

# Finding the Spaces Betwixt and Between: GIS of the 1733 St. Jan Slave Rebellion

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#### Abstract

The 1733 St. Jan Slave Rebellion in the Danish West Indies was an ephemeral event, from an archaeological perspective. Lasting only eight months and diffused across the 52-km² island, the rebellion lacks a traditional archaeological signature even from battlefield methodologies. However, it is useful to apply archaeological questions to topics that are difficult to approach through dirt and shovel. This paper will discuss the application of spatial history/digital humanities methods to analyze the slave rebellion from multiple temporal vantage points, including social conditions leading up to the rebellion, and how creative uses of spatializing textual data may allow researchers to gain new insights into difficult-to-see past people such as enslaved freedom fighters.

**Keywords** Spatial history · Digital humanities · GIS · Slave rebellion · Caribbean · St. Jan

# **Spatial History and Archaeology**

On November 23, 1733 five enslaved Africans climbed a small hill on a tiny Caribbean island and killed the drunken Danish soldiers stationed in a ramshackle building that served as the only fortification on St. Jan. What resulted was eight months of conflict between the European colonists, primarily Danish and Dutch, who occupied the small Virgin Island, and a small group of rebels. The rebels were lead by three men, identified in the European-written documents as King Claes, Coffi, and Kanta. Little is known about these three men, although all were held at plantations operated by officials of the Danske Vestindie-Guinea Kompagnie (VGK) on the eastern portion of the island. Just under 8% percent of the enslaved population, or 110 of 1435 people, were identified as rebel fighters against a non-enslaved population of at least 69 documented people (the actual number of non-enslaved individuals living on island may have been much higher). In the end, it took an international coalition of European nations to quell the



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rebellion and return St. Jan to Danish control. Although this was an important event that significantly impacted how society was structured in the Danish West Indies long after it ended, archaeologically the event was ephemeral, lacking sufficient material culture or distinct features that could be excavated and analyzed, cataloged and bagged. I maintain that looking at such events, specifically slave rebellions and political violence that occurs directly from the project of enslavement, is an important task for historical archaeologists to understand past human experiences and subsequent cultural expression. While such events often do not leave direct evidence within the material record of their occurrence, directly engaging with the "punctuated equilibrium" of events (Beck et al. 2007; Bolender 2010) is important to understand changes and transformations in the archaeological record.

There has been much work done in the Danish West Indies, as well as the broader Caribbean, on understanding landscapes and viewsheds, especially how such landscapes related to the experience of slavery and the emergence of modern Europe (c.f., Casella 2010; Fitts 1996; Hicks 2007; Lenik 2011; Singleton 2001; Yentsch 1996). James Delle (1998:38) grounds his study of nineteenth-century Jamaican coffee plantations in "material spaces" that are both social and material places that are part of an "empirically measurable universe that has been created and/or defined by humans." (Delle 1998:38). Specific to investigations on the island of St. Jan in particular, Douglas Armstrong (2003, 2008) has used large landscape-level approaches to understand the ever-evolving experiences of West Indians in the Danish West Indies.

Twenty-first century archaeology, therefore, is an exciting time to pose new or difficult research questions. As a discipline, archaeology is not only able to apply its dig-kit to new sites, but to add new tools to that dig-kit. One suite of new tools is spatial narratives, applying mapping techniques to texts and information in historic documents, oral histories, and other datasets that were not necessarily intended to be spatial by the historic agent who created it, and allowing researchers to gain new insights into seemingly well-understood events or time periods. For archaeologists, with a near universal affinity for mapping sites and features, there has been a growing engagement with textual geographic analysis, or visualizing and spatializing qualitative data (Bollwerk 2015; Murrieta-Flores and Gregory 2015). Many, if not all, of the articles in this volume illustrate what can be done with a creative use of multiple datasets. The focus of this approach is creating alternative data sets to gain different perspectives or deeper understandings of past human experiences, or to complement and challenge traditional datasets such as artifact assemblages. Currently, much of this work is interdisciplinary across historical sciences and the humanities, including history, geography, and literature studies. This approach lacks a unifying paradigm or even a comprehensive or encompassing label, and is instead identified variably as spatial history, digital humanities, historical GIS, or qualitative GIS, among other identifiers (Dempsey 2012; Knowles et al. 2015; Roberts 2016; Taylor et al. 2018).

A common thread through some of these various studies is the idea of making those rendered invisible by traditional historiographic methods visible, providing marginalized, oppressed, and underrepresented people with agency and dignity. This is exemplified in the work of Gokee et al. (this volume) who employ "counter-mapping" to center international narratives of human migrations on the experiences of the individual humans who experience it. Others use these tools not only to see past cultures, but to bring together various strands of information for contemporary communities.



Townsend et al. (this volume) use spatial methodologies to create avenues of "digital repatriation" with contemporary Cherokee communities. More historic-focused studies use digital humanities and spatial history to extract a deeper understanding of the people who populated and created past societies. Mikecz (2017), for example, used what he calls geovisualizations to make the erasures of Indigenous people who aided in the Spanish conquest of Peru visible in documents of conquest. Focusing on lapses of time, periods when the Spanish linger in one particular area, as well as on quantifying the "mood" of the Spanish in their journals and writings, the author is able to bring indigenous actors to the forefront and shows how they were active agents in the conquest of Peru. In this analysis, the author challenges the deterministic and fatalistic view of the conquering of the Americas by Europe.

These approaches often times use visualizations or methods that differ from simply mapping qualitative variables. Shafie et al. (2017) use hypergraphs and a "superdyadic" analysis to discuss Carib attacks on European colonies in the sixteenth and seventeenth centuries. The authors tack back and forth between both qualitative and quantitative measures to explore the relationships and collisions occurring in the Caribbean as European nations sought to dominate the territories and Caribbean peoples sought to resist the interlopers. Likewise Warner-Smith (this volume) spatializes historic texts, specifically newspapers, to trace not only the spread of cholera in the nineteenth century Caribbean, but how the disease was understood by contemporaries. This is where the greatest power of these new methodologies lies- in the multimodal use of "objective" and "subjective" data to weave a different picture of past events than researchers have generally attempted previously. Spatial history is not simply making a map out of text. It requires spatial analysis to illuminate to the reader of the map why it is important where a historical actor was at any given point in time to understand the trajectory of a historical event, how a cultural group behaved, or whatever it is the context of the map is depicting (c.f., Evans and Daly 2006; Gregory 2003; Ingold 1993, 2011; Llobera 2006; Lock and Pouncett 2017).

Much of the analysis I conducted of the 1733 St. Jan Slave rebellion emerged from an approach that used ArcGIS to spatialize narrative text in an attempt to see the enslaved population on the landscape, and thereby understand how they were active agents in the rebellion. I believe that the florescence of techniques that take advantage of the sophisticated software packages increasingly available to researchers will benefit our approach to asking questions of people who have been rendered invisible in the archival record and ephemeral in the archaeological record. What follows is an explanation of the rebellion and the methods of spatializing text that lead to conclusions about the relationships between the planters, enslaved population, and the landscape, as well as posing challenges to the dominate historical narrative of the rebellion. This reframing of invisibility is part of a larger project to make visible the agency of the enslaved by situating them on the landscape.

# A Brief History of St. Jan and the 1733 Slave Rebellion

The Danish West Indies (today the United States Virgin Islands) was comprised of three islands, the 83-km<sup>2</sup> St. Thomas, occupied in 1672; 52-km<sup>2</sup> St. Jan, colonized in 1718; and the 216-km<sup>2</sup> island St Croix, colonized in 1734. All three islands were administered



by the VGK, a company chartered by the Danish Monarchy and overseen by a board of directors in Copenhagen. St. Jan was located only 12 km from St. Thomas. Colonizing St. Jan was an opportunity for the VGK to increase production for St. Thomas planters who had already exhausted the island. The Danish West Indies were not idealic agricultural areas- both islands were steep, with thin volcanic soils and few reliable water sources. In the case of St. Jan, there were no reliable ground water sources. The earliest settlers faced near constant harassment and attacks by the English and Spanish. By 1733 the island was recorded by the VGK as "full" with 106 plantation plots claimed by European planters (Governors Order Book et al. 1733–34:1100).

St. Jan was immediately a backwater that was marginalized both economically and politically. The Company plantation, located on one of the best protected bays in the Caribbean, was on the east end of the island, and a day's voyage from Charlotte Amalie, the capital of St. Thomas. The company plantation was chronically underresourced, lacking in both free and enslaved labor, and underfunded to meet the needs of a profitable sugar plantation. This pattern was replicated across the island. As many of the plantations were established as subsistence farms that existed to subsidize larger operations, or mono agricultural operations meant to complement endeavors on St. Thomas, private plantation owners were unwilling or unable to invest in their properties and likewise neglected the enslaved or indentured population that lived and worked on the properties. In addition, many planters themselves maintained permanent residence on St. Thomas, or worse, back in Copenhagen. The Danish authorities relied not only on enslaved labor but also indentured servants from Danish prisons for their labor. This population was largely abandoned, and the St. Jan plantations were in the hands of mesterknegts (the Danish term for overseers) who oversaw day-to-day operations of the plantations, and the enslaved populations who actually performed the day-to-day operations of the plantations. Many of the mesterknegts identified in the historic documents were overseers for several plantations, or were themselves small property holders in addition to being overseers on larger plantations. All of this gave rise to a variety of social conditions that allowed for a successful slave rebellion on St. Jan in 1733 (Norton 2013).

The rebellion began in the early morning hours of November 23 when a small group of enslaved people climbed the hill to Fredericksvaern, the only defensive fortification on island, killed all but one of the soldiers stationed there, and signaled by canon fire for their compatriots to attack the plantations across the island. This rebellion lasted for eight months, without reinforcements or outside aid to the rebel force. This is a well-known story to many on modern day St. John; it was popularized through an historical novel by a local historian named John Anderson (1975) and reinforced by contemporary National Park Service interpretations.

As the popular version attests, during the eight months of the event, the rebels were able to drive a majority of the free white population from the island, and caused widespread property damage, drawing the entirety of the 52-km² island into the conflict. Some of the enslaved population who were not involved in the rebellion escaped with the planters in the early morning hours of November 23 to St. Thomas where Europeans waited helplessly while their island fell into chaos. What has been lacking in the popular historiography of the rebellion is a nuanced discussion of who was involved in the rebellion and under what circumstances, a resolution that the spatial distribution of key people and events during that eight-month time frame has



helped to illuminate. The rebellion has almost always been depicted as "island wide" and as being caused by the "Aminas," newly arrived enslaved peoples from the El Mina trading post in Ghana. In this way the rebellion was characterized as a sudden event and perpetrated by outsiders, seemingly inexplicable to those who lacked forewarning about its approach. While there are some glimmers of truth about the causes and conditions of rebellions in such a summary, it lacks an explanatory power that elucidates the conditions of political violence, and allows those whose authority and power were challenged, in this case European plantation owners and the VGK, to dismiss the violence as aberrant. This spatial approach therefore moves to instead recognize the structural issues that pushed desperate people to take up arms.

## Cartographic and Documentary Record of St. Jan

St. Jan was marginal and largely unimportant, even from an administrative point of view. Nothing illustrates this more clearly than the fact that the island went unmapped for the first 75 years of its European occupation. The first depiction of St. Jan via map was a 1719 creation by celebrated Dutch cartographer Gerard Van Keulan. While contemporary to the time period that the island was occupied, it is, for all intents and purposes, a fake. Van Keulan never stepped foot on St. Jan, and it is doubtful that he or his staff ever visited St. Thomas. The defensive structures pictured were a bluster by then governor Bredahl who was desperate to stop the harassment of St. Jan planters by the English and Spanish (Norton 2015).

The first surveyed map of St. Jan was completed by the Danish Royal Cartographer Peter Oxholm in 1780 (Armstrong 2003). Even then Oxholm argued that St. Jan was not worth the time and expense to properly map, and it was only carried out under the direct orders of the Monarch Christian VII, who was a cartophile. Oxholm carried out his orders admirably, and fortunate for US researchers, he published his survey at the same scale as contemporary United States Geological Survey (USGS) maps. No map has ever been identified that corresponds with the 1718-33 time period, nor is any such document referred to in correspondence or other documentation from the time period. As with other types of historic silences, the lack of mapping was most likely conscious choice on the part of the VGK and the planters. There is an obvious utility in not fully mapping the island that goes unstated by the VGK. While the VGK were reliant on the tax revenue generated by property ownership and agricultural production, the Danish authorities on the ground were embedded in an informal economy that made them reliant on their neighbors and the investment of the shareholders back in Copenhagen. The lack of maps and other documentation about St. Jan meant they were less transparent and less accountable to the shareholders. It also allowed the authorities to hide their own incompetence and failures, of which there were many, controlling a narrative that would have been difficult to challenge from Europe. This is seen in other documents, such as letters and reports, which are sent to the Board of Directors in Copenhagen where substantial information is omitted, particularly if that information illustrated another failure on the part of the Danish officials in the Caribbean, or if additional resources were being requested.



The only indication of where any of the 106 plantations were was in landlisters (1728, 1730-33), tax documents used by the VGK to collect revenue owed to the Company. Each plot of land, or plantation, was numbered, with the numbers being relatively consistent within the landlisters. This allowed me to follow many changes in ownership over the course of five years of records keeping. The name of families/owners and the name of plantations were also recorded, although inconsistently. However, there are plantations today with extant buildings in ruins that retain the historic names, and so I was also able to use these names to trace properties through the landlisters. Table 1 is a sample of adjacent property descriptions in the Caneel Bay Quarter on St. Jan from 1728, the first year that tax records were recorded, thru 1733, the year of the rebellion.

In just these first five properties of Caneel Bay, which was a quarter with relatively well reported property boundaries, property one, Daniel Jansen's property, lacked any narrative description of the property's location for the first five years of landlister recordation leading up to the 1733 rebellion. And yet, Jansen's property lines are used as descriptors for the property boundaries of adjacent plantations. Also note that in 1732, property number five, that of Dooris' Widow, has the same description as property number four, to which it is adjacent. There is also the common issue of different spellings for the same name across years, as well as a lack of clarity of who inherited a property after the death of the original owner. In other quarters we see a lack of continuity even with the numbering of the plots from year to year. The landlisters also included demographic information for the individuals who resided at that plantation. While often just the number of people was recorded, in some instances names of individuals were also recorded, as was their status as enslaved or free. Women, men, and children were all recorded separately, along with their respective ages as all heads were taxed, albeit at varying rates. To entice colonists to the island, the VGK promised 7 tax free-years to establish a property. While landlisters are not recorded until 1728, the year a plantation was established by the original owner, going back to 1718, was also recorded. By 1728 the Company's Shareholders must have been pressuring the planters to pay up.

The landlisters have their own sordid histories (Fog Olwig 1985; Norton 2013) but among the important aspects for this paper is that landlisters were how the company calculated taxes, and the property valuations were based completely on self-reporting by the planters, including plantation size and location, crop type, profits made in any given year, and the numbers as well as the demographics of enslaved people. As seen in Table 1, the plantation boundaries themselves were folk geographies based on a type of metes and bounds system that was never actually surveyed and revolved around adjacency to other property owners or to ill-defined landscape features. Although the Danish authorities lacked an explicitly spatial reference for where each of the plantations was located, the ownership of the plantations became the primary way they identified where different events were taking place and how they recorded activities across the island. For a landscape level archaeological investigation of the 1733 rebellion, these 106 plantations plus the defensive structure Fredericksvaern (also referred to as Fortsberg) became the basic spatial unit of analysis.

The remaining information regarding locational or spatial data came from two primary documents, the Secret Privy Council correspondence, the official correspondence of the leaders of the colony, and the Governor's Order Book, a document that



 $2000 \times 1500$  fod

 $2000 \times 1500$  fod

Table 1 A representative sample of landlister narratives of property boundaries in Caneel Bay Quarter, 1728-33

Landlister 1728 Number	1728	1730	1731	1732	1733
1	Borger Captain Daniel Jansen [No description recorded] 3000 × 2000 fod (942.3 × 628.2 m)	Borger Captain Daniel Jansen [No description recorded] 3000 × 2000 fod (942.3 × 628.2 m)	Daniel Jansen's Widow [No description recorded] 3000 × 2000 fod (942.3 × 628.2 m)	Daniel Jansen's Widow [No description recorded] 3000 × 2000 fod (942.3 × 628.2 m)	Daniel Jansen's Widow [No description recorded] 3000 × 2000 fod (942.3 × 628.2 m)
2	William Gandis (Sold to Pieter Durloe) In the flat of Caneel Bay west of Maho Bay West South West along Dan Dansens North barricade up against Jochum Delicats North barricade 3000 × 1500 fcd (942.3 × 471.15 m)	Pieter Durloe In the flat of Caneel Bay west of Maho Bay West South West along Dan Dansens North barricade up against Jochum Delicats North barricade 3000 × 1500 fod (942.3 × 471.15 m)	Pieter Durloe In the flat of Caneel Bay west of Maho Bay West South West along Dan Dansens North barricade up against Jochum Delicats North barricade 3000 × 1500 fod (942.3 × 471.15 m)	Pieter Durloe Runs level from Caneel Bay west from Maho Bay along Daniel Jansens north bar 3000 × 1500 fod (942.3 × 471.15 m)	Pieter Durloe Runs level from Caneel Bay west from Maho Bay along Daniel Jansens north bar 3000 × 1500 fod (942.3 × 471.15 m)
ю	Pieter De Buyck West of William Gandis place to Adrian Runnels East North East in length and in breadth south and north on the west barricades but the east only 1000 fod 3000 × 1500 fod (942.3 × 471.15 m)	Pieter De Buyck [No description recorded] 3000 × 1500 fod (942.3 × 471.15 m)	Pieter De Buyck [No description recorded] 3000×1500 fod (942.3×471.15 m)	Abraham Beaudewyn M de Buycks Widow Lies west of Pieter Durloes to Adrian Runnels, Iength East North East 3000 × 1500 fod (942.3 × 471.15 m)	Abraham Beaudewyn M de Buycks Widow Lies west of Pieter Durloes to Adrian Runnels, length ENE 3000 x 1500 fod (942.3 x 471.15 m)
4	Joh. Delicats Heirs Between Jan Vlacks and Corn Delicats running in length ENE and WSW in br south and north 2000 × 1500 fod (628.2 × 471.15 m)	Joh. Delicats Heirs Between Jan Vlacks and Com Delicats running in length ENE and WSW in br south and north 2000 × 1500 fod (628.2 × 471.15 m)	Joh. Delicats juniors widow Between Jan Vlacks and Corn Delicats running in length ENE and WSW in br south and north 2000 × 1500 fod (628.2 × 471.15 m)	Joh. Delicats juniors widow Between Jan Vlacks and Corn Delicats running in length ENE and WSW in br south and north	Joh. Delicats juniors widow Between Jan Vlacks and Com Delicats running in length ENE and WSW in br south and north



		(628.2 × 471.15 m) deserted
	1733	
	1732	(628.2 × 471.15 m)  Dooris Widow Between Jan Vlacks and Corn Delicats running in length ENE and WSW in br south and north 2000 × 1500 fod (628.2 × 471.15 m)
	1731	Hans Pieter Dooris Lies alongside #4 2000 × 1500 fod (628.2 × 471.15 m)
	1730	Hans Pieter Dooris Lies alongside #4 2000 × 1500 fod (628.2 × 471.15 m)
Table 1 (continued)	Landlister 1728 Number	Jacob Delicat Lies alongside #4 2000 × 1500 fod (628.2 × 471.15 m)
Table 1	Landlist Number	5

Please note, no landlisters were recorded in 1729 Fod is a Danish foot, equal to 1.0305 English feet, or 0.3141 m



was ostensibly the official daily diary of the Governor of the colony. The Secret Privy Council was a group of VGK officials and prominent planters who served as the government for St. Jan, and haphazardly, or intermittently, kept a log book of daily activities. The log book was rarely signed, but was written in various hands, and included not just Danish but the occasional pages written in Dutch. During the rebellion these documents were overseen by Phillip Gardelin, who served as the colonial governor. The Secret Privy Council was largely disbanded during the rebellion, replaced by a small group of male planters with some enslaved individuals who established a garrison at one of the properties on the North Shore of St. Jan to fight the rebels. While written from a first-person perspective, it was created by several different secretaries and was not always kept daily. The Governor's Order Book therefore remains as the predominant source of information about daily life and occurrences during the rebellion. During the course of events, Gardelin or his secretary would mention when rebel actions were reported to take place at certain locations. The locations were always referred to within the context of land ownership, such as "at Kiervings" or "seen at the Company Plantation." Sometimes these reports were offhand comments that were not expounded on.

## **Mapping the Plantations**

The challenge for an archaeological investigation of these events was creating a spatial reference to locate the plantations and events recorded in the landlisters, Secret Privy Council correspondence, and the Governor's Order book. Prior to my own research there had already been a large amount of archaeological survey completed on the island, with almost all known sites recorded handheld GPS units, and managed through various iterations of ArcGIS. The prevailing basemap that had been used by multiple researchers studying the period of Danish occupation is the 1780 Oxholm map (Armstrong 2008). This was the basemap that I also used, for multiple reasons. The Oxholm map recorded the plantation buildings (although not ownership boundaries), and the accuracy of Oxholm's survey matched the accuracy of the contemporary GPS data, and therefore allowed properties that were extant in 1780 to be georectified. The 1780 Oxholm map provides an accurate visualization for the un-occupied spaces between planter dwellings and other primary buildings, as well as including topography and important geographic features, as opposed to a contemporary satellite image, which introduces too much noise from more recent development. Using the narrative descriptions of the landlisters I mapped the metes-and-bounds type descriptors of the plantation boundaries, anchoring the entire map around known property locations from both archaeological survey and the 1780 Oxholm map. The standard minimum size for a plantation was 3000 fod (Danish feet) by 1000 fod, of which only the length of the 1000 fod dimension was taxed. These minimum requirements were later dropped, and by 1729 all the newly claimed plots fell below the minimum required size. None of the entries in the landlisters included a discussion of where the built environment, or actual plantation houses and outbuildings, were located within the boundaries, so the spacing was based upon best fits with natural topography, then centering boundaries over either extant or known archaeological remains of buildings, as well as best fit in relation to other plantations.



Figure 1 illustrates the 26 properties from 1733 that have been identified and recorded through traditional archaeological survey. In addition, these properties can also be tied directly to the Oxholm map (c.f., Horvath 1991; Kellar 2004; Knight 2010; Norton et al. 2011; Solis 2004; Wheaton 2000; Wild et al. 1991; Wild and Reaves 1986). All 26 properties also appeared in the landlisters, so I had over two dozen "anchors" or known geographical locations upon which to hang the more large-scale description of property boundaries. I created polygons that were the same size and dimensions reported in the landlisters. For the properties that were interior to the island, I roughly centered the property polygon over the known built environment, which was primarily either an extant house or the foundations of such a house. Geolocating the remaining 80 plantations became a logic puzzle as much as an exercise in mapping. First, chains of ownership for each property was traced through the five years of existing landlisters to more accurately determine not only who owned what properties, but to rectify any variations in the descriptions of property locations. As the planters self-reported all taxable aspects of their property, they were also not specifically geolocating their own boundaries, but instead were describing areas based on relative distances and adjacency to their neighbors. A small number of property owners failed to ever report the actual size of their plantations, and are represented by circles rather than rectangles in Fig. 2. There is no record or indication that this was ever verified for accuracy or corrected by the VGK, to whom the taxes were owed.

Initially I was looking to create a simple polygon that could form the basic unit of analysis. In the original GIS, all information pertaining to the enslaved population was recorded as to the plantation where they labored, as was all other spatial information such as crop types or years that plantations were established. This was in an effort to identify variables that may have favored some enslaved participating in the rebellion or not. Ultimately, a relatively few number of variables contributed to participation in the



Fig. 1 Archaeologically identified and recorded plantations that were extant in 1733





Fig. 2 Plantation boundaries and the self-identified quarter

rebellion, and a primary factor was related to geography- where on the island the enslaved person was held. This corresponds closely to Quarters, as can be seen in Fig. 2. In the Danish West Indies, islands were separated into areas called Quarters that were essentially related clusters of properties. For St. Jan, these clusters were related not only geographically, but also culturally (for instance, the Dutch tended to settle in the Little and Big Cruz Bay and the Danish in Coral Bay) and corresponded roughly to time periods (Durloe's Bay and Caneel Bay were settled the earliest, with French Quarter being settled later than all the other quarters). The visual results of the original GIS exercise were particularly striking. What resulted was an untidy patchwork of property boundaries that in many ways evoked the folk geography that planters themselves may have had for the island, the island on which they depended for their livelihood and in some cases their day-to-day existence. The logic puzzle of locating the plantations had resulted not in a well demarcated and orderly island, but an island where there were jumbles of peoples and locations, and then large gaps of betwixt and between where portions of the island were unclaimed even from an administrative perspective. As stated above, the plantation was going to be the basic unit of analysis. I had succeeded in spatializing data from which I could analyze the rebellion.

Spatializing the self-reported descriptions of the property boundaries indicated that this patchwork had unclaimed spaces, reinforcing the idea that the planters had only a vague notion of where their property existed on the landscape, especially since the VGK saw the island as completely accounted for. Some of this could be explained by purposeful misinformation on the part of the planters attempting to evade taxes or cheat their neighbors, but the sheer expanse of the gaps supports that this was not the entire story. St. Jan was separated into quarters, which were geographically designated regions of the island, and appears to have been a method for the inhabitants to have "neighborhoods" to which they could refer. It is unclear whether or not the quarters



were pre-determined by the Company for St. Jan, and they seem to have grown much more organically, as plantation plots on the island were claimed. This is supported by the fact that quarter boundaries change over time. Eventually, the quarters become distinct cultural areas as people of different European nationalities come to dominate different parts of the island. St. Jan had eight quarters in 1733. As can be seen in Fig. 2, in at least three cases the planters self-reported being in a neighboring quarter that they would not logically be in from a purely geographical point of view, further supporting the idea that boundaries on the island were fluid at best and narrowly understood at worst.

Figure 3 depicts the same plantation units, but with points representing the location of the built environment, i.e. plantation houses and outbuildings. As stated above, these locations were initially georectified with the 26 properties recorded with GPS equipment. The remainder were placed via analysis of the terrain, historic documentation, or left in the geographic center of the previously created polygons.

In many ways this depiction of where the likely location of the plantation dwellings, or the built environment, of 1733 St. Jan is more accurate than Fig. 2 in that Fig. 3 indicates the areas where the European planters were physically present when they were on the island. The domestic space would have been the best understood area. This includes the house where the property owner resided, followed by outbuildings where other immediate tasks took place, perhaps areas where water was collected or stored; the paths from one domicile to another; the path to the shore where once could leave the island or trade with passing boats. However, the interior of the island, perhaps even the fields, for planters who were by-and-large absentee, would largely be unknown to the European planters. To see where the enslaved may have found refuge, and therefore where the rebels may have found space to move, and plan, and to attack, I not only attempted to map and visualize the planter's spaces, but attempted to visualize and map how the planters perceived their spaces. Although there are also large gaps indicating possible areas that could have been exploited by the enslaved population, visually the

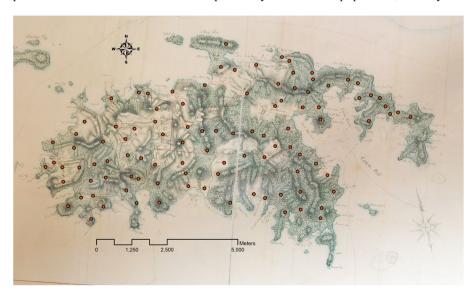


Fig. 3 The known or most probable location of planter dwellings and/or significant outbuildings in 1733



betwixt and between and the ambiguities are less obvious than the depictions of the larger plantation boundaries.

This betwixt and between compounded the large conceptual issue of the planters being strangers to the island. These hard boundaries of the polygons are more concrete than what the planters themselves knew of the island. The absentee rate for the planters/plantation owners in 1733 may have been as high as 53% (Norton 2013:53). The planters, many of whom did not reside on St. Jan, had both cognitively and physically surrendered the island to the enslaved, the indentured servants, and the poor whites forced to remain on island in order to scratch a subsistence out of the thin, volcanic soils. In one visual punch you can see how the enslaved population- those who actually grew the crops, and built the infrastructure, and were left to self-subsist by the plantershad spaces on island they could exploit because they were outside the perception of the Danish authorities. The physical absence of the planters, and the lack of knowledge of the larger landscape outside of individual dwellings, created conditions that allowed for degrees of freedom by the enslaved. These spaces would have been easier to use and exploit for a variety of activities, everything from subsistence gardens to encampments.

## Mapping the Rebels

During the rebellion the Danish authorities appear to have been overwhelmed, and imagined, across Pillsbury Sound, a massive army of Africans threatening their lives and livelihoods. There is almost no documentation of the trials of the suspected rebels or the aftermath of the rebellion. For this project I was able only to recover a portion of an account that had been recorded by the Secret Privy Council (1733), but that was missing substantial portions of the beginning and end of the entry. The Governor's Order Book has passing mentions of "justice being served" when suspected rebels are captured; never are formal trials recorded or discussed (Norton 2013:73). Nearly every formerly enslaved person who did not vacate the island on the morning of November 23, 1733, with the fleeing planter families was considered part of the rebel army. Due to this perception, there was never an attempt to identify where the rebels originated internally. Although the Danish documented rebels and identified them via the plantation to which they were tied, the Danish maintained that the rebellion was an island wide affair, and did not perceive that enslaved individuals from one part of the island over another were primarily involved. One key factor lost on contemporaries was that only 8 % of the enslaved population was actively involved in the rebellion (Norton 2013). Another key factor lost on the VGK was where on island the rebellion was located. Therefore, in this analysis spatializing the texts allows for different populations of enslaved people to become more visible. This visibility likewise allows for a deeper understanding of who the rebels were fighting. Just as the Danish perceived the entire remaining enslaved population to be rebels, they also perceived that the rebels were targeting the entire planter society in the rebellion. The spatialization shows that the rebels may have been specifically fighting the Danish authorities, and not necessarily the entire population of European planters.

The Coral Bay Quarter, located on the southeastern quarter of the island, was the area of the island that was dominated by the VGK. It was in Coral Bay that Frederiksvaern, the fort, was located, as well as the Company plantation. Beginning



in 1725, this was also the area where VGK officials claimed or were granted plantations of their own. Coral Bay Quarter had the largest number of enslaved people, as the Company Plantation was the largest enslaver on island. This quarter also produced the largest number of rebels, and the key leaders seemed to have originated from the Company plantation. Correspondingly, Coral Bay also experienced the largest amount of direct property damage during the earliest days of the event.

Although the Company had one of the largest populations of enslaved people on St. Jan, as well as the highest number of rebels, the high number of rebels cannot be accounted for by population size only. Two Dutch planters on the North Shore, Pieter Durloe and Johannes Beverhoudt, for example, each had populations of enslaved individuals that equaled that of the Company, yet the historic documents did not record any identified rebels from either of these plantations. In fact, Durloe's Bay and Caneel Bay, each of which had enslaved populations on par with Coral Bay, only provided three-percent and four-percent of the rebels respectively, equaling only 7 individuals. As can be seen in Table 2, a majority of the rebels, 64%, came from Coral Bay, with the second highest percentage, 14% coming from the French Quarter, which was also adjacent to Coral Bay and an area that was dominated by VGK plantations. This spatialization makes it clear that the epi-center of the rebellion was the east end of the island, and that the VGK were the targets of political violence. This affinity for the eastend was not completely lost on the planters; as early as December 1733, one of the planters, Beverhoudt, suggested they cede the east-end of the island to the rebels (Governors Order Book et al. 1733:1153).

The Danish authorities did not know where the rebels were encamped during the rebellion, assuming that the massive African force they were fighting were spread throughout the island. However, it appears from the spatial analysis that the rebels remained primarily on the east end of St. Jan, and specifically in the Coral Bay area. This is due in large part to the fact that a majority of rebels had lived and worked on the eastern portion of the island prior to the rebellion, that they had the most familiarity with the landscape and resources available there. Figure 4 illustrates the potential

**Table 2** The Number of Rebels from each quarter, as compared to the over-all number of identified enslaved people from the Landlisters. There is no correlation between the number of enslaved people in a quarter and the number of rebels a quarter produced

Quarter	Number of Enslaved	Number of Identified Rebels	Percent of the enslaved population Identified as Rebels	Percent of overall Rebels from Quarter
Coral Bay	298	70	23	64
French Quarter	64	16	25	14
Caneel Bay	192	4	2	4
Durloe's Bay	258	3	1	3
Lameshure Bay	121	6	5	5
Little & Big Cruz Bay	225	2	<1	2
Maho Bay	159	8	5	7
Reef & Fish Bay	118	1	<1	1
Total	1435	110	8	100



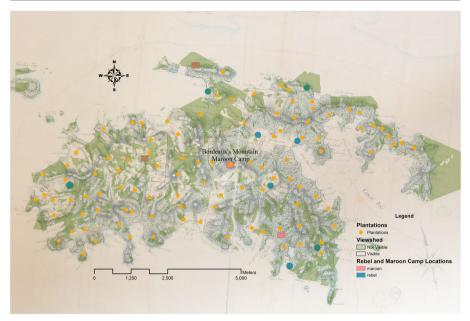


Fig. 4 St. Jan Viewshed from the probable or known location planter dwellings in 1733, as well as the reported locations of rebel and maroon camps. Limited areas of visibility are displayed in green

location of rebel spaces, or possible encampments as spatialized from the historic document analysis. Of the eight rebel spaces identified, seven are on the east end of the island, with five of those clustered around the Coral Bay area. In the correspondence documents the Danish noted times and places that enslaved people were encountered. The notations were usually unspecific and were identified in relation to who owned the property. For instance, in April of 1734, the rebels were reported to be camping in the ghut at the Company Plantation. There is no clear ghut within the boundaries of the Company plantation as the Company claimed the only plain on the island. Therefore, there is upwards of 120 ha with which this description could correspond. These reports by the Danish were correlated to fit with natural topographic features such as ghuts (a steep cut due to intermittent, seasonal streams, similar to a gorge), or within areas with a limited viewshed, both of which would have served to mask groups of people from easy surveillance by the VGK, while still maintaining access to resources, pathways, and other key landscape features (Norton and Espenshade 2007).

Where and when plantations were established becomes an important aspect of understanding the social landscape of the island. The very first plantation officially established was the Company Plantation in Coral Bay, tucked into the Southeastern corner of the island, juxtaposing in many ways the earliest private plantations that were established clear across the island along the north shore. The VGK chose Coral bay for their plantation and the fort due to the excellent quality of the harbor, however the position of the harbor, not located on a direct route from St. Thomas or any other island, left it isolated and largely useless for international trade. It also left the east end of the island one of the last areas to be occupied, with employees of the VGK claiming plantations, often smaller than the  $3000 \times 1000$  fod size, between 1725 and 1729.



The way that the private plantations were located illustrates the existential tensions in the lives of the planters. The earliest plantations were established on the north shore, directly across Pillsbury Sound from Charlotte Amalie, giving these properties access to the shore for ease of travel and trade. Fifty-percent of 26 properties were located between 0 and 100 ft (30 m) above sea level, on an island that peaks at 1273 ft (388 m) above sea level. Sixteen of the plantations were completely isolated, lacking a direct view-shed to any other neighboring plantation structure, with the remaining plantations having limited visibility, as illustrated in Fig. 4. Interestingly, nearly all the archaeologically recorded plantations were adjacent to properties that lacked an owner-resident; even if there were direct lines of sight possible, it is unknown whether there would have been a substantial plantation complex, or dwelling inhabited by a free person, to even view. Fifty-two percent of the archaeologically identified plantations were situated in such a way that their view sheds extended out to sea, providing the ability to survey for foreign ships or privateers, both of which had been known to harass plantations on St. Jan during the early settlement years. One plantation reportedly had canon that pointed out to sea.

The same landscape knowledge that allowed for a successful rebellion against the Danish Authorities would have also provided knowledge for enslaved or other people who wanted to avoid the conflict altogether. While the popular story of the rebellion was that those on St. Jan in 1733–34 were rebels and those who left with the planters during the early chaos of the conflict were loyal, the reality was that many others, if not the majority of others, were abandoned and attempted to live in between the two warring factions as maroons in the interior of the island. The VGK did not distinguish between rebel camps and maroon camps, however four possible maroon spaces were identified through the spatialization of the historic texts. The European groups who attempted to quell the rebellion seemed to consider any formerly enslaved person they came upon to be part of the rebel factions. A close reading of the documents, as well as a twenty-first century-understanding of the myriad experiences of slavery and political violence, suggest that at least some of the Africans encountered in the bush, living outside of a plantation context, were essentially civilians in the sense that they were not a part of either faction, had not taken up arms, and were just trying to avoid the conflict and survive. For instance, one camp that was raided by European forces late in the conflict, April 1734, was comprised of "substantial dwellings" containing men, women, and children. It was reported that up-to 25 people were killed with little to no opposition (Caron and Highfield 1981; Longueville 1734). Geographically the camp was located outside of the Coral Bay area, within the Reef and Fish Bay Quarter, where less than 1 % of the enslaved population involved in the rebellion. Reef and Fish Bay Quarter had a moderately high over all enslaved population of 118 individuals prior to the rebellion (Table 2). It is unknown how many enslaved individuals left the island with planters, and it is possible that the large enslaved population of Reef and Fish Bar Quarter, as well as people fleeing Coral Bay or nearby areas, set up a camp on Bordeaux's Mountain.

A close look at Fig. 4 also illustrates that the camps identified as Maroon habitations are located in areas removed or somewhat isolated from the center of rebellion activity and camps. Just as the rebels were utilizing viewscapes to shield themselves from easy surveillance, so too the Maroon camps were hidden from both VGK surveillance as well as possible surveillance by the rebel encampments. Even the possible Maroon



camp "at Kierving's" located in the center of the island, was just below a ridgline that would have provided some protection.

While the rebels attempted to live and fight in near invisibility, they understood the power of performative violence with the sacking and burning of the northshore. By February of 1734 at least one faction of the rebels was willing to negotiate a truce settlement with the VGK. At this time the European planters were still maintaining their distance and living largely on St. Thomas, with the exception of the small militia force located at Pieter Durloe's on the north shore of St. Jan. The Governor attempted to come ashore at Coral Bay to speak face to face to one of the rebel leaders, King Claes, but at the last minute decided not to leave the boat and instead made a hasty retreat from the island. King Claes clearly saw this action as a betrayal of trust, and in retaliation sacked and burned the plantations along the north shore. The destruction there would have been more visible from St. Thomas than destruction anywhere else on St. Jan, and one can imagine the visible wisps of smoke from burning structures and fields, visible across the sound. The nuanced movements across the island suggest high-levels of landscape understanding, and the sophisticated manipulation of view sheds and site lines to communicate with or hide from the enemy. This challenges a fundamental assertion by the Danish authorities that "Aminas," or newly arrived Africans, were responsible for the conflict- this degree of sophisticated strategy and tactics could only be carried out by people with intimate knowledge of the landscape in which they dwelled and worked.

#### Conclusion

The purpose of attempting to precisely map all the known physical, economic, and social variables about the island was ultimately to approach an understanding of how the enslaved experienced their physical and social landscape, and how that knowledge played a role in the 1733 rebellion. The plantation was the basic unit of analysis for the current interpretation of the rebellion because it was inherently spatial. The plantation properties were also how the Danish authorities identified places on St. Jan. The ruins of plantation dwellings are preserved on the modern day landscape of St. John, and so can be mapped and quantified despite the fact that the plantation boundaries themselves were often fuzzy to the planters at the time of the 1733 slave rebellion, and remain elusive to modern researchers. The spatialization of the textual documents was an effort to spatialize invisibilities, and to create a representation of how the agency of the enslaved carved a space where at least some of them could imagine an opportunity to achieve their freedom and self-governance. This was far from the enslaved population simply taking advantage of the negative space constructed by the Europeans. Very much akin to the invisible social spaces that provide refuge and a place for resistance as described by Scott (1990), the enslaved population of St. Jan practiced "hidden transcripts" asserting their own agency over the island, creating a social landscape that was inconceivable to the European planters. The enslaved population recognized a political and cognitive space that allowed them to both coordinate and execute a rebellion against the colonial government as it existed at the time. The rebellion could occur because of the lack of control the planters had over the island. While ultimately defeated, the rebellion lasted for eight months on a small island with few resources and



no opportunity for support or resupply for the rebel factions. It was an impressive effort that was very nearly successful in gaining long-term freedom for a group of enslaved people. It was only through spatializing textual documents that were not inherently spatial that the rebels could be seen on the landscape, and a larger interpretation of where they were and why they were there could be created, driving analysis of an informed act of political action as opposed to a blind act of desperate violence. Slave rebellions were not uncommon events, but it is necessary to understand why they occurred in some places and not others. For 1733 St. Jan, the spatial history of the rebellion reveals that the European plantocracy lacked fundamental knowledge about their plantations, their landscape, and the population who lived there which was comprised primarily of enslaved individuals. The enslaved population, on the other hand, did have intimate knowledge of the landscape, resources and people, and were able to leverage that knowledge into a successful rebellion.

We are fortunate in archaeology that we can claim many methodologies in our pursuit of knowledge. The discipline's adherence to rigorous quantification of tangible data provides a foundation of scientific precision and accuracy that allows us to make credible, and sometimes incredible, claims about humanity. As Brown (2015) notes in his own scholarship mapping the 1760-61 Jamaican slave revolt, creativity is key to seeing the invisible in archival records, and has often been key for archaeologists to see the invisible in artifact assemblages. Archaeologists understand that there will always be gaps in knowledge of the past. However, we can explore the gaps using creativity and ingenuity to get as close as we can to those histories rendered invisible. Spatial history and digital humanities provide new tools, or new ways to think about existing tools, to interrogate data sources and documents that are largely silent on certain groups of people. The 1733 St. Jan Slave Rebellion was a tremendously important event that influenced the political-economic structure not only of St. Jan subsequently, but St. Croix and St. Thomas as well (Norton 2013, 2015). Applying spatial history methodologies to archaeological questions regarding the rebellion not only gives us more insight into the past, but also opens up other avenues of inquiry to understand the unfolding of Danish West Indian cultures throughout the eighteenth and nineteenth centuries.

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A note on the maps: the 1800 Oxholm map of St. Jan was used as the background map for the print version of this article due to the fact that it was sketched in black and white. The preferred map for this analysis is the 1780 Oxholm map which was in full color, and used in the on-line version of this article. The two maps are at the same scale and have only minor differences.

