CARTOGRAPHERS IN THE CARIBBEAN

Economics and Mapping in the Colonial New World

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THIS PAPER IS THE CULMINATION OF A SEMESTER'S WORTH OF RESEARCH AND WORK CONDUCTED AT THE BURNS LIBRARY AT BOSTON COLLEGE AS PART OF DR. SYLVIA SELLERS-GARCIA'S "MAKING HISTORY PUBLIC" COURSE IN THE SPRING OF 2014. THIS CLASS FOCUSED ON CARTOGRAPHY FROM THE EARLY MODERN ERA, AND THIS ARTICLE FOCUSES ON AN INCREDIBLE ATLAS THAT WAS PUBLISHED IN 1775 ENTITLED *THE WEST INDIA ATLAS*. THE ATLAS, WHICH IS A DETAILED EXAMPLE OF COLONIAL-ERA CARTOGRAPHY, WAS PUBLISHED BY AN ASSISTANT TO A MR. THOMAS JEFFERYS, WHO WAS THE GEOGRAPHER TO KING GEORGE III AT THE TIME OF HIS DEATH IN 1771. THIS REMARKABLE TEXT FEATURES NOT ONLY ACCURATE MAPS AND REPRESENTATIONS OF THE CARIBBEAN ISLANDS, BUT ALSO VIVID DESCRIPTIONS OF THE VARIOUS TERRITORIES AND THEIR HISTORIES. BOTH THE ECONOMIC CONTEXTS AT THE TIME THE ATLAS WAS PUBLISHED AND HOW JEFFERYS AND HIS ASSISTANTS CHOSE TO REPRESENT THESE CONTEXTS WITHIN THE VARIOUS MAPS THROUGH SYMBOLS AND REFERENCES TO NAVIGATIONAL RESOURCES WERE EXAMINED AND ANALYZED.

INTRODUCTION

As a region of tropical islands and countless waterways, the Caribbean represented far more than just a picturesque landscape for exploration to those who lived there during the eighteenth century. From the pirate haven of Nassau to the sweltering plantations of Barbados, people from across Europe and other parts of the world came together in this region for opportunities in the realms of trade and wealth. This vast amount of wealth manifested itself in items and concepts such as precious metals, personal glory, and mass quantities of commodities like sugar and rum, which attracted those from the highest and lowest echelons of society to locations as diverse as their backgrounds. The islands themselves even reflected these differences to an extreme degree; on islands like Jamaica and Cuba, lush tropical forests dominated the landscape and contrasted sharply with the islands of the sandy and flat Bahama archipelago.[1,2]

Exoticism, to most Europeans, remained a very broad term at this time, but the consensus on its definition seems to include foreign flora, fauna, climate, societies, and language. With islands occupied by the Spanish, French, Dutch, and British, the Caribbean embodied this exoticism during the colonial times. Tropical jungles containing wild species of mammals and birds fascinated many of these Europeans, who became evermore curious about the islands. They came to view these exotic islands, and the surrounding regions of Mexico and Florida, through pieces of artwork and the tales of individuals who lived and traded there. Combined with the growing merchant networks of individuals in the region, these methods of portraying exoticism seemed to draw most of the migrants to the region.

Depending on their background, many of these migrants sought their fortunes in trade, pirating or privateering, or plantation agriculture. This influx of labor and use of merchant networks and agricultural lands for economic gain constituted the most important foundational pieces for the Industrial Revolution in the early nineteenth century.[3] The romanticized nature of the Caribbean during this time also provided some measure of inducement for migrants to make the journey across the Atlantic, though this effect is difficult to gauge. Romanticizing the region impacted various social groups in different ways during the colonial era. Tales of the high seas and abundant wealth available for the taking likely inspired the ruffians of society, pirates and privateers, far more than rational and economically sound merchants. Collectively, one can refer to the system that characterized the increase in trade and growth on an economic basis as mercantilism, and the method in which this system operated as the triangular trade.

As a system of trading networks across the vast Atlantic Ocean, the triangular trade required extremely precise charts and maps for sailors and merchants who carried and directed shipments of cargo to specific ports. In the mid-eighteenth century, an English cartographer and geographer to the King of England named Thomas Jefferys began compiling a series of charts and maps that formed the basis of his atlas entitled, *The West Indian Atlas or a General Description of The West Indies: Taken from Actual Surveys and Observations*.[4] Unfortunately, Jefferys passed away in 1771 before the completion of his work, which subsequently fell to one of his editors to complete and publish.[5] Because of his role as the King's geographer, Jefferys, and subsequently the maps he created, carried strong credibility and respect. In this particular atlas of the West Indies, Jefferys clearly focused on the aspects he deemed necessary for travelers and inhabitants of the region to know.

By charting out the vast territories and wide stretches of open waters within a merchant and economic context, Jefferys presented the atlas under the heavy influence of the mercantilist attitude prevalent throughout Europe, which ultimately resulted in the map's limited objectivity. The images and drawings associated with the maps, along with the context of mercantilism that existed during this time, indicate that Jefferys created the atlas for the specific purpose of providing topographic and economic information

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about some of the significant islands to expose the trade potentiality of the Caribbean. However, he makes no specific references to mercantilism itself in the atlas, and is therefore not likely to make an argument for or against it. European governments, in contrast, heavily promoted these mercantilist doctrines of encouraging government control over trade for the accumulation of wealth, often depleting the finite amount of available resources on the planet.[6] These doctrines also ignored the well-being of the lands where the resources came from, as conveyed by Jefferys's editor: "Europe is continually enriched by carrying constantly to America not only all the goods which it produces or manufactures, but likewise those that its ships fetch from Asia or Africa."[7] From this quote and indicators within the maps, it becomes clear that this ideology heavily influenced the atlas Jefferys created, which truly limited the objectivity of the maps. One can infer that Europeans viewed, and utilized partially through accurate mapping, the Caribbean and its islands as a vital economic hub of trade and resources.

MAPPING AND IMAGERY

Situated thousands of miles away from Europe, the Caribbean represented an extremely distant and exotic place to many Europeans, both figuratively and literally. Artists and cartographers like Jefferys sought ways to convey the characteristics of this strange region, including the island jungles' stifling humid climate and their newly discovered creatures. By describing a land full of bountiful resources and wealth prime for the taking, many eighteenth-century literary and cartographic pieces attracted European merchants and lower-class citizens to the islands. In Jefferys's atlas alone, there exist significant depictions of this economic thinking through an ornate drawing on the title page, as well as smaller references within the introductory text. The title page drawing, which depicts a type of island scenery with a European man and several Africans on the beach, gives some indication about the kind of presence Europeans imposed on the region. In the picture, one of the Africans pictured is smoking a pipe of tobacco and is sitting amongst a group of barrels that, by the presence of a bottle on top of one of them, seems to indicate barrels of rum.[8] Rum, developed from sugar, became a massive export to both mainland North America and Europe, while tobacco became a heavily addictive substance in both of these regions as well.

FIGURE 1: A MAP OF THE NORTHERN COAST OF CUBA, EMPHASIZING THE WIND CURRENTS AND REGIONAL GEOGRAPHY TO AID IN NAVIGATION OF MERCHANT FLEETS.[11]

The basic formatting system Jefferys employs for the atlas bears some resemblance to the practices illustrated in modern cartography; however, he also uses some proto-anthropologic analysis throughout the atlas. The map of Texas, for example, is meticulously accurate in and of itself, but Jefferys also places a description of the local inhabitants by writing the information in a wide arc on the map itself. His emphasis on the exotic nature of the Caribbean region and the New World in general, which contrasts heavily with many European ideals and social norms, is evident in his account of some of these natives as "tribes of wandering Indians."[9] Jefferys also follows a trend of many European cartographers by indicating the impact of Christianity on the region through the labeling of towns and villages in Mexico. On these labels, the only indicator besides the name is a symbol of a church steeple, which dominated many eighteenth-century cityscapes in Europe and in the European colonies of the New World.[10]

As a series of islands surrounded by water, trade through overseas shipping became critical for the survival of colonial populations in the Caribbean. Jefferys takes very careful note of this through his maps and points out several locations that might interest ship captains, such as "good anchoring and watering for ships" on a Bahamian island as well as the presence of "fresh water" in Florida (Figure 1).[11] Trying to facilitate the passage of ships in the region indicated, at the very least, an understanding by Jefferys of the vast merchant networks under development in the region.

FIGURE 2: A MAP OF CENTRAL JAMAICA WITH VERY DISTINCTIVE INDICATIONS OF SETTLEMENTS, PLANTATIONS, AND ROADS ON THE ISLAND SURROUNDING KINGSTON AND THE PORT ROYAL AREA. [13]

On a far narrower scale, Jefferys also mentions a very specific trade route: that of the Spanish treasure fleet, the Flota, on its return journey from the Americas to Spain. Considering that this is an English atlas, it seems rather provocative and suggestive for Jefferys to deliver such crucial information regarding another country's property.[12] This inclusion ties in directly with the inherently competitive nature of mercantilism found in Jefferys's atlas. He also takes care to decorate most of the larger maps with other drawings of European vessels on the water, which further emphasizes the naval and commercial lifestyle of the region (Figure 2).[13] Within the mappings of territories outside English control, Jefferys includes detailed locations of towns, roads, and physical features of these different regions. Most of these details are likely due to the acquisition of charts from Spanish ships in the 1760s during the most recent war with Spain, which is assumed to be the Seven Years' War.[14] For example, the mapping of the southern coast of Hispaniola is notable for its French labeling, along with the English equivalents in some locations. The markings of the land's physical features were also useful for sailors in that region (Figure 3).[15] The Anglo-Spanish rivalry, as seen in the map of the southern part of Cuba, can also be seen through English intrusions and surveying of Spanish possessions for their own benefit.[16]

Jefferys, or possibly his editor, did not just limit his illustrations to his maps; he also included in the atlas an elaborate illustration following the introductory descriptions of the different islands and regions. The image is very clearly that of an angel standing, in a classical pose, on the beach of an island, which seems to exist somewhere in the Caribbean considering the surrounding flora. The most poignant connections to the ideals of European superiority and exploitation lie within the objects that surround the angel in the picture. Signs of civilization, ranging from a telescope to a sheet music book, lie at the angel's feet amid further clutter, while a European vessel is present in the background. The symbolic nature of all these different images refers to the notion many Europeans held of the transfer of culture and civilization from Europe to the Caribbean islands.[17] Not all development of the Caribbean region stemmed from European intrusions, as many agricultural practices in the region and its immediate surrounding areas originated from Native American practices. For example, the physician Sir Hans Sloane provided a depiction of the exotic practice of how natives grew cactus plants in southern Mexico for the production of red dye, which they accomplished by taking acid from the body of the beetle that feeds on the cactus.[18]

GEOGRAPHY

In a tropical climate like the Caribbean, Europeans discovered a wide variety of physical features and wildlife foreign to these settlers amongst their small settlements and plantations. Ranging from the tropical jungles of Cuba to the flat swamplands of South Florida, this geography often posed problems for settlement and economic development, but the European settlers on each island utilized these physical features to their advantage. One could usually classify these advantages in terms of natural fortifica-

FIGURE 3: AN ILLUSTRATION FOUND IN THE OPENING PAGES OF THE ATLAS THAT ILLUSTRATES THE EXOTIC CHARACTERISTICS OF THE CARIBBEAN THAT EUROPEANS EMPHASIZED. [15]

tions or suitable climates for agriculture. For example, the "great mountains" of Jamaica provided great natural fortifications against intrusion of foreigners or pirates hostile to the British settlers in Kingston and Port Royal.[19] Jefferys's atlas depicts these massive mountains through detailed and accurate illustrations of multi-layered mountainous formations (Figure 4).[20] He also offers a sea-level depiction of the island of Barbados by sketching the mountains from the perspective of a sailor approaching the island from the northwest.[21]

Topographical differences between the islands ultimately influenced the respective successes of different colonists within the region. In the Bahamian archipelago, for example, the settlers in the early eighteenth century primarily consisted of pirates and privateers who settled the island of Providence and established a colony at Nassau. Because of a lack of drinking water and suitable soil for cultivation, the colony and its descendants generally relied on the spoils of their plunder.[22] In contrast, the agricultural islands of the Lesser Antilles produced huge amounts of crops for export, such as the French-owned island of Guadeloupe that annually yielded "46 million weight of sugar."[23] Numbers from other sugar-producing islands such as Barbados remained similar, trading "above 432,000l. sterling," to different points throughout the triangular trade regions.[24] Relative stability in English governance and victories over the French and Spanish in several wars during the eighteenth century truly provided the British with a distinct economic advantage over their competition. With an expanded economic base in North America following the Seven Years' War and the transfer of experienced seamen to the Caribbean following the War of Spanish Succession, the available markets for goods and the sailors to transport those goods expanded as well. In Jefferys's atlas, the presence and importance of these plantations was significant enough that he felt it necessary to mark their borders within detailed maps of individual islands in the Lesser Antilles.[25]

However, the most notable topographical descriptions of the islands actually lie off the coasts of each island through the presence of water depth indicators. These measurements, utilized by European ship captains to ensure goods safely arrived to their destinations, proved critical for the facilitation of trade in the Caribbean. Jefferys' maps include not only depth measurements along coastal waters, but also small indicators of rocks and

FIGURE 4: A MAP OF THE WESTERN ISLANDS IN THE BAHAMAS, WITH A SPECIAL NOTE EMPHASIZING WHERE SHIPS COULD ANCHOR AND TAKE ON FRESH WATER.[20]

other hazards located in the water.[26] These critical measurements and indicators dictate the importance of shipping to Europeans in the Caribbean, and further emphasize the intent of exploitation of the region's natural fruitfulness by the Europeans. With accurate depth measurements that facilitated this exchange, European merchants eventually helped provide the basis for further economic growth in other colonies and in Europe.[27]

To assist in the establishment of colonies within these islands, European explorers and adventurers took great care to give accurate descriptions of exotic flora and fauna within the region. In the late seventeenth century, Sloane journeyed to the Caribbean with the recently appointed governor of Jamaica, the Duke of Albemarle.[28] His extensive accounts of the flora in Jamaica, addressed to Queen Anne of Great Britain, constitutes one of "the largest and most considerable" collections of natural descriptions from this period.[29] Sloane, throughout the book, makes constant references to the potential of different plants and wildlife in providing sustenance for those who arrived. However, there do seem to be some exceptions to the natural fruitfulness of the land, including a type of seaweed that is "saltish to the taste" and "delightful to the Irish palats."[30]

Fauna in the region, relatively untouched by man except for native interaction, also became a very important source of sustenance for European explorers venturing throughout the Caribbean islands. Sloane mentions bird species

such as Boobies and Noddies that "suffer themselves to be catch'd by the Hand," which further emphasizes the need of Europeans to survive on animals rather than agriculture during their long voyages. Because the voyages required being at sea for weeks at a time, food for the sailors became an absolute necessity, and fishing was the primary means of providing it. His sketches of the tropical Bonito fish and its corresponding description, for example, emphasize their rather large size and "savoury" taste.[31] To continue development of shipping lanes and traffic, information such as this for European ship captains became vital. Making connections from home to other regions provided the European sailors with some familiarity, such as the acknowledgment of specific types of shellfish being present in both Jamaica and Scotland.[32] This simple mention of a connection between foodstuffs and geography likely gave a reader of this volume residing in Great Britain a sense of perspective and a guide to where one could seek food.

MERCANTILISM AND TRIANGULAR TRADE

The ideologies of mercantilism and exchange manifested themselves through the establishment of the trans-Atlantic triangular trade networks between Europe, Africa, and the colonies of the New World.[33] The trade networks connected to the Caribbean colonies often relied on individual ship captains operating under very specific directives from their respective merchants, who resided thousands of miles away in Europe. One prominent London merchant, William Freeman, even gave one of his ship captains a directive to lie to officials who boarded their ships, a common practice among merchants in order to make sure goods reached their destinations.[34] Merchants formed consistent bonds with ship captains that made regular voyages to the New World territories like Jamaica generally out of a need for familiarity and consistency in dealings.[35]

In terms of mapping, Jefferys clearly realizes the vast array of shipping throughout the Caribbean during the period of triangular trade, and he decorates many of his maps with illustrations of his ships on the open seas. These ships, pictured in countless different locations, seem to concentrate around regions where shipping is at its highest volume in different channels or straits. Throughout the maps, many of these pictured ships follow the directions of the small "darts" which represent the currents on the open seas.[36] To ship captains and merchants, these current markings are an invaluable tool for navigation and transporting goods at a more rapid pace than relying on wind alone.

Jefferys and his editor make other allusions to practices such as the cultivation of sugar throughout the atlas. The map key of St. Vincent in the Lesser Antilles notes that the island possesses twenty-two rivers capable of driving sugar mills, which indicates the importance of sugar cultivation in the region.[37] The trials and tribulations of agriculture extended far beyond the English realms however, as the French in La Martinique discovered during the eighteenth century. With little progress made in the production of cacao or sugar, the planters on the island started producing coffee beans that became a raging success.[38] Likewise, in Puerto Rico, Jefferys describes how the island does not produce enough goods beyond the basic needs of its "lazy possessors."[39] This blatant and unwarranted bias against the Spanish likely stems from historical conflicts with the Spanish, some of which led to Jefferys gaining possession of many of the maps in the first place.

CONCLUSION

Accurately describing, much less depicting, a varied landscape such as the Caribbean presented an enormously challenging task for the cartographer Thomas Jefferys during the eighteenth century. His work, along with that of other Europeans, utilizes several different methods to accomplish this task, and consequently provides modern day historians with a perspective on the region and mercantilism. Through an analysis of imagery within Jefferys' maps and the methods he utilizes to describe geography and his important references to trade and mercantilism, the general European viewpoint on the Caribbean seems clear. As a tropical land with a favorable climate for the cultivation of sugar, tobacco, indigo, coffee beans, and cacao, the Caribbean region represented an enormous opportunity for exchange during the eighteenth century. This trade, manifested through the practice of triangular trade as well as the economic doctrine of mercantilism, dominated every aspect of Caribbean colonial life during this time.

However, the most important role the Caribbean played during the colonial era truly came after the eighteenth century, when the goods it exported helped provide the capital for industrialists and economies to expand in the Industrial Revolution. Analysis of the economic exchange in the Caribbean unfortunately never takes into account the lasting human impact on people such as African slaves or Native Americans living in the Caribbean. For example, on the passage from Africa to America, slave mortality rates ranged from 8.2-21 percent.[40] These figures, while shocking themselves, do not even account for the countless oth-

ers who passed away from the malicious treatment received on the plantations in the region. European mortality rates, while evidently lower, also create a deeper understanding of the horrid conditions that many of the colonizers went through during the triangular trade era.

The suffering that many people endured in the Caribbean during this time are tragedies best classified as silences within these maps. They are also representative of the major disadvantages to the economic development of the region. Instead of trying to describe these horrific stories, Jefferys creates a series of truly remarkable and incredibly detailed maps that likely facilitated the passage of ships and cargo, and gives a much clearer understanding of life in the Caribbean at the time. This understanding really serves a dual purpose, however, as it both feeds into the romanticized European image of the exotic colonial Caribbean while telling a mercantilist history of the region. His atlas, although it does not specifically argue for mercantilist ideals, clearly embodies the pri nciples of this colonial economic system and focuses specifically on the aspects of naval commerce. Jefferys, and other Europeans like him, understood that accurate maps of this region could facilitate the development process and provide merchants with the best possible opportunity for successful exchange of goods in the colonial era.

ENDNOTES

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