

Archaeological manifestations of cross-cultural encounters along the Dixcove coastline, Western Region, Ghana

Fritz Biveridge

To cite this article: Fritz Biveridge (2020) Archaeological manifestations of cross-cultural encounters along the Dixcove coastline, Western Region, Ghana, *Azania: Archaeological Research in Africa*, 55:2, 189-216, DOI: [10.1080/0067270X.2020.1757861](https://doi.org/10.1080/0067270X.2020.1757861)

To link to this article: <https://doi.org/10.1080/0067270X.2020.1757861>



Published online: 05 May 2020.



Submit your article to this journal [↗](#)



Article views: 13



View related articles [↗](#)



View Crossmark data [↗](#)



Archaeological manifestations of cross-cultural encounters along the Dixcove coastline, Western Region, Ghana

Fritz Biveridge 

Department of Archaeology and Heritage Studies, University of Ghana, P.O. Box 3, Legon, Ghana

ABSTRACT

Using both archaeological and historical data, this paper examines the consequences of the British presence at Dixcove in the seventeenth to nineteenth centuries and how their encounter with local Ahanta populations there impacted the body polity of Ahantaland and the local economy. It shows that prior to the advent of the British and their construction of Fort Metal Cross, Dixcove was a small coastal chiefdom with fishing and salt production constituting the mainstays of the local economy. The period subsequent to British arrival then witnessed the rapid development of vibrant commercial relations between the two groups and the evolution of Dixcove from cosmopolitan to urban status.

RÉSUMÉ

Employant les données archéologiques et historiques, cet article examine les conséquences de la présence britannique à Dixcove entre les dix-septième et dix-neuvième siècles, et considère la manière dont leur rencontre avec les populations Ahanta locales impacta sur la politique d'Ahantaland et l'économie locale. L'étude a révélé qu'avant l'arrivée des Britanniques et leur construction de Fort Metal Cross, Dixcove était une petite chefferie côtière où la pêche et la production de sel constituaient les piliers de l'économie locale. La période suivant l'arrivée britannique vit le développement rapide de relations commerciales dynamiques entre les deux groupes, et Dixcove évolua d'un statut cosmopolite à un statut urbain.

ARTICLE HISTORY

Received 30 June 2018
Accepted 15 October 2019

KEYWORDS

Atlantic contact era; cross-cultural encounters; Dixcove; Ghana

Introduction

This research presents results of the first historical archaeology investigations conducted at Dixcove (4°48'N, 1°57'W) located 35 km west of Takoradi, the capital of Ghana's Western Region. Two reasons necessitated the investigation of this site, which had previously not been explored by archaeologists. The first and most important was that Fort Metal Cross and its neighbourhood, the commercial epicentres of the Anglo-Ahanta encounter during the Atlantic contact era, had been leased to a foreign investor who is converting the facility and its environs into a hotel/leisure complex primarily to promote historical tourism in the district. Ongoing construction of an administrative

block, a restaurant and several chalets to house tourists has destroyed much of the archaeological data embedded in the stratigraphy around the fort's environs. Making this loss worse, was the general dearth of archaeological information relating to the Anglo-Ahanta encounter along the Dixcove coastline due to the fact that the geographical focus of most historical archaeologists researching cross-cultural contacts in the past has been the Central and Greater Accra Regions, further to the east. It was thus imperative to conduct salvage excavations in areas as yet unaffected by construction in order to recover archaeological data with which to illuminate and facilitate the reconstruction of over four centuries of Anglo-Ahanta interactions, including the impact of those interactions on the body polity of Ahantaland, the local economy and the British settlers living in the fort.

The focal loci of the investigations were the two ancient suburbs of Ntwarkro (Upper Dixcove) and Daazikessie (Lower Dixcove). Archaeological data retrieved from surface surveys and excavation of five units constituted the primary data sources used for the study. Early European records archived at the Public Records Office, London, and the State Archives at The Hague and ethnohistorical data constituted the other sources used. The research was funded by the Ghana Denmark Archaeological Project (GDarch Project) and the University of Ghana Faculty Development Fund.

Historical background to the Anglo-Ahanta encounter at Dixcove

Much of what is known about the Anglo-Ahanta encounter derives from the testimony of European mariners and traders. It is uncertain when the first contact between the Ahanta and Europeans took place, although Lawrence (1963: 292) has postulated that it preceded by some two hundred years the construction of Fort Metal Cross in 1692. According to Bosman (1705: 12-13), before European arrival Dixcove was called Efiema and comprised two small chiefdoms, each governed by its own paramount chief. Nana Amoako-Agyebu VI, Adontenhene of Daazikessie (pers. comm., 28 July 2012), has noted that the name change occurred sometime in the early seventeenth century after British mariners began referring to the area as 'Dick's cove,' after Dick, a prominent British trader who operated from the natural cove at the site. This was later corrupted to 'Dixcove' by European seafarers to refer to both the cove and its environs. Early European records posit that fishing, gold mining and palm oil and salt production constituted the major lynch-pins of the local economy prior to European contact and subsequently constituted important traditional exports from the Dixcove coastline to Europe (Dumett 1987: 209; Marees 1987: 75). Items exchanged via the inter-continental Atlantic trade included blue/red perpetuanoes (a light form of cloth), pewter basins, glass products, iron and copper bars and sheets, Flemish knives, cases of liquor and spirits, guns, gunpowder and coral, as well as perishable consumables such as tea, lard, vinegar, flour, molasses, candles, soap, tallow and tobacco (Feinberg 1989: 50; DeCorse 2001: 154).

Trade between the Ahanta and Europeans (principally the British) during the early contact period initially boomed because Dixcove had abundant reserves of quality gold, lime, gneiss, granite and timber required for the refurbishment of ships and trade factories on the Gold Coast (Daaku 1970: 40; Dantzig 1980: 45). A missive from the captain of the *Eliza*, Samuel Swan, to his brothers that dates to August 1811 states, among other things, that 'the gold dust collected from Cape Lahou down to "Dix Cove" is thought to be the

purest on the whole coast' (Bennett & Brooks 1965: 50). According to Lawrence (1963: 293), the British Royal African Company and the Dutch West India Company were the most vibrant European trading companies operating at Dixcove. To enhance their commercial activities there and gain a foothold on the African mainland, the Royal African Company began the construction of Dixcove Fort in 1692. After a brief transfer of properties between Britain and The Netherlands between 1868 and 1872, the fort was renamed Fort Metalen Kruis (Fort Metal Cross). According to Lawrence (1963: 293), an Englishman named Charles Hinson is presumed to have negotiated and sought the consent of the chief and tribal elders of Ntwarkro to pave the way for its construction.

The coastal trade was essentially a very profitable enterprise for both the British and the indigenous populace of Dixcove. A 1772 document entitled *A Treatise upon the Trade from Great Britain to Africa* that evaluated British trade on the Gold Coast described it 'as the first principle and foundation of all the rest; the main spring of the machine which sets every wheel in motion' (PRO. T. 70/1455. F.1: 1778). Commenting on Britain's overseas commerce on the Guinea Coast in the early modern era Priestley (1969: 3) asserted that trade 'was the bedrock of her national power,' while Hallett (1963: 196) described it as 'essentially necessary to the well-being' of Britain's New World Colonies. According to Coombs (1963: 4), British trade on the Guinea Coast was very profitable, with its total value in the 1850s estimated to be about five times that of the Dutch, whose economy also benefitted from the trade in gold and later also in slaves. The competitive zeal of Europeans to build trade factories on the Gold Coast to exploit its natural and human resources is itself a testimony to the profitability of the commerce in which they engaged.

There is, however, overwhelming documentary evidence to indicate that trade along the Dixcove coastline was not limited to traders based in Britain, but that it also attracted ships from several areas of North America, including New York, New Orleans, Charleston, Newburyport and Boston. American trade on the Gold Coast blossomed after the United States gained independence in 1783, taking advantage of the subsequent embroilment of much of Europe, Britain included, in the French Revolutionary and Napoleonic Wars. A report by Samuel Swan, an American trader aboard the R.I *Love & Unity* to Jacob Tidd at Elmina dated 20 August 1809 asserted that:

'I have been offered at 17 Gall. [gallons] p[e]r. oz. [ounce] to take all my rum, but as I know there is no American on the coast & that all my rum is in demand, I have determined not to sell at less than 15 & I expect by the time I return from 'Dix Cove' (which place I am now under weight for) to get an oz for 14 or 13 Gall. The rum is so good that Davison could not sell at 18 pr Oz while I would give 16G. My rum is now my principal object having 74 hhd. still on hand, 60 bar flour, 50 cases of Gin & most of the cloth & some of the small articles. The Amt sales are at present 16,139 Doll. & the Amt Invoice on hand is 12,725 dollars. I shall go no further up than 'Dix Cove' and shall touch at every place from that to Accra, by which time I expect I will have no more on board than I shall want to carry over to Prince Island with me' (Bennett & Brooks 1965: 28).

There is documentary evidence to suggest that the British introduced Western forms of education and even attempted to propagate the Gospel and Christianise the local population at Dixcove. Examples of Dixcove notables who received such education include Quamina, son of Acca, (a Dixcove caboecer, i.e. a native African appointed by his ruler to supply European traders with slaves), who became an educated protégé of The

British Company under Mr Thomas Allan of Dublin (Priestley 1969: 37–37), and the son of the chief of Ntwarkro, who was placed under the educational charge of another gentleman in Dublin with sponsorship from the Company of Merchants in the 1750s (PRO. T. 70/1530 25 February and 6 June 1759). Others were Harry and Richard Brew, sons of Richard Brew, both of whom were educated in England and returned to Dixcove in 1768 (PRO. T. 70/1536. Thomas Westgate to Richard Brew 28 October (1768). DeCorse (2001: 37) notes that mulatto individuals in particular ‘were educated in the art of letters, the Holy Scriptures, foundation of economics, some crafts as well as in the making of plantations’.

The late nineteenth and early twentieth centuries also saw many Africans on the lower rungs of the social ladder learning to read and write because literacy afforded a valuable means of guaranteeing access to upscale jobs like trade brokers and interpreters that were considered prestigious and affluent occupations during the period (Graham 1976). Literacy also facilitated the transfer of European technical know-how in fields such as brass smelting and carpentry. Evidence by the Rev. J. Beecham to a question by the Chairman of the Proceedings of the Select Committee on West African Forts of the House of Commons in 1842 regarding where British missionaries were stationed on the Gold Coast indicated their presence not only at Dixcove, but also at a range of other locations, including Commenda, Cape Coast Castle, Annamaboe, Cormantine, Salt Pond, Tantum, Lago, Mumford, Winnebah and Accra (Metcalf 1964: 176).

Deductions from historical sources clearly indicate that before the late nineteenth century, Dixcove was not a British cultural transplant or colony because British traders there continued to make regular ground rent payments and a variety of other payments described as ‘tributes’, ‘funeral fees’ and ‘Friday drinks’ to the two Dixcove traditional ruling authorities (P.R.O. T 70/1433). It is also worth noting that, while the British dominated trade there, they had not monopolised it because the two groups were mutually dependent on each other. Relations were, for most periods, symbiotic, convivial and beneficial to both and it appears that the British only began to exercise absolute political control in Dixcove’s municipal affairs after the late nineteenth century, even though its commercial role almost ceased with the abolition of the British slave trade in 1807 (Anquandah 1999: 78–79). Thereafter, it served as an indispensable service station/administrative hub until 1874 when the Gold Coast was proclaimed a British colony.

Archaeological research at Dixcove

Archaeological investigations at Dixcove began with three unstructured surface surveys all undertaken on foot at Ntwarkro and Daazikessi (Figure 1). These are the oldest settlement quarters of Dixcove and are where much of the interaction between the Ahanta and Europeans occurred. They thus constituted the best areas for recovering archaeological data relevant to the reconstruction of that interaction. Ntwarkro is estimated to have covered some 6.47 ha, including the precincts of Fort Metal Cross, and survey here revealed that much of the stratigraphy from ground surface to about 30 cm into the sub-surface soil was loose and friable, having been extensively damaged by ongoing construction activities. It was not possible to explore Daazikessie in detail because the original settlement quarter, which covered 33,120 m², had been built upon by the current population, making the recovery of cultural materials impossible.

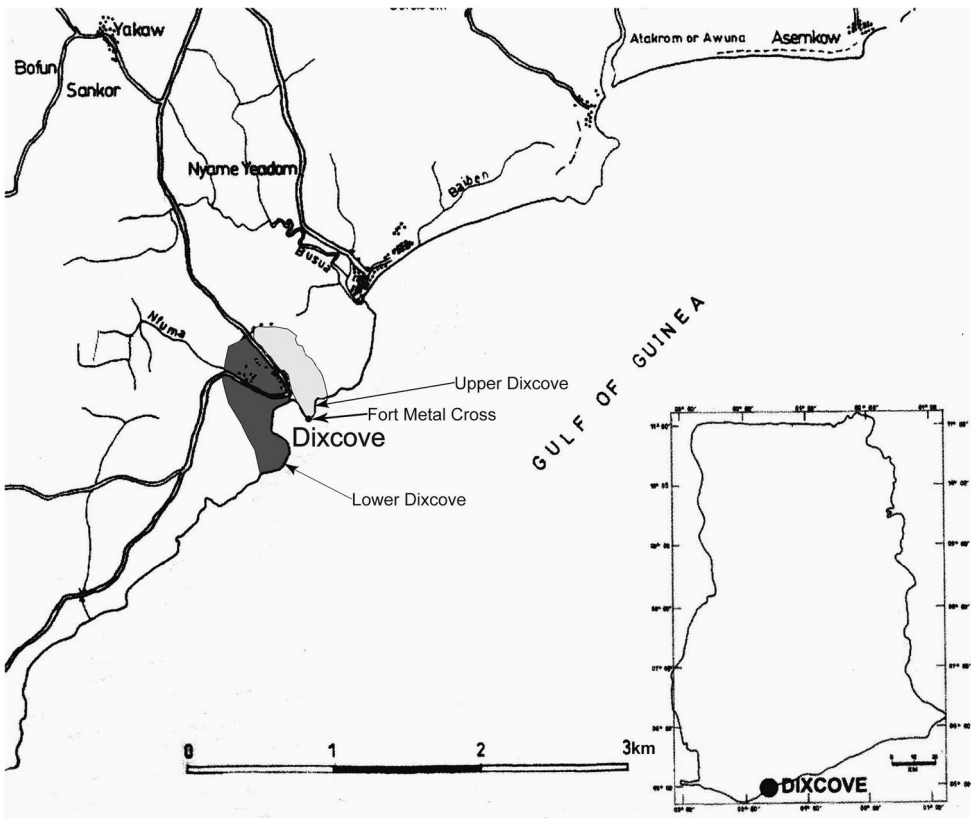


Figure 1. Map of the Dixcove area showing the locations of Fort Metal Cross, Lower Dixcove (Daazikessie) and Upper Dixcove (Ntwarkro).

The purpose of the survey was to identify recognisable material traces indicative of culture contact and exchange between the Ahanta and Europeans, establish their geographical extent and note the spatial distribution and density of the cultural materials present. Along with three *in situ* archaeological features — a group of three abandoned stationary stone grinders, a house floor and part of its standing wall — the cultural materials listed below in [Table 1](#) constituted all the material remains recovered at

Table 1. Ntwarkro: types of finds recovered during the surface survey.

Types of finds	Total	Percentage of total finds
Imported ceramics	13	9.1
Glass beads	3	2.1
Local pottery	26	18.2
Bones	6	4.2
Solidified tar	3	2.1
Metal objects	17	11.9
Mollusc shells	35	24.5
Stone grinders	5	3.5
Cannons	4	2.8
Bottle fragments	31	21.7
Total	143	100.0

Ntwarkro. The second phase of the archaeological investigation then involved the excavation of five units (Figure 2). Unit 1 measured 2 × 1 m and was located 0.8 m east of Fort Metal Cross. Units 2 and 5 measured 1.5 × 2 m each and were located 51 m and 51.8 m respectively northeast of Fort Metal Cross, while Units 3 and 4 measured 1 × 1 m and 1 × 3 m respectively and were placed 3 m south and 4.2 m southwest of it. The location of Units 1, 3 and 4 was informed by the dense scatter of cultural materials found there relative to the areas bordering them as noted during the surface survey, while the locations of Units 2 and 5 was informed by ethnohistorical information that

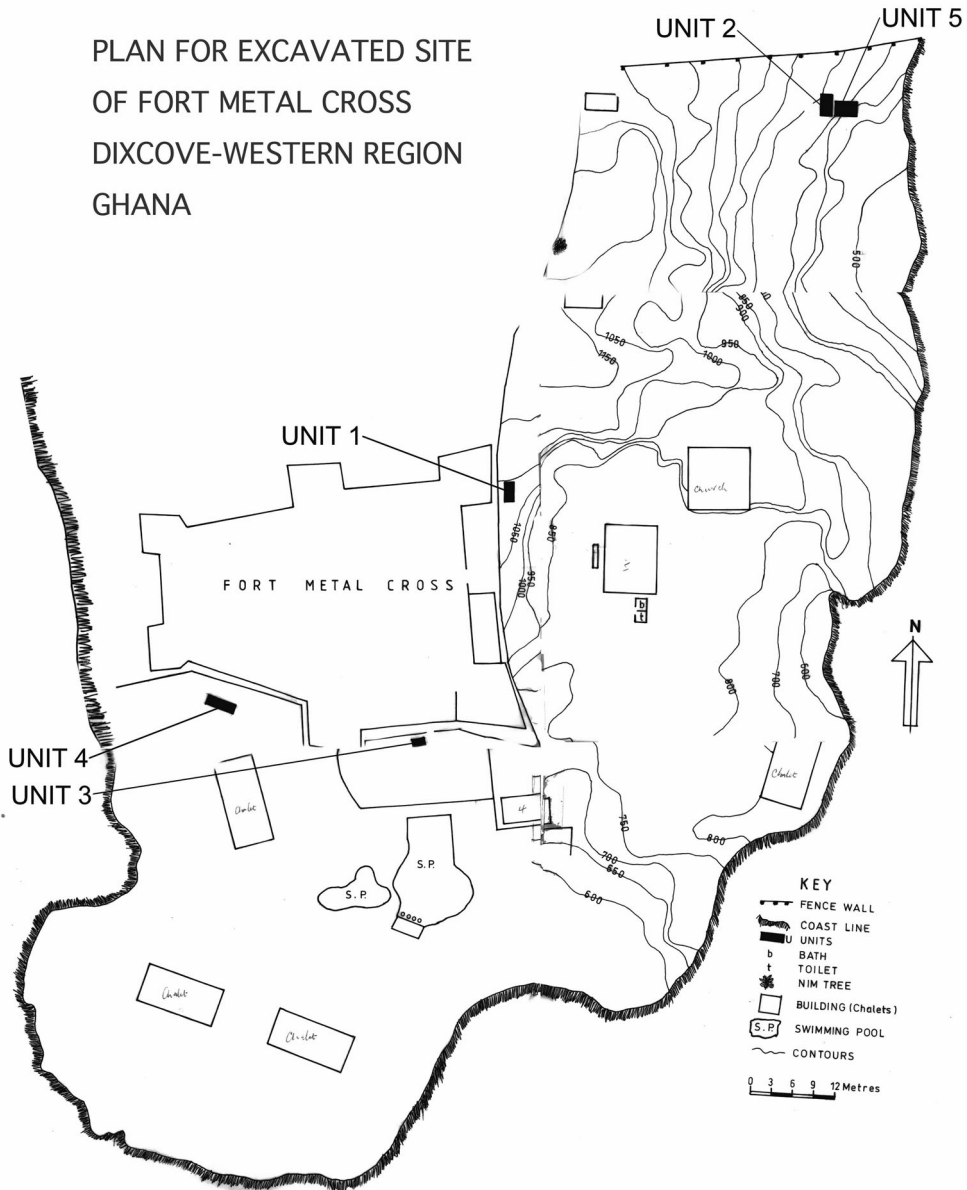


Figure 2. Site plan of the five excavated units and some major features at Upper Dixcove (Ntwarkro).

identified them as refuse disposal points (Atua Gyasie, pers. comm., 13 June 2012; Nana Kwesie Aggrey, pers. comm., 13 June 2012).

Form, size, shape, function and medium of manufacture were the major attributes used to facilitate the description of the cultural materials retrieved from excavation. In the following discussion the term ‘type’ refers to all those diagnostic attributes that describe, illustrate and differentiate one artefact type from another, while ‘category’ is defined as any set of diagnostic attributes that bring together distinct features, acts and experiences that, while not identical in every respect, are nevertheless sufficiently similar to enable them to be described as a label. In turn, ‘attribute’ refers to all the inherent characteristics that define a particular artefact such that any entity exhibiting those characteristics will automatically be included in that type.

‘Decoration’ refers to any colour, design, motif or physical manipulation of the exterior or interior surfaces of a medium like clay for the purpose of enhancing its aesthetic value, whereas ‘decorative field’ refers to any area on a vessel where decoration has been placed. ‘Fabric’ refers to all the internal constituents (clay, temper, levigation etc.) used in the production of ceramics, while ‘burnished’ describes potsherds with shiny smooth surfaces devoid of all conspicuous pores. An arbitrary level of 20 cm thickness was used to control vertical provenience while stratigraphic colours were determined by use of a Munsell Soil Colour Chart. Tables 2–6 record the frequencies of the various cultural materials retrieved from the five excavation units.

Cultural materials of local origin

A total of 2664 local potsherds were recovered, constituting the most abundant and ubiquitous artefact retrieved from the research area. The bulk of them are dull, well worn and lustreless and measure approximately 7–12 cm across their longest axis. Mineralogical analysis of 40 potsherds randomly selected from all the stratigraphic levels at Ntwarkro and Daazikessie was undertaken at the Department of Earth Sciences Laboratory, University of Ghana, Legon, and revealed that plagioclase feldspars, quartz and hornblende constitute the principal mineral constituents present. On the other hand, the principal mineral constituents of the rocks and clays of the Dixcove area are phyllites, schists, quartzites,

Table 2. Ntwarkro: types of finds recovered from Unit 1.

Type of finds	Level 1	Level 2	Level 3	Level 4	Level 5	Total	Percentage of total finds
Smoking pipes	8	8	13	-	-	29	3.2
Beverage bottles	7	25	40	4	-	76	8.5
Red bricks	2	4	1	-	-	7	0.8
Bones	1	36	9	17	5	68	7.6
Mollusc shells	16	92	119	124	13	364	40.6
Imported ceramics	37	33	-	1	-	71	7.9
Tiles	4	-	-	-	-	4	0.4
Glass beads	1	4	1	-	-	6	0.7
Metal objects	5	8	8	2	2	25	2.8
Palm kernel shells	-	-	-	1	26	27	3.0
Local pottery	9	37	42	85	24	197	22.0
Slate pencils/boards	-	-	1	-	-	1	0.1
Iron slag	-	3	-	7	10	20	1.3
Tar	1	-	-	-	-	1	2.2
Total	91	250	234	241	80	896	100.0

Table 3. Ntwarkro: types of finds recovered from Unit 2.

Type of finds	Stratigraphic level												Total	Percentage of total finds
	1	2	3	4	5	6	7	8	9	10	11	12		
Beverage bottles	69	67	263	166	184	199	237	148	56	60	28	-	1477	12.6
Bones	25	42	19	33	78	213	164	138	124	45	15	-	896	7.7
Imported ceramics	C	39	72	57	43	43	89	166	185	115	16	-	851	7.3
Smoking pipes	2	3	14	13	10	2	23	28	23	49	4	-	171	1.5
Mollusc shells	442	341	178	427	706	594	898	298	341	408	185	23	4841	41.4
Glass beads	81	166	131	44	104	98	52	61	37	16	12	-	802	6.9
Slate	1	2	-	9	1	-	-	2	2	1	-	-	18	0.2
Red bricks	-	-	-	-	2	-	-	3	2	-	-	-	7	0.1
Metal objects	44	71	146	161	168	193	215	142	102	29	29	-	1300	11.1
Kernel shells	2	-	9	11	13	1	21	15	-	2	-	-	84	0.7
Local pottery	11	32	66	52	85	125	147	113	140	220	126	12	1129	9.7
Tiles	1	3	1	-	-	11	-	12	-	-	-	-	28	0.2
Grinders	1	3	-	1	-	1	-	3	-	-	-	-	9	0.1
Coins	-	-	-	-	-	1	-	-	-	-	-	-	1	0.0
Iron slag	-	-	-	-	1	2	1	-	4	3	9	13	23	0.2
Buttons	-	-	-	-	-	-1	1	1	-	-	-	-	2	0.0
Tar	-	-	-	2	5	-	-	-	-	---	-	-	7	0.1
Daub	-	-	-	2	2	5	3	2	1	4	2	12	33	0.3
Tuyères	-	-	-	-	-	-	-	-	-	-	-	1	1	0.0
Total	705	769	899	978	1322	1498	1851	1132	1017	952	426	61	11680	100

Table 4. Ntworkro: types of finds recovered from Unit 3.

Type of finds	Level 1	Level 2	Level 3	Level 4	Level 5	Total	Percentage of total finds
Metal objects	-	1	2	-	-	3	15.8
Mollusc shells	-	2	3	1	2	8	42.1
Imported ceramics	-	-	1	-	-	1	5.3
Beverage bottles	-	-	2	-	-	2	10.5
Bones	-	1	4	-	-	5	26.3
Total	-	4	12	1	2	19	100.0

Table 5. Ntworkro: types of finds recovered from Unit 4.

Type of finds	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8	Total	Percentage of total finds
Smoking pipes	-	1	3	4	2	-	1	-	11	0.5
Buttons	-	-	-	-	1	-	-	-	1	0.0
Local pottery	11	27	29	45	32	21	9	2	176	8.6
Imported ceramics	-	6	4	25	33	16	19	-	103	5.0
Beverage bottles	2	4	9	10	17	18	9	-	69	3.4
Metal objects	14	21	23	24	23	43	20	-	168	8.2
Mollusc shells	2	59	83	288	293	453	199	2	1379	67.4
Bones	-	9	7	16	22	17	7	2	80	3.9
Glass beads	-	-	10	19	13	9	4	-	55	2.7
Cannon	2	-	-	-	-	-	-	-	2	0.1
Slate	-	-	1	-	-	-	-	-	1	0.0
Total	31	127	169	431	436	577	268	6	2045	100.0

Table 6. Ntworkro: types of finds recovered from Unit 5.

Type of finds	Stratigraphic level											Total	Percentage of total finds
	1	2	3	4	5	6	7	8	9	10	11		
Smoking pipes	14	31	18	16	34	21	21	27	12	2	-	196	2.7
Buttons	3	1	2	-	-	-	-	-	-	-	-	6	0.1
Local pottery	51	61	84	5	111	135	257	229	167	43	19	1162	16.0
Imported ceramics	13	42	52	122	143	94	42	26	2	1	-	537	7.4
Beverage bottles	11	33	41	92	117	163	27	19	2	4	-	509	7.0
Metal objects	16	74	167	184	136	368	42	29	7	2	-	1025	14.1
Mollusc shells	786	132	294	22	176	90	79	126	31	26	15	1777	24.5
Tuyères	-	-	-	-	-	-	-	-	1	3	-	4	0.1
Bones	6	11	99	112	149	118	39	72	2	-	3	611	8.4
Glass beads	275	90	96	125	97	41	23	10	-	-	-	757	10.4
Slate	-	-	-	-	8	1	2	-	-	-	-	11	0.2
Kernel shells	3	6	11	91	131	171	111	73	4	3	2	606	8.3
Roof tiles	-	-	1	1	-	-	-	-	-	-	-	2	0.0
Querns	-	-	1	-	-	2	1	-	1	-	-	5	0.1
Iron slag	-	-	-	1	1	3	2	2	7	7	24	47	0.6
Grinders	-	2	-	-	-	-	-	-	-	-	-	2	0.0
Coins	-	-	2	-	-	-	-	-	-	-	-	2	0.0
Red bricks	-	1	2	1	-	-	-	-	-	-	-	4	0.1
Total	1178	484	870	772	1103	1207	646	618	238	97	50	7263	100.0

hornstones, biotites and andesites (Kesse 1985: 12–16), indicating that the inhabitants of Dixcove sourced their pottery from beyond the local area. The large number of such locally produced sherds found and their presence in all stratigraphic levels of the excavations

suggest that they constituted an integral and essential household item in common use during the period covered by this study.

All three major traditional surface treatment types associated with locally manufactured vessels in the region are represented, namely red-slipping, smudging and surface smoothing. As part of the analysis, all the rimmed sherds that could be reconstructed were broadly categorised into two vessel forms, namely jars and bowls. Within these classes three types of jar (Vessel Types U1–U3) and eight types of bowl (Vessel Types U4–U11) were identified.

A total of 326 sherds were decorated. In most cases their decorative field has patterns inclined vertically along the shoulder and upper neck regions of the vessels. Six principal decorative patterns were identified with short incised linear motifs the most dominant, followed by single circumferential grooved patterns, multiple circumferential grooved patterns, dot stamped patterns, short linear oblique patterns and short vertically inclined patterns (Figure 3). Combing using a tool with multiple teeth marks appears to have constituted the principal device used to achieve the linear patterns because the grooved lines were parallel and equally spaced, both vertically and horizontally.

A large faunal assemblage was also retrieved ($N = 14,029$), the majority of it consisting of molluscs ($N = 11,463$) rather than bone ($N = 2566$). The identifiable fraction of the latter comprised 744 specimens (29.0%) with mainly long bones (femora, tibiae, fibulae, humeri) being the most common (61%) followed by metapodial and phalanges (32%) and teeth (7%). Mammals dominate the identifiable assemblage, followed by fish, reptiles and birds. Species present include domestic dwarf short-horn cattle (*Bos taurus*), sheep (*Ovis aries*) and goat (*Capra hircus*), along with giant rat (*Cricetomys gambianus*), cane rat (*Cricetomys gambianus*), grasscutter (*Thryonomys swinderianus*) and red river hog



Figure 3. Ntwarkro: examples of the ceramics recovered showing the two principal decorative patterns present: short linear oblique/diagonal patterns (left) and short vertically inclined patterns (right).

(*Potamochoerus porcus*). A sample of 1752 oil palm (*Elaeis guineensis*) kernel fragments constituted the only botanical material recovered.

Analysis of cultural materials of foreign origins

Items of foreign origin were analysed under the following sub-headings: ceramics, hardware and construction materials, clothing and dress accessories, leisure items, healthcare and medical equipment, weaponry and firearms, literacy and education-related materials and household accessories.

Ceramics

A total of 1657 imported ceramics (plates, mugs and condiment-holding vessels) were recovered (Figure 4), the bulk of them comprising fragmented late nineteenth- and early twentieth-century creamwares, delftwares, porcelains, white wares and stonewares with an average sherd size of less than 7 cm². Analysis of the few larger sherds that could be reconstructed indicated that they comprised a gamut of shallow eating plates and bowls. The breakdown according to form is as follows: (a) flat plates (N = 975, 58.8%), (b) condiments holding vessels (N = 16, 1.0%), (c) teacups (N = 19, 1.1%) and (d) mugs (N = 149, 9.0%). Only 11 pieces were clearly identified because they had manufacturers' marks embossed on them. Five of these came from Britain (one each from Staffordshire, Burslem, Cobridge (both in Stoke-on-Trent, which in turn lies within Staffordshire), Bristol and Chelsea). The first had the inscription 'AULT' imprinted at its base. According to Godden (1968: 40), this was the trademark of William Ault and Company (c. 1887–1923). The second fragment had the inscriptions 'BOOTE' and 'England' imprinted at the base and was most likely manufactured by T. & R. Boote, manufacturers of different earthenware types. Again according to Godden (1968: 43), this company, located at Burslem, has been in operation since 1842. Godden (1968: 10) further notes that the inclusion of the word 'England' on British ceramic wares denotes a post-1891 production date while 'Made in England' denotes a twentieth-century production date. The third fragment had the inscription 'W.B.' impressed at its base and was most probably manufactured by William Brownfield (and Sons). Godden (1968: 48) notes that this company operated between about 1850 and 1891 and that after 1871 it added 'S' or 'Sons' to its original 'W. B.' trademark initials. This suggests that the fragment recovered at Dixcove pre-dates 1871 because it did not have either of these additions on its base. The fourth fragment had the trademark of a globe with the inscription 'MINTONS' imprinted in the middle and a crown located atop of it. According to Godden (1968: 94), this trademark belongs to Mintons and Sons, a Bristol porcelain manufacturer incorporated since 1851 to the present day. Finally, the fifth fragment consisted of the base and lower body of a mug and had two inscriptions, a 'C.V' imprint and — below this — 'Made in England'. 'C.V' was the company logo of Charles Vyse, a Chelsea-based producer/modeller of earthenwares and porcelain whose company operated from 1919 until 1963 (Godden 1968: 128). According to Godden (1968: 43), the five British earthenware-manufacturing companies positively identified above operated collectively between 1842 and 1963. The various ceramic wares and, by association, the other artefacts



Figure 4. Assorted imported creamwares, whitewares and porcelains from the Dixcove study area dating to c. 1740–1880.

recovered from Levels 1–3 of Units 2, 4 and 5 at Ntwarkro should therefore be dated to the late nineteenth or twentieth centuries.

Four delftware fragments thought to have originated from companies in Rotterdam were also identified. The first with the inscription ‘*De Drie Klokken*’ (translated ‘The Three Bells’) imprinted at the base began manufacturing ceramics in the late eighteenth century (Morley-Fletcher and McIlroy 1984: 200–201). The second fragment appeared to be part of a pancake plate with *famille verte* designs imprinted in the middle. Morley-Fletcher and McIlroy (1984: 209) note that the *famille verte* design was unique to the *Ary Rijsselberg in De 3 Vergulde Astonnekens* factory and was probably manufactured there. The third fragment was a small thin-lined circular patterned polychrome dish with the word ‘*De*’ inscribed at the base is likely to have been manufactured by the *De Roos* factory in Friesland, while the fourth had only part of a ‘*Bijl*’ imprint readable and was thus difficult to assign to a date or manufacturer. The remaining two fragments comprised floral patterned sponged designed porcelains ascribed with the word ‘*VDuyn*’.

That over 1576 sherds of local and foreign origins were retrieved around the precincts of Fort Metal Cross at Ntwarkro which historical records posit was densely settled by local people in the past (Lawrence 1963: 296) compared to only 81 sherds at Daazikessie provides clear attestation that the former area was the commercial epicentre of Dixcove during the Atlantic contact era and that the bulk of the imported ceramics originated from the fort and the African settlement bordering it.

Hardware and construction materials

Construction materials comprising metal nails, screws, iron rods, brackets, mottled dark-red daub, fragments of asbestos roofing sheets and a bell (Figure 5) were retrieved from Unit 2 (Levels 2–9) and Unit 5 (Levels 2–8). Other retrieved materials included fragments of imported dark-red roofing slates that are S-shaped in section and protuberance, red bricks, hinges and tar. In all, 2969 metal items were found, most with extensive degrees of corrosion that made identification difficult and cumbersome. Materials identified numbered 168 and include 96 nails in a variety of sizes and shapes (57.1%), five bolts with lengths of 4.0 and 5.3 cm (1.1%), seven iron rods (4.16%), a hasp (0.59%), 26 iron brackets (11.3%), seven brad nails (4.16%), four door hinges (2.38%), 19 screws in a variety of shapes and sizes (11.3%) and ten remnants of what appeared to be hoes (5.9%). All the nails had ‘T’ heads and appear to be hand-forged as evidenced by variations in the diameter and thickness of their shanks.

Establishing the chronology for the various construction materials found was done in association with datable imported ceramics and Venetian and Bohemian glass beads. According to Francis (1995: 64), the earliest European beads to arrive in Sub-Saharan Africa were Venetian drawn beads in the 1500s and 1600s. In the light of the above observations, the construction and hardware materials recovered at Ntwarkro, particularly those between Levels 4–9 should be assigned post-seventeenth century dates while those underlying Level 9 should be assigned a pre-seventeenth century age.



Figure 5. Ntwarkro: hanging metal bell from Unit 4 dating to c. 1720–1820.

Clothing and dress accessories

A total of 1640 artefacts associated with clothing and dress accessories were recovered. They mainly comprise glass beads, dress buttons, a metal hook (part of a belt), metal bangles and rings. The bulk of the 1474 glass beads are monochrome (72.5%) rather than polychrome (27.4%) Venetian and Bohemian beads (Figure 10), with a few chevron beads as well. Bauxite beads locally called *nsamso* and *Akyem te* constituted the only locally manufactured beads found. All were relatively well preserved, having retained their main characteristic attributes such as colour, pattern and shape; only 33 had their ends partly fragmented or unevenly chipped. Five shapes were identified: spherical 191 (12.9%), barrel 64 (4.3%), disc 824 (55.9%), tubular 68 (4.6%) and seed 327 (22.1%).

All 12 of the dress buttons found were well worn as evidenced by their dull vitreous interior and exterior surfaces that lacked back-markers to facilitate manufacturer identification and probable country of origin. In shape they varied from near rounded discs (N = 3) to squares with smooth rounded edges (N = 2) and included two boutonnières, each of which ranged in diameter from 1 to 3 mm.

Leisure items (glassware and tobacco pipes)

A total of 2557 glassware fragments and 415 smoking pipes constituted the main items associated with leisure activities or personal indulgence. The bulk of the glassware consists

of schnapps, gin, champagne, wine, whisky and beer bottle fragments (Figure 6), closely followed by pharmaceutical/medicinal vials, pomade-holding containers and perfume storage bottles in that order (Figure 7). Other items associated with European imported liquor included 13 alcoholic beverage stoppers, three glass pewter caps and eight bottle spigots (Figure 8). There was a glaring paucity of stemwares in the glass assemblages. The type of alcoholic beverages present in the various bottle types found was determined by contained reference to Doreen Beck's (1977) *Book of Bottle Collecting*.

The majority of the assemblage retrieved from Units 2 and 5 (Levels 3–7) comprised parts such as mouths, shoulders, bodies and bases, with only 41 items recovered whole. A further 29 of the alcoholic beverage bottles comprised dark-green and light-green case bottles, some with kick-up bases. According to Beck (1977: 48–50), case bottles were associated with gin exports from the seventeenth century onwards; he describes them as tall, square-based, rectangular and hunched with squared-off shoulders and short stubby necks. Table 7 provides quantitative data on the various types of alcoholic beverages present at the site.

Establishing the winery, distillery, chronology and country of origin of these beverages was difficult because of the very fragmentary sizes of the glassware found (mean area <10 cm²). A sizable number had also developed patches of patina along several parts of their exterior and interior surfaces, further exacerbating the difficulty of identifying them. Only 11 fragments were lettered with identifiable trademarks and seals. The majority originated from distilleries in Britain and The Netherlands. Other recovered non-alcoholic glass bottled items of indulgence included pomade containers, toilet water bottles, 'torpedo'-shaped soda water bottles, scented oil bottles, pickle jars and syrup bottles. Other notable items included Perrier mineral water bottles, fragments of panes of mirrors that



Figure 6. Ntwarkro: gin/schnapps bottle remains from Units 2 and 5 dating to c. 1780–1850.



Figure 7. Ntwarkro: excavated fragments of soda water and pomade-holding bottles from Units 2, 4 and 5.

had lost their reflective mercury coating and lavender and perfume bottles. Perfume bottles were the most common non-alcoholic glass container present ($N = 107$, 35.0%). Further information on the items with identifiable marks is provided in [Table 8](#).

According to Beck (1977: 80), the eighteenth century was ‘a great age for perfume bottles’, something duly reflected in the relatively sizable number of them recovered. DeCorse (2001: 161) has noted that the nineteenth century then witnessed production of a greater diversity of bottle forms and shapes due primarily to technological improvements in the bottle manufacturing industry. These new bottle forms became important receptacles for new exotic European export items like Vaseline, tobacco snuffs and perfumes. Like ceramics, the bulk of the glass bottle assemblage was retrieved from Units 2 and 5 in areas historically recorded as being heavily populated by local people and thus further supporting the assertion that this area may have been the commercial epicentre of Anglo-Ahanta trade. [Table 9](#) gives a breakdown of the various non-alcoholic beverage bottles according to excavated units from which they were found.

A total of 415 imported smoking pipes were retrieved ([Figure 9](#)), almost all of them ($N = 407$, 98.1%) from Ntwarkro as opposed to Daazikessie. Stems comprised 401 of these items and measured 3.0–6.5 cm long, while there were 14 bowls. All appeared to be well fired and relatively well preserved with smooth, well burnished surfaces. Twenty-six pipes from Units 2 and 5 displayed signs of charring and evidence of extensive use-



Figure 8. Ntwarekro: alcoholic and non-alcoholic beverage stoppers from Units 2 and 5 dating to c. 1750–1880.

Table 7. Ntwarekro: alcohol beverage types by excavation unit.

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Total count and percentage of beverage type
Gin/Schnapps	21	1226	2	19	103	1371 (80.2%)
Whisky	4	77		8	24	113 (6.6%)
Wine	2	18		6	81	107 (6.2%)
Champagne	-	5		3	12	20 (0.7%)
Beer	4	87		3	3	97 (5.6%)
Total	31	1413	2	39	223	1708 (100.0%)

wear attested by light-brown coloration and several striation marks. Establishing the manufacturer and country of origin of the pipes was difficult because only four bowls were marked or decorated. DeCorse (2001: 165) has noted that the bulk of smoking pipes manufactured in Britain, continental Europe and America after 1800 were largely unmarked, while the shapes and sizes of their bowls were also very similar. The first decorated bowl

Table 8. Ntworkro: bottle fragments with identifiable marks.

Trademark/seal	Distillery name and location	Count	Unit	Stratigraphic levels
Star and Stork with a worm	J. H. Henkes Company, Netherlands	4	2	3, 4, 6, 7
AVDE monogram	A. van den Elaarf Distillery, Schiedam, Netherlands	1	2	6
Merkles	-	1	2	6
T & J.	Hunt Brewers, Branbury, England	1	5	6
	Bansley Bottling Company, England	1	2, 5	5, 7
F.C.C.	-	2	5	6
Walkers Kilmarnock Whisky	Kilmarnock, Scotland (established 1865 to the present)	3	2	5, 7
	Belfast, Northern Ireland	2	2	5, 7
Falcon Ba-----? (Trade mark: reindeer horn)	England	1	2	6
F.AS	England	1	2	4
Blanxenheym & Nolet (Trade mark: key)	Schiedam, Netherlands (established 1714 to the present)	1	2	6
Eagle Whasekame & Co. (Trade mark: eagle)	Netherlands	3	2, 5	3,4,5

Table 9. Ntworkro: non-alcoholic beverages, other items in containers and mirrors.

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Total types	Percentage of total non-alcoholic containers
Pomades	-	5	-	3	7	15	5.2
Scented oils	-	14	-	7	14	35	11.7
Mirrors	1	7	-	-	9	17	5.5
Syrups	2	16	-	2	12	32	10.4
Perfumes	3	39	-	16	48	106	35.0
Toilet water	4	16	-	3	23	46	15.2
Pickle jars	1	9	-	1	9	20	6.5
Mineral water	4	16	-	3	6	29	9.4
Soda water	-	1	-	-	2	3	1.0
Total	15	123	-	35	130	303	100.0

displayed flowery patterns at the point where the bowl attached the stem, the second had a bulging ridge around the rim, the third the 'TD' trademark embossed at its base and the fourth the word "LONDON" boldly inscribed at the bottom.

The bulk of the imported smoking pipes found at Dixcove probably originated from Britain because British pipes dominated collections at Elmina and other parts of British West Africa by the end of the nineteenth and twentieth centuries (DeCorse 2001: 165). Those retrieved from the lowest stratigraphic levels of the Dixcove excavations should be assigned a post-seventeenth-century date because current archaeological evidence and documentary information suggest that smoking tobacco through pipes was a practice introduced onto the Gold Coast during that period (Harrington 1978: 1–5; DeCorse 2001: 163). Their recovery from all levels of the excavations corresponding to the post-Atlantic contact period attests to their popularity as smoking devices among the local population. That no smoking pipe of local manufacture was retrieved from the excavations is also further testimony to the popularity of imported pipes. Together with tobacco, they were most likely among the earliest European consumables offered for sale along the Dixcove coastline.



Figure 9. Ntwarkro: examples of excavated tobacco pipe bowls and stems dating to c. 1780–1900.



Figure 10. Examples of excavated Venetian polychrome (background) and monochrome (foreground) glass beads from the Dixcove study area dating to c. 1640–1820.

Table 10. Ntwarkro: pharmaceutical products by excavation unit and stratigraphic level.

Pharmaceutical product	Origin	Unit	Stratigraphic level	Date range
Fisher's Seaweed Extract.	England	5	Level 6	1890–1920
Handysides Blood Food	England	2	Level 5	1900–1920
Kruschen Salt	England	2	level 6	1930–1950
Bailay Castor Oil	England	2	Level 5	1930–1950
Sloans liniment	England	2	Level 3	1940–1950
Vaseline	ChesebroughNew York	5	Level 3	1930
Liqufruta Cough Syrup	England	2	Level 1	1950

Healthcare and medical equipment

A total of 315 items relating to healthcare practices was found. They principally comprise fragmented pharmaceutical bottles, a microscope dish (Figure 11), poison vials, chemical suppositories and household cleaning containers. Most display a heavy patina on their exterior and interior surfaces and represent 12.3% of the total glassware assemblage. Like the other glassware items, the bulk of this category of finds were retrieved from Units 2 and 5 and from all stratigraphic levels except those of likely pre-Atlantic contact date (Level 10 (200 cm) in Unit 5 and Level 11 (220 cm) in Unit 2).

Blakeman (2010: 226) has noted that before the nineteenth century medicines, particularly ointments, which had previously been packaged in galipots and small barrel-shaped pudding bowls and pots for export, were now placed within straight-sided transfer printed pots that rarely exceeded 5 cm in length and that had details of the manufacturer, retailer and the compounds embossed on their sides. In the latter half of the twentieth century,

**Figure 11.** Ntwarkro: microscope dish with patina dating to c. 1880–1920.

shallow dishes with transfer printed lids and glass jars with ceramic button lids became popular. The relatively high count of pharmaceutical bottles associated with Western orthodox medicine suggests that it was heavily patronised by the indigenous population and was not limited to British residents of Fort Metal Cross alone.

Level 4 of Unit 5 produced the base and lower body of a ceramic water filter (Figure 12) partly embossed on its side with the inscription 'Doulton', suggesting that it was probably manufactured by the Doulton Water Filter Company, at Lambeth, London. Also found at all levels of the stratigraphy were large numbers of a local vessel similar to current ethnographic models in use at Dixcove for preparing indigenous medicinal concoctions. This suggests that issues pertaining to health and sanitation were a priority and of serious concern, not just for the British residents of the area, but also the indigenous population. That these vessels were recovered at all levels of the stratigraphy also indicates that indigenous medical practice has persisted for several centuries in the area.

European weaponry and firearms

A total of 52 heavily fragmented metal objects associated with European weaponry were recovered. They comprised two heavily worn gunflints, two fragments of shells, 42 cannons and part of a musket, all retrieved from Units 2 and 5. Gunflints retrieved



Figure 12. Ntwarkro: lower body of the Doulton water filter from Unit 5, Level 4, dating to c. 1880–1920.

from archaeological contexts are usually associated with European firearms. DeCorse (2001: 171) has, however, cautioned that they were sometimes also used as strike-a-lights in the past, postulating that most of the gunflints recovered from his extensive fieldwork at Elmina Old Town may have been used for this activity. The majority of those found at Dixcove had battered edges or distinctive U-shaped wear patterns that suggest they were used and reused as strike-a-light.

All the cannons with their decrepit carriages were unserviceable and were found within the precincts of the fort. The largest consisted of two nine-pounders located on its south-east bastion and two very large cannons of unknown poundage located southwest on the spur curtain facing the anchorage at the cove. Others included 12 six-pounders and 16 four-pounders on the spur facing south to the sea and ten one-pounders on the north bastion facing the town. All the cannons were of British origin with the insignia 'GR' and 'G.R.A.C' embossed on them. The 'GR' insignia (Figure 13) is the royal cipher of George III (reigned 1760–1820). The earliest European weapons to be traded on the Gold Coast consisted of axes, half pikes and crossbows (Jones 1983: 132). However, during the sixteenth century, small and limited quantities of smoothbore muskets became the principal European firearm traded there (Vogt 1979: 45, 155–157, 192).

Literacy and education-related materials

A total of 154 artefacts associated with education and literacy were found, comprising 148 fragments of slate boards and six fragmented slate pencils (Figure 14). It is worth noting



Figure 13. One of several unserviceable British-made cannons from Dixcove dating to c. 1780–1900.



Figure 14. Ntwarkro: slate pencils and slate boards from Units 2, 3 and 4 dating to c. 1890–1950.

that 123 (79.9%) of these items were confined to the upper stratigraphic levels (Levels 1, 2, 3 and 4) of Units 2 and 5. Examination of the writing slates under a magnifying glass revealed a concentration of several irregular and jagged scratch marks/fine wear patterns concentrated along their inner central portions that indicated extensive usage. Their recovery near the fort suggests that writing and formalised instructional education may have been undertaken inside it. Some of the items found in association with these education-related materials included imported ceramics and plastic beads that can be dated to the mid-nineteenth to mid-twentieth centuries. Since the stratigraphy of Units 2 and 5 is undisturbed, these dates can be assigned to the educational materials under discussion.

Household accessories

Two corroded silver spoons, one fork and five metal blades believed to be knives (representing 0.2% of all the metal objects found) and 98 fragments of drinking glasses (representing 3.8% of the total number of glass items) constituted the principal household accessories recovered, mainly at Ntwarkro. To facilitate their analysis, the metal items were first desalted by boiling them in water and then sun-dried to remove caked debris to expose any manufacturer/attrition marks that might have been embossed on them in order to facilitate their identification. Also recovered were three pieces of transparent broken glass belt-jars with patina that are believed to be part of a lantern. Together, they constituted the only artefacts associated with lighting to be recovered at Dixcove. The bulk of the glassware, mainly parts of tumblers, carafes and soup bowls, were retrieved

from the upper stratigraphic levels (1–3) of Units 2 and 5 and are dated to the period 1850–1950 by association with datable European ceramics and beads also retrieved there.

Discussion

The cumulative evidence from the archaeological investigations undertaken at Dixcove indicates that three trade systems operated simultaneously in the research area during the period covered by this study. The first was an intra-regional trade network with neighbouring coastal polities like Fanti and Nzema and inland populations like Wassa and Ncassa, the second with neighbouring polities on the Atlantic seaboard in Ivory Coast and at Whydah in modern Bénin and the third the inter-continental trade across the Atlantic with European companies and interloper traders. All three of these trade systems were integral and contributed significantly to the growth and development of the local economy. Historical (Barbot 1732: 433; Fage 1967: 42; Daaku 1970: 5–7) and ethnohistorical sources (Nana Kwesi Apeatu, pers. comm., 23 July 2015; Maxwell Akah, pers. comm., 26 December 2015; Isaac Attu Cromwell, pers. comm., 26 December 2015) have it that the first and second systems predated the advent of Europeans to the Gold Coast and involved the exchange of a variety of local products such as fish, salt, *quaqua* cloth, *cori* beads, leopard skins, pottery, food staples and processed shellfish. According to Daaku (1970: 6) and DeCorse (2001: 142), early European traders exploited to their advantage the big and ready market for local products like *quaqua* cloth (also called *adra* or Benin cloth) and *acori* beads on the Gold Coast by procuring large quantities of them from Ivory Coast and Benin, where they were produced on a large scale, and reselling them on the Gold Coast for profit. The relevance of the intra-regional trade system was that it made possible the exchange of a variety of goods readily and easily available in one area to less endowed areas with a demand for them. Analysis of the imported artefact inventory recovered from the excavations indicates that they originated from diverse places suggesting that Britain, the main European power trading at Dixcove, did not only procure goods from home, but also relied on supplies from other countries to satisfy local demand. Some of the products identified in the archaeological assemblage that document this include Chinese porcelain, Rhenish stonewares and Bohemian and Venetian glass beads.

The recovery of slate pencils and boards attests to the importance of literacy and Western education at Dixcove. That the bulk of the education-related artefacts were recovered at Ntwarkro and from stratigraphic levels corresponding to the mid-nineteenth to early twentieth centuries suggests that Ntwarkro was probably the local centre of education and instructional training because Western style education gained eminence during that period. According to DeCorse (2001: 149), institutions linked to Basel, Wesleyan and Catholic missions were at the forefront of this endeavour. That the bulk of the educated-related materials were recovered around the precincts of the fort is testimony to the fact that the British also documented their trade/administrative transactions with local people. It was difficult to gauge from the available data the success of European education at Dixcove primarily because of limited documentation and the unusually low count of education-related materials retrieved and their fragmented nature. However, it was probably not common in the community and largely limited to mulatto individuals and the children of the local élite. Its impact was probably of little consequence overall, especially as there is no record of expatriate teachers having been present.

The recovery of substantial quantities of metal objects associated with various forms of building work is testimony to the regularity of constructional works undertaken at Dixcove. That the bulk of them were recovered around the fort's precincts indicates that much architectural re-engineering and re-enforcement were undertaken on it during the period of its occupation. According to Lawrence (1963: 292–298), no other European trade station on the Gold Coast experienced and resisted as many sieges and bombardments as Fort Metal Cross. This was primarily because of the intense commercial rivalries that periodically erupted between British, Brandenburger and Dutch traders along the coast that occasionally led to war, a situation necessitating regular repair work to refurbish and make structural alterations to the fort's architectural design to expand and fortify it. Red bricks, granite blocks, lime and wooden planks constituted the main building materials used in constructing Fort Metal Cross (Lawrence 1963: 91–95).

Five of the liquor bottles retrieved from the excavations had a caked dark-brown talc-like substance embedded at their bottoms that easily disintegrated between the fingers after applying only a little pressure. While these impregnations could not be clearly identified, they suggest that liquor bottles were re-used by local people for other purposes aside from the storage of liquor after the original liquor contents had been consumed and the bottles had been discarded.

The combined evidence (archaeological, historical and ethnohistorical) reviewed above provides a glimpse of past socioeconomic and cultural relations between British traders and the indigenous population of Dixcove. Their relationship appears to have been generally convivial and symbiotic, inextricably linked to trade and to the economic interests of the two parties. That a large number of local people settled around the precincts of the fort further testifies to the harmonious relations between them. Dow (1927: 2), for example, noted during his visit to Dixcove that 'most of the huts belonged to Negroes in the service of the factory and were under the protection of its guns'. Such settlement was, however, probably also necessitated by security concerns as they sought protection from the Nzema and the Dutch whom they mistrusted (Lawrence 1963: 301–303). That 14 of the heaviest cannons (8 to 10 poundage capacity) were directed toward the land, rather than the sea, appears to support this assertion.

Conclusion

The impact of trade can be gauged by the extent to which foreign products are accepted by and integrated into a community. The number and wide range of European trade commodities recovered from the excavations at Dixcove shows that local people there had developed strong tastes and inclination for European products, notably alcoholic and non-alcoholic beverages, ceramics, Western orthodox medicines and tobacco. Other areas where change was evident included Western education and architecture. It was, however, difficult to glean from the archaeological record the effect that imported trade commodities had on settlement patterns or the ideology and belief systems of local people. The high demand and propensity for imported goods nevertheless not only attests to the socio-cultural interactions and expanding commercial relations between the two groups, but also offers a clear testament to the vibrancy, sophistication and ever-widening nature of the economic system that existed along the Dixcove coastline.

The multiplicity of economic opportunities, exchanges and incentives created by trade probably encouraged other ethno-linguistic populations to resettle at Dixcove. This is reflected in the dramatic increase in molluscs, local ceramics and imported pottery recovered from stratigraphic levels corresponding to the Atlantic contact era compared to those that predate it. The wide array and number of locally produced artefacts and exotic European items recovered is phenomenal and attests to the importance of the coastal trade in the Dixcove area. Dixcove may have vied with Fort St Antony for commercial dominance and was probably the administrative hub of British traders along this stretch of the Ghanaian coast. That the bulk of European imports were retrieved around the precincts of Fort Metal Cross and the adjoining indigenous settlement suggests that the area was the commercial epicentre of the coastal trade and that the population of Ntwarkro was bigger than that of Daazikessie in the past.

The coastal trade impacted on other aspects of the local economy because it provided a wide variety of inputs necessary for their facilitation. For instance, the large quantum of fish remains found in the post-Atlantic contact stratigraphic levels compared to those of pre-contact age suggests that novel introductions like imported cotton sails and nets probably boosted the output and growth of the local fishing industry. In addition, trade facilitated the introduction of new products like tobacco and a gamut of novel alcoholic beverages, mainly from Europe, into Dixcove society. Another development was the modification and diversification of the intra-regional trade network, leading not only to an increase in the volume and array of goods exchanged but also to their diversification, with European imports now dominating.

Trade along the West African coast facilitated the evolution and growth of a new social stratum of wealthy, property-owning indigenous merchants at Dixcove. The building of several, large storied European style houses using imported building materials such as slate, baked clay tiles and asbestos roofing systems is overwhelming evidence of an expanded African élite class. That all these structures were sited on the beachfront close to the fort suggests that their owners had established a good and sound rapport with the British residents of the fort.

Fort Metal Cross played a vital role in the ascendancy of the political economy of Dixcove. It served not only as the principal catalyst that boosted trade and tilted the regional balance to her advantage, but was also the single most important factor facilitating the rise and expansion of the two Dixcove states from the status of small insignificant fishing villages to places of cosmopolitan standing with links to bustling ports such as Bristol and Liverpool in Britain and Boston and Charleston in North America, thereby directly connecting the research area to the global economy.

Notes on contributor

Fritz Biveridge is Senior Lecturer and Head of the Department of Archaeology and Heritage Studies, University of Ghana, Legon. His research interests include issues relating to heritage management, culture contact, acculturation patterns and the socio-economic and political implications of the latter on the groups involved. He is currently investigating the consequences of the British presence along the Dixcove coastline and how it impacted Ahantaland and neighbouring polities in the early sixteenth to late nineteenth centuries.

ORCID

Fritz Biveridge  <http://orcid.org/0000-0001-7754-3394>

References

- Alpern, J. 1995. "What Africans got for their slaves: a master list of European trade goods." *History in Africa* 22: 5–43.
- Anquandah, J. 1999. *Castles and Forts of Ghana*. Paris: Atlante.
- Barbot, J. 1732. *A Description of the Coast of North and South Guinea*. London: Churchills Collection of Voyages and Travels.
- Beck, D. 1977. *The Book of Bottle Collecting*. London: Hamlyn
- Bennet, N.R. and Brooks, G.E. (eds). 1965. *New England Merchants in Africa: A History through Documents*. Boston: Boston University Press.
- Biveridge, F. 2005. "An archaeological investigation of the Kpone coastline and its implications for understanding the coastal Dangbe." MPhil diss., University of Ghana, Legon.
- Blakeman, A. 2010. *Blakeman's Bygones Review*. London: Dearne Valley Printers.
- Bosman, W. 1705. *A Description of the Coast of North and South Guinea*. London: Frank Cass Ltd.
- Coombs, D. 1963. *The Gold Coast, Britain and the Netherlands 1850–1874*. London: Oxford University Press.
- Daaku, K.Y. 1970. *Trade and Politics on the Gold Coast 1600–1720: A Study of the African Reaction to European Trade*. London: Clarendon Press.
- DeCorse, C.R. 2001. *Archaeology of Elmina. Africans and Europeans on the Gold Coast. 1400–1900*. Washington: Smithsonian Institution Press.
- De Marees, P. 1987. *Description and Historical account of the Gold Kingdom of Guinea (1602)*. Oxford: Oxford University Press.
- Dow, G.F. 1927. *Slave Ships and Slaving*. Salem: Marine Research Society.
- Dumett, R.E. 1987. "Pre-colonial gold mining in Wassa: innovation, specialization, linkages to the economy and to the state." In *The Golden Stool: Studies of the Asante Center and Periphery*, edited by E. Schildkrout, 209–224. New York: American Museum of Natural History.
- Fage, J.D. 1967. *The History of West Africa*. London: Routledge.
- Feinberg, H. 1989. "Africans and Europeans in West Africa: Elmina and Dutchmen on the Gold Coast during the 18th century." *Transactions of the American Philosophical Society* 70(7): 1–186.
- Francis, P. 1995. *Beads of the World*. Algen: Schiffer Publishing Ltd.
- Godden, G.A. 1968. *The Handbook of British Pottery and Porcelain Marks*. Washington: Frederick A Praeger Publishers.
- Graham, C.K. 1976. *The History of Education in Ghana*. Accra: Ghana Publishing Corporation.
- Hallett, R. 1963. "The European approach to the interior of Africa in the eighteenth century." *Journal of African History* 4: 196–223.
- Harrington, J.C. 1978. "Dating stem fragments of seventeenth and eighteenth century clay tobacco pipes." *Quarterly Bulletin of the Archaeological Society of Virginia* 9: 1–5.
- Jones, A. 1985. *Brandenburg Sources for West Africa History 1680–1700*. Wiesbaden: Steiner Verlag.
- Kea, R. 1982. *Settlements, Trade and Politics in the Seventeenth Century Gold Coast*. Baltimore. John Hopkins University Press.
- Lawrence, A.W. 1963. *Trade Castles and Forts of West Africa*. London: Jonathan Cape.
- Majewski, T. and Schiffer, M.B. 2011. "Beyond consumption: towards an archaeology of consumerism." In *Historical Archaeology* edited by T. Majewski and D. Gaimster, 191–207. Tucson: Springer.
- Metcalf, G.E. 1964. *Great Britain and Ghana. Documents of Ghana History: 1807–1957*. London: Thomas Nelson & Sons.
- Morley-Fletcher, H. and McIlroy, R. 1984. *Christie's Pictorial History of European Pottery*. Oxford: Phaidon.
- Nunoo, R.B. 1957. "Excavations at Asebu in the Gold Coast." *Journal of West African Science Association* 3: 51–70.

- Priestley, M. 1969. *West African Trade and Coast Society*. London: Oxford University Press.
- St Clair, W. 2006. *The Grand Slave Emporium. Cape Coast and the British Slave Trade*. London: Profile Books Ltd.
- Schrire, C. 1998. *Digging Through Darkness: Chronicles of an Archaeologist*. Charlottesville: University Press of Virginia.
- Schledorn, L. 2003. *History of a Natural Product. De Porcelyne Fles*. Amsterdam: Wander Publishers.
- South, S. 1977. "Research strategies for archaeological pattern recognition on historic sites." *World Archaeology* 10: 36–50.
- Van Dam, J.D. 2004. *Delffse Porceleyne: Dutch Delftware 1620–1850*. Amsterdam: Waanders Publishers.
- Van Dantzig, A. 1978. *The Dutch and the Guinea Coast 1674-1742: A Collection of Documents from the General State Archives at The Hague*. Accra: Ghana Academy of Arts and Sciences.
- Van Dantzig, A. 1980. *Forts and Castles of Ghana*. Accra: Sedco Publishing Limited.
- Vogt, J. 1979. *Portuguese Rule on the Gold Coast: 1469–1682*. Athens: University of Georgia Press.

Archival sources

The Public Records Office, London

- P.R.O. T.70/1130 (1750).
- P.R.O. T.70/1536.
- P.R.O. T.70/1530 [John Roberts Committee] 25 February and 6 June 1759.
- P.R.O. T.70/1455. F1. 1788.
- P.R.O. T.70/1130/1750.

Furley Collection. Balme Library, University of Ghana, Legon

- NBKG 82/1715.