

The Production and Use Patterns of Ga Pottery in the Lower Densu Valley, Western Accra plains, Ghana

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Introduction

Ethnographic studies of traditional crafts have been conducted from numerous perspectives. In recent years, research efforts have been focused on the dynamics and complexities of the technology and socio-cultural aspects of specific crafts. One particular traditional craft that has been the subject of many specialist studies in recent years is pottery production (Crossland and Posnansky 1978; David and Henning 1972; Effah-Gyamfi 1980). Ceramics are a regular component of the archaeological record and have therefore been the focus of anthropological enquiry. Archaeologists have sought to understand many aspects of man's past by relating contemporary pottery to prehistoric wares (Anquandah 1992; Bredwa-Mensah 1990; Osei-Tutu 1987). David and Henning (1972: 1) have observed that 'In order to validate archaeological assumptions about the relationships between pottery and society, there is an evident need for anthropological case studies'. To ensure the applicability of ethnographic data on pottery production to the interpretation of the archaeological past, researches have been conducted in societies where cultural and historical continuities, as well as similarities in technology, are present. This paper presents an ethnographic study of ceramic technology and use patterns in the Western Accra Plains of South Ghana.

Geographical and cultural setting

The Ga inhabit the western section of the gently undulating Accra Plains. The eastern portion of these plains is occupied by the Dangme who are the immediate linguistic and cultural neighbours of the Ga (Kropp Dakubu 1987: 2; 1988: 103). Together the Ga-Dangme occupy about 3,245 square km of territory.

Among themselves, the Ga distinguish between traditional townsmen and rural peoples. There are six large Ga towns located along the coast. These are Ga Mashie (Central Accra), La, Osu, Teshie, Nungua and Tema (Fig. 1). All these towns have their village settlements, *aklowai*, located a few kilometres inland. The Ga, who live in the urban areas, consider themselves as townsmen while those who are in the villages are thought of as rural, or *kosee*.

The western boundary of the area is formed by the Densu river, the broad valley of which runs through a low-lying landscape. The vegetation here, like other places on the Accra Plains, is characterised by grassland with a variable development of thicket scrub and scattered trees. The Densu Valley is the focus of farming activities and a variety of food crops is produced here by the rural Ga. These include yams (*yele*, *Dioscorea sp.*), maize (*abele*, *Zea mays*), cassava (*duade*, *Manihot esculenta*), cow-peas (*yoo*, *Vigna unguiculata*), tomatoes (*amoo*, *Lycopersicon esculentum*), egg plants (*sebe*, *Solanum melegna*), and pepper (*shito*, *capsicum sp.*). Fishing, hunting and gathering are also important components of the Ga subsistence economy.

Ga residential structures represent what de Kilson (1967: 83) considers as 'polar types', with one form being a model of the traditional residential system and the other

of the modern system. Generally, the physical layout of the two residential architectural modes, *shia*, consists of rectangular single-roomed or multi-roomed structures made of solid coursed mud, wattle and daub, unbaked mud-brick or solid cement blocks arranged in quadrangular compounds. The compound organisation of the two systems is, however, different. The modern system consists of the independent conjugal family composed of a man, wife, and children, which, according to de Kilson (*ibid.*: 38): 'has developed in response to the association with Western institutions'. The traditional residential system, on the other hand, is characterised by polygamous extended family houses, *wekushia*. In this system, the Ga separate male residential compounds, *hiiamli*, from female compounds, *yeiamli*. In some cases, the two compounds may be joined together by a common door linking to the outside. In other cases, the two compounds may be close to each other though not actually joined together (Azu 1974: 20).

In the traditional residential compound, the courtyard serves as a kitchen and general work area for daily chores. Cooking and related activities are carried out over mobile or immobile tripod hearths made either of clay moulds or large stones. The Ga use a wide range of ceramic vessels for their domestic and other activities. These include storage pots, ritual pots, eating bowls, medicine pots, wine pots, cooking pots and steaming pots. After the day's domestic activities, vessels are washed and stored either in an interior room or close by the kitchen area. Large pots for holding water used for domestic activities are located along the walls of structures. Large pots for storing

<i>Vessel</i>	<i>Sub-Type</i>	<i>Size</i>	<i>Primary function</i>
Gbe	Dido Tsumli gbe Fanyaa gbe	extra large large large	storing domestic water storing drinking water water conveyance
Ka	Ka (apotoyiwa) Ka	large/medium large/medium/small	grinding condiments eating all kinds of food
Kukwei	Aflata kukwei Tsofa Kukwei Wonu kukwei Likoliko	large/medium medium/small large/medium/small large/medium/small	storing grain flour and dough preparing herbal medicine cooking soups and stews cooking food
Saasen	-	medium/small	tapping and storing palm-wine
Ntasse	-	large/medium/small	steaming mashed corn
Laate	-	large/medium	hearths for cooking
Kulo	-	medium/small	ritual purposes

Table 1 Ga pottery classification

drinking water are kept in an inner room.

The ceramic vessels used by the Ga are produced by Ga potters in some villages located in the Densu Valley. These potting centres are Weija, Oblogo, Afuaman and Manhean respectively (Fig. 2). The pottery production of Weija and Oblogo ceased about twenty years ago, whilst that of Afuaman and Manhean is quickly disappearing. From 1988 to 1990, when research for this study was undertaken, there were only six

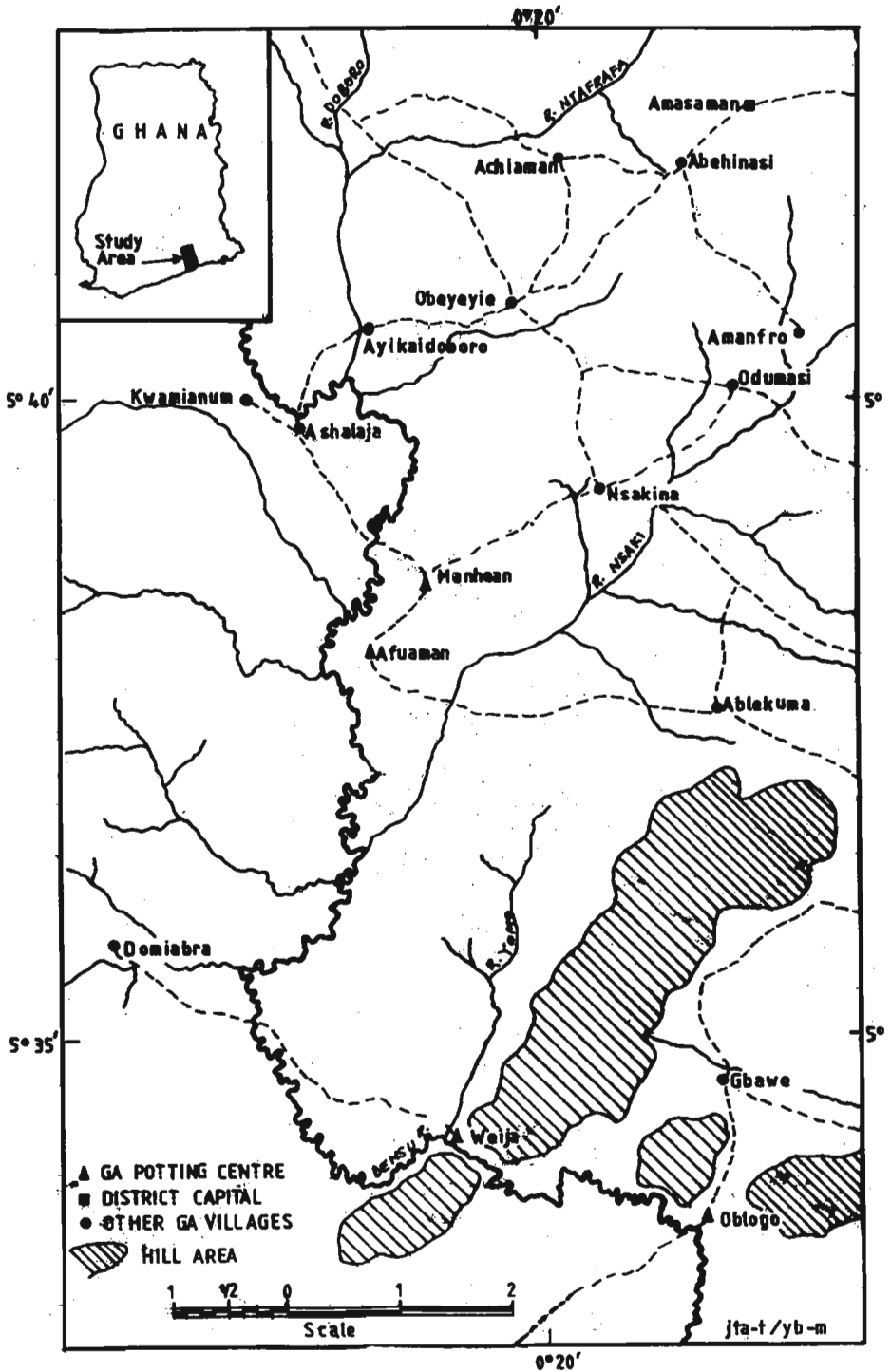


Figure 2 Lower Densu Valley pottery centres and other village settlements

resident potters engaged in this craft. These active potters were quite old with the youngest among them over fifty years in age. Several young women interviewed by the research team in the potting villages knew the craft but they were not making pottery. These young women were not engaged in the industry because, in their own words, it was 'yeimei anitsumo' ('an old women's job'). This attitude poses a threat to the existence of a once thriving traditional industry.

The potters of the Densu valley produce twelve categories of ceramic vessels (Fig. 3). The term *gbe* is used to describe all kinds of vessels. However, different names are also given to the vessels according to their forms and functions. In all, three terms are used to describe the vessel forms produced by the potters. These are *ka* (open bowls), *kukwei* (cooking vessels) and *gbe* (water storage pots). There are sub-types within these broad categories distinguished by their functional roles. Other common vessels that do not fit into the above typology are also differentiated by their functions. These are *ntaaso* (steaming pots), *laate* (hearths), *kulo* (ritual pots) and *saasen* (palm wine pots) (Table 1).

Pottery manufacture

Pottery production in the Densu valley is an entirely female affair carried out on a household basis as a part of the daily domestic routine. Pottery is produced all year round, although it is subordinate to agricultural activities. Production is at its peak during the dry season, *aharabata*, when farming activities have declined.

Ga pottery production is non-mechanised. The production processes involve clay acquisition and preparation, forming, decoration and surface treatment and firing.

Clay acquisition and preparation

The potters of the Lower Densu valley exploit clay dug from shallow pits along the banks of the Densu river. Tempering material (in the form of grit) comes from termite mounds, *ghotsui*, which abound in nearby fields not far from the potting villages. The potters do not go more than 1 km to get clay. Clay and temper are dug by either men or women using hoes (*koi*) or adzes (*sosoo*), and are transported back to the villages by head potterage. Ga potters do not recycle broken pottery in the production process as grog.

When the clay and temper are brought to the potters, they are kept in separate heaps. To make the raw materials suitable for use, the potters process them by removing coarse surface clays and foreign matter such as pieces of wood, leaves, roots and pebbles. The processed materials may be used in the fresh state to manufacture pots. Quite often, the Ga potters sprinkle water on the treated clay and temper. They are then left over a period of time (about three weeks or more) to 'get sour' before the potters use them.

All the potters employ identical techniques in paste preparation. They begin by mixing small proportions of clay and temper in a pile. The potters determine the ratio of clay to temper by eye, but this seems generally to follow an equal proportion of 1:1. Water is sprinkled on the mixed heap and the body is blended by hand kneading, until the potters judge from the feel and appearance that the paste has reached the required level of malleability.

Forming the vessel

Ga pottery is formed by the drawing technique, whereby the potter first places a large clay lump on a mould support (*monglo*), which may either be a carved circular piece of wood or a large sherd, usually the bottom of a broken pot. The mould support is then placed

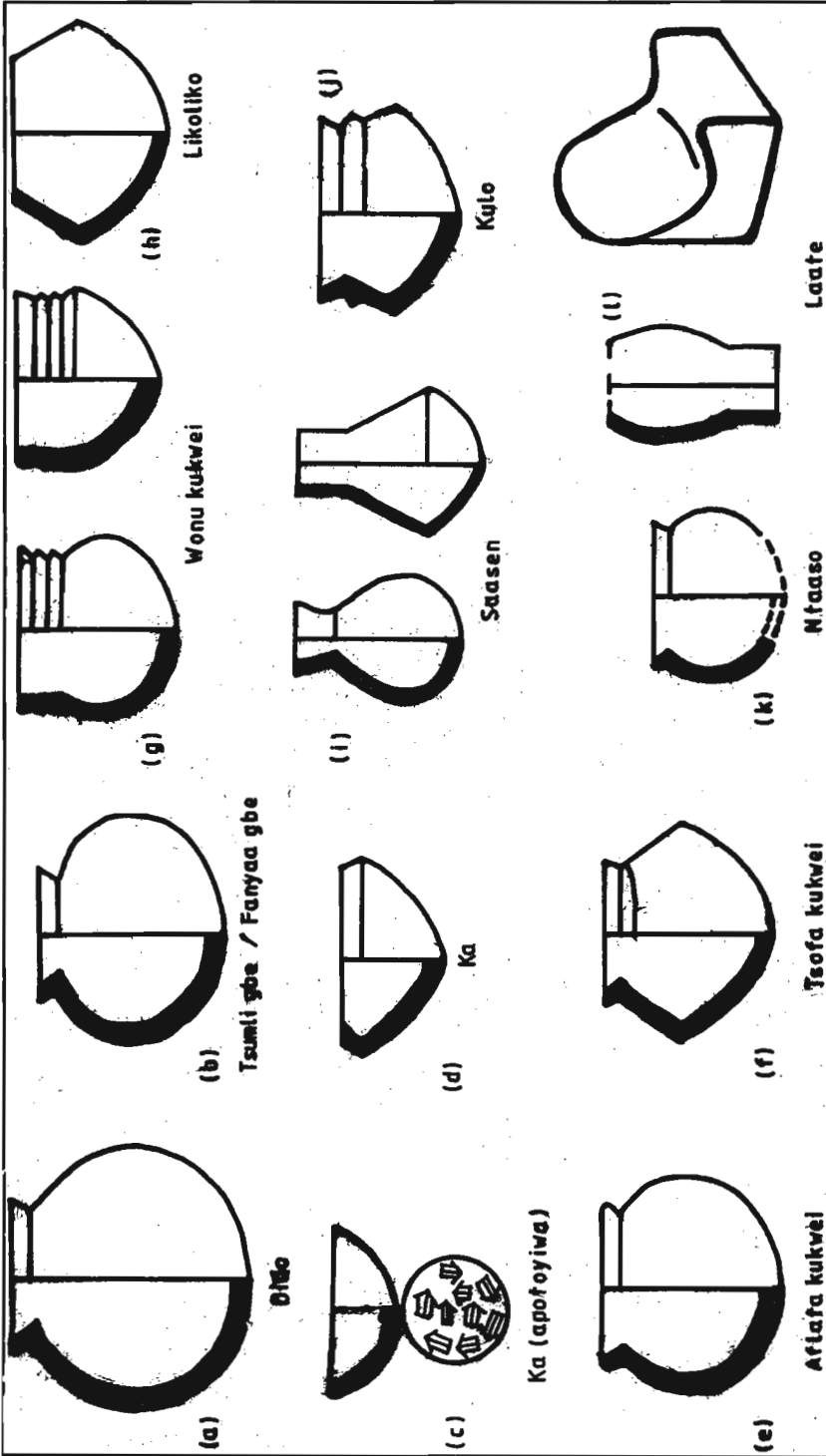


Figure 3 Ceramic vessels produced by Ga potters in the Lower Densu Valley

on a wooden block, *gblu*. The potter opens the clay lump by thrusting her fist into the centre. The walls of the emerging vessel are refined by squeezing the clay paste between the hands while simultaneously pulling or stretching the clay upwards. Whenever necessary, bits of past are added in the course of vessel formation.

The tools employed by Ga potters to manufacture pots are not only simple and few in number, but also vary slightly from one potter to another. In the construction of a vessel, a corn cob (*abeletso*), and a carved piece of bamboo splinter (*pamplotso*), are dragged or rouletted along the vessel's walls, so as to make it the desired shape. Smoothing of the vessel's surface is accomplished with a wet rag. Excess clay paste is scraped off the vessel with a half seed-pot of *Azelia africana* (*papao*). The vessel's rim is formed by marking a line at the top section of the unfinished vessel using the half seed-pod. In the process of drawing the line, a thin piece of clay is scraped off the vessel. The marked rim is then shaped in-between the thumb and opposing fingers of a wetted hand while the vessel is turned by the other hand.

At this stage, the potter leaves the vessel on the mould support to dry for an hour or longer before work can recommence. If a large vessel, for instance a water storage pot, is being constructed, one half, usually the upper part, is made first. Afterwards the lower half, that is the mid body to the base, is added with the aid of a concave wooden tool. In the leather-hard stage, the vessel is trimmed using a sharp piece of metal to obtain the required wall thickness and to bring it to the desired shape.

Surface treatment and decoration

The next stage of the manufacturing process is surface treatment and decoration. Various kinds of decorative or functional motifs maybe executed on the inside and/or outside of the vessel. Surface enhancement will vary according to the type of vessel to be treated or decorated. The exterior and interior of eating bowls are burnished and smudged. Sometimes the exterior surfaces of food bowls are slipped with red clay solution before firing. Vessels that are used for cooking food are usually roughened and textured on the outer surfaces, achieved either by rolling a rough-textured corn cob or brushing a handful of dry grass over the surface of the vessel. This produces rough surfaces, thereby ensuring improved heat transfer in cooking, and also ensures a better grip, especially when the vessel is lifted when wet. The interior surfaces of grinding bowls are incised while the bottom parts of steaming pots are pierced with a cylindrical wooden tool to produce circular holes. Ritual vessels are decorated with various incised patterns on the body, and clay embossments can also be affixed to the body parts of such vessels.

Firing

Ga potters fire their vessels in the open outside their compounds. Every potter has her own firing place, *niishaahe*. The open air or mixed firing is the only method employed by the potters of the Densu Valley. Before firing, the vessels are dried for some time depending upon the weather. In the dry season, vessels may take up to about ten days to dry while during the wet rainy season, this takes a longer time of not less than three weeks.

On the firing day, the potters bring their vessels outside, to warm them in the morning sun. Firing takes place in the late afternoon. A bed or platform of firewood, dry grass and oil palm husks is prepared on the ground and the potters then arrange the vessels upside down on the fuel. Another set of fuel, this time firewood and grass, is placed around and on top of the pottery. This process is repeated until all the vessels to be fired

are arranged in layers to form a conical or dome shaped structure with each layer separated by fuel. The potters arrange the vessels in such a way that spaces are created in the heap to facilitate the free circulation of air. Large pieces of firewood and dry fan palm fronds are arranged around the pottery as a support structure. The fuel is ignited from the lower layer to the top, and the firing process may take up to one-and-a-half hours to complete. A long pole is then used to extract the vessels after the fire has died down.

Ga potters fire-smudge certain types of pottery, especially eating bowls and pots for soup preparation. The potters collect green leaves and heap them close to the bonfire. The vessels to be smudged are removed in their red-hot state and quickly placed in the green leaves. The thick smoke produced engulfs the vessels and enters and seals the pores in the pottery, thereby making the pot's surfaces shiny and black in colour.

Pottery production in the Lower Densu Valley is linked with the traditional religious practices of the Ga. It is claimed that the Ga goddess, Naa Afiiye is the custodian of the potting industry. For successful pottery production and a good market, an annual thanks-offering of drinks, a hen and *kpoikpoi* (a meal of steamed mash corn seasoned with palm oil and eaten with palm soup) is dedicated to Naa Afiiye. In addition, certain taboos are strictly observed from the stage of the clay acquisition and preparation to the firing stage. For instance, clay is not collected on certain days of the week, particularly on Wednesdays, *Shoo*, and Fridays, *Sohaa*. Other activities related to potting are not performed on these days. Also it is taboo for pregnant and menstruating women to participate in the production process or even to go near to the clay sources. To avoid unsuccessful firing and breaking of pottery, whistling in and around the firing place is forbidden.

Distribution of Ga pottery

Ga potters produce wares to supply both Ga and non-Ga markets. The potters in the Densu valley seldom peddle their wares in the market place. Female intermediary traders travel from Accra (Ga Mashie), Nsawam and Kasoa to buy from the potters. The vessels are loaded in large baskets with grass in between them to minimise or avoid breakage during transportation. The pots are covered with strong fibre nets, *ntan*, before they are transported by vehicles to the markets. Additionally, a significant number of ceramic vessels is distributed by head portage along a complex network of foot-paths that link the production centres to other Ga villages in the Lower Densu Valley.

I have been involved with archaeological studies in the Densu basin since 1988 and through such research it is clear that this pottery tradition has flourished in the Densu Valley from about the sixteenth-century AD (Bredwa-Mensah 1990). The Densu Valley has therefore been supplying the Western Accra Plains with its products for over four centuries.

Ceramic use patterns among the Ga

Every traditional Ga household uses locally produced pottery for domestic and other purposes. Despite this positive trend, the functional roles of some of the locally-made pottery has been supplanted by mass-produced modern goods of plastic, metal and glass.

The Ga use four kinds of domestic ceramic containers for storage despite the diffusion of alternative vessels such as plastic drums, basins and metal cans. Two of these storage vessels, *dido* and *tsumli gbe*, are used for storing water. Most households in rural Ga use water fetched from streams and wells for domestic purposes. Water for washing

and food preparation is stored in the *dido*, an extremely large ceramic container. Drinking water is stored in water coolers, *tsunli gbe*. Due to the tropical hot weather, there is of course a preference for cool and sweet drinking water all the year round. Pottery water-coolers allow transpiration and evaporation and so keep the stored water cool. Another storage container is the *saasen*. This is used to tap and store a traditional drink, *tedaa*, from the palm tree. According to Ga palm-wine tappers, the drink loses its freshness and becomes 'too hard' if it is not stored in the ceramic container. There is one ceramic vessel for the dry storage of food, particularly grain flour and dough, prior to cooking. The vessel, *aflata kukwei*, is preferred by Ga women because they believe ceramic containers prolong the storage of food materials better than metal and plastic ones. Also, these ceramic storage containers are in strong demand because the alternative plastic and metal containers are comparatively expensive.

About half the pottery produced by the Ga potters consists of culinary vessels. Traditional Ga foods are normally accompanied by soups, stews and sauces. Ga women use shallow bowls with incised grooves on the interior surfaces, *ka, apotoyiwa*, to grind cooked vegetables for these relishes. Meals are often eaten communally and therefore require larger and deeper bowls, *ka*. There are also smaller bowls, *ka*, that may occasionally be used by the individual for eating. Food is cooked in an ceramic vessel called *likoliko*, while soups are prepared in a *wonu kukwei*. These traditional pottery vessels now have several strong competitors. Cast metal cauldrons and aluminium containers are now preferred by Ga women for cooking food and soups. However, a ceramic vessel, *ntaaso*, is always used by Ga women for ceremonial cooking of *kpoikpoi*, a meal served and eaten during the celebrations of the annual Ga festival of Homowo (meaning 'hooting at hunger'). It is also served as part of annual thanks-offerings to Ga deities.

Ga pottery also plays a significant role in the traditional medical practices of the western Accra Plains. Ga traditional medical systems involve the application of medicinal and nutritional herbs for healing and the promotion of health, as well as magico-religious practices which involve the performance of rituals. The preparation and storage of herbs, plant concoctions and other traditional medicines involve the strict use of special pottery called *tsafa kukwei*. According to some traditional medical practitioners, the potency of herbal medicines is maintained and prolonged when prepared in ceramic vessels. In the traditional religious practices of the Ga, rituals concerned with the passage of life, spiritual protection, ceremonial cleansing and shrine worship are performed by using a special ceramic vessel called a *kulo*. Ga traditional worship centres may take one of these forms: a tree temple or an outdoor grove called *aklabatsa*, or an enclosed round mud house, roofed with grass tapering to a point on the top called a *gbatsu*. In these worship centres, a number of symbolic items, namely ritual ceramic vessels, brooms, wooden stools and a special altar, may be found. At Manhean, the shrine of the village god has an altar comprising a forked tree capped by the ritual ceramic vessel or *kulo*. Shrine worship among the Ga involves the performance of rituals for ceremonial cleansing and spiritual protection. Ritual ceramic pots in Ga shrines contain herbs and holy water. During worship, shrine attendants sprinkle the holy water on devotees who seek cleansing and protection at the shrines.

As will be apparent from the above, every vessel produced by Ga potters is associated with a definite stated use or primary function, hence the designation of pottery as cooking pots, eating bowls, water storage vessels and so on. This set of ideal functions

indicates actual usage. However, some vessels can be put to one or more secondary uses. For example, *tsofa kuwei*, primarily used for boiling herbal medicines, may also be used to cook food. *Likoliko*, used for cooking food, are sometimes used to boil herbal medicines as well. Grinding bowls, *ka apotoyiwa*, are also utilised as eating bowls when not needed for their primary function.

Breakage, re-use and discard of ceramic vessels

Almost all vessels used locally are broken and discarded within the households or elsewhere within the village settlements. The factors involved in breakage are varied, although the majority of vessels are broken as a result of accidents (especially those that are frequently moved about, such as cooking vessels and eating bowls) and ageing processes.

Pottery broken in the process of usage is put to several other uses. Investigations reveal that the two potting villages of Afuaman and Manhean utilise potsherds from broken vessels as raw materials in house building. The local people crush broken vessels into smaller pieces, mix then with mud and combine them with organic plant materials to construct mud tauf and wattle-and-daub houses. According to some old Ga men in the Densu Valley, houses built with a mixture of crushed potsherds and mud are not only strong but have a long life-span because they can withstand erosion. Ethno-historical evidence gathered in the Densu Valley reveals that there is a reasonable continuity with present-day building practices in the area.

The extra-large water storage pots, *dido*, when broken, can still be utilised as dry storage containers. Medium-sized pots like, *aflata kukwei*, *tsofa kukwei* and *likoliko*, are also put to a variety of secondary uses such as water troughs for domestic animals, for storing water used for sharpening cutlasses, receptacles for frying grains, potters tool-kits or children's play things. Vessel rims are utilised as pot-stands.

Broken vessels that are not utilised immediately may be discarded in two ways, leading to the accumulation of primary and secondary refuse mounds. According to Schiffer (1972), artefacts discarded at their location of use are termed primary refuse, while those discarded elsewhere are known as secondary refuse. Potsherds that are not needed for re-use are swept and dumped on community or neighbourhood refuse mounds. Dumping is usually done on the nearest mound to one's compound, but that is not always the rule. For instance, due to blood ties, a particular household may choose to share common dumping grounds with other family members in another section of the village. At the time the research was conducted, there were four such secondary refuse mounds located in different parts of the Manhean village. In addition, a number of old refuse mounds, some of which are heavily eroded, are located in various parts of Manhean.

Large potsherds designated for secondary functions may be moved to infrequently used areas in the house compounds where they will not prove a danger to bare feet. Also, despite daily cleaning of house compounds, smaller potsherds may be left over, some of which are pressed into the clay floor surfaces of the compounds. Rooms which serve as stores for assorted materials, areas along walls, house floors and corners may carry significant broken pots which may turn into primary refuse when they enter the archaeological context.

Implications for the archaeology of the area

What implications do the ethnographic observations made about pottery re-use and discard patterns in the research area have for the archaeology of the Western Accra Plains?

The use of potsherds as raw materials in house building carries an archaeological implication. In rural Ghana, building technologies and construction practices are predominantly traditional. Mud and wood materials are combined to build houses that are highly susceptible to agents of decay when they collapse, thereby producing ephemeral architectural remains. McIntosh (1976: 46; 1977: 185) observed in his study of mud wall decay in Hani, a village in the forest savannah mosaic zone of Ghana, that environmental conditions combined with traditional building customs of the area, make the archaeological identification of mud walls extremely difficult. However, in the Lower Densu Valley, ethnographic observations about building technologies and collapsed building structures seem to suggest that the recognition of architectural features in archaeological contexts, particularly mud walls, may not be such a frustrating task. Collapsed buildings in Afuaman and Manhean have rectangular shaped layouts marked by protruding potsherds which are well set in the building remains (Fig. 3). This presents a unique situation which can probably serve as a clue to the archaeological identification of the layout of the architectural structures in the Western Accra Plains and, apparently, the Lower Densu Valley.

The study further suggests that observations made about pottery dumping patterns may guide archaeologists working in the study region to make inferences about past activity centres and dumping behaviour. The ethnographic observations concerning discard patterns indicated that both primary and secondary refuse mounds are formed in the villages of Afuaman and Manhean. The accumulation of primary refuse in houses is of archaeological importance. It was observed that despite regular maintenance (i.e. cleaning up), every house in the research area carried significant primary refuse. The treatment of primary refuse in houses seems to suggest that potsherds are likely to be found in relation to their functions within house floor areas. On the other hand, potsherds found outside house floors may not correlate to their functions. Again, it is most likely that excavated potsherds from house floors may cluster in typological groups which could be used to infer different activity areas (that is cooking, sleeping, storage places) in the houses.

Archaeological studies have revealed that refuse mounds of different sizes are located in different areas of ancient Ga settlements in the Western Accra Plains (Field 1962; Ozanne 1962; Anquandah 1982; Bredwa-Mensah 1990). Excavations have shown that some of the mounds contain workshop and household objects including several hundred potsherds. The sizes, distribution patterns and range of artefactual contents of these ancient mounds, seem to suggest that they are secondary refuse deposits accumulated by different households and workshops that shared common dumping grounds in different locations of the settlements.

Conclusion

This paper has focused on the ethnography of Ga pottery. Issues highlighted included the technology of Ga pottery production, the use of pottery in primary and secondary contexts and their concomitant entry into the archaeological record. Implications of the research for the archaeology of the Western Accra Plains have been put forward.

However, these implications should not be considered as firm conclusions; rather, they are offered as suggestions capable of being tested archaeologically.

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