

Archeological and Historic Survey of *Ga* Costumes: 15th18thcentury

Dr. Regina Kwakye-Opong Department of Theatre Arts, University of Ghana, Legon Email: yaapomaa2008@yahoo.com

Abstract

This paper surveys the archaeological discoveries of Ga costumes and adornments from the 15th-18th century. It also highlights the historical and the socio-cultural evidence of their costumes and adornments, make-up, headdresses/hairstyles, in terms of sex, status and so on. An important way of looking at the strength and dynamics of a creative art is by examining its earliest periods. This allows the researcher or reader to get a glimpse of the 'life' or chronology of that creative work, in order to draw tangible conclusions and provide helpful suggestions. In this pursuit this paper employs interviews, as well as historical and archaeological accounts by some early European travelers to the Guinea Coast around 1600, in addition to some oral traditions. Even though scanty, it was observed that clothing differentiated the poor from the rich, and also designated occupation, mood and the status of royals. The paper concludes by recommending further research, documentation and also calls on traditional leaders to help sensitize the people through seminars, workshops and durbars.

Key Words: Ga people, history, clothing, costume, adornment, century

1. Introduction

Throughout the world history has been a valuable tool used to help a people to know their past. By such means society is not only built but as well gets to know the historic past, juxtaposes with the present to inform the future. This also acts as a means of assessing the strengths and dynamics of a piece of art from 'her' earliest beginnings to the present. In this perspective, a researcher or reader gets a glimpse of the 'life' or chronology of that creative work; in order to accentuate its origin, progress or deterioration, and thus, draw very tangible conclusions and suggestions. Hence, its past coupled with its developmental stages point to either a state of progress or that of retrogression and therefore acts as "the speculum and measure-tape" that portray the true shape and resilience of the art (Kwakye-Opong 2011). The history of Ga costume is presumed to have its beginning from 1500 or earlier. It can be traced through archeological discoveries together with artist impressions as reported by some early European travelers to the Guinea Coast. The history of Ga people has been studied by various people. Ethnographic studies by Field (1965); Quacopoome (2001), for instance report on the social life of the Ga people. Culturally, issues on rite of passage, traditional governance, and worship of deities among others have extensively received attention. What seems ignored, however, is research on the costume history of the people. This paper through interviews, oral sources, and secondary data, examines the earliest record of Ga costumes between the 15th and 18th centuries. It was observed that the earliest forms of clothing which were close to nudity were recorded by European travellers who first came to the Guinean Coast. Though scanty, these clothes delineated the rich from the poor, and also identified class, royalty, gender, occupation, transitions in life such as death and funeral, as well as religion. Gold, beads, fabric and make-up, were used during the early years, presumably, 14th-17th century. However, around the 18th century the life style of the Ga people was influenced by the European merchants who came to trade with them. (Hair et al 1990; Larbi 2000)The paper concludes by suggesting similar research on the various ethnic groups in Ghana; since most valuable information on such clothing tradition is nicked in the bud. Whether the Ghanaian society is advancing with regards our clothing culture, remains a 'mystery' because the history of it seems 'boxed'.

2.Digging up History for Development.

Historical facts on all cultures over the world have received extensive attention by various writers. Ranging from religion, politics, economics and social stances of the society, writers have helped readers get a glimpse of events from the beginning till now. Among some of these writers are Levtzion (1973); Anquanda (1982); Rattary (1959); Barbot (1992) and Conton (1965) who have provided historical accountson continents, countries, towns and ethnic groups. In *West Africa in History*, Conton reports on the life of the African before 1800, in which he establishes the arrival of the Europeans from the 1500 to 1800. This chronological study notes: "how the way of life of men and women in West Africa has changed graduallysince man first began to live here 500,000 years ago" (Conton 1965:9). He reiterated further that humans back then at the beginning were 'probably' not able to speak and also lived life much like animals. There was nothing like ethnic divisions as well as indications of communities such as towns and villages; their main concerns were food and drink. There were no Ghanaians, Nigerians nor Ivoirians. Historians got the true nature of situations through the things people accidently dropped,



or left carelessly about or hid and forgot about. Whiles some items like clothing and food decayed and disappeared, others like tools, pottery, and coins were preserved for many centuries. One way of finding the dates to events that happened was by noting the depth at which the various object were found. Conton therefore reports on the Dark Ages from about 400,000-150,000 years indicating that:

when the second wet period dragged on man was gradually driven towardthe coast by an advancing green wall of forest....About 280,000 years heseems to have been forced to leave West Africa altogether, except perhapsnear river estuaries and on offshore islands such as the Isle de Les Plantains, and Sherbo. (Canton 1965)

This however did not affect all parts of Africa. A new culture called the Middle Stone Age lasted for about 5,000 years from 8,000-3,000 years where people became skilful that 'microliths' (small tools) made of hard stones called quartz were used. A still better period, Neolithic or Stone Age, gave the Wet African mastery on the materials he was using to create tools. Pottery was developed alongside these implements and examples are the Egyptian pottery dating about 6,000 years. Archaeologists also discovered the use of beads as ornaments used by Neolithic men and women. Recently in the valleys of Niger and Benue very old and very beautiful pottery works in the shape of human heads has been discovered to reveal the aesthetic nature of art at the time.

In *Rediscovering Ghana's Past*, Anquandah also among other things establishes the origin of Ghanaians; their farming and village life, people of the North, the Akan and those living in sites along the Accra plains. He mentions that: "the exploitation of minerals for a long distance trade wascertainly one of the vital factors which facilitated urbanizationand state formation in the Middle Iron Age in Ghana." (Anquandah 1982)Jinyini and Chemraso in DormaaAhenkro, Nsohunu, Banda Nkwanta,Senikrom, Awusin and Atuna in Takyiman were among the ancient towns with sites of traditional gold mining activities.(Anquandah 1982) Oral traditions about Ayawaso, the site of the 16th-17th century capital of Greater Accra, states that the nuclear settlements of the century capital of Greater Accra were mining alluvial gold for export before AD 1600. They, however, stopped mining when they realized that their Akan neighbours started producing superior gold around 1400. These records are authentic indications that there were gold industriesaround that period. In Brong Ahafo region for instance, there existed an important "local Textile industry which traditions date centuries back". Moreover, the Savannah land of Ghana; the ancestral traditions of the Mamprusi, Dagomba, Gonja, etc, located within the Black and White Voltas were on the trade route where Kola, ivory and gold was plenty. These Volta influenced areas are noted for the beginnings of:

...iron technology and potting. By the first half of the B.C. there were established in this area village communities some of which adopted new traits including stock breeding pottery craft and stone grinding industries for the production of polished axes, bracelets and beads.

Anquandah concludes that out of the early period of Ghanaian state formations emerged a new society whose development might not be appropriately connected with Asia and the New world with regard Ghanaian cultural traits like, iron technology, gold technology and gold trade. (Anquandah2006)

Commenting on the earliest forms of dressing, Levtzion (1980) established that the ancient kingdom of Ghana was believed to have developed alongside small states within the Guinea Coast, and that ancient Ghana and Mali were in the Sahel and Sudanic Savannah respectively. Also the *Mossi* who comprised both the *Dagomba* states in the Guinea Savannah and *Akan* states developed within the same period. The pivots of this early civilization: Ghana, Mali and Songhai flourished through trade and commerce, technology, education and the arts- which included clothing and adornment. Accordingly, these activities brought with them interactions and inter-empire transactions, hence, influences in art and culture. The trans-Saharan trade in 1145, for instance brought to Bilad al-Sudan camels loaded with rich merchandise of copper, red and other colours, garments, woolen cloths, turbans, aprons, assorted beads made of glass, shell or stone, as well as spices and perfumes. Around 1532, dozens of ships visited Elmina and took with them over "400 kilograms of gold each year to Lisbon. The use of skins as costume was also identified with the Sudanese people of Ghana around the tenth century, but later on around the eleventh century even commoners in Ghana wore robes made with cotton, silk, or brocade. Levtzion emphasizes that "only the king and the crown prince had the right to wear sewn clothes according to the Muslims fashion" (Levzion 1980).

3. Survey of Historic Costumes

The final part of the theoretical base concentrates on people who have tried to give a systematic account of costumes or fashion of other cultures. Kwakye-Opong (2011); Tortora& Eubank (1994); Barton (1969) and Yarwood (1992) in their studies give a chronological account of costumes of some cultures. Kwakye-Opong for instance, inher thesis tries to trace the Ga costume from 1700 to 2100. In it she notes that earlier clothing for the



people were scanty, but it developed along other cultures such as the *Akans* who settled among them; as well as influences of other cultures through their migration, and finally acculturation from Western fashion.

Then too Yarwood(1992), Tortora&Eubank(1989) Barton(1969) and Payne(1965) give a chronological summary of clothes and accessories used in the Ancient World since 3000B.C.-A.D.300, from Mesopotamia to present Vietnam; 1964-1974. Clothing elements discussed under the various periods include fabrics, wigs, hairstyles, beads, gold, rings and so on. Interestingly, each of these items is treated with accuracy and precision. The authors draw reader's attention and enthusiasm with pictorial evidence as well as supporting sketches. As a result, Payne (1965) does not only establish the asserted information, but also finds it more appropriate to dilate on how some of the costumes are worn. She reports:

One figure from the rower tomb of the fifth dynasty in the Cairo museum has the overlapping end of his loin skirt rounding out in front with no sharp angles; another has a sharp angular fold on the left side only; on a third there is a half-pyramid extending beyond the body in what seems to be a solid almost architectural structure.

The accounts of Clarke (2009), Gardi (2009), Anquanda (1982) Levtzion (1980), Barbot (1723), Ogilby (1670), de Maree (1987/1602) and many others point to the earliest record of the culture of the people living in parts of the West African sub-regions. Among other things some of these archeologists, historians and ethnographers witnessed and reported on clothing and accessories worn between the tenth and seventeenth centuries.

Regarding textiles; archeologist have reported that woven-striped fabrics have existed in some parts of West Africa around the sixth century A.D. Various writers have also emphasized on the origin of strip-woven fabric, tracing it with the Egyptians then to the Roman Kingdom, through the Northern parts of the continent, across the Sahara into the Central, Western and extreme Southern parts of the African continent. Assessing the clothing nature in Mali around the eleventh and eighteenth centuries, Bolland (1992) noted that textiles discovered among the skeletal remains in the burial caves proved that the people used cotton, wool, leather and fiber skirts which point to the obvious existence of looms, and fastenings at the time. These reported worksare appropriate spring boards that form the pivot of this paper, informing the stretch of thought and the pattern of development.

4. Ethnographic account of Ga people

Accra emerged in the seventeenth century as one of the many trading centers on the Gold Coast of West Africa that served as a link between the expanding Atlantic economy and the African interior. According to Parker (2000), "... by the beginning of the eighteenth century the three townships that together constituted Accra were the political, economic, and sacred epicenter of Ga state and society." For the next two hundred years, a struggle for possession of the town surfaced when European trading forts and local leaders competed with powerful African neighbours over the jurisdiction of the town and for a portion of its mercantile wealth. Around the middle of the nineteenth century the British consolidated their stand as the dominant coastal power and in 1877, Accra emerged the headquarters of the newly created crown colony of the Gold Coast, and later in 1957 as the capital of Tropical Africa's first independent country.

As recorded in Ghana's census in 1984, Accra had a population of 859,600 people, but currently, according to the 2011 census, Accra is one of West Africa's biggest cities with approximately four million people. In line with the period under study, settlers in the Accra plains were the *Ga* and *Dangme* people who have similar traits with regards language, politics and socio-cultural activities. The *Dangme* people were found on the east and consisted of; *Ningo*, Shai/Se *Kpone/Sege*, *Osu/Osudoku*, *La/Ladoku* and *Gbugbla*. The *Ga* occupied the west and comprised of the *Ga* Mashie of Accra, *Gbese*, *Kinka*, *Sempe* in central Accra and others from places like *Akuapem*, *Akwamu*, *Fanteland*, *Osudoku*, *Aneho* in Togo, and Lagos(Nigeria) found in Osu, La, Teshie, Tema, Nungua, KorleGonno, Mamprobi and some other places (Anquandah2006).

There are a lot of myths surrounding the origin of *Gas*; one of these myths claims that their ancestors came to this present destination from the east and north and dwelled among several *Guan* groups who preceded them. History cannot determine when this happened and how long these *Guans* who lived before them had stayed there, however, Henderson-Quartey (2001) relates: "The living conditions of early humans, universally, have been studied in the Stone Age which covers the periods formed . . . (Approx. 3 million to 15,000BC)." He continues further that: "this definition would be used to get human activities in the Accra Plains into the frame of universal historic development" (Anquandah 2006).

Another myth also maintains that the traditional history of *Gas* begins with migrations generally believed to have started from the regions east of the Volta River. It is anticipated that, the ancestors of the ethnic groups of Accra, Lateh, Obutu and Mowuremigrated from the sea to the Coast one after another. Bruce-Myers (1978), a *Ga* historian also recorded another version which says: "The *Gas* came all the way from the central part of the continent... and they are the kinsmen to the Benin."



Through her own conclusions from "scattered fragments of circumstantial evidence", Margaret Field (1940), an anthropologist, relates that: "...the three Ga speaking refugee parties: the Ga-Bonni, the Ga-Wo and the Ga-Mashi migrated separately from Tetetutuand other Benin parts." According to her, the people themselves claim they came down the Niger from inland before traveling along the coast, yet Field asserts that these perceptions do not affirm the true origin of the Ga because they lack evidence. This journey in question according to Krobo traditions covered the north, central and southern territories of Benin and Togo, however, Ga history is not specific on the journeys from Sameh or Benin parts to Tetetutu from where the migration started and ended to the Accra Plains. Nonetheless, Henderson-Quartey (2001) continues:

It could be inferred from the references made to the Ga on some of the routes which were not mentioned in Ga stories that they were numerically insignificant and never the vanguard of the movements. It was most probably at Tetetutu that they regrouped into the Ga-Mashi, the Ga-Wo and the Ga-Bonni. This supposedly, explains the lack of details in the Beginnings of the Ga migration.

Tracing the period of the migration is, therefore, a very difficult task because we cannot be sure of how far back into prehistoric periods the migration history could emanate. Yet what appears dependable is that the *Ga*, the *Adangme*, and the related ethnic groups reached their present destination within the same duration from the regions of the south east, which is far beyond the present frontiers of Ghana. And Henderson-Quartey (2001) finally sums up: "This is the one clear guide and has been corroborated by archaeological and linguistic studies in this region". But so far no specific date has been established for the first migration to the Accra Plains.

The territory of Ga stretches from Lanma in the West to Tema in the east and from the foot of the Akwapim hills in the north to the Atlantic Ocean in the south. To the north they share a common boundary with the Adangbe and in the west with the Afutu and Fante (Akan). The land of Ga people stretches from the Coast of Ghana from their capital at Accra which is also the capital of Ghana northwards to the foot of the Akwapim Hills and to the east is the Densu River. The traditional western limit where the Ga settled is the Sakumo River and the Sakumofio lagoon, a boundary located by a hill and known to the Ga as Lanma. Gas are almost merged with the closely related Dangbe speaking people; located about thirty miles to the east, between Tema and the Laloi lagoon. As indicated already in the introduction chapter, the Gaare divided into six major traditional groups which form the modern city of Accra. These are sometimes referred to as towns and they are: GaMashie (Central Accra), Osu(Christiansburg), La, Teshie, Nungua and Tema. Each of these towns has many villages which are sub divided into quarters (akutso) and their numbers differ from town to town. The area occupied by the Ga people lies between longitudes 0°15Wand 0°00' (Greenwich Meridian) and latitudes 5° 30' and 5° 45' north. With regards to the climate of the town, Azu (1974) has quoted Boateng as saying: "Rainfall is very low, averaging about 30" and the annual average temperature is about 79-6°F". This area constitutes the coastal plains with low hills, grassy plain, and patches of scrub. Along the coast are series of lagoons of different sizes that form the basis of the people's economic and religious sustenance. Because of its cosmopolitan nature, Accra is basically the centre of trade in Ghana which has necessitated a construction of beautiful tall buildings for transacting business. Presently, it is theonly town in Ghana that provides international air travel services.

5. Archeological findings on Adornments

Radio – carbon records obtained in field investigations conducted on *Gas* in the late 1970's indicated that the settlement was founded probably in the fourteenth centuries but flourished in the 1500s (Anquandah 2001). One of the earliest settlements of the "*GaWo* was Wodoku which is sited $5^0 38^1$ North and $0^0 10^1$ West in East Legon, Accra". It is the first of the *Ga*-speaking group to arrive at the present site of the Ningo people (*Manga* people) presumed to be the early settlers along the coast. Other sites include KorleGonno, Oklu, Opo, Ajenkotokuand Abochiman (Davies 1967; Field 1940; Dakubu 2009). It is worth isolating these sites because specific clothing items were retrieved by historians and archeologist from some of these places.

A major determinant of Ga cultural identity-including clothing can be traced to ancient Ga pottery discovered from ruins in Ayawaso around the 15th century. This potteryrevealed the morphology and the life of pre-urban Ga around the time, and stressed "flowing profile,round base, hematite body and coating, plastic decoration in the form of stamping, ridge designs as well as incisions found on the neck, shoulder and body of vessels.

The 17th century saw a new form of innovation or creativity such as cylindrical pedestals with inverted foot rings; believed to be fashioned after imported brass vessels and sophisticated-relief appliqué designs that portrayed motifs such as plants and reptiles, as well as patterned and stamped designs (Anquandah 2006). The pottery had a "reddish brown and sometimes black fabric... fine-grained and occasionally coarse, and contains quartz fragments and small peaks of mica". Other discoveries on the Shai Hills at Ladoku and Woduku included hornblende; a shiny blackish mineral, as well as shreds of lateritic concretions of fabric that has appealing and glossy appearance. As shown in figure 1, the pottery were observed with a variety of designs predominantly



single as well as in multiple groves, with most of them patterned horizontally, vertical or in some cases a blend of the two. Some of the single ones were roulette grooves with comb, cord roulette, rim-lip notches, squarish and embossment stamps, while the multiple designs combined "groves and cresentic stamps, incision and roulette, incision and finger impressions, incisions and dot stamps, incision and comb stamps, dot stamps and triangular stamps, incisions and cresentic stamps, dot stamps and embossment" -Boachie-Ansah2006.

Archeological excavations also conducted around 1982 and 1990 in some sites on Adwuku Hill, 14th-15th century, including a probable *dipo* or puberty-rite shrine revealed some indigenous clothing items such as eighteen beads in bauxite /shell; twenty-seven brass ornaments of rings and reposes designed bracelets and three ivory carved ornaments. Other foreign imports also found included twenty-eight beads-venetian rosettes, prosser, tumbler and twelve cowry shells (CypreaMeneta). A similar excavation conducted at Woduku around the same period also brought out objects of copper alloy consisting two pieces of ornaments presumed to be a bracelet and a piece of brass sheet, whiles that of Ladoku revealed two brass bracelets designed 'with circumferential incisions at the termind'. Again, at the later site, hordes of beads retrieved consisted of five-layer hot-tumbled chevron translucent beads with alternating white, brick red, green and blue set-in stripes; four-layer hot-tumbled chevrons with set-in stripes of brick-red, light grey and blue; instating chevrons hot tumbled with alternating red brick and blue strips on sea blue core as well as blue green and brown tumbled seed beads.

Boachie-Ansah (2006) again referred to an observation by Peter Francis Jnr, Director of the Centre for Bead Research, Lake Placid, New York, indicating that, some of these beads could be traced to Venice and Amsterdam, appearing "in the first or second quarter of the seventeenth century". And that the striped beads could possibly originate from Venice and dates between the seventeenth and eighteenth centuries, whiles the blue seed beads could be associated with Amsterdam and may be placed between 1560 and 1650 or presumably, at a later time.

6. Early Historical Evidence of Ga Costumes

Historical accounts of clothing among the people who lived along the coast of Modern Ghana indicated that the earliest European visitors who travelled to the Guinea Coast around the 16th and the 17th centuries such as Barbot, de Maree, and Ogilby gave an artist's impression of the "negro's", clothing including the Ga people (Figures 2a-c). Interestingly, some of the writers emphatically noted some clothes used by the Ga people and indicated that:

The fashion of adorning their heads are very various; some wear very long Hair curled and platted together and tied up to the crown of the head; others turn their hair into very small curls, moistening them with oil and sort of dye, and then adjust them in the shape of roses; between which they wear Gold 'Fetishes' or a sort of coral here called Conte de Terra which is sometimes of quadrupled value to Gold, as also a sort of blew coral, which being moderately large, is so much valued, that its generally weighed against Gold. They are very fond of our Hats... (Bosman 1967)

The people's passion for jewellery was so great that gold and the above mentioned corals were worn on the leg, arm, neck and waist. Bosman, again emphasized the diversity of clothes and how they were worn among the rich, poor, nobles and the youth. He reported on a particular type of dress called *Paan* which consisted of "three or four ells of either velvet or silk cloth, (*perpetuana*) or some sort of stuff; and several [of the 'negroes'] have this sort of habit... made of fifty sorts of stuff'. This type of cloth is worn around the body, then rolled up, into a 'small compass'; leaving the ends hanging in front, and exposing half of their legs.

The poor people or commoners such as wine-tappers, fishermen, and their like were identified with 'an ell or two of sorry stuff'. Some of them only used a girdle worn between their legs, and then wrapped around them just to cover their nakedness (Fig.2a). Nonetheless, these fishermen complemented this style of dressing by wearing hats or caps. The young ones (*maceroes*) wore very simple clothes, and their chiefs (*cabocero's*) chose to keep the same low profile, by wearing "only a *Paan*, a cap like that of the old Israelites, and a string or chain of corals about their heads; and this is the dress they daily appear".

Contrary to the men's outfits, the women were more modish because their clothes were comparatively expensive; hence, Bossman was very convinced "the fashion in the Netherlands and all European over seems to have established its throne among the female sex". With regards their adornments, he assets:

Ladies plait their hair very artfully, and place their *Fetishes's*, Coral and Ivory, with a judicious air, and go much finer than the men. About their necks they wear gold chains and strings of coral, besides ten or twelve small white strings of *Conte de Terra* and gold about their arms and legs also they are plentifully stored therewith; and they



wear them so thick about their waist, that their nakedness would be sufficiently covered...

Their extravagant clothes, coupled with their seductive mode of design drew attention to them and established their motives because:

on the lower part of their bodies they wear a *Paan* which is three or four times as long as that of the men. This they wind round their waist, and bind it on with a fillet or red cloth, or something else about half ell broad and two ells long, to make it fit close to the body, both ends of the fillet hanging out on their *Paan*; which in indies of quality is adorned with gold and silver—lace on the upper part of their body they cast a veil of silk or some other fine sort of stuff...

He emphatically concluded that the women were fashionably equipped such that they "know how to dress themselves up sufficiently tempting to allure several Europeans". Barbot's (1723) accounts about the *Ga* also complement Bosman's dress discoveries. According to Barbot, the attire of the *Ga* men was similar to the *danta* which was worn by the *Akans*, as well as a big loin cloth which "serve as blanket at night and as a lounge dress in the morning usually worn by wrapping it round the body so that one arm was left uncovered". It is asserted the *Ga* men found it appropriate, convenient and healthier to uncover their upper torso when the weather was extremely hot. Cloths were therefore worn from the waist down to the knee (Fig.2a, right). The *Ga* women similarly used loin cloths which were held by a narrower belt, in addition to a large cloth wrapped around their hips as skirts. Another larger cloth more gorgeous than the skirt was used as a shawl to cover the upper part of their bodies, as shown in figure 2b.

7. Make-up

Make-up was extensively used by most of the women. To that end they wore red or white "colouring on their faces"; with some on their eyebrows and cheeks (commonly called eye shadow and rosy-cheeks respectively) as well as small cuts on both sides of the face. Others were also fashioned "in raised marks (tumears) and pinking (de'coupures) done on their shoulders, breast, and belly [most probable, tattoos] and dressed in pink materials". Ceremonies were also celebrated with enormous bracelets or ribbons 'loaded on the neck, arms and legs of the women. And some group of women called *etiguafo* who identified themselves as prostitutes were distinguished by their rich expensive clothes as well as their long nails. This dress code was specifically associated with Ga towns such asNingo, Labbadi, and Tema, and Barbot was very emphatic on his report, indicating: "I saw some at Acra so attired..." (Hair et. al.1992).

8. Some 1800 Costumes

The appearance of the people of Accra in early 1800 was likewise witnessed and documented by Rask Johannes (1754). Reporting him, Selena Winsnes (2006) in her paper for a colloquium presentation on Accra Before colonial Times, reiterated that the women used a lot of hair decorations among which was a small bone comb which had three or four teeth. As a sign of acknowledging the respected social position of the elderly or nobles, the women removed the comb from their hair before greeting such people. It was also the custom of the Ga to honour a fishmonger during her first pregnancy. At this stage the other women throw dust and sand over the pregnant woman and also loosen her hair locks. After washing off the dust and sand at the sea, her closest friends shave her hair in a special pattern and braid it again. On the other hand during the last four months of pregnancy of the wife of a merchant (mercador), she wears about six to seven strings of glass bead around her waist, with her upper torso bare. Even though a deerskin was the commoncloth used by the pregnant woman, a sheep skin was sometimes used and worn around the lower abdomen in addition to a straw whisks which was worn from the wrist to the elbow. It was a taboo for a husband to shave his hair and beard whist his wife was pregnant; he could only shave after the woman delivers her baby. To show her appreciation to the husband for honouring her with a child, the wife makes a cap of either the deerskin or sheepskin for him immediately the wife delivers. During enstoolment, their nobles (kabaseers) were decorated with gold and aggrey beads used as crown, necklace, wristlet and anklet; valuing about "100 Ragsdale". Additionally, the king holds in his hand a sword and "wears a green wreath on his head", presumably, the nyanyara leaf. Deadbodies were also adorned with gold and wrappedwith about three to four pieces of cloth (Winsnes 2006).



8. 1800 Homowo Costume.

Among the many festivals in *Ga,Homowo* is the best celebrated. It is an annual festival celebrated by all the six *Ga* townships, and each year *Ga*indigenes meet in their various towns to celebrate the *Homowo.Homowo* is gotten from two *Ga* words, *homo* meaning hunger and *wo*meaning to hoot at (Amoako-Attah 2001). Oral tradition noted that *Ga* people observe this conquest of hunger with a specially prepared diet made with unfermented corn powder called *kpokpoi* (which has now been corrupted to *kpekple*) and palm nut soup prepared with fish only (preferably *tsile* and *odaa*). They hoot at "and ridiculed hunger" as they eat the meal. In respect of the *Homowo* festival celebrated around the 1800, Winsnes reported that there were on display all kinds of fashionable as well as traditional costumes. Hairstyles, jewellery and body paintings were in 'ridiculous fashion'. Some of the people smeared their bodies with *malaget* dough; either on the whole body or in very compact stripes on the neck, shoulder and breast. Others also wore their stripes from the fingers to the elbow as if they were wearing gloves, while some displayed the fashion of the Roman boots; by making their stripes from the toe to the middle of the calf. The facial make-up of the women also consisted of striped red earth interspersed with white chalk spots, and in the middle of each cheek were "white chalk marks as large as an 8-shilling piece" (Winsnes 2006).

The people were particular with their dressing, therefore they made sure their outfits were comfortable; consequently, they wore light clothes or dressed partially when the weather was hot. Nonetheless, not even the weather could dictate the women's code of dressing because on ceremonial occasions such as parties the women wore expensive as well as gorgeous clothes, to the extent that someEuropean men could not resist being attracted. For instance, when Barbot honoured the Danish agent in Accra's invitation to a play, the clothing and adornment of the Accra women nearly 'choked' his European guests (Hair et. al.1992). This was so because the *Ga* women had combined both their traditional fashion and those of the Europeans. Marriage ceremonies could therefore be performed in traditional clothes, or if the couple desired a church wedding, the bride would wear a flowing long gown plus a veil whilst the grooms' outfit would comprise a three- piece suit, as shown in figure 10.

9. Headdress/Hair Style

The men wore their hair in various styles, and Barbot describes and supports this observation with samples of six headsincluding a man from Cape Coast and Accra in 1679, wearing plaited hairstyles as well as an old man with a single tuft crown (Figure 3). Around this same period, there was awedding in Accra where the bride was adorned ingold ornaments on several parts of her body. Additionally, she wore red and white marks designed on her face by her bride's maids. Barbot also noted two female heads; the first was a woman of 'Corso' and Accra and the other, a fashionable woman with her face painted red and designed with white lines and patterns (Hairet-al 1992).

As part of their clothing components the fisher men wore caps made with animal skins and rushes, which served as a protective dress in both sunnyand raining seasons, as well as a type of bark cloth known as (*quaqua*), also worn as a waist-cloth. (Bosman 1967; Jones 1993). Most *Ga* men covered only their loins and pubis, leaving the rest of their bodies bare.

Around the late 17th century, there was another code of dressing that seems to flourish alongside the traditional fashion; referred to as the "European Fashion". This style was copied from the mulatto people of mixed African and European breed whose clothes were either imported from Europe or sewn by local tailors and seamstresses (Daniell 1852). Consequently, whiles the traditional artists embarked on bark cloth production and jewellery, the skilled tailors and seamstresses concentrated on the European clothes. However, Labi has quoted Wuff's account in the middle of the nineteenth century on the transformation of Ga dressing as "being generously adorned with strands of beads made of iron rings on their arms, fingers, feet and toes. And that the wealthy wore large rings made out of the finest gold (Labi 2006).

10. Fabrics

Oral tradition on textiles of *Gas* mentions that *Gas* patronized the *kyɛnkyɛn* cloth together with*lon* (raffia fibre), *nyanyara* leaf (*Momordicacharantia*),*kpekpe* and *oloobo*. Since the raffia and the *nyanyara* are plant fibres, their origin can be traced to *Gas* earliest discoveries and awareness on clothing; probably before the pre-historic period. The *kpekpe* and *oloobo* cloths are however, current and according to some *Ga* elders, their origin may point to the 1800s.

The *lon* is a long green grass which is collected and dried to obtain a brownish colour. It can be either used in its brownish state or dyed according to its ritual purpose, and mostly worn by priests and priestesses; especially the



Tigare priest and priestess who use it as a skirt. Chiefs, otofo initiates and some other Gas may be required by tradition to wear a string or two of the lon as necklace, bracelet or anklet. The nyanyara leaf is a creeping plant collected and designed in its green state to suit a religious purpose. It is believed to have the ability to cleanse, protect and empower users and thus reserved for Ga traditional leaders such as chief priests, chiefs, priests/priestess and used during ceremonial occasions such as durbars, coronations, festivals, and sometimes for healing (Nortey 2008). With such people of rank the fiber is created and worn as a necklace, but in very few instances nyanyara can be worn around the waist. Until recently nyanyara was solely connected with such functions, but today some Ga traditional groups such as dancers and musicians also wear the nyanyara necklace during performance.

Kpekpe is a sack cloth, brown in colour and used in the olden days to make clothes. This tradition was not uncommon to the other Gold Coasters. Royals and commoners (males, females and children) all used the *kpekpe*; however, their position and status were identified by factors such as style, length and volume of their respective dress. Nonetheless, commercial activities with some foreign countries as early as 1100 introduced the Ga to all types of fabrics such as linen, silk, cotton and brocade and so on. (Levzion 1980).

11. Clothing associated with Royalty and Widowhood

The late NiiDzamansahIII, chief of Otnibirelated that in the olden times, the only costumes used by a *Ga* chief priest, a chief and the queen mother were a white calico cloth, a white *adasaa* (big togas), the *afili* and the *nyanyara*leaf. They walked bare-foot. This constituted their costume during confinement, when outdoored and at all functions.

Costumes for widows in the olden times were identified with a special hair-cut known as nkommo. As reported by Madam VictoriaTetteyfio, this hairstyle is worn with the temples of the widow clean shaved, leaving a small portion of hair at the top. This hair style symbolizes the lonely state of the widow; explaining that the stronger part of her as well as her support for existence, her husband, has been removed. And that is why a greater portion of the hair has to be shaved. Apparently, in the olden days and to date, from the day the death of the spouse is announced, the living spouse starts wearing black or dark clothes. The widow wears any dull cloth made into kaba and two loin cloths, and discards all jewellery and foot wear. The use of these items were not encouraged in the olden days because both jewellery and footwear were considered items of beauty, therefore, avoiding them were synonymous with deep grief. Madam Victoria Naa Ode Kweifio, another respondent from GaMashie also mentioned that, in the olden days and to date, from the day the death of the spouse is announced, the living spouse starts wearing black or dark clothes. Similarly, when a man loses his wife to death he is also expected to show his grief, and he does so by way of wearing dark clothes such as black, red and dark-brown. Such has been the tradition established in the olden days, 15th-17th century, and also imbibed today. Whilst the early years, 14th-16th centuries were noted with a piece of cloth worn around the waist, the 17th and 18th centuries noted that widowers wore clothes such as a black shirt worn over a black pair of trousers or a black jumper and adasaa, a very low hair-cut, no accessories nor footwear. The widow also wore black kaba and two loin cloths. Unlike the widow, custom does not require any special hair-cut for the widower, but according to oral tradition one major means for a widower to portray his deepest affection and bereavement, is to also shave his hair.

In line with *Ga* tradition the surviving spouse performs the *kura* (widowhood rite) which starts with a seven-day confinement in the sleeping room of the departed (Manoukian 1950). Accordingly, Field (1961) has reported that during this period the mourner wears or "clasps the garment or blanket of the dead which is believed to contain the spirit of the dead spouse". At dawn, on the eighth day, the dead and the living are symbolically separated and this ritual involves casting off all the clothes and beddings of the dead to the old lady in charge of the *kura* rites. Afterwards, the widow/widower baths in herbal preparation prescribed by the old lady, and later, he/she is sent to the sea for a ritual washing. This is done to cleanse the *kra* (soul) of the living spouse. Additionally, *klobo*(myrrh) is smeared on the body; an antidotebelieved to prevent the *sisa* (spirit) of the dead spouse from harming the living spouse. During the final funeral performance the widow/widower uses *Birisi*, a type of black cloth. Then three days after the burial of the spouse, the surviving spouse is again sent for a ritual cleansing in the sea. The smearing of the myrrh on the body is repeated for the same reasons already noted. A widow/widower wears the mourning clothes for a year. Then, after fulfilling that "covenant" a special ritual is performed, which allows the living spouse to discard the black clothes and use white ones. It was learnt with dismay that widows adhere to the custom and mourn and dress in their dark clothes for the stipulated one year. However, a man in a show of hegemony could respect this for about two months only.

Children wore smaller versions of adult clothes within all the periods. According to oral tradition between the 15th and 17th century, immediately a child was born, a cord which was spiritually fortified against evil spirits and evil eyes was worn around the waist, but sometimes around the neck and the wrist. Around the later part of the



17th century the cord was replaced with a string of waist beads worn before and after the child is named. This constituted the only form of clothing until it was six years when the female child is partially adored with *bue*, a strip of red cloth tucked in the waist beads from the front to the back to cover the genitals. In some situations, such as children of royal birth, more of the beads were added to the original one. When the girl attains the puberty age, she is given her secondcloth which is a loin cloth made of the bark cloth *kyenkyen(Antiaris* species). As an adult costume the *kyenkyen* cloth was made by removing the back of the *kyenkyen* tree and soaking them in water to soften. The cellulose was later beaten with wood mallet until it produced the required softness convenient for use (Fig.7). It was then dried and worn around the waist at knee length or slightly below the knee. To re-enforce its hold on the wearer- so that it does not fall off-, the cloth was wrapped around the waist once or twice and rolled at the waistline, leaving the upper torso with the breast uncovered (See fig.8-right). With time the unmarried girl was given one loin cloth which was worn around the bust and used as the main dress on all occasions (See figs 4&8). Apparently until the female child was married she was clothed as such, but immediately she got married she was distinguished with a second cloth tied around the bust and knotted at the back to cover the breast; however, leaving the stomach uncovered (Fig. 8-left).

In contrast with the clothes of girls the fashion of boys was more elaborate and enormous. At the prime of their years, between one and seven, the male child wore *danta*- a piece of loin cloth produced from the bark cloth (*kyenkyen*) which was passed between the thighs to cover the genitals and firmly tied around the waist. At ages seven and ten costume changed to a piece of loin cloth which he wore around the body and extended to the knee. It was passed under both arms, with the two ends crossing at the chest and eventually knotted on the nape-the two arms are thus left uncovered. This form of attire known as *koola* became the child's major costume until he became an adult (Fig.6). And like his female counterpart, this mode of dressing was the major attire for all occasions, as depicted in a school session in figure 4. Adulthood was then honoured with a bigger cloth/jumper or jumper and togas.

12. Millitary Company (Asafo)

The Ga Asafo group or companyis a military organization instituted in the olden days to defend their people during war. And by the "seventeenth century therefore the Ga kingdom was a militarized society whose soldiers were equipped with the latest European weaponry..." (Osei-Tutu 2000). According to Papa Nii Myers, and Osei-Tutu (:54) this group formation and their military clothes were presumed to have been copied from the Fantes who came to settle with the Ga. Clothing was an identifying mark among the various groups and as told by Labi (2002), Fante military strategy prescribed specific clothes that distinguished Fante warriors from their enemies. Additionally, Ogilby (1670) has recounted that the early Fante who fought for the Dutch in the seventeenth century distinguished themselves from their enemies by wearing linen cloths. During that period and to date military costume has been an important part of war and a matter of competition. With this spirit, therefore, each group tries to excel the other in appearance.

Commenting on Ga military attire worn in the 1980s Osei Tutu (2000) echoes lsert indicating the use of a loin cloth (Ga Tɛklɛ), as well as a woven raffia, hoods of animal hide and a variety of magical amulets to cover the private parts (Jones 2000).

As recorded by Barbot (1732:295) military costumes at the time (17-18th century) was made of a traditional cloth which was tied around the soldier's waist and in between their thighs, leaving a piece of it to hang behind them. This way of dressing was a strategy to help them wear as little cloth as possible to remain light and avoid any hindrances or obstructions during war. To prove the potency of military strength, costumes usually had peculiar and strange fittings such as a horsetail in its natural colour or dyed in red or blue, with small bells sometimes hanging on it.Belts were worn around the bodies of the warriorswhiles sheaths were also used to hold daggers and knives, as well as pouches to store gun powder and bullets (Osei-Tutu 2000). Apart from these physical protections, the warriors were also fortified spiritually; theirfaces were painted in red and yellow and their bodies decorated with different charms and objects such as wreaths of tree branches spiritually fortified.

The main component of military caps used (like helmets) during these centuries were the skins of animals like the crocodile, elephants, buffalo and leopard. Their helmets were decorated with red parrot feathers, horns, the white teeth of hippopotamus, precious red shells or jawbones of enemies killed in previous wars. And to make the caps stiff and firm the outside was painted with sacrificial blood. Some of the soldier's hats were designed with red and white shells and goat horns, intended to physically and spiritually protect the soldier's head during war. They also wore masks made with skins of animals such as crocodile, goat, sheep and leopard; and these were designed like animals, to frighten the enemy(Ogilby 1670). One distinguishing feature of every *asafo* company is the use of flags. Flags were used for identification during war and in military dance performance. They were also "carried into battle and used by the army to identify which formation they [soldiers] belonged to or the location of their own *asafo*" (Labi 2002).



16. Conclusion

History of an art as noted has a cultural impetus adding to the authenticity of a people or society, helping them to focus on the past, present or the future. The paper has examined the earliest clothing culture of the Ga people and how archaeologist and historians have helped to document findings for the present and future generations. Oral traditions have also helped to dig up some hidden information, which otherwise would not have been known. Hence, the paper concludes, suggesting that researchers should turn their attention to the origin of costumes of the other ethnic groups in Ghana. This is a seeming neglected area that needs urgent attention, if the history of Ghana can be complete.

Reference

Ammah, C. N. (1980). Ga Homowo and other Ga-Adangme festivals. Accra, SedcoPublishing Limited.

Amoako-Atta, F.K. (2001). Festivals in Ghana. Kumasi, Amok publications, 2

Anquandah, J. (1982). *Rediscovering Ghana's Past*. Accra, Sedco Publishing Limited and Longman Group Limited, 68,71

Anquandah, J. (2001). Fort Crevecoeur (Ussher) – Historical Archaeological Survey of the Site at Old Kinka. Accra, UNESCO

Anquandah, J. (2006). The Accra Plains.1400-1800-an Overview of Trade, Politics and Culture from the Perspective of Historical Archaeology. Accra Before Colonial Times: Proceedings of a Colloquium on Early Accra. Research Review Supplement (17)55-87 Institute of African Studies, University of Ghana, Legon, 1, 54, 9 Antubam, K. (1963). Ghana's Heritage of Culture. Leipzig, Koehler & Amelang.

Azu, G.D. (1974). The Ga Family and Social Change. Cambridge, African Studies Centre, 7

Bolland, R. (1992) Clothing from Burial Caves in Mali, 11th – 8th Century. *History, Design and Craft in West African Strip-Woven Cloth*.53 – 81.US: Smithsonian Institution, 54

Barbot, J. (1992). *Barbot on Guinea: The writings of Jean Barbot on West Africa 1678-1712*. (2). Hair.P.E.(ed). London, The Hakluyt Society.

Barton, L. (1969). Historic Costume for the Stage. Boston, Walter H. Baker Co.

Boachie-Ansah, J. (2006). Excavations at Wodoku and Ladoku and their implications for the Archaeology of the Accra Plains. Accra Before Colonial Times: Proceedings of a Colloquim on Early Accra.Research Review Supplement (17).55-87. Institute of African Studies, University of Ghana, Legon, 60, 55-59

Bosman, W. (1705). A New and Accurate Description of the Coast of Gunea. London, Frank cass & Co Ltd.

Bossman, W. (1967). A New and Accurate Description of the Coast of Guinea (4th English ed.) London, Frank Cass & Co Ltd, 117-121, 120

Bredwa-Mensah, Y. (2002). *Historical-Archaelogical Investigations at the Fredriksgave Plantation, Ghana: A case study of Slavery and Plantation Life on a Nineteenth Century Gold Coast*. Unpublished PhD Thesis, Archaelogy Department, University of Ghana, Legon.

Conton, F. W. (1965) West African in History:Before 1800. G. Allen & Unwin. University of California: California.

Daniell, W.F. (1852). On the Ethnology of Akrah and Adamgbe, Gold Coast, Western Africa. *Journal of the Theological Society*. Jan. 14-Feb. 11, 6-7

deMarees, P. (1987). Description and Historical Account of the Gold Kingdom of Guinea (1602). Translated from Dutch and edited by Albert Van Dantzig& Adam Jones. Oxford University Press.

Davies, O. (1967). West Africa Before the Europeans: Archaeology and Prehistory. London: Metheum

Field, M. J. (1940). Social Organization of the Ga People. London, Oxford University Press, 59-61

Field, M.J. (1961). Religion and Medicine of the Ga People. London, Oxford University Press, 201

Gardi, B. (2009). The Research Expedition. *Woven Beauty: The Art of West African Textile*.. Gardi, B. (ed). Basel: Christopher Merian Verlog, cop. 28-39

Ghana Statistical Services (2011) Ghana Demographic and Health Survey. Accra, Statistical Services.

Hairs P. E. & Jones, A. & Low, R. (1992). Barbot on Guinea: The Writings of Jean Barbot on West Africa 1678-1712. II London, The Hakluyt society, 439-495, 498, 497-498

Henderson-Quartey, D. (2001). The Ga of Ghana. Kingsbury, London: Book in Hand Ltd, 52, 60

Jones, A. (1993). German Sources for West African History 1599-1669. Wiesbaden, Steiner, 69

Kwakye-Opong, R. (2011). Clothing and Adornment in the Ga Culture: Seventeeth to Twenty-first Century. (PhD Thesis in African Art and Culture). Kwame Nkrumah University of Science and Technology, Kumasi, 72



Labi, K. A. (2006). Europeans Descriptions of the Art and Architecture of early Accra ca. 1450-1800. Accra Before colonial Times: Proceedings of a Colloquim on Early Accra. Research Review Supplement (17).121-135. Institute of African Studies, University of Ghana, Legon, 130

Larbi, K.A. (2002). A Study of Change and Continuity in FanteAsafo Art. Unpublished PhD Thesis, African Studies, University of Ghana, Legon, 96-97

Levtzion, N. (1980). *Ancient Ghana and Mali*. London: A division of Holmes and Mier Publishers, 134-180 Manoukian, M. (1950). *Akan and Ga-Adangme People of the Gold Coast*. London, Oxford University Press, 92 Myers, J. M. B. (1978). "The Origin of the Gas" Journal of the African Society, (27), 15

Nii-Adziri, W. (2006) MantseSlikiTekle- A cultural History of the Ga Funerary Loin-Cloth. Accra Before, Colonial Times: Proceedings of a Colloquium on Early Accra Research Review supplement (17). 163-169 Institute of African studies, University of Ghana, Legon.

Nortey, S. (2008). The Homawa Festival in Accra – Its Artistic and other Cultural Aspects. Unpublished PhD Thesis, General Arts Studies, Kwame Nkrumah University of Science and Technology, 146, 140 Ogilby, J. (1670). Africa. London, T. Johnson, 431

Opoku, A.A. (1970). Festivals in Ghana. Ghana Publishing Corporation, Accra.

Osei-Tutu, J. K. (2000). *The Asafoi (socio-military groups) in the History and politics of Accra (Ghana) from the* 17th to the mid-20th Century. Trondheim, Department of History, NTNU, 20, 54, 21

Osuola, E. C. (2005). Introduction to Research Methodology (3) Accra, Africa First Publishers Limited.

Ozanne, P.C. (1962). Notes on early historic archaeology of Acera. *Transactions of historical Society of Ghana*.6: 51-70.

Parker, J. (2000). Making the Town: Ga State and Society in Early Colonial Accra. Portsmouth, Heinemann, xvii Payne, B. (1965). History of Costume From the Ancient Egyptians to the Twentieth Century. New York: Harper & Row, 10

Quarcoopome, S. S. (2006). The Decline of Traditional Authoriy: The Case of Ga Mashie State of Accra. *Chieftancy in Ghana.Culture,Goverance and Development.*395-408. Odotei, I. &Awedoba, A. K. (eds), Accra: Sub-Saharan Publishers.

Rattary, R.S. (1927). Religion and Art in Ashanti: Oxford: Oxford University Press.

Ross, H.D. (2002). Gold of the Akan from the Glassel Collection: The Museum of Fine Arts, Houstone. Hong Kong, Merrel Publishers Limited.

Tortora, P. & Eubank, K. (1989). Survey of Historic Costume. New York, Fairdrid Publications Press

Winsnes, S.A. (2006). Rites, Rituals and Recreation in Early Accra: a Congeries. Accra Before Colonial Times: Proceedings of a Colloquium on Early Accra. Research Review Supplement (17). 111-121 Institute of African Studies, Legon, 111-120

Yarwood, D. (1992). Fashion in the Western World: 1500-1990. London, B.T. Batsford Ltd.



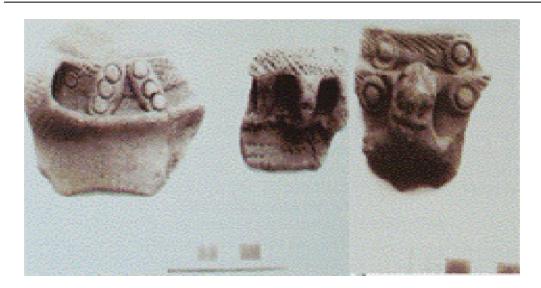
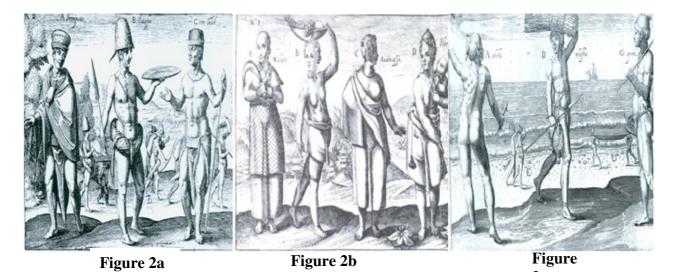


Figure 1:Some *Cherekcherete* pottery designs that revealed the life of pre-urban *Ga* **Source:** From the Journal Archaeological Evidence of Early Ga History 1400-1800



Figures 2a-c: Early 17th Century costumes used by Men (2a), Women (2b) and Commoners (2c) in the GoldCoast.

.Sources: From the book, Description and Historical Account of the Gold Kingdom of Guinea (1602)



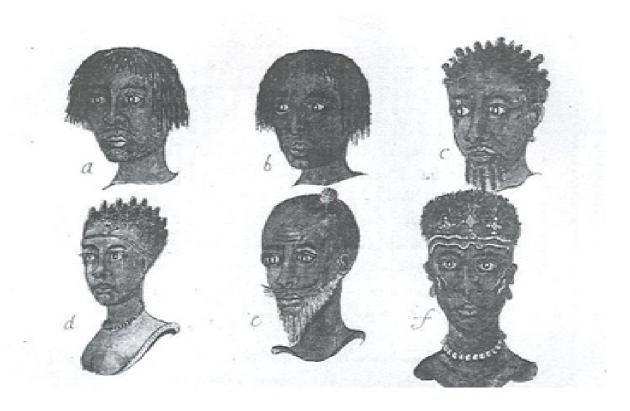


Figure 3: Male and female hairstyles of 17th century Gold Coast

Source: From the book Barbot on Guinea: The Writings of Jean Barbot on West Africa 1678-1712



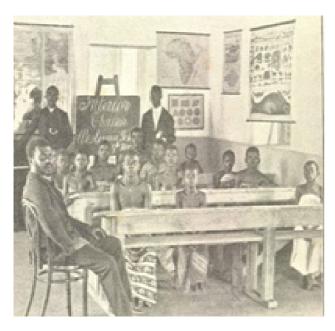


Figure 4: Children wearing cloth in school in 1800s

Source: From the book, The Gold Coast: Past and Present



Figure 5: A girl wearing aloin cloth around her bust



Figure 6: The *koola* style used by boys in the 1700s



Figure 7: The bark cloth (right) **Source:** From the National

Museum, Accra.





Figure 8: The first *kaba* style knotted on one shoulder.



Figure 9:A girl wearing a loin cloth to cover the breast (left) and a loin cloth worn around the waist with breast uncovered (right).

Sources (Figs 8&9): Drawn by the researcher

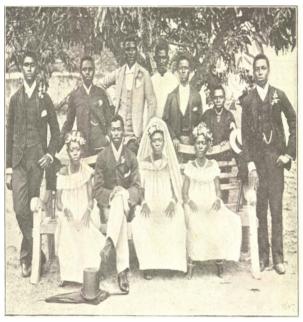


Figure 10: Costumes worn at a wedding ceremony in the 1800s.

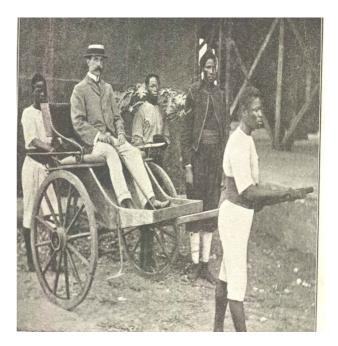
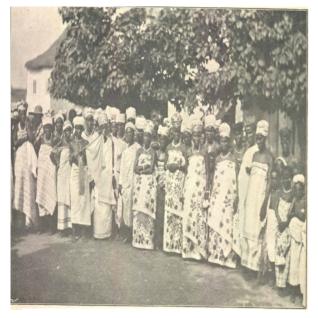
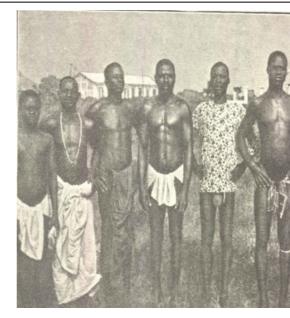


Figure 11: A policeman (top right) and a guard (down right) in costume, Accra, 1800s.

Sources (figures 10 & 11): From the book, Gold CoastPast and Present.







Fi1800s costumes

Figure 13: A group of men in loin clothes in the 1800s

Sources (figures 12 & 13): From the book, Gold CoastPast and Present.

The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage: http://www.iiste.org

CALL FOR JOURNAL PAPERS

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

Prospective authors of journals can find the submission instruction on the following page: http://www.iiste.org/journals/ All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

MORE RESOURCES

Book publication information: http://www.iiste.org/book/

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digtial Library, NewJour, Google Scholar

























