



ISSN: 2452-5162

HAAL

Historia Agraria de América Latina

<https://doi.org/10.53077/haal.v6i01.265>

A Republican *El Dorado*? The livestock commodity frontier of the Orinoco at the service of Venezuelan and Colombian Independence

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Received: 10 March 2025 • Accepted: 16 May 2025

HAAL is published by the Centro de Estudios de Historia Agraria de América Latina – CEHAL (<https://www.cehal.cl>), and the Asociación Latinoamericana de Historia Rural – ALAHR (<https://alahr.org/>)



Abstract

This paper shows how the animal resources of the Orinoco played a decisive role in the military success of the Venezuelan and Colombian Independentistas between 1818 and 1821. It first analyzes the constitution of new agricultural activities in the Orinoco from the 18th century onwards, mainly cattle raising, essentially through the work of religious orders. Then it is demonstrated that, through international trade, the resources of the Orinoco were exported mainly to the Caribbean, where mules and cattle were indispensable for the mills (and also for feeding, in the case of cattle). Thus, this work aims to demonstrate that commerce between the cattle commodity frontier of the Orinoco and the consolidated and the sugar commodity frontier of the Caribbean enabled the patriot army of Venezuela and Colombia to defeat the Spanish forces.

Keywords: Commodity frontier, War, Independence, Livestock, Orinoco.

¿Un *El Dorado* Republicano? Los recursos ganaderos de El Orinoco al servicio de las independencias venezolana y colombiana

Resumen

Este artículo muestra como los recursos animales del Orinoco jugaron un papel decisivo en el éxito militar de los Independentistas de Venezuela y Colombia entre 1818 y 1821. Se analiza primero la constitución de nuevas actividades agrícolas en el Orinoco a partir del siglo XVIII, principalmente la ganadería, en buena parte a través de la labor de ordenes religiosos. Después se demuestra que, a través del comercio internacional, los recursos del Orinoco estuvieron exportados sobre todo hacia el Caribe, donde las mulas y el ganado eran indispensables para los trapiches (y también para la alimentación, en el caso del ganado vacuno). Así, este trabajo pretende demostrar que el comercio entre la frontera mercantil de ganadería del Orinoco y la frontera mercantil del azúcar del Caribe, jugó un papel decisivo para dar al ejército patriota de Venezuela y de Colombia la capacidad financiera de ganar la guerra contra España.

Palabras clave: Frontera mercantil, Guerra, Independencia, Ganadería, Orinoco.

Introduction

“En el año de 1536 creciendo la voz, y fama del Dorado, esto es, de cierta provincia de Enaguas, o de Omaguas, que en los mapas se apunta con nombre de Manóa, y que se ideaba (y aún hay fundamento para ello) llena de grandes tesoros, se arrestaron a descubrirlos, Pizarro desde el Perú, Pedro de Ordáz desde Quito, y Gonzalo Jiménez de Quesada desde el Nuevo Reino despachó a don Antonio Berrío; este llegó al Orinoco, perdió casi toda su gente, y murió en la demanda.” (Gumilla, 1944, p. 59).

Like the unfortunate Antonio Berrío, many colonial explorers traveled the Orinoco in search of the mythical city of El Dorado. When Venezuelan independence fighters defeated the royalists there in 1817, the old dream of a golden city belonged to the past. However, they also imagine their future thanks to the richness of the province of Guayana: its mules, horses, donkeys, oxen and the numerous fruits of the land. While these resources could be consumed locally to feed and equip the army, they were also exported to buy weapons, ammunition and uniforms, particularly to the Caribbean basin, which was in demand. Until now, books dealing with the history of sugar or cotton do not necessarily pay attention to the origin of the livestock employed on the plantation (Beckert, 2014; Bosma, 2023). However, this paper shows the central role of the mules and cattle from the Orinoco in this process, especially when the patriots needed to sell massively these animals in order to buy military equipment in 1817-1821. In this sense, this article is in line with an abundant literature showing that livestock has been major protagonist in the colonization of the Americas for centuries (Crosby, 2003; Norton, 2024; Weis, 2021; Brignon, 2022), and it also suggests that their hemispheric trade needs to be integrated into the study of global commodity chains¹ of sugar, cotton, guns and other products.

Specifically, this article demonstrates that the seizure of control of the Orinoco area and its resources by patriot forces from 1817 onwards made it possible to equip, feed and finance the pro-independence army of Venezuela and New Granada with new efficiency, and was a decisive factor in the victory over the forces of the Spanish monarchy. Recent historiography has already demonstrated that the independence fighters were able to acquire the firearms and ammunition essential for equipping their army through international trade (Besseghini, 2023; Blaufarb, 2018; Terrien, 2018; Vidales, 1988). Sailors serving the patriot cause, as well as bankers and weapons merchants, played a central role in this process. The patriot naval officers who scoured the West Indies, often foreign volunteers, managed to obtain war loans, with dubious guarantees, such as Gregor Mac Gregor. (Parra Ariza, 2022) . The strategic role of the Guayana province in strengthening the independence army has also been highlighted by several authors (Bencomo Barrios, 2006; Falcón, 2019; Osorio-Bortolussi, 2024; Thibaud, 2006). The role played by the export of goods produced in Venezuela and New Granada in financing these equipment

¹ “Global commodity chains are structures that connect actors across space – not only to each other, but also to world markets” (Bair, 2009). On this concept, see also (Gereffi & Korzeniewicz, 1994; Hopkins & Wallerstein, 1977)

purchases, has also been recently revealed very interesting chapter written by Andrés Zambrano, who insists on the deprivation of the livestock in the province caused by massive exportation (Zambrano, 2018). However, the history of the formation of this agricultural frontier, the importance of this issue in the rivalries between warlords, as well as the insertion of these resources into commodity chains, are three fundamental aspects that are still poorly appreciated and that this paper will analyze.

Indeed, by studying the reports of commercial ships entering and leaving the port of Ciudad Angostura (Venezuela), contained in the *Correo del Orinoco*, a newspaper founded by the patriots², we can assess the type of resources exported and acquire an idea of the nature and scale of the goods exported. This assessment remains approximate, as these accounts are incomplete. On the one hand, they give a fairly precise indication of the number of ships entering and leaving the port, the type of vessel (frigate, schooner, barge, etc.), their nationalities, the names of the captains, their origin or destination and the goods involved. On the other hand, they generally do not specify the volumes involved. However, a study of these accounts, combined with an analysis of patriotic and royalist military correspondence and the memoirs of the combatants, undoubtedly demonstrates the central role played by the export of resources resulting from the transformation of the Orinoco basin into a livestock commodity frontier since the 18th century, in the economy of the independence army. The study of resources also highlights the central role played by the slave-holding islands of the Caribbean basin in the demand for these resources.

First, I will analyze what was the economic importance of this livestock region created by the Capuchin missions during the 18th century when the Independence War began. To do this, I will draw on archival documents from the Archivo de la Corona de Aragón (Barcelona), the Archivo de la Facultad de Teología de Granada (Granada), and the collection Pablo Morillo Conde de Cartagena at the Real Academia de la Historia (Madrid). Then, I will show how the patriots seized this livestock commodity frontier, organized themselves, while experiencing internal conflicts, to put its animal and agricultural resources at their service; studying various printed sources relating to the missionaries' missions and the documents attached to the memoirs of Daniel O'Leary. Finally, by studying in particular the exports reported in the *Correo del Orinoco* newspaper, I will demonstrate the crucial role of exports of mules and cattle and other and agricultural products in financing the war, and how they were primarily headed for the Caribbean basin, becoming part of global commodity chains.

² We used the issues of the newspaper digitized by the virtual library of the Banco de la República de Colombia: <https://babel.banrepcultural.org/digital/collection/p17054coll26/id/4166/rec/2>.

Map 1. The eastern Orinoco basin at the end of colonial era.

Source: Elaborated by Edwin Fabian Gil Contreras and Frédéric Spillemaecker.

The eastern Orinoco basin at the end of colonial era and the birth of an agriculture and livestock commodity frontier

In the 18th century, the eastern part of the Orinoco Basin witnessed a significant increase in agricultural colonization, at the crossroads of different interests. Firstly, the Crown wished to control better the province of Guayana, whose boundaries were uncertain and bitterly disputed with the Dutch and Portuguese³. Historiography has focused on the very active role played by Manuel Centurión, governor of the province of Guayana from 1766 to 1776. In this context, religious orders played a vital role and developed numerous missions with a variety of agricultural activities, including cattle, horse, and mule breeding. Livestock breeding had a clear commercial outlet. Secular settlers also developed *hatos* (large and extensive ranches). Oxen and especially mules were prized by merchants for sale in the West Indies, where they were used for

³ The delineation of the border between Venezuela and Guyana (a former Dutch and then British colony) is still the subject of dispute.

travelling, carrying goods and operating the sugar mills on sugar plantations⁴ (Bosma, 2023; Higman, 2011). Venezuela was an important mule-exporting territory for the Caribbean (Aizpurua, 1988), along with other continental American regions such as New England (Carrington-Farmer, 2024). Indeed, the expansion of mule farming in Venezuela is a perfect illustration of Jason Moore's demonstration that : “the sugar frontier called forth a complex of commodity frontiers in the Americas, leading simultaneously to market-widening and market-deepening”(Moore, 2000).

However, obstacles to these colonization processes were of various kinds. Thus, livestock were threatened by various predators, such as crocodiles and especially jaguars. The latter were hunted by organized ranching gangs, armed with spears and muskets (Caulín, 1779: 36). Guayana also suffered raids by the Caribs, who enslaved other Amerindian peoples, in particular to sell them to the Dutch (Whitaker, 2016; Whitehead, 1988) . Indeed, while Spanish Guayana was, as we have seen, an area of diversified agriculture, in which livestock played a major role, the territories controlled by the Dutch (Essequibo, Demerara and Berbice) saw the development of an enormous plantation economy based mainly on the mass deportation of Africans, but also, in smaller numbers, on the enslavement of Amerindians⁵. The missionaries' memoirs also emphasize the constant flight of Amerindians from the missions. Indeed, they came up against pre-existing religious beliefs and the authority of their leaders, shamans and healers, who held great sway in the communities. The monks tried to win their good graces by recognizing their authority when they converted them. The account of the mission of two Capuchin monks, Benito de la Garriga and Tomás de Mataró, illustrates these strategies in their first contacts with the communities. In 1772, these two Capuchin monks embarked on the Caroni and encountered a community of Sarapa Amerindians⁶. On Easter Day, they raised a cross, celebrated mass, and also gave two batons of command, one of captain and the other of lieutenant, "a los dos principales de la Nacion", without really knowing whether the Amerindians had been convinced by this ceremony. In 1779, the Catalan monk Benito de La Garriga also reported several disappointments for the Caroni Capuchins in the years 1760-1770: in particular, the successive flight from the missions of several hundred natives, barinogatos, aruacas, guaicas or caribes (Carrocera, 1979: 342-343). He also reports that Amerindians periodically rebelled against

⁴ From the end of the 17th century, planters on the various islands explored various alternatives to sugar mills powered by mules or oxen: windmills (in Barbados from the 1670s), water mills (in Santo Domingo and the Dutch colonies at the end of the 18th century, and above all steam-driven cane crushers (the first arrived in Cuba in 1797 (Bosma, 2023). However, the role of animal-powered sugar mills remained fundamental well into the nineteenth century (and there are still examples of them today), with considerable variations from one area to another.

⁵ By 1770, there were around 500 plantations in the Essequibo, Demerara and Berbice regions with 18 900 slaves, then 700 plantations with 97,000 slaves by 1800 (Koulen, 2025, 67, 89). Of course, slavery also existed in the Spanish province of Guayana, but in much smaller proportions. The Venezuelan Guayana also became a refuge for maroon slaves from the Dutch colonies. Many of them lived in the jungle, sometimes in Amerindian communities.

⁶ Archivo de la Corona de Aragón (ACA), *Quaderno que demuestra el Viage que hicieron dos Padres Capuchinos catalanas misioneros para el descubrimiento de la Parima y Laguna en el año del Señor 1772*, Monacales, 57, Capuchinos de Guayana, tome 4 f. 183-191.

colonization, killing soldiers, Spanish settlers and missionaries, resulting in the loss of certain villages.

Despite these difficulties, and thanks to the support of soldiers from the Guayana governorate, the missions grew steadily until the beginning of the Wars of Independence. To sum up, the regions near the Orinoco River and Delta, in eastern Venezuela could be divided into three areas of agricultural colonization. First, north of the Delta, in the region of Barcelona and Maturin, the Franciscans⁷ and the Aragonese Capuchins set up missions, and at the same time Spanish settlements were founded. The Amerindian peoples incorporated into these missions were the Chaimas (the most numerous), the Caribs, the Cuacas, the Cores, and the Parias or Pariagotos. (Abaurre Valencia & Longás Otín, 1988). This region corresponds to the eastern end of the Llanos, the great plains stretching from the Andean foothills in New Granada to the Atlantic coast. In 1784, this area was home to 74,792 head of cattle (Figuerola, 1978: 191). According to the Capuchin friar Antonio Caulín, this region was characterized by the variety and diversity of its agricultural production:

There are innumerable herds of horses, mules, and cattle, which multiply with abundance in all the distance of the plains (...) beautiful meadows, and extensive valleys, in which the inhabitants cultivate, and achieve grown fruits of sugar cane, honey, bananas, corn, cassava, and rice, beans, and others, which they produce in abundance.⁸

The narrator emphasizes the great fertility of these plains, which also have the advantage of being very close to the mouths of the Orinoco for international trade. Between 1784 and 1810, Aragonese Capuchin missions expanded into the Orinoco delta itself and began evangelizing the Warao (Abaurre Valencia & Longás Otín: 1988).

Secondly, south of the Orinoco, the Catalan Capuchins had established missions on the banks of the Caroni, one of the river's main tributaries. Thanks to a detailed report by the Governor of Guayana, Matias Farreras, sent in 1815 to Pablo Morillo, General-in-Chief of the Royalist armies in Venezuela, we have a fairly accurate idea of the development these missions had reached by the time of the Wars of Independence. By the time he wrote this report, the Caroni missions were still largely untouched by the war: "Those contain 28 Religious Villages 26 Religious 20 000 Souls of only Indians. Their products are livestock, some horses, hides, tallow, banana, cotton, rice, corn, beans, cedars, arariba and other woods"⁹.

⁷ Settled in Piritu from 1656, 80 kilometers west of Barcelona.

⁸ «Se encuentran inumerables [*sic*] de Hatos de Ganado Caballar, Mular, y Bacuno [*sic*], que multiplica con abundancia en toda la distancia de los llanos (...) hermosas Vegas, y dilatados Valles, en que los habitantes cultivan, y logran crecidos frutos de azúcar, miel, papelones, platanos [*sic*], mais [*sic*], cazábe [*sic*], y arroz, frixoles [*sic*], y otros, que con abundancia producen.» (Caulín, 1779, p. 8).

⁹ «Aquellas contienen Pueblos 28 Religiosos 26 Almas de solo Indios 20 000. Sus productos ganado bacuno, algunos cavallos, cueros, cebo, guina, algodón, arros, mais, frixoles, cedros, cartanes y otras maderas», Real Academia de la Historia (RAH), colección Pablo Morillo Conde de Cartagena, 7696, Leg. 53, a), report of Matias Farreras to Pablo Morillo, April 19, 1815, f. 67 verso. We identify "cartanes" as arariba wood thank to the *Atlas*

This description shows the variety of products produced by these missions, and their commercial potential. The livestock, hides, the cotton and the woods were probably the products in which international merchants may be the most interested. Thirdly, we should mention the Franciscan missions of Rio Negro and the Upper Orinoco, with 38 villages, which are much less well known to historiography than the two above-mentioned communities. The same 1815 report underlines the diversity of their productions: “The others consist of 29 villages, 19 monks and 6500 Indians. Their productions are chiquichiqui palm cables, Rio Negro tar, wild cacao, manioc bread, woods, and pirogues”¹⁰.

We should point out that these productions are totally different from the previous ones, for environmental reasons. In fact, the Rio Negro and Upper Orinoco missions were set up in the middle of the rainforest, in contrast to their counterparts on the plains. Some of these products were also exported, such as cocoa and chiquichiqui palm (*Leopoldinia piassaba*) cables, used in the navy. The Spanish officer also observed a difference in the way products were marketed. He states that, whereas in the Capuchin missions, the goods are “common property”, in the Franciscan missions in the jungle, the Amerindians live in smaller groups and negotiate themselves with the religious and traders. From these statements, it can be inferred that the Capuchins of Caroni had greater control over the resources of their missions, produced by a population more densely grouped in the plains, than the Franciscans of the Rio Negro, whose flock was more scattered in the jungle.

Archaeological research also shows the changes in diet brought about by the expansion of livestock farming. For the Amerindian populations of the Orinoco River, the main animal protein used to be turtle meat, but excavations at Fort San Francisco, located on the river, show a decline in turtle consumption in the 19th century, in favor of beef (Sanoja & Arenas, 2005: 52-117). The boom in these agricultural products also raised the question of their export and trade with foreign colonies, from the port of Ciudad Angostura. In 1792, the governor of the province of Guayana explained the situation of his territory, requested permission to trade with the colonies of other empires. In response, Francisco de Saavedra, gave a pragmatic and balanced advice to Diego Gardoqui, secretario de Estado y del Despacho de Hacienda¹¹, and to the King, he gave a pragmatic and balanced response, suggesting that, while commerce with Spain should be, of course, a priority (especially for such important goods as coffee and cocoa), the location of the region, which was not among the most prosperous in the empire, should invite acceptance of trade with foreign colonies. In fact, from 1808, during the first phase of the Venezuelan War of Independence, the province remained loyal to Couronne, and it was the royalists who benefited from the sale of these products. According to Manuel Díaz Ordoñez, the ease with

de maderas tropicales de América Latina (Chichignoud & Bofill, 1990). The plátano guineo (here written “guina”) is a sort of banana: <https://dle.rae.es/pl%C3%A1tano#HxJeBOj>.

¹⁰ “Las otras consisten en Pueblos 29 Religiosos 19 Almas de solo Indios 6500. Sus producciones son cables de chiquichiqui, Brea de Rionegro (sic), cacao silvestre, pan de mañoco, maderas, y Piraguas”, RAH, *Id.*

¹¹ Archivo Histórico de la Facultad de Teología de Granada (AHFTG), 9.3-Unidad documental simple FSAAVEDRA_C49_021 - *Informe de Francisco de Saavedra a Diego Gardoqui, en el que enjuicia las dos consultas elevadas por el gobernador de Guayana solicitando un permiso de comercio con las colonias extranjerias*, July 25, 1792.

which the Crown allowed landowners and merchants to trade with foreign colonies, and the abundant agricultural resources available to them for a small population, could explain their reluctance to join Venezuelan Independence (Díaz Ordóñez, 2009).

Indeed, the livestock trade to foreign colonies was vital for this region. The War of Independence disrupted this trade, but did not interrupt it. The demand for mules, cattle and cables from the West Indies was still strong, and these sales could therefore represent significant revenue for the political forces that were fighting each other, both royalists and independentists, even if they also required these animal resources to provide food for the troops and transport the armies' equipment. Dominated by loyalists, the port of Ciudad Angostura was, during the first years of the war, a base of naval operations for the Crown against the patriots (Díaz Ordóñez, 2009), supported by the region's agricultural production and trade revenues. In 1815, the Loyalist governor of Guyana considered that the traders of Ciudad Bolívar possessed 7847 mules, to be sold to the "foreign colonies", which means mostly to merchants operating in the Caribbean¹². During the war, this income became crucial for the province's defense: in July 1814, a merchant named Amores Conde sold a load of mules on the island of Trinidad and offered the proceeds to buy lead and gunpowder¹³. The independentists were aware of the significance of these exchanges for the protection of the province, and constantly sought to undermine them.

The takeover of the province by the patriots, Ciudad Angostura and its hinterland livestock commodity frontier

The patriots' first attempt to seize the province of Guayana took place in 1812, and resulted in a major naval defeat at Sorondo on March 25 and 26 ((Díaz Ordóñez, 2009; González Sierralta, 2023: 119; Parra Pérez, 2011: 420-421). Later, after the crushing defeat of the armies of the Republic of Venezuela at the hands of José Tomas Boves in 1814, the loss of Caracas and the exile of Simón Bolívar, the Cumaná llanos and the Orinoco margins became the refuge of pro-independence guerrillas led by Manuel Cedeño and José Tadeo Monagas. In 1815, these troops attempted to seize Ciudad Angostura, but were defeated on June 25 by royalist forces led by Nicolás Ceruti and Salvador Gorrín¹⁴. As Governor Nicolas Ceruti relates, "a certain number of horses provided by the Catalan Capuchin and their hatos"¹⁵ played a key role in the victory.

However, this defeat did not prevent patriot guerrillas from continuing to fight in the region. The continued existence of independence rebels took on major importance in 1816, when the main independence military leaders returned from their Haitian exile and landed in eastern Venezuela. After a slow start to this new patriot campaign, two strategies emerged. Simón Bolívar, whose status as Supreme Chief of the Armed Forces had been confirmed in Haiti, although his control over guerrilla leaders was highly hypothetical (Lynch, 2006, 99-100),

¹² RAH, *op. cit.*, f. 67.

¹³ RAH, *op. cit.*, f. 6 n°2.

¹⁴ RAH, *op. cit.*, Nicolás Ceruti to Pablo Morillo. July 8, 1815, f. 164 to 168 verso.

¹⁵ "cierto numero de caballos qe la Reverenda Comunidad de P.P. Capuchinos Catalanes, y de sus Hatos franqueó", RAH, *op. cit.*, f. 166 verso.

believed that the fighting should continue in the Caribbean coastal regions, from the port of Barcelona, to Caracas, his hometown (Thibaud, 2006, 223). On the contrary, Manuel Piar, an outstanding military strategist born in Curaçao, saw Guayana province as the operational base the patriots needed:

Guayana is the key to the Llanos, it is the fortress of Venezuela; Guayana has been the center and refuge of enemies; it has been the source that has spilled slavery in the Republic. Because of its position it is in contact with foreign countries and with the entire interior; it is covered and defended by a wall stronger than bronze, by the Orinoco; it, in short, is the only country in Venezuela that, exempt from the calamities of the previous war, offers us resources to provide us with what is necessary for our needs.¹⁶

His vision was well defined. The province of Guayana, with its fortresses sheltered from the river, its resources (in livestock and agricultural production) and its international trade connections could be the basis for the later successes of the independence movement in Venezuela and New Granada, by opening up the Llanos route. Despite Bolívar's disapproval, Piar succeeded in carrying out his plan by joining forces with the Monagas and Cedeño guerrillas. With triumphs at El Juncal on September 27, 1816 and San Félix on April 11, 1817, he opened the doors to the coveted province. For Simon Bolivar, Piar was by then not only a fabulous general, but also a serious rival. The rivalry between the two men eventually led to a treason trial against his nemesis, who was accused of trying to raise the slaves and the pardos (mixed-race people with African origins) to serve his own ambitions. The West Indian general's was finally sentenced to death and executed on October 16, 1817. However, there is no trace of such a radical plan in Piar's own writings, and the reasons for its execution are the subject of much historical debate (Bencomo Barrios, 2006; Fischer, 2018; Lynch, 2006; Thibaud, 2003). The elimination of a powerful opponent enabled Bolívar to impose his authority on other ambitious officers. Next, between September and November 1817, the patriots were building new institutions, such as the Council of State and the High Court of Justice, from Ciudad Angostura, the de facto capital of the Republic (Thibaud, 2006: 244-247).

Yet the great work of the general of Curaçao remained: Bolívar took advantage of Piar's advances to rally behind his strategic vision, and completed the seizure of the Guayana as a formidable rear base. The first reason why control of the region's resources gave the patriots a new advantage was their direct use in warfare. These animals were obviously indispensable for feeding, equipping the cavalry and transporting the two armies (Spillemaeker & Cardenas

¹⁶ "Guayana es la llave de los llanos, es la fortaleza de Venezuela; Guayana ha sido el centro y refugio de los enemigos; ha sido la fuente que ha derramado esclavitud en la Republica. Ella por su posición está en contacto con los países extranjeros y con todo el interior; ella está cubierta y defendida por un muro más fuerte que el Bronce, por el Orinoco; ella, en fin, es el único país de Venezuela que exento de las calamidades de la guerra anterior nos ofrece recursos para proveernos de lo necesario", Manuel Piar to José Antonio, Páez, November 28, 1816 (Blanco Gómez & Azpurúa, 1876, 499).

Herrera, 2024). The more animals an army had at its disposal, the stronger it could become, and if these animals had been taken from the enemy or were located in territories previously controlled by him, the enemy was weakened in the same proportion. Moreover, for the Independence army, a second factor was of decisive importance: the patriots were lacking funds, but they needed to acquire a significant number of firearms, ammunition and other essential equipment. In their memoirs, the foreign volunteers testify to the wealth of agricultural production in the Orinoco (cocoa, cotton, tobacco) that the patriots seized, whether in the form of missions or plantations (Adam, 1824: 87; Hippisley, 1819: 228-229; Vowell, 1831: 21-22). Irish Captain William Jackson Adam was impressed, when reaching Angostura, to see that, from one moment to another “the immense forests, the extent of which were beyond the limits of vision were exchanged for highly cultivated plantations, the varied beauties of which were a source of pleasure and amusement”(Adam, 1824, 107). However, according to the same officer, the Spaniards, fleeing the advance of the patriots, sometimes burned down farms and destroyed plantations (Adam, 1824, 105-106), thus limiting the agrarian gains of the independence army.

As Alexander Zambrano has shown, Simón Bolívar organized the trade in these resources, relying in particular on the designated administrator of the Caroni missions, the priest José Félix Blanco, who ordered the requisition of mules and leather so that its sale could be used to purchase munitions (Zambrano, 2018). However, Manuel Piar had previously expressed his disagreement with this tactic. In May 21 1817, he had told Blanco that exporting mules to foreign islands was too great of a risk, because in several occasions, the foreign merchants in charge of these missions had simply disappeared with the product of the sale, without delivering guns or ammunition as they were supposed to do (O’Leary XV, 1881, 262). Piar used to have a clear preference for keeping the mules for the army. This was only one of a great number of disputes he had with Bolívar on many subjects before his execution. The tragical death of the mixed-race caudillo enabled Bolívar’s view to prevail and accelerated the exportation of livestock and related commodities for the following years. Once settled in Ciudad Angostura, on September 15, 1817, Simon Bolivar immediately announced his wish to gather 2,000 mules to buy arms and ammunition. To this end, he first approached General José Antonio Páez, who was operating in the Llanos region of Apure, several hundred kilometers west of Angostura, with no great success. Increasingly exasperated, the General-in-Chief of the Venezuelan Armed Forces reiterated his request to Páez four times in the following months¹⁷. The caudillo from the Apure seemed to have other priorities. Closer and more readily transportable to Angostura, mules from the pastures of the Caroni ranches and missions were also used as exchange products to obtain essential equipment for the armies. However, the patriots also had to deal with the problem of smuggling of mules and leather. In several letters, Bolívar alerted his officers that these sales for the benefit of private individuals, rather than the Republic, were depriving the patriot cause of precious resources¹⁸. Smuggling to the West Indies, particularly of mules, was an age-old activity

¹⁷ Bolívar to Páez, in O’Leary XV, 1881: October 4 1817, 326; November 13 1817, 461; December 15 1817, 500; December 19 1817, 515.

¹⁸ Bolívar to the governor of the fortress of the Guayana la Vieja, October 23, 1817, O’Leary XV, 1881, 432; Bolívar to Rafael Urdaneta, October 23, 1817, October 23, 1817, O’Leary XV, 1881, 433.

in Venezuela, and one that the patriots in turn had to contend with, like the royal officers before them (Aizpurua, 1988; Cromwell, 2018) This type of trade was not without its perils: on October 14 the patriot Colonel Marten was arrested for illegally supplying not only mules, but also oxen, the latter being of major importance in feeding the soldiers¹⁹.

Moreover, in order to attract foreign merchants to the port of Angostura (and towards exchanges for the benefit of the Republic), the *Correo del Orinoco*, the official newspaper of the warring Republic, carried texts praising the ease and interest of trading with Ciudad Angostura. In the August 8, 1818 edition, for example, a text was published in English²⁰ describing the precise navigation conditions for crossing the mouths of the Orinoco. Ironically, the text reproduced was taken from Cosme Churruca's *Derrotero* published in Madrid: in other words, the cartographic and hydrographic work carried out by this officer as part of the Northern Atlas expedition from 1792 to 1805 (Puig-Samper, 2017). This study carried out to better defend the territories of the Catholic Monarchy, was now used by the independentists to encourage English-speaking merchants to trade with them and thus finance the fight against Spain. In the introduction, an anonymous merchant explained, also in English, that navigation conditions in the river delta had been greatly exaggerated and should not be feared. As proof of his good faith, the navigator added that he had crossed the mouth of the river himself, and provided further details, notably concerning the presence of the Guaraumos (now called Warao) Amerindian pilots. In addition to goods, news brought in by foreign ships is particularly prized by *Correo del Orinoco* editors, especially when it is bad for Spain. The August 22 edition, for example, reported on San Martín's victories in Chile and on General Andrew Jackson's capture of the Spanish town of Pensacola in Florida, giving the reader the impression of a general collapse of the Catholic monarchy.

From the port of Ciudad Angostura, and control of the missions, the patriots were able to trade with the Atlantic world, all the more so as they had an increasingly powerful international privateer fleet at their disposal. Between 1817 and 1820, this strategic advantage enabled the implementation of two major phenomena that greatly contributed to the Independence victory: the massive arrival of foreign volunteers, mainly British and Irish (Brown, 2006), and the consequent purchase of firearms and ammunition (Blaufarb, 2018). Furthermore, by studying the reports of ships entering and leaving the port of Ciudad Angostura contained in the *Correo del Orinoco*, we can have an idea of the importance of the export of animal and agricultural resources in the economy of the Patriot port, and therefore in the economy of the commodity frontier of the Orinoco controlled by the Patriots; and also have access to lists of imported goods. Nonetheless, this source is far from exhaustive. In fact, most of the lists of goods in the newspapers mentioned their type but not their quantity, which does not enable to provide a quantitative approach of the phenomenon.

Moreover, descriptions of incoming shipments, for example, make almost no mention of the arrival of weapons or volunteer fighters, despite the fact that these phenomena were massive

¹⁹ Bolívar to the Chief of the General Staff, October 14, 1817, O'Leary XV, 1881, 343.

²⁰ In a second step, the same description was also published in Spanish in the August 15, 1818 edition. The order of publication, shows that English-speaking sailors are the primary target audience for this message.

between 1818 and 1820 (Blaufarb, 2018; Terrien, 2018). In addition, at particular periods, the density of political and military events led the editors to abandon the precise reporting of ship arrivals and departures, which no longer appeared in the newspaper. This was particularly the case during the Congress of Angostura in 1819-1820, or in the weeks following the patriot victory at Carabobo on June 24, 1821, which precipitated the defeat of loyalist forces in Venezuela. Thus, in 1820, Jacob Idler delivered to Bolivar's army almost 12,000 muskets (4,360 of which came from France), 175,000 flints, 4,200 uniforms and 4,000 pairs of boots, all worth over \$230,000. According to Rafe Blaufarb, he was paid through shipments of tobacco from Venezuela (Blaufarb, 2018). Through a study of British archives, the same researcher also demonstrates that during the period 1814-1815, 30,000 muskets, 1.5 million flints, 300 tons of cannons, 130 tons of gunpowder, 550 tons of rifles, 2,750 pistols and 4,500 sabers were exported from the neutral Caribbean islands of St. Thomas (Denmark) and St. Bartholomew (Sweden)²¹. Privateers serving Venezuelan independence fighters, as well as patriots from Buenos Aires and Chile, were very active on these islands (Terrien, 2018; Vidales, 1988). Spain obviously fought these exchanges: according to British volunteer James Hackett, the entire crew of a ship carrying mules sold by the patriots was massacred by a Royalist privateer in December 1817 (Hackett, 1818). However, thanks to the activity of republican privateers and ships from various nations (particularly British, American and Danish), the Independents were generally able to trade successfully (Terrien, 2015).

With these limitations in mind, it is still useful to undertake a general survey of this source. For the purposes of this paper, we focus this study to outbound goods, for two reasons. First of all, because the fundamental object of this writing is to assess the commercial importance to the patriots of the goods produced in the Orinoco Basin. Furthermore, because the exports were not sensitive goods such as weapons, and the practice of dissimulating certain exchanges by the publishers was therefore, if not non-existent, at least much more limited than for imports.

“Finding and sending all the mules that can be found” (...) to finance Government’s enormous debt”: the “export as much as you can” paradigm

The 8th of October 1818, from Ciudad Angostura, Simón Bolívar urged José Antonio Páez to “find and send all the mules that can be found” and other goods, “because all of them will be used to finance Government’s enormous debt”²². The data provided by the *Correo del Orinoco* thus allow us to partially analyze the evolution of the destinations and these mules and other goods shipped from the port of Ciudad Angostura between 1818 and 1821. In terms of destinations, a constant pattern can be observed throughout the period. The leading destination is Trinidad, particularly for mules. There are two reasons for Trinidad's primacy: firstly, its close proximity to the island,

²¹ See UKNA, FO 72 208, Council Office, “Whitehall to Foreign Office”, November 29, 1817; UKNA, FO 73, 138, “Lord Bloomfield, British Ambassador to Stockholm, to Count de Wetterstadt, Swedish Foreign Minister”, Stockholm, March 20, 1829. Cited in Blaufarb 2018.

²² “que haga recoger y remitir todas las mulas que se pueda (...) pues todos servirán para ir cubiendo la deuda enorme de Colombia”; Bolívar to Páez, O’Leary XVI, 106.

which also served as a platform for re-export, Secondly, the colossal development of sugar cane, and secondarily cotton and other plantation crops requiring mules, which grew rapidly from 1800 onwards. In fact, much less exploited in previous centuries and decades than those of other islands such as Barbados or Antigua, sugarcane culture in Trinidad was more productive in the proportion of 5 to 2 compared to these other British colonies (Williams, 1962). The second destination for exports is the “colonies”, the identity of which is generally not specified, although the names San Tomas and San Bartolomé also recur regularly. The absence of certain nearby colonies, also devoted to slave plantations, may come as a prior surprise: no trace of Berbice, Demerara and Essequibo (which together form Guyana²³, formerly Dutch, officially English since 1815), or Dutch Guyana (now Suriname, still Dutch). However, it can be explained by the fact that in the eighteenth century, the Dutch exploited the marshes in these colonies to build water mills and develop river transport, instead of using mules or oxen for these tasks (Bosma, 2023). Moreover, Berbice, Demerara and Essequibo were among the colonies that adopted steam-driven cane crushers the earliest: by 1820, half of all such machines operating in the Caribbean basin were located in these territories. Therefore, they were much less dependent than others on animal muscle power (Bosma, 2023, 91). As for nationalities of the boats, at the end of 1818, the *Correo del Orinoco* counted 15 ships leaving the port, of various flags. Only three of them flew the Venezuelan flag. There were three English, three Danish, one French, one North American and three ships of unknown nationality. As for the 201 boats mentioned for the years 1819-1820, they are indicated as sometimes national, but also English, Danish, French, Dutch, North American and Swedish. Over the entire period, most of these ships were destined for the colonies of the Caribbean basin, with the exception of two vessels bound for North America (one for New York).

In terms of content evolution, the state of the record leads us to distinguish four phases. In the first phase, from May to September 1818, the newspaper describes in detail the loading of 13 cargo ships that left the port: 8 of these (approximately 61.5%) were loaded with mules, the most important commodity. The other goods are mentioned no more than once each (hides, oxen, grease) and are therefore marginal. We should also mention the special case of a shipment of arms and ammunition, which is the only one not sold to a foreign nation, but instead destined for the patriot guerrillas in the Orinoco basin, as it was sent to Casanare in New Granada (present-day Colombia).

In a second stage, for the end of 1818 and for the year 1819, the information unfortunately becomes much more fragmentary. In 1819 (November), only two ships are described in detail: one carrying mules, the other cattle. The newspaper's editors are passionately interested in the debates at the Angostura Congress, and the report on port activities is neglected. However, the March 27, 1819 edition contains extremely valuable summarized information: since August 22, 1818, 201 boats have passed through the port, and 2,641 mules and 1,881 steers have been exported. Crucially, this edition is the only one to be explicit about quantities of livestock exports. In the third phase, from April 1819 to January 1821, no further information appears.

²³ Although Venezuela claims long-standing sovereignty over the Essequibo.

This was no doubt a choice to keep a low profile with regard to the ships present in Ciudad Angostura, in the context of the massive arrival of British and Irish volunteers. On the contrary, the year 1821, marked by the spectacular successes of the patriot army in Venezuela, also saw a return to extremely precise descriptions in *Correo del Orinoco*. For this reason, a table is useful for presenting the products exported during the year.

Table 1. Exports from Ciudad Angostura (now Ciudad Bolívar, Venezuela) in 1821.

Product exported (unknown volume)	Number of boats where this product is present	Percentage of boats where this product is present (the total is above 100% because one boat may carry several products)
Mules	19	32,80%
Cattle	18	31%
Grease	3	5,20%
Coffee	3	5,20%
Tobacco	6	10,30%
Cables from Rio Negro	5	8,60%
Leather	12	20,70%
Cocoa	2	3,40%
Fruits	2	3,40%
Cotton	2	3,40%

Source: issues of *Correo del Orinoco*, 1821, Hemeroteca Digital Histórica, Banco de la República (Colombia).

In comparison to previous years, mules were present in only 32,8% of the boats, and cattle in 31% of the boats (sometimes in the same boats). What is more, a greater variety were exported in 1821 which probably corresponds to the greater extent of the territories controlled by the patriots all over the Orinoco basin, which gave them access to a wider diversity of agricultural lands and products. For instance, the presence of cables of Rio-Negro also shows that the patriots had now solid least commercial bounds with the Upper Orinoco and its Franciscan mission, to export this good very much prized in the navy. These cables were made from a palm locally named *chiquichiqui*, still used nowadays in craftsmanship in the Upper Orinoco. Additionally, contrary to the mules and cattle exported to the Caribbean; goods such as cocoa, coffee and tobacco were principally sent to the United States, to ports like New-York and Philadelphia.

From May 1821 onwards, many other Venezuelan ports were liberated by the patriots: Coro, La Guaira (the port of Caracas, the capital, also liberated), Cumaná and others. The port of Ciudad Angostura lost its importance, and by 1822 trade was no longer reported in the *Correo del Orinoco*, the last issue of which was published on March 23, 1822. In the light of these figures, we can formulate several hypotheses about the importance of the Orinoco region for the patriots,

and also note that certain questions remain. First, the data of 1817-1821 clearly suggest that the control of the missions of the llanos of the Cumana and of the Caroni provide them resources to make profitable exchanges with merchants of various nations. The great quantity of mules and cattle exported in these years served to buy flour, rum and clothes, and other goods useful to improve the life of the army as shown in the imports record. Given the limited funds available to the Venezuelan government, merchants and bankers accepted payment in kind, and mules were more prized than cattle. The British officer Hippisley reported that the merchant Guthrie, well established in the colony of Grenada, had advanced considerable funds to the Republic, and had been disappointed to see his ships loaded with oxen and not mules (Hippisley, 1819: 141-142). Indeed, in a Caribbean basin, where slavery was still in expansion, mules were more needed than ever, for the sugarcane mills and for transportation, as pointed out Gustavus Hippisley: “the islands of the West Indies will be always ready purchasers for the livestock, which in general pays the merchant well” (Hippisley, 1819: 146). The pivotal place of mules in the plantation economy was explained by the planters themselves in the literature that some of them devoted to their activity at the time, such as *The Jamaica Planter's Guide*, written by sugar cane planter Thomas Roughley in 1823. For instance, the author points out that the head cattle and mule man is a central employee on the plantations, responsible for purchasing the right bovines or equines for the job, making sure they are in good physical condition, and directing the transport of cane to the mills by these animals (Roughley, 1823). Saint-Domingue, now Haiti, was no longer the colony where sugar production reached recourse in the context of an extremely violent society of mass slavery (Dubois, 2004; Fick, 1990; Gainot, 2017). Indeed, since the re-establishment of slavery by Napoleon Bonaparte, Haiti was the only place in the Caribbean basin where slavery remained abolished. The sugar commodity frontier continued to expand, particularly in Cuba, Puerto Rico, Jamaica, Guadeloupe and Trinidad, always through the enslavement of millions of workers of African origin (Ferrer, 2014; Moore, 2000; Williams, 2021), and through the work of numerous mules, even in the context of a more or less marked diversification of energy sources depending on the area (Morgan et al., 2022, 105). The Caribbean Basin was still in the era of the Early Capitalist Commodity Regime, characterized in particular by deforestation, soil exhaustion and slave revolts (Blackburn, 2000; Moore, 2000).

Despite the crushing of revolutions and abolitions in almost all the islands, revolts and marronage still marked the region's history. Huge slave revolts still occurred as in Barbados in 1816 and Demerara in 1823. In Ciudad Angostura, where some ships had slaves on board, a case of marronage is reported in the sources. . On October 24, 1818, the *Correo del Orinoco* reported that 5 slaves had escaped from the English schooner Jackmann: Tomas, Congo, Sam, King and Jorge. The first three were African, while King was originally from Barbados and Jorge, who is said to speak a little French, from San Martin. They left in the ship's longboat, with clothes, provisions and Portuguese currency. The public notice promised a reward for finding them. This notice shows that even if Simón Bolívar had promised liberation to every slave joining his army and to his family since his comeback from Haiti in 1816 (Lynch, 2006: 109; Spillemaeker, 2021), the republican port of Angostura was not an abolitionist place.

While they undeniably helped finance the independence cause, these massive exports of livestock do not seem to have been accompanied by adequate planning, from an agricultural standpoint. In 1818, for example, British trader John Princep estimated that, as the war progressed, the number of livestock in the Caroni missions had fallen from around 50-60,000 to 15,000 (Princep, 1975: 21). The report by Commissary General Uzcátegui, studied by Alexander Zambrano (Zambrano, 2018), which in the same year gives an account of the evolution of cattle population, confirms these orders of magnitude: in 10 months the number of oxen would have fallen from 37,290 to 15,029²⁴. It is impossible to know which percentage has been consumed by the troops, the civilians, under the authority of republican army or by contrabandists, or even robbed by bandits. What is certain is that the numbers were falling dramatically. Moreover, the conditions in which the animals were slaughtered sometimes showed some hurry and lack of hygienical considerations. In the village of San Miguel, John Princip discovered a “horrific spectacle”:

At the time of my visit, the place was littered with horns, skulls, and bones; and although the plaza had recently been swept clean, and the rubbish burned, nevertheless, the entire surrounding area was covered with the remains, and thousands of vultures were triumphantly feasting on carrion (...) The consequences of this criminal negligence were truly terrible; all those employed in the slaughter died; their families caught the infection and perished in the same manner (Princep, 1975, p. 55-56).

In a region devastated by epidemics and war, cattle slaughtering constituted an additional factor of fatality. These processes were indispensable to feed to the troop and to generate the grease and the leather that were exported but they could be nefarious and even deadly for the workers who had to perform it. Meanwhile, in Ciudad Angostura, a small group of British merchants flourished thanks to this trade and gave the most sumptuous balls where South American, British and Irish officers and the ladies of fine Ciudad Angostura society would gather (Adam, 1824: 127). In addition to tradesmen of all nationalities, European immigrants from other professions also worked in the town: Venezuelan General Mariño was served by French cooks (Adam, 1824: 132), and a “foreign jeweller”, Adrien Joseph Labitte, also offered his services to the more affluent officers and merchants²⁵. The production process of animal resources consumed by the army or sold for its equipment was highly unequal, and the prosperity of high-ranked officers and merchants was ultimately based on merciless exploitation of rural workers in the Orinoco and of slaves in plantations in the West Indies.

²⁴ Archivo General de la Nación, Sección: Gobernación de Guayana, tomo VI, “Relación que presenta el comisionado general M. Uzcátegui del ganado existente en las misiones del Caroní, expone que con el ganado por su antecesor en su estado que le presentó el año próximo pasado y el extraído de las Cimarroneras hacían un total de 37.290 reses, hace relación del ganado que se ha consumido para el abasto de la tropa y el que se ha destinado para pagamentos hechos por orden del gobierno durante 10 meses y presenta para la fecha un total de 15.029 reses. Upata 1818”. Cited in Zambrano, 2018.

²⁵ *Correo del Orinoco*, April 8, 1820.

Conclusion

Despite the meagre quantitative data available in the sources concerning a period of war under precarious material conditions, certain findings can be made concerning the increasing role of the Orinoco commodity frontier in Atlantic trade between 1817 and 1821. By far the most important products exported from Ciudad Angostura, either illegally or under the aegis of the Republic, were livestock (mules and cattle) and their derivatives such as fat and leather, mainly to the Caribbean islands. The sugar frontier, and others such as the cotton frontier, were intimately linked to the expansion of capitalism, particularly reinforcing British financial and industrial power (Beckert, 2014; Williams, 2021). The Orinoco region was integrated into these dynamics in various ways. Directly, as the region was home to a number of cotton, cocoa and tobacco export plantations. But above all, as a border livestock supplying the large-scale plantations of the Caribbean basin. So, the Orinoco was fully integrated into various commodity chains: sugar commodity chain, cotton commodity chain, and other commodity chains in which the Caribbean plantation economy played a central part. For instance, if we recreate the complete commodity chain of some clothes or sheets manufactured in Britain which included cotton from Trinidad island, that part of this cotton was produced, of course by enslaved workers, but also with the help of mules: a lot of them from the Orinoco. Some of the ships carrying these goods also owed their cables to the Natives of the Franciscan missions in the Upper Orinoco, who supplied the chiquichiqui palm used in their manufacture.

In terms of economics, the conquest of Guayana by the Independents was not strictly speaking a break with the past, it was much more an acceleration of the commercial dynamics that already happened between South America and the Caribbean from at least the seventeenth century. As a matter of fact, studying commerce in Ciudad Angostura during the period 1817-1821 principally enables to show that financiering the army was based on the exchanges between two areas: the Orinoco and the Caribbean. In the Orinoco, rural workers, most of them free, but some enslaved too, were cultivating the cacao, cotton or tobacco and above all breeding the cattle and the mules. In the Caribbean, the sugar frontier based on slavery was indispensable to provide the precious rum of the South American troop and, above all, was the origin of the constant demand for equines and bovines. The commerce between the two regions was the economic mechanism that enabled to fortify the army of the Independence of Venezuela and Colombia. It is because they understood how to insert the animal and agricultural resources of their territories in Atlantic trade that the patriots could finance their army. The blood and the sweat of free and enslaved workers, as much of soldiers, as much of mules, cattle and horses, made the fortune of the merchants, the glory of the generals and gave birth to the new Republics.

References

- Abaurre Valencia, M. M., & Longás Otín, L. (1988). Aportación al estudio de las misiones en América: Los capuchinos aragoneses y la misión de Cumaná (1650-1810). *Argensola: Revista de Ciencias Sociales del Instituto de Estudios Altoaragoneses*, 101, 77-96.
- Adam, W. J. (1824). *Journal of Voyages to Margaritta, Trinidad, & Maturin: With the Author's Travels Across the Plains of the Llaneros, to Angustura, and Subsequent Descent of the Orinoco, in the Years 1819 & 1820*. Dublin: R.M. Tims.
- Aizpurua, R. (1988). Las mulas venezolanas y el Caribe Oriental del siglo XVIII: Datos para una historia olvidada. *Boletín Americanista*, 38, 5-15.
- Amodio, E. (1994). La conquista espiritual de El Dorad. Las expediciones capuchinas al lago parime (1750-1777). *Boletín Museo Arqueológico de Quibor*, 31, 171-193.
- Bair, J. (2009). Global Commodity Chains: Genealogy and Review. In Bair, J. (Ed.), *Frontiers of commodity chain research* (pp. 1-35). Stanford: Stanford University Press.
- Beckert, S. (2014). *Empire of cotton: A global history* (First Vintage Books edition). New York: Alfred A. Knopf.
- Bencomo Barrios, H. (2006). *Manuel Piar: Estancias de una existencia provechosa*. Caracas: BanCaribe.
- Besseghini, D. (2023). The Weapons of Revolution: Global Merchants and the Arms Trade in South America (1808-1824). *Journal of Evolutionary Studies in Business*, 8 (1), 81-118. <https://doi.org/10.1344/jesb2023.8.1.34043>.
- Blackburn, R. (2000). *The overthrow of colonial slavery: 1776 - 1848* (Reprinted). London & New York: Verso.
- Blanco Gómez, J. F., & Azpurúa, R. (1876). *Documentos para la historia de la vida pública del Libertador* (Reedición Conmemorativa, Vol. 5). Caracas: Imprenta de «La Opinión nacional».
- Blaufarb, R. (2018). La révolution armée, la révolution victorieuse: Comprendre la conquête de l'indépendance de l'Amérique latine. *Annales historiques de la Révolution française*, 393 (3), 175-193.
- Bosma, U. (2023). *The World of Sugar: How the Sweet Stuff Transformed Our Politics, Health, and Environment over 2,000 Years*. Cambridge, MA: Harvard University Press.
- Brignon, T. (2022). Un bouleversement éthologique en cascade. Animaux européens et américains dans les missions jésuites des Guarani (Paraguay, xviiiie siècle). In É. Baratay (Ed.), *Les animaux historicisés* (p. 83-98). Paris: Éditions de la Sorbonne.
- Brown, M. (2006). *Adventuring through Spanish colonies: Simón Bolívar, foreign mercenaries and the birth of new nations*. Liverpool: Liverpool University Press.
- Carrington-Farmer, C. (2024). Shipping mules in the eighteenth century: New England's equine exports to the West Indies. In Delahaye, A. Peyrol-Kleiber, E., Roper, L.H. & Van Ruymbeke, B. (Eds.), *Agents of European overseas empires* (p. 200-222). Manchester: Manchester University Press. <https://doi.org/10.7765/9781526167347.00018>.

- Carrocera, B. (1979). *Mision de los capuchinos en Guayana. II Documentos (1760-1785)*. Caracas: Academia Nacional de la Historia.
- Caulín, A. (1779). *Historia coro-graphica natural y evangélica de la Nueva Andalucía, provincias de Cumaná, Guayana y vertientes del río Orinoco*. Madrid: Secretaría de Estado y del Despacho Universal de Indias.
- Chichignoud, M., Deón, G., Détienne, P., Parant, B. & Vantomme, P. (Eds.) (1990). *Atlas de maderas tropicales de América Latina*. Yokohama & Nogent-sur-Marne: Organización Internacional de las Maderas Tropicales; Centre Technique Forestier Tropical, Dept. de Cirad. <http://public.ebookcentral.proquest.com/choice/publicfullrecord.aspx?p=3399033>.
- Cromwell, J. (2018). *The smugglers' world: Illicit trade and Atlantic communities in eighteenth-century Venezuela*. Williamsburg, Virginia: Omohundro Institute of Early American History and Culture & University of North Carolina Press.
- Crosby, A. W. (2003). *The Columbian exchange: Biological and cultural consequences of 1492* (30th anniversary ed). Westport: Praeger.
- Díaz Ordóñez, M. (2009). La real armada y el control del Orinoco en la primera parte de la independencia venezolana: La batalla de Sorondo. *Revista general de marina*, 257 (8), 271-281.
- Dubois, L. (2004). *Avengers of the New World: The story of the Haitian Revolution*. Cambridge, MA: Belknap Press of Harvard University Press.
- Falcón, F. (2019). *La campaña libertadora de 1816: Bolívar, Macgregor, Piar*. Caracas: Rivero Blanco Editores.
- Ferrer, A. (2014). *Freedom's mirror: Cuba and Haiti in the age of revolution*. Cambridge: Cambridge University Press.
- Fick, C. E. (1990). *The making of Haïti: The Saint Domingue revolution from below*. Knoxville: University of Tennessee Press.
- Figuroa, F. B. (1978). *La estructura económica de Venezuela colonial*. Caracas: Universidad Central de Venezuela, Ediciones de la Biblioteca.
- Fischer, S. (2018). Specters of The Republic: The Case of Manuel Piar. *Journal of Latin American Cultural Studies*, 27 (3), 295-311. <https://doi.org/10.1080/13569325.2018.1485558>.
- Gainot, B. (2017). *La révolution des esclaves: Haïti, 1763-1803*. Paris : Vendémiaire.
- Gereffi, G., & Korzeniewicz, M. (Éds.). (1994). *Commodity chains and global capitalism*. Westport: Praeger.
- González Sierralta, H. (2023). *José Antonio Anzoátegui: Accionar y forja de un héroe binacional (1810-2019)*. Caracas: Centro de Estudios Simón Bolívar.
- Gumilla, J. (1944). *El Orinoco ilustrado: Historia natural civil y geográfica de este gran río y de sus caudalosas vertientes. Tomo I*. Bogotá: Editorial ABC. <https://babel.banrepcultural.org/digital/collection/p17054coll6/id/20/>.
- Hackett, J. (1818). *Narrative of the Expedition which Sailed from England in 1817 to Join the South American Patriots*. London: John Murray.
- Haro Cuesta, J. (2017). *La Amazonia venezolana en tiempos de la Ilustración (1750-1861)*. Caracas: Escuela de Educación- UCV.

- Higman, B. W. (2011). *A concise history of the Caribbean*. Cambridge: Cambridge University Press.
- Hippisley, G. (1819). *A Narrative of the Expedition to the Rivers Orinoco and Apuré in South America: Which Sailed from England in November 1817, and Joined the Patriotic Forces in Venezuela and Caraccas*. London: John Murray.
- Hopkins, T. K., & Wallerstein, I. (1977). Patterns of Development of the Modern World-System. *Review (Fernand Braudel Center)*, 1 (2), 111-145. <https://www.jstor.org/stable/26918185>.
- Koulen, P. (2025). *Financing plantations and slavery: Dutch credit in Essequibo, Demerara and Berbice, 1770-1820*. Rotterdam: Doctoral Thesis, Erasmus University Rotterdam.
- Lynch, J. (2006). *Simón Bolívar: A life*. New Haven: Yale University Press. <http://site.ebrary.com/id/10217114>.
- Moore, J. W. (2000). Sugar and the Expansion of the Early Modern World-Economy: Commodity Frontiers, Ecological Transformation, and Industrialization. *Review (Fernand Braudel Center)*, 23 (3), 409-433.
- Morgan, P. D., McNeill, J. R., Mulcahy, M., & Schwartz, S. B. (2022). *Sea and land: An environmental history of the Caribbean*. Oxford: Oxford University Press.
- Norton, M. (2024). *The tame and the wild: People and animals after 1492*. Cambridge, MA: Harvard University Press. <https://doi.org/10.4159/9780674295285>.
- Osorio-Bortolussi, J. A. (2024). La Guayana venezolana como escenario geoestratégico en la guerra de Independencia (1810-1819): Aspectos para su estudio. *Anuario de Historia Regional y de las Fronteras*, 29 (1), 65-86. <https://doi.org/10.18273/revanu.v29n1-2024004>.
- Parra Ariza, D. (2022). Los patriotas y el “papel” como medio de pago. *Boletín OPCA*, 21, 40-53.
- Parra Pérez, C. (2011). *Historia de la Primera República de Venezuela*. Caracas: Fundación Biblioteca Ayacucho-Banco Central de Venezuela.
- Perera, M. Á. (2006). *El Orinoco domeñado: Frontera y límite: Guayana siglo XVIII: ecología cultural y antropología histórica de una colonización breve e inconclusa, 1704-1817*. Caracas: Universidad Central de Venezuela, Consejo de Desarrollo Científico y Humanístico.
- Princep, J. (avec Shacht Aristeguieta, E., & Tello Quijano, J.). (1975). *Diario de un viaje de Santo Tomé de Angostura en la Guayana Española, a las misiones Capuchinas del Caroní / John Princep; prólogo de Efraín Shacht Aristeguieta; introducción y notas de Jaime Tello*. Caracas: Ediciones de la Presidencia de la República,.
- Roughley, T. (1823). *The Jamaica Planter's Guide: Or, a System for Planting and Managing a Sugar Estate or Other Plantations in that Island, and Throughout the British West Indies in General*. London: Longman, Hurst, Rees, Orme, and Brown. <https://doi.org/10.1017/CBO9780511783906>.
- Sanoja, M., & Arenas, I. V. (2005). *Las edades de Guayana: Arqueología de una quimera: Santo Tomé y las misiones capuchinas catalanas 1595-1817*. Caracas: Monte Ávila.
- Spillemaecker, F. (2021). Les indépendantistes vénézuéliens face à l'esclavage: Les défis d'une révolution atlantique dans une société coloniale (1790-1830). *Astérior. Philosophie, histoire des idées, pensée politique*, 24. <https://doi.org/10.4000/asterion.5734>.
- Spillemaecker, F., & Cardenas Herrera, J. J. (2024). Inventar la república en el reino animal. Las bestias del Llano como protagonistas de la Independencia de la Nueva Granada y

- Venezuela: 1815-1819. *Fronteras de la Historia*, 29 (2), 252-275. <https://doi.org/10.22380/20274688.2712>.
- Terrien, N. (2015). « *Des patriotes sans patrie* » : *Histoire des corsaires insurgés de l'Amérique espagnole (1810-1825)*. Mordelles : Les Perséides éditions.
- Terrien, N. (2018). « Une inséparable trinité » : Neutres, corsaires et approvisionnement en armes des insurgés de l'Amérique espagnole (1812-1823). *Stratégique*, 118 (1), 165-176. <https://doi.org/10.3917/strat.118.0165>.
- Thibaud, C. (2003). « Coupé têtes, brûlé cazes ». Peurs et désirs d'Haïti dans l'Amérique de Bolivar. *Annales. Histoire, Sciences Sociales*, 58e année (2), 305-331.
- Thibaud, C. (2006). *Républiques en armes*. Rennes: Presses universitaires de Rennes. <https://pur-editions.fr/product/3889/republiques-en-armes>.
- Vidales, C. (1988). Bernadotte, San Bartolomé y los Insurgentes de Tierra Firme: La ayuda de Suecia a la causa bolivariana. *Instituto de Estudios Latinoamericanos, Universidad de Estocolmo*, Informe, 53. https://www.academia.edu/2129868/Bernadotte_San_Bartolom%C3%A9_y_los_Insurgentes_de_Tierra_Firme_La_ayuda_de_Suecia_a_la_causa_bolivariana.
- Vowell, R. L. (1831). *Campaigns and cruises in Venezuela and New Granada and in the Pacific Ocean from 1817 to 1830*. London: Longman and Company.
- Weis, T. (2021). Animals as and on Resource Frontiers. *Commodity Frontiers*, 3, 1-13. <https://doi.org/10.18174/cf.2021a18154>.
- Whitaker, J. A. (2016). Amerindians in the Eighteenth Century Plantation System of the Guianas. *Tipiti: Journal of the Society for the Anthropology of Lowland South America*, 14 (1), 30-43. <https://doi.org/10.70845/2572-3626.1220>.
- Whitehead, N. L. (1988). *Lords of the Tiger Spirit A History of the Caribs in Colonial Venezuela and Guyana*. Providence: Foris Publications.
- Williams, E. E. (1962). *History of the people of Trinidad & Tobago*. Frederick A. Praeger.
- Williams, E. E. (2021). *Capitalism & slavery* (Third edition). Chapel Hill: The University of North Carolina Press.
- Zambrano, A. (2018). Del auge al ocaso. La administración del ganado en la Provincia de Guayana durante el gobierno republicano (1816 y 1821). Notas para su estudio. In Torres Iriarte, A. (Comp.), *Correo del Orinoco, 1818-1822: Relecturas de un periódico revolucionario*. Caracas: Centro Nacional Historia.