santo Domingo remained wellsuited to work in the sugar mills. The fact that the mules from the Spanish colony did not have to undertake a debilitating sea journey and that they did not need acclimation, added to their value. Despite its trade with New Spain and Venezuela, Saint Domingue continued to have "the utmost need for mules". The price paid for Spanish mules was higher than their typical difficult behavior merited, according to Moreau. Meanwhile, demand for cattle from the Spanish colony only grew stronger. Martinique's cattle trade was similarly centered on Puerto Rico -whose cattle sold in Martinique for 400-500 a head, primarily as work animals (TOMICH, 1990, p. 149).

Since the 1740s, when trade with Santo Domingo increased vigorously, Saint Domingue also expanded commerce with New Spain (Mexico) and the Venezuelan coast on the South American mainland, in part using their legal trade with Santo Domingo as a subterfuge. Moreau noted that a major reason for the shift was the increasing frequency of droughts, along with inadequate breeding. This led Saint Domingue planters to buy mules "on the coasts of the Spanish continent, in the Gulf of Mexico, imitating the *islas de Barlovento* (the Spanish name for the Lesser Antilles) which equally suffered from the same penury". On three zones of the Venezuelan coast, exports of mules raised in the interior grasslands, the Llanos, found a ready market facilitated by Curacao merchants. "Saint Domingue thus joined a circuit that also connected with the British and French sugar islands of the Lesser Antilles, always in demand of work animals" (MOREAU DE ST. MÉRY, 1944, p. 369-370).

Saint Domingue's mule trade with the Spanish colonial mainland was larger by mid-century than with Santo Domingo, where the cattle trade kept growing. Alexander von Humboldt, who travelled extensively in Venezuela, reported that Puerto Cabello annually exported over 10,000 mules (HUMBOLDT, 1956, III, p. 155). For Venezuela generally, Humboldt estimated exports of 30.000 mules a year (HUMBOLDT, 1956, V, p. 170); and this, despite a decline over the previous decade due to the Haitian Revolution and Caribbean wars. Humboldt commented in detail about the contraband trade in mules between the Venezuelan coast and the Caribbean islands, principally with the Eastern Caribbean islands but also with Saint Domingue. The Llanos on the Venezuelan interior, where most of the mules originated, had a livestock population of some 1.2 million cattle and 90,000 mules (RUPERT, 2012, p. 172). In the Llanos, the offspring of horses and donkeys grew in feral state, and were brought to the coast. Since the weeks-long journey could take its toll on the mules, they were usually fattened in large hatos on the coast before shipment. There were several major mule-export zones on the Venezuelan coast. Coro, facing Aruba; Puerto Cabello; and Tucacas, where a Sephardic enclave thrived; Barlovento, east of Caracas; and Rio San Juan, on the Gulf of Paria facing Trinidad.

Venezuela mule exports represented about half the value of the colony's main export, cacao (RUPERT, 2012, p. 155, 172)

In the late eighteenth century, the bulk of the mule trade apparently shifted to eastern Venezuela, Oriente, as Curaçao merchants began to be displaced by Venezuelans trading directly with the sugar-producing islands. The mules were exported on *muleras*, which carried up to 12 mules, or on larger vessels that could accommodate (if that is the right word) up to 80 mules. In Humboldt's vivid description, the mules were roped to the ground and lifted on board by cranes.

Arranged in two rows, the mules stay upright only with difficulty as the vessel heaved and rolled [durante los movimientos de balance y arfada]. In order to intimidate them and make them more docile, the drum [caja] is played for much of the day and night. May the reader judge the tranquility that a passenger may enjoy who has the courage to travel to Jamaica on one of these schooners loaded with mules! (HUMBOLDT, 1956, III, p. 155-156).

Aruba and Bonaire were used as way stations and meeting places in the contraband routes; even the barren Las Aves group was used, with feeding grass brought over to the islets. By the 1780s, Saint Domingue purchased an average of 5,000 mules per year, at 100 pesos each (MOREAU DE ST. MÉRY, 1944, p. 396). While available price information is fragmentary, it should be noted that 100 pesos is more than three times the price on the Venezuelan coast in the early 1800s, or in Puerto Rico in the 1760s (40 pesos per mule) (O'REILLY, 1969 [1765], p. 401). Apparently, there were handsome profit margins. In contrast, donkeys from Santo Domingo [not mules] sold in Saint Domingue for 15-20 pesos. Horses sold for an average of 25 pesos and, as noted, cattle sold for 16 pesos. It is also apparent that there was no shortage of mules in the market. The breeders on South American coast, Moreau reported, paid premium prices in Aruba for male donkey "studs" --up to 500 pesos, over 15 times the market price-- in order to or breed mules for sale to Saint Domingue.

The trade network between Saint Domingue and the Caribbean coast of Venezuela and the coast of New Spain-- and the its ultimate links with the interior hinterlands of the Spanish colonial mainland where the mules were in fact raised -- suggest the breadth and complexity of the social relations that configure a plantation economy. One dramatic expression of those links was the 1795 conspiracy in Coro led by José Leonardo Chirinos, a free black married to a slave, which resulted in 162 executions including Chirinos. As Rupert notes, Chirinos visited Saint Domingue in the early 1790s several times with his employer, who was engaged in the mule trade (RUPERT, 2012, p. 206).

The most conflictive interaction between the French and Spanish colony was the large maroon population in the mountainous border region of the Santo Domingo. The maroon settlements included runaways that, to Moreau's alarm, had never known slavery (MOREAU DE ST. MÉRY, 1944, pp. 418-24). In the early eighteenth century, the Spanish authorities agreed to return the maroons to Saint Domingue, but these had no effect. In 1719, the Spanish government also established a settlement, San Lorenzo de los Minas, on the Ozama River; again, no results: "because the rebel blacks prefer to remain in their hide-outs, enjoying a savage liberty, rather than submit to the obligations, severe though reciprocal, that society imposes" (MOREAU DE ST. MÉRY, 1944, p. 421; translation supplied). Free coloreds and blacks were extensively involved in the cattle trade, which conceivably provided legal cover for conspirators moving across an elusive frontier. "It would be difficult to hear louder or more univocal recriminations than are directed at the Spanish, in relation to the black Frenchmen that flee from their home" (MOREAU DE ST. MÉRY, 1944, p. 425). With good reason, from the slaveholders' point of view: the maroon zones of the Spanish side were to be a major staging area for the Haitian Revolution (FICK, 1990).

Brazilian perspectives on plantation-hinterland relations

Comparison of plantation-hinterland interactions between Hispaniola and Brazil underscores the significance of these patterns as characteristic local/regional dimensions of the Atlantic and world economy that cannot be deduced from broader levels of analysis, and which have specific geographies, material life, and social relations. In the first major epoch of Brazilian sugar production, in the late sixteenth-seventeenth century, the main hinterland zone of the plantation regions of Northeast Brazil (Pernambuco and Bahia) were the initially the coastal sertãos of Alagoas and Sergipe, but later also Ceará, Piauí, and Maranhão.

Until the second half of the seventeenth century that is, after the defeat of the Dutch occupation, settlement in Bahia and Pernambuco largely followed the littoral (CAPISTRANO DE ABREU, 1960, p. 130-3). Penetrating the interior of Pernambuco was especially difficult due to the highlands and *mata* in the hinterland; its rivers were not navigable, except for the São Francisco; and the indigenous Tupis (Cariris) closer to the coast presented formidable resistance (CAPISTRANO DE ABREU, 1954, p. 67-8). While Pernambuco's hinterland extended far to the south of Recife and deep into Sergipe, Bahia's tended to remain within its own "little Mediterranean": the Recôncavo with its bay, and more than fifty islands and a dozen rivers, with abundant terrestrial and aquatic food sources.

Settlers from Bahia, seat of the colonial capital, its *capitania* geral much larger than Pernambuco, did not readily abandon the marinha (littoral) for the interior (CAPISTRANO DE ABREU. 1960, p.88). Though closer to Bahia than to Pernambuco, and largely controlled by Bahia landowners, Sergipe was the major provider of work animals and wood for the sugar mills of Pernambuco. Among Sergipe's settlers, the presence of the baianos was less pronounced than Pernambuco. "The Bay of all Saints, with its islands and bays, its ports and shores, was a Mediterranean Sea that made profitable and possible an intimacy between the port of Salvador and its agricultural hinterland" (SCHWARTZ, 1985, p. 76). Agricultural and cattle hinterland, it should be noted. The Recôncavo was also excellent for hunting and raising cattle; the export of hides was an important activity early on. In the early seventeenth century, Frei Vicente do Salvador even believed that the land in Bahia was better suited to cattle than to sugar cane. "The earliest chroniclers complained that their contemporaries were scratching the sand of the coasts

like crabs, rather than thrusting into the interior" (CAPISTRANO DE ABREU, 1954, p. 213).

While the regions adjacent to Pernambuco and Bahia supplied livestock, the São Paolo region developed a thriving trade in agricultural produce that supplied Minas Gerais through mule trains. Until the 19th century, São Paolo's agriculture was not based primarily on large scale plantations but on small and medium sized holdings worked as family farms with slave labor (LUNA AND KLEIN, 2003, p. 29, 80) The region had a major ethnic and cultural indigenous Tupi presence (Tupi was the main spoken language for all races in São Paolo through the eighteenth century) as well as a substantial free colored population. "The occupation of the Minas Gerais led to an active regional market, with the *paulistas* supplying the transport animals and food essential to the mining economy" (LUNA AND KLEIN, 2003, p. 181). The São Paolo region resembled the Spanish Antilles as a major hinterland zone for a region that was then producing directly for the world market (LUNA AND KLEIN, 2003, p. 105). In the nineteenth century São Paolo, like the Spanish Antilles underwent a full-scale evolution toward slave labor and overseas production, as configurations of "second slavery" (TOMICH, 2004; TOMICH AND ZEUSKE, 2008), while the slave-based mining zone that they formerly supplied became stagnant.8

In Brazilian and Caribbean historiography, plantations overshadow hinterlands, and interactions between the two zones are little understood. This has perhaps been the case especially in the Caribbean, where "plantation economy" models posited a "total economic institution" under slavery (CURTIN 1998; see TOMICH 2011). In Brazil, this has been called the "plantationist" perspective (LINHARES, 1979). In his history of plantation and smallholder production in Bahia and the Recôncavo, B. J. Barickman writes: "Historians have devoted their attention almost exclusively to the plantation [...] and, by extension, to the export economy" (BARICKMAN, 1998, p. 1). "Recent scholarship has begun to reveal the ongoing importance of local small-farm staple production in the Brazilian context, as a counterweight to the stress on the plantations in the traditional literature" (LUNA AND KLEIN, 2003, p. 79). Plantation zones

have been studied far more closely than hinterlands, because of their world-market links, and because archival sources are stronger, among other reasons.

Theoretical frameworks and interpretative schemes have gone in and out of fashion over the past six decades, but the consensus among scholars has, until recently, remained solid: monoculture, latifundia, and slavery did indeed define and shape Brazilian society through the colonial period (1500-1822) and during most of the nineteenth century (BARICKMAN, 1998, p. 1).

Views of plantations as closed institutions with solely metropolitan connections leave, by definition, little room for consideration of hinterlands. However, Brazilian historians have been generally aware of plantation-hinterland interactions, and hinterlands have figured prominently in Brazilian historiography and in cultural discourse (CAPISTRANO DE ABREU, 1954, p. 217-18; FREYRE, 1937) Caio Prado Júnior devoted major sections of *The Colonial Background of Modern Brazil* to the cattle economy of the *sertão* and its interaction with the coast (JÚNIOR, 1967).

Conclusion: la isla como es, el Caribe como es

The Hispanic and the non-Hispanic Caribbean were both different and connected. Historians have noted the voracious consumption by the "sugar islands" of work animals and timber, which resulted in deforestation and overgrazing (FUNES, 2008; WATTS, 1987; SHERIDAN, 1994; DUNN, 1972) Less attention has been paid to the links between the ecologically rich Spanish colonies, with their extensive forests and livestock populations, and the far wealthier but ecologically impoverished "sugar islands". However, it is not enough to note the "interaction" between the Spanish islands and the plantation economies as an external process between two discrete entities; we need a broader, more Caribbean, more Atlantic perspective.

The "sugar revolution" in some parts of the Caribbean went hand in hand and indeed may have had as a precondition, a cattle revolution in others. And these plantation-hinterland relations -- where "hinterland" was hardly a passive state-- existed not only between islands but within them, particularly in the larger islands (SHEPHERD, 2002, 2009). A multiracial population of peasants (cattle-hunters and ranchers, fishermen and woodsmen) thrived in the Spanish territories, in counterpoint to the sugar islands' huge slave populations and thin segments of free whites and persons of color. Hispaniola's twin sovereign powers, perhaps the most striking case of plantation-hinterland interaction in the Caribbean, were only a more accentuated variant of that regional complexity. Indeed, the strength of Hispaniola's intra-island regional configuration may have contributed to shaping the island's dual polities as much as the other way around. This is, in Rafael Yunén's apt phrase, *la isla como es*, and a key to *el Caribe como es* (YUNÉN, 1985).

Saint Domingue's trade circuits with the Spanish mainland colonies in New Spain and Venezuela also raise important questions about connections between the Caribbean archipelago, the coastal regions of Central and South America, and the Thirteen Colonies/U.S, and about the extent and boundaries --however fluid-- of what we mean by "Caribbean" and its relationship with the Atlantic. In particular, we need to consider more closely the sub-colonial, subnational regions on the Caribbean-littoral of the continent, from eastern Venezuelan to Veracruz and the Gulf of Mexico. In all, these may be useful steps toward a more inclusive and challenging historiography of the Caribbean, and of the Americas as a whole.

Notas

(Endnotes)

Revised version of a paper originally presented at the conference "Beyond sweetness: new histories of sugar in the early Atlantic world", October 24-27, 2013

John Carter Brown Library, Brown University.

The Yaque river basin (2,950 km2), on the western Cibao valley, receives less rainfall (700 mm annually) than the eastern Cibao (Yuna river basin), which is characterized by much more rainfall (1500 mm) and denser vegetation. The Yuna basin is quite extensive (3,500 km2). See José E. Marcano, Distritos hidrogeográficos de la República Dominicana http://www.jmarcano.com/mipais/geografia/rios/ distritos.html, accessed March 30, 2014.

- ³ The French insisted on a frontier 40 kms east of the present-day border at the Dajabón/Massacre River, while the Spanish insisted on a frontier at Le Cap, over 50 kms *west* of that border. Mutual incursions and even smaller-scale Spanish *devastaciones* occurred in the contested region into the early decades of the eighteenth century. The "first depopulation of Guarico" by the Spaniards was in 1691, when the famous Battle of Limonade was won --at great human cost-- by the Spanish and creoles. A second depopulation was executed by the English, again against the French, in 1695. Labat attributed to the English the virtually nil population of the Guarico in 1690s. The 1697 Treaty of Ryswick, itself ambiguous, hardly settled matters on the ground (MOREAU DE ST. MÉRY, 1944, pp. 17-23). Not until 1773 was the agreement reached on boundaries, even though the Spanish and French monarchs belonged to the same royal family and were closely allied in wartime.
- ⁴ As it happens, "Tango-Mango" is also the name of a riverine locality near Bandundu, Democratic Republic of the Congo. From this area, millions of slaves were captured for export to the Americas. Probably due only to the resonance of two words familiar among anglophome audiences, "Tango Mango" has become a frequent name for Latin American restaurants in the U.S..
- 5 Trésor de la langue francaise informatisé http://atilf.atilf.fr/ dendien/ scripts/ tlfiv5/visusel.exe?59;s=1855037790;r=2;nat=;sol=1; accessed March 21, 2014.
- ⁶ 1 square league = 4,248 acres or 17.2 km^2
- http://www.stcroixlandmarks.com/history/sugar-mills , accessed March 30, 2014.
- Though closer to Bahia than to Pernambuco, and largely controlled by Bahia landowners, Sergipe remained a major provider of work animals and wood for the sugar mills of Pernambuco. Perhaps because of its close interaction with Bahia, which displaced Pernambuco as the major sugar producer in the later seventeenth century, Sergipe took a sharper turn away from wood extraction (and later cattle raising) to sugar production. Another major factor was the massive slaughter and displacement of cattle during the Dutch war and the suppression of Palmares, which principally affected Alagoas. By the 1720s, Sergipe produced one-third of Bahia's total sugar output. In later periods, the economy of Sergipe became based principally on sugar cane. In Alagoas, as a reflection of its ecology as well as its history, cattle raising remained its principal industry, though the state is also one of Brazil's major producers of sugar cane and coconuts.

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