

"The Island of the Clouds": The Archaeology of Life on the Margins in a Small-Scale Caribbean Island Landscape, Bequia (St. Vincent Grenadines) ca. 1700–1900 CE

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Abstract The study of marginal Caribbean islands and economies remains understated within the wider context of the discipline of Caribbean historical archaeology. Research has tended to focus mainly upon the study of the dominant site form of the colonial period in the region: the industrial sugar plantation, and mainly upon the larger islands. This contribution moves the scale of analysis to the smaller Caribbean island landscape as a whole entity, and attempts to frame an archaeological biography of Bequia in the St. Vincent Grenadines over the last three hundred or so years. Further, we consider how more peripheral economic strategies that developed there over this period impacted upon this island landscape, how they are recognized archaeologically and what they can tell us about wider social and economic processes. Using landscape archaeology survey allied to GIS and historical cartographic analysis, the study presented here charts the emergence and development of a distinctive insular Caribbean socioeconomic identity very much on the margins.

Keywords Bequia · Landscape archaeology · Historical mapping · Island archaeology · Caribbean

The Context of the Study

This contribution aims to frame the cultural, economic, and social biography of a small Caribbean island backwater (Bequia, St. Vincent Grenadines) over the last three hundred years or so through the use of a diverse range of landscape archaeology methodologies. In this paper, the island itself becomes the single unit of archaeological analysis rather than the site (cf. Curet 2004). The size of the island enables the

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landscape archaeologist, through the study of historical mapping rectified with GIS, as well as on-the-ground survey, to build up a picture of changing island landscape organization over a period that embraces early French colonial settlement, English/British domination, the development and decline of a small-scale sugar estate economy, and finally the emergence, in the post-emancipation period, of a distinctive maritime-focused culture that pervades the character of Bequia to this day. The observations made here will offer a contrast to the heavily plantation-dominated studies prevalent in Caribbean historical archaeology focusing as it does on an island that is both physically and economically on the margins, a place where the sugar industry was never greatly significant.

The island of Bequia (pronounced "beck-way"; the toponym derives from the Arawak language word *Becouya* and means "island of the clouds"; Dick 1977) is the most northernmost of the St. Vincent Grenadine islands (Fig. 1). The island roughly describes a back-to-front "C" shape; on the west is the main anchorage of Admiralty Bay where most settlements focused (Fig. 2). On the south, the airstrip is built upon reclaimed land at Paget Farm; further eastward are the fishing villages of La Pompe and Friendship. Running up the eastern, windward (Atlantic) coast settlement is less dense, and the prevailing northeasterly Trade Winds make for rougher seas here. The northern end of the island is heavily forested with limited settlement.

Bequia, along with the other Grenadine islands, is relatively arid. Rainfall on the larger Windward Islands is much heavier due to the accumulation of cloud on the windward (east-facing) slopes and their higher elevations. The windward slopes of St. Vincent receive alone twice as much precipitation as Bequia, whose



Fig. 1 Location of the island of Bequia in the greater Caribbean



Fig. 2 Map of sites mentioned in the text

annual values are ca. 1,650 mm, and often even then this is variable. There are a number of wells on Bequia used to access groundwater, but are only effective on a domestic scale; the infamous "Bequia Drought" of 1957–59 effectively ended the island's cotton industry, for example (Adams 1976; Price 1988: 19). Access to water and its effective management is therefore a key factor in human settlement and cultural development on Bequia, as we shall see.

Three key historical factors have impacted upon the formation of the socioeconomic and cultural identity of Bequia in the colonial period, and these factors have profound implications for understanding the shaping of the island's archaeological landscape. Firstly, sugar monoculture was only briefly successful here. At their zenith, between 1765 and 1838, nine sugar "estates" (the term is used locally rather than "plantation") were active. They totalled approximately 1,214 ha, which is significant given the overall area of the island is 1,497 ha (St. Vincent Government 1868) but much of this was hilly and forested land. As such, the actual area of land available for sugar cultivation would have been limited by these factors. Bequia therefore existed on the margins of the vast Windward Island industrial monocultural sugar system, and the industry was never profitable, rather there tended to be a greater focus upon additional smaller-scale and marginal agricultural production of crops such as cotton, indigo, and copra. The archaeological visibility and spatial disposition of the Bequia sugar estate, it would be expected, should differ considerably from the larger plantations elsewhere in the Windwards. This is a subject to which we shall return.

Secondly, the first European settlement here was by the French, and this was initially a relatively small-scale and unstructured colonial encounter. This was followed within sixty or so years by a more concerted and structured English effort that effected a farreaching reorganization of the island-scape which is evidenced through the study of historical mapping sources, as we shall see. It should also be noted that other groups also played a significant part in the creation and maintenance of a very distinctive local creolised island culture (cf. Finneran 2013): indigenous "island" Caribs, "Black" Caribs and African slaves all played varied roles in the emergence of a diverse population base. A study of the Bequia island landscape therefore offers scope for teasing out this complex ethnic history and cultural interplay.

Thirdly, the economic and cultural response to the end of slavery in Bequia (i.e., after 1833) also provokes interest. This is a crucial "hinge point" in the Anglophone Caribbean, and one that has recently begun to attract archaeological recognition (Armstrong 2010). Newly freed slaves moved from the estates and formed their own settlements, squatting on marginal land and developing their own economic strategies. From this period a distinctive maritime culture emerged, based upon fishing, whaling, ship building, and seamanship (Finneran 2016), placing Bequia within the continuum of the dynamic (but still poorly understood) Afro-Caribbean/Afro-American maritime cultural fluorescence in the Americas (cf. Harris 2014a, b). This "turn" from land to sea during this period is also visible in the reorganization of space on the island landscape, with an emphasis upon settlement type and location, especially on the south side of the island around Friendship Bay, as we shall see.

This paper will argue that these social and economic twists and turns in the story of Bequia are traceable in the fabric of the island landscape and can be recovered through a multidisciplinary landscape archaeology approach, and this is the key contention that informed the overall research design. The fieldwork that underpins this contribution was undertaken in 2014 and 2015 and involved field walking, standing building recording, and limited excavation. Subsequent desk-based work focused upon the collation of a series of relevant historical documentation and cartographic resources to produce an enhanced geo-referenced set of GIS-based historical mapping data (and with reference to the work of Degraff and Baldwin 2013), which could matched against the picture yielded by archaeological survey and by oral history research. The research design, although "landscape archaeological" in orientation therefore aimed to be integrated and multidisciplinary, and focused upon a "whole island" approach rather than on seeing discrete sites in isolation. One key historical resource that has been used to underpin the archaeological research described herein has been the use of historical cartography (cf. Aston 1997 for an overview).

The utility of historical cartographic sources in Caribbean island settings has been recently recognized by archaeologists (cf. Armstrong et al. 2008; Clements 1997; Delle 1989; Hicks 2007; Higman 1986; Leech 2007). Doug Armstrong's work at Trent's Plantation in northwestern Barbados (Armstrong 2015), to cite just one application, indicates the possibilities of such an approach. Geo-referencing a very early estate survey against modern cartography he was able to reveal a great deal about the earliest phase of Barbados' plantation history, locating sites not found on later mapping. For the purposes of this study, seven historical maps have been utilized (Table 1) spanning the period from ca. 1763 to 1861. These have been used to delineate landscape change across the three key phases noted above, viz.: (1) the French colonial period (ca. 1700–1763); (2) the English sugar plantation developmental period (ca. 1763–1833) and (3) the post-emancipation period (1833-ca. 1900). In order to understand why these three broad phases have been defined, a more detailed elucidation of the settlement history of Bequia is required.

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The Settlement History of Bequia

The precontact ethnohistory of the wider St. Vincent-Grenadines chain can be inferred from linguistic, oral history and, above all, archaeological sources (Bright 2011: 71; Callaghan 2007). On Bequia itself, precontact sites are few, but the site at Park on the east coast merits special mention as it is particularly rich, although threatened by coastal erosion. According to local Vincentian tradition (Gullick 1985: 43) Columbus sighted the islands on January 22, 1498 on his third voyage (this is historically inaccurate as he did not commence this voyage until May 30, 1498). The inhabitants of these islands at this time would have been a recently arrived people who had come from the region of the Guyanas and who had intermarried with the peoples they found here. Columbus refers to them as "Caribs," but more accurately they are now referred to by their own ethnic names, Kaliphuna or Kalinago (Allaire 2013). Historically and popularly these peoples are referred to as "Island" or "Red Caribs" (Davis and Goodwin 1990). The Spanish did not settle the islands, however, and the "Island Caribs" of St. Vincent (which they referred to as Hairoun) were able to retain a degree of freedom.

From the 1660s St. Vincent (along with Dominica) was guaranteed by the French and English as an "Island Carib" territory and no attempt was made by the European powers to settle either island (Taylor 2012: 31). The rights of the "Island Caribs" were reaffirmed under the terms of the 1748 Treaty of Aix la Chapelle that ended the Austrian War of Succession (and which also had ramifications for European rivalries in the Americas as a whole) but all the while ad hoc attempts at settling St. Vincent were undertaken by the French. We know from historical sources that when the French first arrived on St. Vincent from Martinico (Martinique) in 1719, there were no accounts of Bequia being inhabited at all (Shephard 1831: 18), and it was believed that the "Island Caribs" only ever visited Bequia to obtain wood for building canoes (Price 1988: 7).

It is against this background of nascent and rather tentative colonial contact between French pioneers and "Island Caribs" that a new ethnic factor enters the equation. According to local tradition, a slaver *en route* to Barbados was wrecked off Bequia and the surviving Africans came ashore to St. Vincent and intermarried with local "Island Caribs" to form in time a new ethnic group: the so-called "Black Caribs" (Newman 2014). Sir William Young (1724–1787), Governor of Dominica from 1770, had a hand in dealing with the "Black Carib" insurrection on St. Vincent in 1772. He wrote that the "Black Caribs" originated from slaves "from the cargo of an African slave ship carried from the Bite of Benine for Barbados and wrecked about the year 1675 on the coast of Bequia" (Young 1787: 60-7). Allegedly, Young reports, the Caribs at first enslaved them, but soon the slaves turned on their captors. George Davidson (1787, p. 17), states that the "Black Caribs originally sprang from the cargo of a Guinea ship…wrecked on one of the Grenadilloes."

From now on the colonial-era fortunes of Bequia and its larger neighbor St. Vincent are entwined. In spite of its status as a protected Carib reserve, the French gradually established settlements in southern and leeward St. Vincent, and a small number of French turtle fishermen and farmers (likely engaged in cotton, tobacco, and indigo production) and their families are believed to have settled in Bequia from the early 1720s (Shephard 1831: 20). On March 3, 1762, the island of

Grenada was captured by the English and, along with Tobago, Dominica, St. Vincent and the Grenadines, was ceded to the British under the terms of the Treaty of Paris of 1763. A number of sugar planters arrived in Bequia from St Kitts, Antigua, and Barbados. In addition, 15 individuals from the Dutch island of Saba (located in the Leeward Islands to the north) were granted land on Bequia (Melvill 1765). This is, as we shall see, an important historical detail. While the other incomers had to *purchase* land, the families from Saba, it appears, were *granted* land in response to their plea, perhaps in recognition of their abilities in water management techniques and maritime technology (Price 1934).

This did not signal an end to social upheaval. The British put down an insurrection by Caribs on St. Vincent in 1772, and in 1779 the islands were seized again by the French only to be returned under the terms of the Treaty of Versailles in 1783. The remnant French population found ready allies in the shape of the "Black Caribs," and in 1795 war broke out again in response to British encroachment on the Carib lands (Kim 2013). The British eventually overcame the Caribs, killing the charismatic military leader of the "Black Caribs," "Chief" Joseph Chatoyer. At the end of 1796 over 4500 "Black Caribs" had been taken to the island of Balliceaux, off the east coast of Bequia, where they were held prior to deportation in March 1797 to the island of Roatan in the Honduras (Taylor 2012). Descendants of these exiled "Black Caribs" still live in Belize today as Garifuna communities and retain a strong cultural identification with St. Vincent, and Balliceaux in particular as a *lieu de mémoire* of great significance (Gonzales 1986).

The scene was now set for a faster pace of economic development based upon sugar cultivation. In 1776 there were only four sugar estates in Bequia, established by the newcomers from St Kitts, and 22 smallholdings primarily cultivating cotton, which had been likely initially introduced by French growers from the southern Grenadine island of Carriacou. Small amounts of cocoa and indigo were also likely still in production by a remnant French population (Rhodes House Library 1949). During this period sugar production was only just economically viable; pioneer English settlers such as the aristocrat Sir William Young, Charles Warner, and other descendants focused their efforts on this crop, alongside the more marginal French smallholders (Shephard 1831:214). Into the late eighteenth century, only the Spring Estate on the east coast managed to produce in excess of 100 tons of sugar per annum, which was the limit for economic viability. The other eight sugar estates now established in the late eighteenth century failed to meet these targets (in comparison, the admittedly much larger and significantly more fertile island of St. Vincent was producing on average ca. 16,000 tons of sugar per annum; Adams 1976: 14).

Given this background, it is not surprising that slave Emancipation in 1833 and the end of apprenticeship in 1838 saw the almost complete collapse of the sugar economy in Bequia, although many other external global factors contributed to the downturn. In turn this triggered a sharp population decline as many former slaves emigrated to Trinidad where work was more readily available and wages were higher. In 1854 government records put total sugar production on Bequia as standing at just over 103 tons, representing a fall of 72% from the 1828 level (St Vincent Government 1854). By 1931, only 2.0 ha of land in all of Bequia was under sugar cultivation (St. Vincent Government 1931). Freedom also had an implication for landscape organization on the Island. Former slaves left the estates and squatted on marginal lands between Paget

Farm and Friendship Estates, which then became the genesis of settlements at Belmont, La Pompe, Lower Bay, and Paget Farm (Price 1988: 11–12). Small-scale cultivation of cassava, maize, and pigeon peas became their main economic focus.

Soon fishing became an important adjunct to the marginal agricultural activity. Former planters, now looking for another means of production and income, invested in boats and fishing infrastructure, and a new maritime cultural response developed against the backdrop of the collapse of the sugar estates. Price (1988: 14) refers to the former planters' new role as the "Schooner Aristocracy" but he is not quite correct in this assumption. William Wallace Jr. (who introduced whaling into Bequia) was not a former planter, he was the son of a former estate manager turned planter when the estate owner went bankrupt, although in relative island terms he would have been regarded as being wealthy (Nicola Redway, pers. comm.). In time, the skill sets acquired by the many of the former Bequia slaves made them sought-after seamen, especially when the Yankee whalers (i.e., whale boats sailing from the northeastern New England ports such as Nantucket), hunting humpback whales in the waters of the eastern Caribbean came visiting the island in the winter months to resupply and repair.

Out of necessity, a new Bequia-based whaling industry emerged in the last quarter of the nineteenth century, hand in hand with the emergence of a significant ship building industry. In 1881, 30.5% of the male labor force, or 157 individuals, were engaged in maritime activities (Adams 1971). According to an early nineteenthcentury source (St. Vincent Government 1822) we learn that a slave named Louis, aged 10, a "negro from the Reform Estate in Admiralty Bay," was "taken from the estate by an American Whaler Sloop called the Mason's Daughter by Capt. Brown March 4th 1821," Soon more former slaves engaged with this industry, and by 1868, whale oil exports from St. Vincent (mainly from Yankee whaleship activities), ranked fourth behind sugar, rum, and arrowroot starch, and ahead of cotton and molasses (St. Vincent Government 1868). Whales were hunted, killed, and processed (flensed) in specific shoreside locations (tryworks) mainly around Friendship Bay. Whale meat was a source of protein, and also the carcass yielded oil for light and heat. Before the use of refrigerated ships in the 1960s, whale meat was either "corned" (a generic term for salting), "dove" (a local term for whale meat steeped in its own oil and herbs) or sold off fresh at the shoreside. Whaling still takes place annually on Bequia; a quota of four whales per year is permitted under the International Whaling Commission's terms for "Aboriginal Subsistence Whaling" even though the activity has no great antiquity, and historical records confirm the industry was established in 1875 and closely influenced by earlier contact with, and experience of, Yankee whalers, and their techniques (see Finneran 2016 for a nautical archaeological analysis of the "creolised" material culture of Bequia).

The foregoing historical outline, with its heavy economic emphasis, has set the scene for the landscape archaeology analysis. Three key distinctive phases, each with their own set of economic implications can been defined: (1) early French settlement with small-scale agricultural and industrial emphasis, (2) the British "sugar" phase and (3) the post-emancipation collapse and development of an overt emphasis upon maritime activity. We will now address each phase in turn using a combination of archaeological survey data, historical mapping/GIS analysis, and augmented in part by oral and documentary history sources as well, noting how each successive economic shift is mirrored in the organization of the small island landscape.

The Early Colonial Landscape

The archaeology of French colonial archaeology in the Caribbean has been hitherto a relatively neglected field, although is gaining in significance as scholars seek to tease out the material culture implications of domination by the different European colonial powers (Kelly 2004, 2009, 2013). In this corner of the Caribbean at least, the French story is often neglected. The contributions of Father Raymond Breton (1609–79), for example, who lived among the Caribs on Dominica and produced a Carib-French Dictionary, Jean-Baptiste du Tertre (1610–87) and Jean-Baptiste Labat (1663–1738) are often forgotten by Anglophone scholarship (Dobie 2010: 132). It is crucial to recognize that early attempts at French colonization here in the southern Windwards at least were relatively small-scale and informal and as such the archaeological trace of their impact will be ephemeral (Hazelwood and Steele 2003). A study of the archaeology of the early "frontier" phase of French colonization in the southern Windwards would be an interesting counterpoint to the better-defined picture from islands such as Guadeloupe and Martinique, for example, where we see a structured military and indeed religious intervention (e.g., Lenik 2011). Here the picture is more opportunistic and ad hoc.

Early French historical accounts of Bequia tend to emphasise the natural resources of the island, and therefore mirror the economic preoccupations of these earliest European settlers. The following passage, for example, list the forest resources available: "Becouya, éloigné de deux lieues de Saint-Vincent...(dont) la terre est assez bonne, morneuse porte quantité de bois de courbaril, bois d'inde, et bois de chandelle" (unnamed 1713 account quoted by Hatzenberger 2003: 223 n81). These plants are all the source of woods, varnish, and dyes, so it appears that the economic focus of the early French settlers was settling upon those resources. Indigo processing (from the plant *Indigofera tinctoria*) was an important component of early French Caribbean island industries. Many examples of *indigoteries* have been recorded on Guadeloupe and Martinique where they often occupy more marginal landscapes unsuited to sugar production (Delpuech 2001; Rousseau and Vrager 2004). This would have been an ideal industry for a small colonial population on an island such as Bequia.

Indigo works are archaeologically easily recognized, and without the material evidence of cotton, tobacco, or other small-scale agricultural production of the early French colonial phases in the Caribbean, is the most visible. These complexes comprise three tanks or vats, which are placed together. Freshly-cut plants from the nearby fields were placed in the steeper tank (the first and largest) and covered with water and pounded until fermented, at which point the liquid was drained off into the beating vat where it was stirred and agitated. The liquid was then drained away and the residue tapped into a third vat where it was further refined, sieved and bagged. The residue in the bags was then dried until hard (Beeson 1964).

A recent survey of the indigo works on Bequia by Margaret Bradford (2007) has identified three locations on the northeastern coast of the island where this industry took place, on the sites of the later Hope (Ance Hyby area), Spring (Ance Fauvelle) and Park (Ance Caribe) estates and these could broadly date to the mid-eighteenth century (Fig. 3; marked as +). The Park complex was particularly well preserved, and the stone tanks retained their mortar lining, but the site was irreparably ruined through recent development (2015). The processing of the raw material was water intensive, and as such demanded a dependable supply of water (which often in Bequia would not have been



Fig. 3 Reconstruction of early French settlement sites on Bequia based upon geo-referencing of 1764 and 1765 maps and additional material from Degraff and Baldwin 2013, p. 32. Key = X indicates houses shown on 1764 and 1765 mapping; + indicates the three identified indigo processing sites. For further identifications see text below

guaranteed). The vats at Park, for example, are sited next to a watercourse, and an area of culverted channelling (Fig. 4, left), but there is no indication of any further water management or storage strategies here. The placing of these sites on the corner of the island that receives the most rain and which is well served by many natural watercourses would therefore be a sensible precaution. Even so, the industrial production of indigo would not have been possible here (and certainly not on the scale as is witnessed on Guadeloupe and Martinique). According to local informants, later, into the nineteenth and twentieth centuries, these indigo vats were renovated and reused for Arrowroot (*Maranta arundinacea*) processing (a source of starch for culinary use, and a major twentieth-century export crop in the St. Vincent Grenadines; Martin 1967).



Fig. 4 Left: detail of large indigo vat at Park (note irregular coursing of masonry; this feature was largely destroyed during development in 2015); and right large lime kiln structure at Pagets Farm. Scales: 1 m

Apart from indigo works (and toponyms), the archaeological evidence for the formative French phase of colonisation of Bequia is sparse. Local tradition posits that the large limekiln complex at Pagets Farm was an eighteenth-century French colonial construction (and it is so marked on Degraff and Baldwin's map 2013: 32). This is a structure of considerable size (ca. 5 m in height; 3 m diameter; Fig. 4, right) and is built of coursed stone. Raw material for lime making would have been sourced from the nearby coral reefs. The size of the structure suggests an almost industrial production of lime; this could not have been related to a large program of French colonial building activity, because as Fig. 3 indicates, there was very little. The feature must date to the British period when, as we shall see, large-scale estate and fortification building and road construction began to take place. Lime was also used for clarifying sugar syrup, but again there is no evidence of large-scale sugar cultivation during the brief period of French colonization. Additionally, this kiln is morphologically quite unlike those described, for example, by Verrand and Vidal (2004) from Martinique, so the balance of probability is that this feature is a later (English) construction.

The "Old Fort" estate house at Mount Pleasant is thought to be a French-period colonial construction (according to the present owner, Ottmar Schaedle, pers. comm.) owing to the fact that the house itself was marked upon Jeffrey's 1775 map (surveyed in 1763 and effectively showing the extent of French settlement at the time of the English takeover; see Table 1). This map does show a structure (circle in square, possibly indicating a fortification rather than a house) in the general area of the present building, but if we geo-reference this map against a modern map (see Fig. 3, site E), it is clear that the Old Fort is not the building indicated. This identification is supported by the fact that the structure marked on the 1775 map is located by a distinctive curve in the road, which is still preserved in the modern road alignment. No evidence of this building was located during survey.

Remaining with the historic mapping data, two sources can be used to demonstrate the extent of French settlement on Bequia in the years prior to the English takeover, the Privateers Bay map of 1764 and the Jeffrey's map of 1775 based upon a 1763 survey (see Table 1). Figure 3 indicates the geo-referenced positions of the houses shown on these maps as well as the likely French indigo works mapped by Degraff and Baldwin. Only one structure is visible on the 1764 map, "a plantation" (which correlates with land Lot 16 belonging to M. Aquart on the later Byres' map, Fig. 5, and later incorporated as part of the Belmont plantation; shown as A in Fig. 3). In contrast, Jeffery's map, surveyed a year later, shows much heavier settlement around the northern end of Privateers Bay/Admiralty Bay. At least seven houses are indicated here (shown as B in Fig. 3) and these are presumably buildings which would later become part of the Belmont, Union, and Reform Estates.

On the eastern side of the island three structures are identified. The house visible to the northeast above Ance Fauvelle *could* be the original estate house of the nascent Spring Estate (C). The later estate house at Spring is further westward; this is a subject to which we shall return. Northeastward of this house, including the area around Ance Caribe (Park), is the locality of what would later become the Industry Estate. Ance Caribe is also the site of small-scale indigo production *possibly* dating from the French colonial period (house indicated by D). *The Crop Report of 1776* (Rhodes House Library 1949) indicates that 408 kg (400 lbs) of indigo were produced by Peter Brocette



Fig. 5 Geo-referenced sites and settlements from Byres' 1776/1794 maps. For key see text below

owner of Lot 10 on Byres' later map (see Fig. 5) and listed under "land claimed as privately owned."

At least three houses can be identified in Grande Ance (now Lower Bay; F), a location that appears to have been cleared and possibly also fenced, but no subsequent plantation or estate developed here. Local historian Nicola Redway (pers. comm.) suggests that this might be the site of a cotton estate later attached to a house known as "Retreat." There are also several distinct cleared areas shown on the Jeffrey's Map in the southwest, in what is now La Pompe, Friendship, and Paget Farm. The indications derived from an analysis of historical mapping and ground truthing suggest that French settlement on Bequia was piecemeal and based upon small-scale cultivation and limited indigo processing that would likely be constrained by the availability of water. When the British arrive, they start to delineate the boundaries of estates. As we shall see, the boundaries of these new sugar estates often fossilize earlier French settlement patterns.

The Growth of the Sugar Landscape

In the intervening thirteen years between Jeffrey's and Byres' maps much development had taken place and boundaries between estates more formally delineated as the British formalized the ordering of their new island landscape. The plots of land shown on Byres' map (see Fig. 5) thus accord very closely to the later estate bounds shown in the 1830 estate map (Fig. 6). At the southwest of the island, a French Settler Labord, retained his lands (plot 1) and these boundaries match almost exactly the later delineation of the boundaries of Paget Farm Estate. At the west, marked (A) on Byres' map, is a portion of Crown land, ca. 5 ac (2.0 ha) which as the legend tells us is marked out



Fig. 6 Estate boundaries ca. 1830 (adapted from Adams 1971)

for fortification. Eight other sites marked B - I reflect similar areas of Crown Land set aside "for the defence of the island," totalling 38 ac (15.4 ha) in all. These plots of land have implications for our discussion on fortification construction below. Eastwards of (A), Byres' Map shows a series of 11 small plots set aside to be granted to "poor white settlers," which in the later 1830 estates map are shown as "small properties," and which are identified with buildings A on the Jeffrey's Map. A total of 20 lots (totalling 268 ha) were identified by the Commissioners in July 1771 as being suitable to be granted to "Poor Settlers," i.e., unsuitable for the cultivation of sugar (Pownall 1771).

Sir William Young's lands form the boundaries of the later Friendship Estate and Hope Estate (plots 2 and 5). Those owned by St Hillaire (3), Warner (4), and possibly two additional plots were to ultimately form the basis of Mount Pleasant Estate in 1830, still then in hands of Warner's devisees. Land ascribed to "Gelleneau" (elsewhere Gelliseau) (15) matches somewhat the borders of the later Belmont Estate boundaries, and in the very southeastern corner of the allocation is a structure (X) which should be identified with building E on Fig. 3 (although it appears to be shown within a sub-plot, so is perhaps a fortification). Augier and Chevalier's plot (14) matches almost exactly the bounds of the future Union Estate, while the later boundaries of Reform (later known as Ocar – a presumed anglicization of "Aquart") match Aquart's plot (13) along with small patches of lots set aside for granting to poor settlers, lots 18 and 19. These plots are also abutted by Crown land set aside for fortifications.

The later Spring Estate grows out of Henville's plots 8 and 7, as well as un-allotted land and Mr. Estancan's plot 6 and Marianne Estancan's plot 9. Building C on Fig. 3 is still visible within Hanville's plot (7) now at the end of a long driveway (marked Y); this site, the probable earlier estate house, was located during field survey in 2014. It is sited atop a densely wooded hill, with views eastwards and open to sea breezes.

Remains here include a series of low walls and the associated ceramics and roof tile indicates a late eighteenth-century occupation. Industry Plantation later develops from the lands of Fornease (12), Brocette (10), and Servant (11) and un-allotted plots to the north. The probable indigo works shown as building D on Fig. 3 is within Brocette's allocation (marked Z). Byres' map effectively captures the moment when Bequia shifts from a small-scale economy based upon indigo, cotton, and cocoa cultivation of the French period to an attempt to organize it into a smaller version of any other Windward sugar island with the delineation of larger plots whose boundaries form the basis of the later larger estate units (Fig. 6).

Figure 6 is based upon Adams' (1971) analysis of the estate boundaries and derived from plans held by the St. Vincent Government. These have been geo-referenced onto a modern map. Now the boundaries of the estates start to make sense in terms of the local topography; they follow for the most part the courses of rivulets and in some cases the alignment of the main roads. Some boundaries converge on the high point of the island. Adams has marked the location of the actual estate houses themselves (note the shift of the estate house at Spring to its present position), but nothing else. While this map does not allow any more insight into the spatial structure of the nineteenth-century sugar estates on Bequia, other map sources allied to on-ground archaeological survey can help in this regard.

Dovers' 1812 map of the anchorage is a useful source that shows the disposition of two plantations: Belmont and Reform (Fig. 7). Both are spatially contrasting; the Reform estate house is shown alongside "the only windmill in Bequia." Eastward, further away and behind the "town of Bequia" (which itself only consist of a row of buildings along the shore, two wharves and a burying ground and chapel to the south) are three lines of "Negro Houses" totalling 24 dwellings. It is clear from the plan that the town houses consist of a house at the front and likely smaller slaves quarters behind. The map also appears to show a portion of the Union plantation site; the base of a cattle mill is indicated to the south of the "carriage road to Windward," which if we refer back to the Estate boundary map (see Fig. 6) we see forms the boundary between Reform and Union. In contrast, at Belmont to the south we have a more extensive estate house, a cattle mill and 26 dwellings "Negro Houses" aligned in two rows, and closer to the estate house itself. The site of the probable slave village at Spring Estate was located through surface survey in 2014 and identified from large concentrations of lowfired earthenware. This village, located next to an extensive watercourse, is hidden well out of site of the Spring estate house.

Table 2 summarizes the main archaeological visibility of the Bequia estates as observed by fieldwork and archaeological recording in 2014–15. Some are more complete than others. It is necessary however to amplify description of a crucial feature of plantation technology here, namely the use of cisterns and other features of water management that begin to develop with the sugar estates. Stone culverting and revetments have been located at several locations around Spring plantation. These features probably relate to management of water for domestic and livestock consumption, and are not associated with the earlier French indigo works.

"Old Fort," now a hotel, is the much-developed Mount Pleasant estate house. Built of faced stone, the wooden frames and joists in the building are constructed from hard Greenheart wood (*Chlorocardium rodiei*), imported from Guyana, and which is resistant against termite attack (unlike the cedar used elsewhere on the island). Special



Fig. 7 Annotated portion of the 1812 Admiralty Chart indicating disposition of the Reform and Belmont plantations

attention attaches to the extensive casemate and cistern complex, which is exceptionally well preserved (similar ruined structures are noted at Friendship and Belmont, though are not so extensive). The cisterns comprise a series of two barrel-vaulted tanks from which the hotel still draws water. Rainwater is captured on the sloping casemates and ducted into the cisterns. Internally the cisterns are brick vaulted, and it may be inferred the bricks would likely have been imported as ships' ballast from Europe. The owner of the site estimates that the whole cistern complex has a capacity of about 150 m³ (Fig. 8), and has also suggested that their technology is French in origin, but for reasons outlined above regarding the identification of "Old Fort"/Mount Pleasant on the Jeffreys Map and the Byres Map (see Figs. 3 and 4) this cannot be the case. A

Plantation name	Estate House	Slave Village	Cisterns/water management	Mill form	Other features
		3	6		
Paget Farm	Not identified	Not identified	Well	None noted	Large lime Kiln
Friendship	Converted to Hotel	Not identified	Single vaulted cistern; ca. 3 m by 5 m	None noted	
Mount Pleasant	Converted to Hotel	Not identified	Double-vaulted cistem complex	Extant cattle mill	Bread oven; fieldwalking yielded extensive 18th century imported material
Hope	Not identified	Not identified	Not identified	Not identified	Not identified
Belmont	Not identified; shown as a ruin in 1861 map	Indicated on 1816 map, but no features survive	Single large vaulted cistem built into side of slope; similar dimension to the structure at Friendship.	Cattle mill indicated on 1816 map	Foundations of ancilliary buildings in proximity to cistern
Reform	Not identified, but large structure indicated on 1861 map.	Indicated on 1816 map, but no features survive.	Not identified	Windmill indicated on 1816 map; not extant on 1861 map.	Presumably most of the estate core and slave houses destroyed by urban encroachment and shoreline change.
Union	Indicated on 1816 map, now under the site of sports field	Not identified	Not identified	Cattle mill indicated on 1816 map.	Presumably most of the estate core and slave houses destroyed by urban encroachment
Spring	Estate House converted into Hotel; well preserved. Former \estate house located 2014 evidence of low walling survives and extensive traces of imported ceramics from C18; <i>possible</i> French faience ware.	Evidenced by large concentration of low-fired earthenware on banks of a water course to north-west of present hotel.	Extensive culverting and chanelling	Extant cattle mill	Associated with an extensive complex of well preserved buildings, eg boiling house as well as copra drying floor
Industry	Not identified	Not identified	Not identified	Not identified	Remains of ancillary buildings as well as indigo works in the vicinity

Table 2 Archaeological Visibility of the Bequia Sugar Estates



Fig. 8 Plans and elevations of the cisterns at Old Fort, Mount Pleasant, Bequia. The photograph is looking northward, i.e., from the elevation line A-B on the plan with the casemate in the foreground; the two-stored (largely reconstructed) estate house and base of the cattle mill are in the background. Scale in photograph is 1 m

further intriguing detail, already alluded to earlier in the paper, also militates against an early French origin for this water technology.

Analogues to these structures have been recorded hundreds of kilometers to the north in the Leewards at Palmetto Point on the Dutch island Saba by Ryan Espersen (2013). As noted above, a number of families from Saba were offered land on Bequia at the beginning of the British colonial period. The Old Fort (and the other cisterns) bear very close similarity, in terms of overall design and size, to those recorded by Espersen at Palmetto Point (and indeed similar structures are noted also on St Eustatius). This link in technological transfer is further archaeologically evidenced by a stone bread oven at Old Fort, which shows similarities to similar forms investigated by Espersen at Palmetto Point. The standing remains at Old Fort therefore bear witness to technological interchange between different European Caribbean island communities in the late eighteenth century.

Plantation archaeology is of course the dominant motif of Caribbean historical archaeology studies, and Bequia offers a useful corrective to the spatial study of large industrial agro-complexes of, for example, Barbados (e.g., Handler and Lange 1978), Cuba (e.g., Singleton 2001) or Jamaica (e.g., Delle 1999). On Bequia, compact sugar estates developed, limited by the availability of level and unforested land. They were also never financially secure, as is noted above. Unlike Barbados, the planters did not invest (apart from a single instance at Reform) in expensive windmill technology; a basic cattle mill sufficed. It is hard to gauge the nature of the ancillary industrial buildings such as the boiling houses and storage areas, but the extant and wellpreserved structures at Spring are small in comparison with those on Barbados, for example. Only the cistern complexes, vital for the running of plantations in this more arid environment, betray any evidence of infrastructural development on a larger scale. The actual estate houses (where we can identify them) are also smaller in comparison with plantation houses on other larger islands, apart from the relatively large example (apparently with three wings), depicted in the 1816 map at Belmont, of which not a trace survives.

Even a marginal island such as Bequia would have demanded some means of military protection. Segments of land retained for fortification construction are noted on both the Byres' map and the estates map (see Figs. 5 and 6). In comparison to the larger Caribbean islands, Bequia is not greatly blessed with extensive fortification systems, and the few military structures visible today bear witness to local innovation on form rather than being built to a set and imposed European plan (Finneran 2013; Loftfield 2001). Local adaptation in this area of the Caribbean was key. Architecture responded to local needs. At Fort Charlotte on St. Vincent, for example, cannon point seaward *and* landward reflecting the need to defend the island from a French seaward attack as well as from landward guerrilla actions by the "Island Caribs."

On Bequia, when the French were finally defeated, the governor of Grenada and all the ceded territories, Robert Melvill (1771), requested a plan be drawn up to defend Bequia with strategically sited batteries. Captain Harry Gordon, an American officer, estimated that five batteries could be constructed at a cost of £1,990, and would be sited to command bays that could be the targets of seaborne invasion. Admiralty Bay on the west of the island was to be protected by three batteries: two at the north and one to the south of the Bay (Gordon 1771). On the south coast a battery at St Hillaire covered "South Bay" (Friendship). A further battery was sited on "North East Bay."

In order to anticipate the construction of the forts, parcels of Crown Land were set aside, and their locations mapped by Byres in 1776 (see Fig. 5). Byres' map indicates nine areas apportioned for fortifications, but it is believed not all of these were developed as military sites. It is clear that plot G on Byres' map corresponds to the site of the present Hamilton Fort. The present structure was assessed in 2015; it is obvious that none of the remaining standing architecture at the site belongs to the eighteenth century, being a relatively modern low curved stone mortared wall encompassing a viewpoint. Vague earthwork indications to the west of the flat central area suggest trace of an earlier bulwark. The present ordnance on display at the site (which is managed as a historic site by St. Vincent and Grenadines National Trust) comprises five 18- pound cannons, one of which displays a *fleur de lys* forward of the vent, meaning it is a French piece dating from the pre-Revolutionary period. They do not match the inventory proposed by Gordon and presumably represent an inchoate collection of ordnance brought together over the years to enhance the visitor experience to the site.

Other forts or battery sites are found on the island are found in varying states of preservation; none is even of the scale of the admittedly small fort at Hamilton. Byres' plot A (see Fig. 4) is the location of a small ruined fort behind the plantation complex at Paget Farm (this could either be the battery planned as Smith's or Rice's point by Gordon, the identification is not clear). On Byres' plot F are the remains of another battery, although locally this is suggested as being the site of an earlier French battery. It may have been planned to construct another fort at Spring (marked by Byres as plot D). Above Friendship Bay is the site of Byres' plot B. This fortification, known as St Hilaire covered Friendship, or South Bay. The American sailing writer Douglas Pyle (1998:81), mentions an occasion in 1971 when helping at a launch of a newly built wooden boat *Skywave* in Friendship Bay, a sinker (weight) for a new mooring was required. The assembled launching party fetched a cannon from the ruins of the fortifications at St Hilaire and used it instead: "the rusty cannon was a relic ...of slavery and oppression. Now it was being recalled from oblivion and given a useful function". Ambivalent attitudes to the past are a common theme in Caribbean history.

Other sites associated with military activity include a small lookout point above Park beach, at the northern end of the former Industry Estate and facing eastward over the sea. This could be possibly the site of a signal station, but which also may have been used as a dumping ground for refuse, including ceramics and glass. Surface survey here has also uncovered clay pipe bowls and stems, military buttons and musket balls, and pottery shards some with simple incisions, generally indicative of Troumassoid affinity. This site at (corresponding with Point de Diable on the Byres map) is not marked on any historical mapping and nor was it surveyed by Degraff and Baldwin.

The Post-Emancipation Period: Bequia Turns to the Sea

An Admiralty Chart dating to 1861 covers the same area as Dovers' 1812 map gives some indication as to the post-Emancipation (i.e., after 1833) re-organization of the Bequia landscape. Neither the windmill nor the lines of "negro houses" at Reform or Belmont are now indicated, and the battery at Hamilton is marked as a ruin. Belmont is indicated as still being under sugar cane, although the estate house and part of the works are described as ruined, Reform is likewise indicated. Friendship is denoted as "flat pasture" with a group of "huts" indicated at the west end of Friendship Bay where the fishing village of Friendship exists today.

Northwestward the area around Lower Bay is shown as "small holdings" on the 1830 estate map (see Fig. 6); this reflects the fragmentary patterning of plots shown here on Byres' Map (see Fig. 5; parcels of land between 1 and 2). Clearly, the rocky nature of the landscape here meant it was unsuitable for sugar cultivation. This area subsequently became the focus of squatting by former slaves in the post Emancipation period, when their economy re-orientated towards garden cultivation and fishing and other maritime activities. Similarly, the marginal land to the west of the Reform plantation (Hamilton) became a focus for freed slave settlement after 1833, and additional ex-slave settlements developed on the marginal, small - holding land at Lower bay and La Pompe. The main fishing and whaling settlement at Friendship Bay has historically been the home of more mixed-race populations.

In the nineteenth century, the post-emancipation period also saw the beginnings of larger scale patterns of movement and migration between the Caribbean islands and the wider region. Historical archaeology is well placed to pick up on these movements. For example, Barbadian migration to Brazil in the late nineteenth and early twentieth century was provoked by economic needs. The immigrants brought in their own distinctive vernacular forms of architecture (Chattel Houses) that can still be seen in Brazil today (Rocha and Alleyne 2012). In the 1860s, a significant number of "poor white" Barbadians settled first in St. Vincent and then in Bequia, solely in Mount Pleasant, on the site of the old cane fields of the estate. Their descendants still live here today and they retain a number of distinctive "poor white" Barbadian surnames, although there are no traces of Barbadian vernacular architecture here. It is locally remarked that even in such a small island as Bequia there have historically existed ethnically distinct and differentiated settlements, although this is not a picture noted today.

After 1833 many of the main estate houses fell into ruin. Houses at Friendship and Mount Pleasant were converted into hotels in the twentieth century. Houses at Reform and Union disappeared under the urban encroachment of Port Elizabeth, and those at Belmont, Paget Farm, Hope, and Industry all disappeared. The last estate house at Spring was developed as the Firefly Hotel in the 1960s, but the associated plantation structures are still visible. After the collapse of the sugar industry attempts were made to reorientate production in the late nineteenth century. Copra production (i.e., dried coconut flesh) was geared towards the production of oil. The copra industry at Spring is evidenced by the construction of two brickfloored drying areas, as well as the still visible regularly planted coconut palms along open land by the shore. Whaling and boatbuilding also became an important activity in the post-Emancipation period; the archaeological implications of this industry are considered elsewhere (Finneran 2016) but a few points may be made in regard to the impact upon the landscape of this economic reorientation.

Limited excavation and survey was undertaken on two small shore whaling sites (tryworks), on Petit Nevis island and at Friendship Bay in 2015. At Petit Nevis, the recently abandoned whaling works were planned and the extant structures analyzed. Owing to the presence of Ramsay firebricks from the Hebburn Factory, Northumberland that closed in 1925, we are able to date the Petit Nevis furnace to the late nineteenth/early twentieth century (Penmorfa 2017). In addition, a former sugar boiling pot, reused for trying the whale blubber, was recorded. This reuse of material culture is also noted at Speightstown in Barbados where a similar small-scale shore whaling economy developed in the nineteenth century, and is another part of the archaeological recognition of the economic shift in the post-Emancipation period (Finneran 2016). At Friendship Bay, a smaller and earlier shore-based tryworks was also recorded and excavated (dating allegedly to the 1860s; Herman Belmar, pers. comm.). In both cases the structures are markedly similar, comprising brick built platform with bases for two large copper trying pots and ventilation through the back. The historic locations of tryworks and whaling processing sites are indicated on Figs. 9 and 10 (based upon sources from the Bequia Boat Museum, Pyle 1998 and Herman Belmar, pers. comm.).

Bequia was also known for its wooden boatbuilding heritage, an activity that has now virtually died out on the island. These boats are found in two scales: inshore boats and larger trading vessels (schooners). The smaller double-ended fishing boats are rigged with small sprit sails (there are no tall trees on the island suitable for masts; local boatbuilding has adapted accordingly to its environment and uses a two-part bamboo sprit sail mast). These are highly manoeuvrable and appear to be based upon the small boats dropped from the larger Yankee whalers; double-ended boats are easier to beach in the swells of the windward coast in particular. These boats were built by hand and without plans, often using skillsets handed down through families by oral transmission and used for longer-distance, inter-island trading. It is in fact tempting to suggest, certainly in the case of the larger schooner designs built for inter-island trade, that Georgian wooden shipbuilding knowledge and techniques are fossilized here (Finneran 2016).

We are fortunate that the American sailing writer Douglas Pyle (1998:85-93) was able document the final throes of the Bequia shipbuilding industry, an industry which grew directly within the context of the post-Emancipation reordering of the island economic landscape. The ritual and social implications of the communal boat building process and launch (which Pyle documents in a number of Caribbean islands at the end of the 1960s) are fascinating. In Carriacou,



Fig. 9 The post-emancipation reorganization of the Bequia landscape showing nineteenth-twentieth century boat building sites (marked with an X), whaling sites (*) and post-emancipation settlement and industrial zones (+)

a Grenadine island to the south of Bequia, Pyle (1998: 26) reports on the sacrifice of a cockerel to a boat prior to launch and before the arrival of the local Catholic priest. The creole concept is therefore also embodied in the traditional boat - building process as well as other cultural factors.



Fig. 10 Post-emancipation plantation economy and material culture, Spring Estate. Left: reused sugar boiling copper; right brick-lined Copra drying floor. The bricks would appear to date in general from the late nineteenth century (scale: 1m)

Conclusion

This paper has presented an outline of landscape change in a small and marginal Caribbean island setting over a 300 year period as evidenced by historical map analysis, oral history research, documentary study and archaeological fieldwork. We have defined three different timescales, and can perceive, using a combination of the evidence bases outlined above, distinctive shifts in settlement patterning and land use over these periods. Bequia, a small island on the margins of the Caribbean sugar monocultural system, evolved its own economic identity, from an ephemeral French "frontier-style" colonial imprint (cf. Silliman 2005) to a more ordered attempt at landscape management by the English and then finally agricultural collapse, and a shifting socioeconomic emphasis from the land to the sea. The archaeological indications of these marginal Caribbean island industries (indigo and arrowroot processing, copra processing, whaling, and boatbuilding) have been discussed, and they too present a contrast to the dominant narrative of the sugar plantation as the center of Caribbean economic activity (Shepherd 2002).

There are doubtless many other Caribbean island stories to be discovered using a similar combination of methodologies as are outlined here. A number of recent archaeological landscape studies have shown the importance of historical cartography in Caribbean combined with powerful tools such as GIS allied to on-ground survey. Recently published work from Montserrat (which of course has its own unique issues regarding accessibility owing to volcanic activity) has shown us the exciting possibilities suggested by the use of LIDAR, a technique well established in regional archaeological surveys in Europe and America (Opitz et al. 2015). Even without these high-technology solutions, open access GIS programs can be used to help build a sustainable and local approach to landscape survey and site mapping, and add greatly to our knowledge of historical landscape change.

Within the wider Caribbean thematic context, a refocusing upon the archaeology of marginal and non-sugar-related industries, especially in small-island settings, is overdue. For example, the salt industries of the Turks and Caicos offer ample scope for an island landscape archaeology study, such is their scale and complexity (Kennedy 2007). On the small Dutch island of Saba, Ryan Espersen's (2017) doctoral research work has cast light upon the possibilities of an archaeological study of class and poverty in a small - scale island setting, very much in the same context as Matthew Reilly's (2016) stimulating and provocative work in a larger island setting of Barbados. John Chenoweth's (2014) study of the archaeology of a Quaker plantation site on Jost Van Dyke in the British Virgin Islands belongs in a similar continuum to that of Laurie Wilkie and Paul Farnsworth's work on the Clifton plantation on New Providence in the Bahamas (Farnsworth 2000). These offer examples of adaptation of planter economies to small island settings, a counterpoint to the archaeological visibility of the more rigidly controlled and structured plantation landscapes of Jamaica, for example (Delle 1999), or Tobago (Clements 1997). Further, nautical and maritime archaeology studies offer ample scope for focusing on human social and cultural interaction with the sea at a time of great economic and social change (Finneran 2016; Smith 2016).

In summary and reflecting on the project aims stated at the outset, the project has achieved a number of goals. Firstly, at the most basic level, it has demonstrated the archaeological potential of a hitherto understudied small Caribbean island, and in so doing has offered a counter point to the better-studied larger islands to the north. For the first time, we have put the historical archaeology of Bequia on the map, literally and figuratively, and this is important in a region such as the Grenadines and St. Vincent that has seen extensive research on precontact material, but a relative lack of attention paid to the cultural processes of the colonial period. Second it is hoped that the application of a multifaceted landscape archaeology approach, drawing heavily upon historical mapping, has been shown to be highly effective in a small-scale island setting, and has enabled us to chart profound socioeconomic change in the fabric of the island landscape over a 300 year period. Finally, and perhaps most importantly, it is hoped that the possibilities of the study of the archaeology of Caribbean island life on the margins–and beyond the sugar plantation–can be clearly recognized.

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References

- Adams, J. (1971). Historical geography of whaling in Bequia Island, West Indies. *Caribbean Studies* 11(3): 55–74.
- Adams, J. (1976). Environmental and Cultural Factors in the Decline of Agriculture in a Small West Indian Island. University of Wisconsin Center for Latin America, Centre Essay Series No. 7, Madison.
- Allaire, L. (2013). Ethnohistory of the Caribs. In Keegan, W., Hofman, R., and Ramos, R. eds., *The Oxford Handbook of Caribbean Archaeology*, Oxford University Press, Oxford, pp. 97–110.
- Armstrong, D. (2010). Degrees of freedom in the Caribbean: archaeological explorations of transitions from slavery. *Antiquity* 84(323): 146–160.
- Armstrong, D. (2015). Archaeology of the enslaved laborer settlement at Trent's plantation: 2014-15. Journal of the Barbados Museum and Historical Society 61: 146–177.
- Armstrong, D., Hauser, M., Knight, D., and Lenik, S. (2008). Maps, metricals and material remains: an archaeological GIS of late-eighteenth-century historic sites on St John, Danish West Indies. In Reid, B. (ed.), Archaeology and Geoinformatics: Case Studies from the Caribbean, University of Alabama Press, Tuscaloosa, pp. 99–126.
- Aston, M. (1997). Interpreting the Landscape: Landscape Archaeology and Local History, Routledge, London.
- Beeson, K. (1964). Indigo production in the eighteenth century. *The Hispanic American Historical Review* 44(2): 214–218.
- Bradford, M. (2007). Blues from Bequia: Survey of two historic indigo processing ruins. Unpublished paper presented at the 22nd conference of the International Association of Caribbean Archaeology, Kingston, Jamaica, July 23-29.
- Bright, A. (2011). Blood is Thicker than Water: Amerindian Intra- and Inter-Insular Relationships and Social Organization in the pre-Colonial Windward Islands, Sidestone Press, Leiden.
- Callaghan, R. (2007). Prehistoric settlement patterns on St. Vincent, West Indies. Caribbean Journal of Science 43(1): 11–22.

- Cappon, L. (1972). Geographers and map makers, British and American, from about 1750 to 1789. *Proceedings of the American Antiquarian Society* **81**(2): 243–271.
- Chenoweth, J. (2014). Practicing and preaching Quakerism: creating a religion of peace on a slavery-era plantation. *American Anthropologist* **116**(1): 94–109.
- Clements, C. (1997). Settlement patterning on the British Caribbean Island of Tobago. *Historical Archaeology* **31**(2): 93–106.
- Curet, L. (2004). Island archaeology and units of analysis in the study of ancient Caribbean societies. In Fitzpatrick, S. (ed.), Voyages of Discovery: The Archaeology of Islands, Praeger, Westport, pp. 188–201. Davidson, G. (1787). The Case of the Caribbs in St. Vincent. Coke, London.
- Davis, D., and Goodwin, R. (1990). Island Carib origins: evidence and non-evidence. American Antiquity 55(1): 37–48.
- Degraff, A., and Baldwin, K. (2013). Participatory Mapping of Heritage Sites in the Grenadine Islands. University of the West Indies Centre for Resource Management and Environmental Studies (CERMES) Technical Report 65, Cave Hill, Barbados.
- Delle, J. (1989). A Spatial Analysis of Sugar Plantations on St Eustatius, Netherlands Antilles. Master's thesis, College of William and Mary, Williamsburg.
- Delle, J. (1999). Landscapes of class negotiation on coffee plantations in the Blue Mountains of Jamaica. *Historical Archaeology* 33(1): 136–158.
- Delpuech, A. (2001). Historical archaeology in the French West Indies. In Farnsworth, P. (ed.), Island Lives: Historical Archaeologies of the Caribbean, University of Alabama Press, Tuscaloosa, pp. 21–59.
- Dick, K. (1977). Aboriginal and early Spanish names of some Caribbean, circum-Caribbean islands and cays. Journal of the Virgin Islands Archaeological Society 4: 17–41.
- Dobie, M. (2010). Trading Places: Colonization and Slavery in Eighteenth-Century French Culture. Cornell University Press, Ithaca.
- Espersen, R. (2013). Water use at palmetto point and Middle Island, Saba, Dutch Caribbean: a modelled approach for settlement viability. *International Journal of Historical Archaeology* 17: 806–827.
- Espersen, R. (2017). "Better than we": Landscapes and Materialities of Race, Class and Gender in pre-Emancipation Colonial Saba, Dutch Caribbean. Unpublished doctoral dissertation, University of Leiden.
- Farnsworth, P. (2000). Brutality or benevolence in plantation archaeology. International Journal of Historical Archaeology 4(2): 145–158.
- Finneran, N. (2013). "This islande is inhabited with all sortes": Creolising the townscape: towards an archaeological biography of Speightstown Barbados. Antiquaries Journal 93: 319–351.
- Finneran, N. (2016). Slaves to sailors: The archaeology of traditional Caribbean shore whaling ca. 1850-2000. International Journal of Nautical Archaeology 45(2): 388–405.
- Gonzales, N. (1986). Garifuna traditions in historical perspective. Belizean Studies 14(2): 11-24.
- Gordon, H. (1771). Report on the island of Bequia (one of the Grenadines) by Capt. Harry Gordon his Majesty's chief engineer to general Melvill, Grenada, 28th April 1771. Kew, National Archives (T2/487/ 295-300).
- Gullick, C. (1985). Myths of a Minority: The Changing Traditions of the Vincentian Caribs, Van Gorcum, Assen.
- Handler, J., and Lange, F. (1978). Plantation Slavery in Barbados: An Archaeological and Historical Investigation, Harvard University Press, Cambridge.
- Harris, L. (2014a). *Patroons and Periaguas: Enslaved Watermen and Watercraft of the Lowcountry*, University of South Carolina Press, Columbia.
- Harris, L. (2014b). From African canoe to plantation crew: tracing maritime memory and legacy. *Coriolis: Interdisciplinary Journal of Maritime Studies* 4(2): 34–52.
- Hatzenberger, F. (2003). Paysages et Végétations des Antilles. Karthala, Paris.
- Hazelwood, L., and Steele, J. (2003). Colonizing new landscapes: archaeological detectability of the first phase. In Rockman, M. and Steele, J. eds., *Colonization of Unfamiliar Landscapes: The Archaeology of Adaptation*, Routledge, London, pp. 203–221.
- Hicks, D. (2007). The Garden of the World: An Historical Archaeology of Sugar Landscapes in the Eastern Caribbean. British Archaeological Reports, Oxford.
- Higman, B. (1986). Jamaican coffee plantations 1780-1860: a cartographic analysis. Journal of Historical Geography 13(1): 17–39.
- Kelly, K. (2004). Historical archaeology in the French Caribbean: an introduction to a special volume of the journal of Caribbean archaeology. *Journal of Caribbean Archaeology Special Publication* 1: 1–10.
- Kelly, K. (2009). Where is the Caribbean? French colonial archaeology in the English lake. *International Journal of Historical Archaeology* 13(1): 80–93.

- Kelly, K. (2013). La vie quotidienne des habitations sucrières aux Antilles: l'archéologies à la découverte d'une histoire cache. In Situ: Revue des Patrimones 20, available online at: http://insitu.revues.org/10160. doi: 10.4000/insitu.10160. Accessed 28 Jan 2017.
- Kennedy, C. (2007). The other white gold: salt, slaves, the Turks and Caicos Islands, and British colonialism. *Historian* 69(2): 215–230.
- Kim, J. (2013). The Caribs of St. Vincent and indigenous resistance during the age of revolutions. Early American Studies: An Interdisciplinary Journal 11(1): 117–132.
- Leech, R. (2007). In what manner did they Devide the land: the early colonial estate landscape of Nevis and St Kitts. In Finch, J. and Giles, K. eds., *Estate Landscapes: Design, Improvement and Power in the Post-Medieval Landscape Society for Post-medieval Archaeology Monograph 4*, Boydell and Brewer, Woodbridge, pp. 191–204.
- Lenik, S. (2011). Mission plantations, space and social control: Jesuits as planters in French Caribbean colonies and frontiers. *Journal of Social Archaeology* 12(1): 51–71.
- Loftfield, T. (2001). Creolization in seventeenth-century Barbados: Two case studies. In Farnsworth, P. ed., Island lives: Historical Archaeologies of the Caribbean, University of Alabama Press, Tuscaloosa, pp. 207–233.
- Martin, C. (1967). The arrowroot industry in St. Vincent: a case study of a unique crop industry. In Tai, E. et al. eds., *First Triennial Symposium of Tropical Root and Tuber Crops*, University of the West Indies, St. Augustine, pp. 125–139.
- Melvill, R. (1765). West Indies, Grenada, Governor Melvill to Governor Higginson, enclosing a petition from 15 inhabitants of Saba for a grant of 30 acres of land each on the island of Bequia 1765. National Archives (T 1/442/91-4), Kew.
- Melvill, R. (1771). Letter from Melvill to the Earl of Hillsborough dated 25th July 1771. National Archives (PRO T1/493/245-247), Kew.
- Newman, B. (2014). Identity articulated: British settlers, black Caribs and the politics of indigeneity on St Vincent, 1763-1797. In Smithers, G., and Newman, B. (eds.), *Native Diasporas: Indigenous Identities* and Settler Colonialism in the Americas, University of Nebraska Press, Lincoln, pp. 109–150.
- Opitz, R., Ryzewski, K., Cherry, J., and Moloney, B. (2015). Using airborne LiDAR survey to explore historic-era archaeological landscapes of Montserrat in the eastern Caribbean. *Journal of Field Archaeology* 40(5): 523–541.
- Penmorfa (2017). Old Bricks: History at your Feet. Available online at: http://www.penmorfa. com/bricks/england19.html. Accessed Jan 2017.
- Pownall, J. (1771). West Indies: Islands St Christophers and Bequia 1771. National Archives (T1/487/295-300), Kew.
- Price, G. (1934). White settlement in Saba Island, Dutch West Indies. Geographical Review 24(1): 42-60.
- Price, N. (1988). Behind the Planter's Back: Lower Class Response to Marginality in Bequia Island, St. Vincent. Macmillan, Basingstoke.
- Pyle, D. (1998). Clean Sweet Wind: Sailing with the Last Boatmakers of the Caribbean, International Marine/ McGraw Hill, Camden.
- Reilly, M. (2016). "Poor white" recollections and artifact reuse in Barbados: considerations for archaeologies of poverty. *International Journal of Historical Archaeology* 20: 318–340.
- Rhodes House Library (1949). State of Carriacou and the Other Grenadine Islands 1776. Francis Edwards Catalogue no. 695, 1776, Oxford.
- Rocha, E., and Alleyne, F. (2012). Millie gone to Brazil': Barbadian migration to Brazil in the early twentieth century. *Journal of the Barbados Museum and Historical Society* 58: 1–42.
- Rousseau, X., and Vrager, Y. (2004). Les indigoteries de Marie-Galante. Journal of Caribbean Archaeology Special Publication 1: 47–57.
- Shephard, C. (1831). An Historical Account of the Island of St. Vincent. W. Nicol, London.
- Shepherd, V. (2002). Slavery without Sugar: Diversity in Caribbean Economy and Slavery since the 17th Century, University of Florida Press, Gainesville.
- Silliman, S. (2005). Culture contact or colonialism? challenges in the archaeology of native North America. American Antiquity 70(1): 55–74.
- Singleton, T. (2001). Slavery and spatial dialectics on Cuban coffee plantations. World Archaeology 33(1): 98– 114.
- Smith, R. (2016). The Caymanian catboat. In Evans, A. (ed.), The Archaeology of Vernacular Watercraft, Springer, New York, pp. 19–27.
- St. Vincent Government (1822). Slave Records for St. Vincent 1822. National Archives (T71/495), Kew.
- St. Vincent Government (1854). St. Vincent Government Blue Book of Statistics etc. 1854. National Archives (CO 265/34), Kew.

- St. Vincent Government (1868). St. Vincent Government Blue Book of Statistics, etc. 1868. National Archives (CO 265/48), Kew.
- St. Vincent Government (1931). St. Vincent Government Blue Book of Statistics, etc. 1931. National Archives (CO 265/111), Kew.
- Taylor, C. (2012). The Black Carib Wars: Freedom, Survival and the Making of the Garifuna, University Press of Mississippi, Jackson.
- Verrand, L., and Vidal, N. (2004). Les fours à chaux en Martinique. Journal of Caribbean Archaeology Special Publication 1: 29–46.
- Young, W. (1787). Account of the Black Charaibes of St. Vincent with the Charaib Treaty of 1779 and Other Original Documents. J. Sewell, Comhill and Knight, London.