

I Like You, I Like Your Pottery: An Ethnoarchaeological Approach to Ceramic Distribution and Acquisition in Northeastern Ghana

Manuel Calvo · Daniel Albero ·
Jaume García Rosselló · David Javaloyas ·
Kodzo Gavua · Joan Fornés

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Abstract This article deals with the myriad determinants involved in pottery distribution in northeast Ghana, considered from a theoretical perspective that integrates the materiality of vessels and the social, political and historical context where both communities and pottery operate in their daily practice. Hence, we develop a comprehensive research strategy that combines emic and etic views covering the multiple dimensions of pottery life history. In this sense, production units, technical traditions and the characteristics of the redistributive centres, as well as the strategies for pottery acquisition, are studied. Special attention is paid to quite varied aspects such as the physical properties of vessels and their performance characteristics, the reputation of both vessels and potters according to the consumers and the mobility and connectivity patterns found in the study area. On the other hand, interpretations regarding the historical and sociopolitical context of the region are emphasised, as well as the interethnic relationships amongst groups inhabiting the area.

Résumé Dans cet article nous abordons les différents facteurs impliqués dans la distribution de la céramique dans le nord-est de Ghana à partir d'un cadre théorique qui tente d'intégrer la matérialité propre des récipients avec le contexte social, politique et historique dans lequel les communautés et leurs céramiques s'insèrent au jour le jour des pratiques quotidiennes. Pour cela, nous avons développé une ample stratégie d'étude qui combine tout autant les perspectives *emic* comme *etic* et qui englobe de multiples dimensions du cycle de vie de la céramique. Avec cet objectif nous avons étudié les unités de production, les traditions techniques employées ou les caractéristiques des centres distributeurs, ainsi que les stratégies suivies par les consommateurs afin d'acquérir les céramiques. Tout cela a été effectué en accordant une attention particulière, d'un côté, à des aspects aussi variés que les propriétés physiques des récipients et leurs *performance characteristics*, la réputation qu'ont les céramiques et la femme potier pour les consommateurs et les modèles de mobilité et connectivité présents dans la zone d'étude. D'un autre côté, un rôle déterminant a été octroyé aux interprétations réalisées sur le contexte historique et socio-politique de la région, ainsi qu'aux relations inter-ethniques existant entre les différents groupes vivant dans ce territoire.

M. Calvo · D. Albero (✉) · J. García Rosselló ·
D. Javaloyas · J. Fornés
ArqueoUIB Research Group, Department of Historical Sciences
and Arts Theory, University of the Balearic Islands, Mallorca,
Spain
e-mail: d.albero@uib.es

K. Gavua
Department of Archaeology and Heritage Studies, University of
Ghana, Legon, Ghana

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Introduction

Towards a Rupture of the Materialist-Idealist Duality in Pottery Distribution: New Approaches and Strategies

Usually drawing from economic and functionalist positions, most ethnoarchaeological research dealing with pottery distribution and acquisition (see Stark 2003) has interpreted these phases of the vessel life history as mere environmental adaptation, closely related to efficiency, demographic pressure and territorial organization (Deal 1983; Vossen 1984; Arnold 1985). Hence, the material and ecological aspects participating in these processes have been focused mainly on finding generalist laws that may explain the role of pottery in human societies, neglecting its cultural and historical contingency. Amongst the many factors proposed to explain the distribution, we should mention the distance from the production centre (Renfrew 1977), the spatial morphology generated by different exchange models (Renfrew 1975), the geographical distribution of the raw materials needed for pottery production (Arnold 2000, 2005), the economic value of goods (Vossen 1984), the means of transport and mobility networks available or the productive structure (Costin 1990; Arnold III 1991), the technological and typological characteristics of pottery (Longacre et al. 2000; García Rosselló 2008) or a more complex system integrating all these elements (Arthur 2006).

A second perspective has emphasised the importance of social relations and agents involved, to understand the spatial distribution and consumption of pottery. It conforms to a position where the interpretation of material culture cannot be reduced to economic and efficiency factors, but rather that its analysis should provide for the complex social, political, historical and networks of meaning configuring human communities. These views affirm that pottery distribution and consumption are intimately related to different social ties and identities (e.g., Hodder 1982; Dietler and Herbich 1989; Kramer and Douglas 1992; Longacre and Stark 1992; Stark 1992, 1998; Gosselain 1998; David and Kramer 2001; van der Linden 2001; González Ruibal 2005; Calvo et al. 2011, 2013).

The viewpoint presented here aims to continue with the analysis of ceramic distribution networks in a multiethnic territory located in northeastern Ghana carried out since 2011. In previous works (Calvo et al. 2011, 2013), we addressed the role that infrastructure mobility,

connectivity strategies and settlement patterns played in the distribution of ceramics. To a lesser extent, we tackled some social factors involved in such distribution. In the present work, our goal is to address in depth this latter interpretative viewpoint and to relate the patterns of ceramics distribution and consumption in our study area to specific historical, political and social circumstances of the communities living in the region and the relationships they establish with each other. We are mindful of the value of other interpretative schemes, but adopt this approach with the aim of promoting new perspectives in the interpretation of the dynamics that influence pottery distribution, as well as more holistic viewpoints capable of dealing with the complexity of the societies under study.

In this research, we support the significantly active nature of material culture as an influential agent in the configuration of the social arenas of communities (Hodder 1982, 1986; Olsen 2003; Latour 2008; Knapett 2012) and understand that material culture—in this case, pottery—constitutes a mechanism for the negotiation of the mutable aspects of communal identities (Hegmon 2000). The strategy proposed may be considered an attempt at integrating two positions (i.e., materialist and idealist). We thus hope to generate theoretical and interpretive frameworks where the “gross materiality of things” (Knapett 2012, p. 193) also plays a relevant role in the historical and cultural contingency of many discourses and signs participating in the social configuration of communities.

Finally, it should be mentioned that the complex interrelationship existing amongst people, materiality and daily praxis demands a complete analysis of the pottery life history involved in the phenomenon, the spaces and agents defining production, and the exchange, distribution, consumption, maintenance and deposition processes as well as the social space where these actors’ relationships are generated (Lemonnier 1986, 1993; Dietler and Herbich 1994, 1998; García Rosselló and Calvo 2013; Calvo and García Rosselló 2014). This article is based mainly on the study of pottery distribution, integrated in a wider interpretative context which also includes the analysis of its production and the dynamics associated with acquisition. Hence, pottery life history is conceived as an integrated whole, where every phase interacts with the rest and is, in turn, mutually influenced.

The theoretical guidelines presented here require the combination of several strategies, from the analysis of

the physical qualities of the materials, their technology, typology and spatial distribution, to the review of the social, historical and identity context where pottery, potters and consumers coexist on a daily basis.

This article deals first with the way pottery production and distribution networks are organised in certain areas of northeast Ghana. It later moves to the emic analysis of the perception of materiality by consumers, by means of the concept of reputation. Finally, both the physical qualities of pottery and the perception of reality by the users are related to certain social practices, ethnic identities and their specific historical background. This aspect is relevant to understanding the decisions made by producers, sellers and consumers, as much as the complexity of the mechanisms regulating pottery distribution and acquisition.

Despite being thoroughly conscious of the existence of a large number of social and identity elements which also participate in the way pottery is distributed amongst the communities and individuals in the study area (such as questions related to religion, gender, socioeconomic status or the rural-urban dichotomy), for length's sake this first discussion is restricted to the analysis of the material conditions of pottery production and distribution and their relation with ethnic identity. Ethnicity is an important social identity which strongly organises the daily life of the communities analysed while, at the same time, plays a key active role in the configuration of pottery production, distribution and consumption. Conversely, the ceramic universe actively participates in the permanent negotiation of such ethnic identities.

Thus, this article aims to understand how the different ethnic identities present in the territory are related to pottery distribution, acquisition and consumption patterns. From this perspective, we assume that the social relations amongst the individuals of the different ethnic groups are active in structuring distribution patterns; similarly, pottery acquisition and use is involved in the configuration of these ethnic identities. Thus, the historically built social relations—in many cases resting on ethnicity—imply a key element to understanding both pottery production and distribution patterns (see, for instance, Kramer and Douglas 1992; Gosselain 2000; Mayor 2010).

In our opinion, the ethnoarchaeological research and the heuristic strategies that we have been developing in northeastern Ghana could be useful to improve research

methodologies so as to integrate into a coherent whole a large variety of specific material, social and ideological factors which are closely related and actively participate in the practices regarding pottery production, distribution and acquisition.

The Study Area and Local Communities

The theoretical framework, as well as the ideas introduced in the previous section, were applied to a specific case study centred mainly in a territory of some 3,000 km² located in northeast Ghana (Fig. 1). This territory borders Togo and Burkina Faso and is formed by the Bunkpurugu-Yunyoo district (Northern Region, Ghana). Incidentally, few productive systems have been studied in the Mamprusi East, Gushiegu and Chereponi districts—and the suburban area of Garu-Tempene and the Bawku town (Upper East Region)

The territory is highly rural, and the majority of the population is dedicated to mainly the primary sector, dominated by farming and livestock keeping. There are no major differences between the subsistence base among the different ethnic groups, except in the case of the Fulani families who are exclusively dedicated to livestock keeping and do not have access to land.

One of the salient characteristics of our study area is that it is inhabited by a wide diversity of different ethnolinguistic communities. The main ones are B'moba, Mamprusi, Komba (see below) and Fulani in the Bunkpurugu-Yunyoo district, and Kusasi and Mamprusi in the Garu-Tempene suburban area and in the Bawku town. But there are also some Fulani, Talensi, Moshi, Hausa, Dagomba, Chokosi and Busanga families living in the territory (Fig. 2). *Konkomba* is the most common term used to refer to the Komba ethnic group in the anthropological literature, although they refer to themselves as Bekpokpam. Dawson (2000, 2009) states that Konkomba within Ghana are divided in two different groups, the northern Komba and the southern Bimotiev. In this paper, we refer mainly to the northern group (specifically the communities who reside in Bunkpurugu-Yunyoo district), i.e., Komba. In some cases, we refer to both groups and we use the term Konkomba. The present study is focused on the main groups inhabiting the territory.

The different communities living in the area embody multiple, complex and permanently

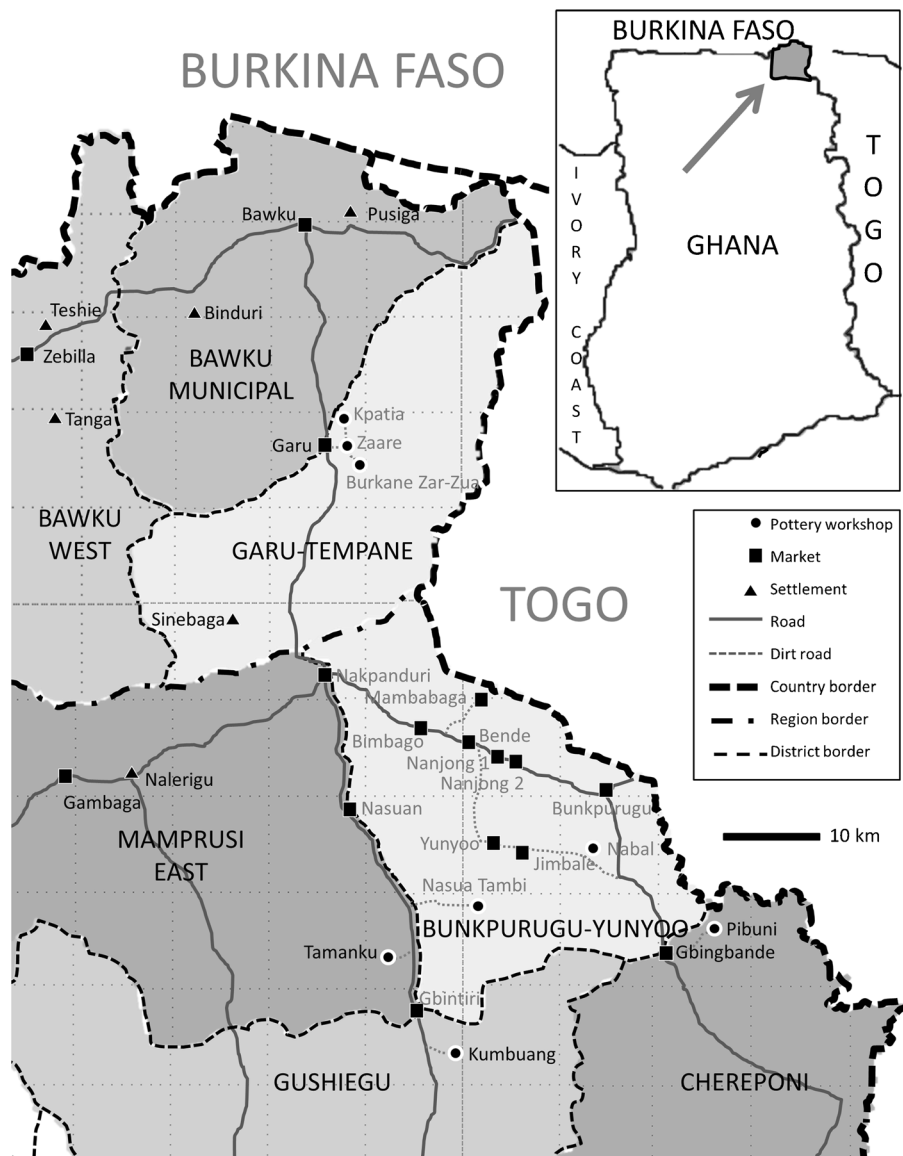


Fig. 1 Map of the study area showing the settlements, markets and pottery production centres referred to in the text

redefined social identities such as gender, status, clan, family, profession and religion, amongst which the presence of different ethnic identities is outstanding. We define ethnicity as a historical, fluid, contingent and relational construct which generates a collective identity characterised by the presence of a metaphorical or fictional kinship. In this relationship, the genealogical or biological reality is irrelevant; what is important is that the pretension of a common ancestor is agreed and recognised by the members of the group (Eriksen 1993; Emberling 1997; Jones 1997; Meskell 2001;

Sweeney 2009). Additionally, we consider other elements which define ethnic identity from outside, particularly the ones generated from the colonial processes imposed by European powers. When dealing with the indigenous communities, European countries highly valued the construction and identity differentiation of the many groups. In this characterisation, the linguistic element and social relations, though not exclusively, played a significant role.

It was due to this ethnic diversity that we decided to conduct a research project in this region

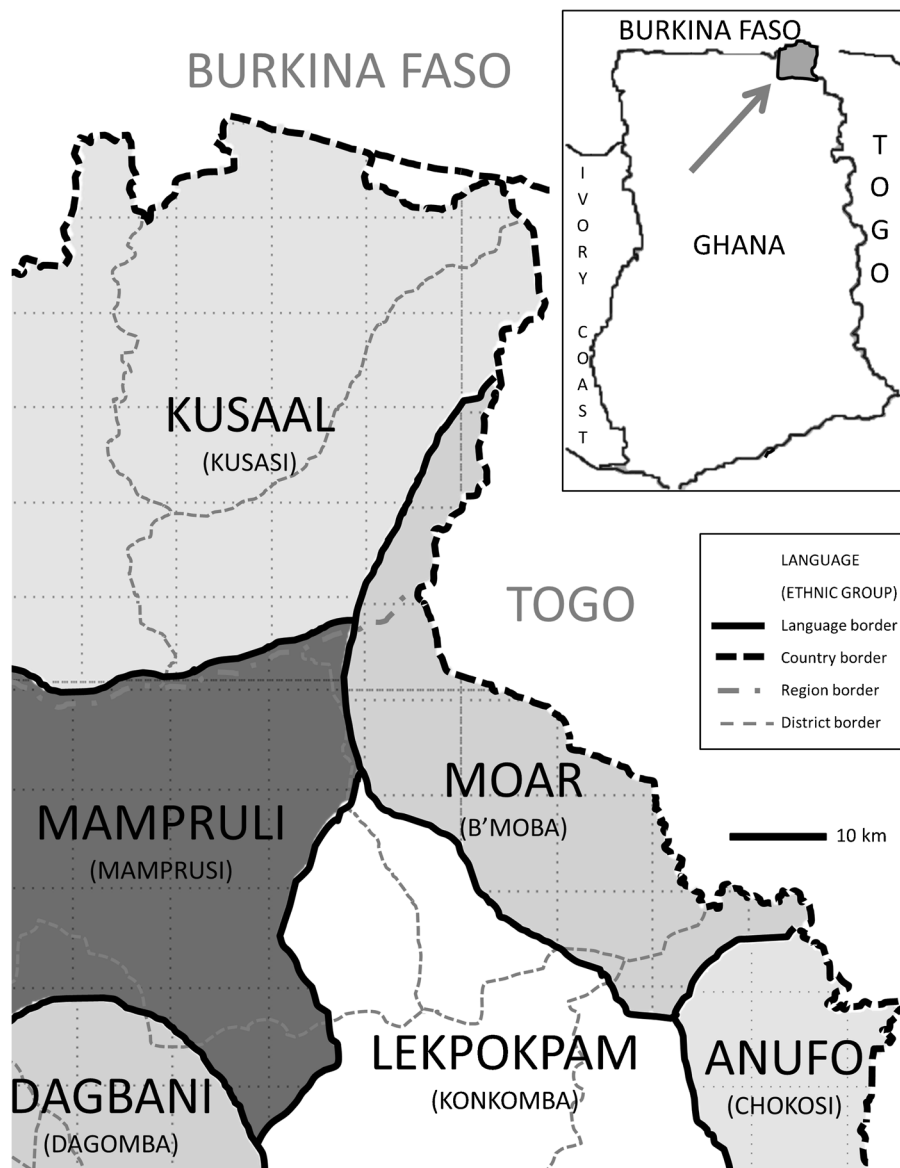


Fig. 2 Map showing the distribution of the main ethnolinguistic groups referred in the text

focused on the connections existing between the materiality of pottery and domestic contexts and interethnic relationships. In this sense, one of the more interesting phenomena identified in the study area is the presence of two groups of potters from different ethnic affiliations, the Komba and Kusasi, whose production is consumed by the communities including the Komba and Kusasi, but also the Mamprusi, B'moba and Fulani who inhabit and share the territory, not always peacefully as we see in the next section.

A General Historical-Political Context of Ethnic Identities in Northeast Ghana

This work discusses, among other things, relationships that may be found between ethnic identities and the production, distribution and acquisition of ceramics. We argue that in our study area ethnic identities are, at present, an important reality that shapes how the different groups relate to each other. Ethnicity has, during the last decades, been a major factor in social conflict that culminated in the outbreak of several violent episodes of

varying intensity between communities (Staniland 1975; Ladouceur 1979; Bogner 2000; Brukum 2001; Tonah 2005b; Weiss 2005).

Nowadays, Ghana's political system is a duality of Western European and local governance systems (Owusu-Mensah 2014). On the one hand, the nation state has been characterized since its political independence in 1957 by a mainly democratic dispensation, which military adventures have up to 1992 interrupted intermittently. It is currently a presidential republic that is recognized as one of the most stable democracies in sub-Saharan Africa, highly decentralized with ten administrative regions and 216 districts (Owusu-Mensah 2014). On the other hand, there exists a system of traditional chieftaincy, linked to the different ethnic groups found in the country, whose origins date back to pre-colonial times, but has undergone major changes both in colonial and post-colonial times. Overall, this complex political system has worked successfully, enabling social, cultural and economic development. However, the system is not without its tensions and conflicts. We provide a brief outline of historical developments that underpin the chieftaincy system and ethnic identities in our study area in order to deepen understanding of the basic characteristics of the system and identities and their attendant conflicts in northeastern Ghana.

According to oral sources and written documents, Mole-Dagbane communities—to which the Mamprusi and Kusasi groups belong—settled around Pusiga, near Bawku, between the thirteenth and fifteenth centuries AD, coming from the northeastern area (Drucker-Brown 1975, 1992). Different oral narrations relate that the newcomers had a centralised and hierarchical political organisation—which may be classified as “a chiefdom ruled by a king” (Rattray 1931, p. 46)—and a patrilineal system, two elements that differentiated them from the acephalous groups previously inhabiting the area, the Konkomba and B'moba. Many researchers (Manoukian 1951; Mather 1999; Bogner 2000; Dawson 2000; Brukum 2001; Pul 2003; Tonah 2005b; Maasole 2006) have argued that these hierarchical groups subdued the aboriginal acephalous peoples, although others stated that they had hardly any interference in their organisation (Hilton 1962, p. 80).

The division between centralized and hierarchical societies on the one hand and acephalous societies on the other, was set in writing by mainly British anthropologists, such as Robert Sutherland Rattray (1931),

during the period of British colonial administration of the territory. It is important to stress this point, as this historical discourse is currently used by the heirs of centralized and hierarchical societies to justify the control of traditional political power, while it is questioned by the heirs of the communities considered originally acephalous, who argue that the distinction did not reflect the chieftaincy system during pre-colonial times but already reflected British colonial influence.

By the late nineteenth and early twentieth centuries, European powers colonized the interior of present-day Ghana. In the case that concerns us, Germany established in 1884 the Protectorate of Togoland (although it was not until 1890 that it began to extend it inland). This Protectorate encompassed most of what is today the Republic of Togo and also part of the eastern fringe of modern Ghana, including our study area (Laumann 2003). The British established in 1874 the colony of Gold Coast along the Guinea Coast and were gradually extending their influence inland until 1902, when they incorporated part of northern Ghana into what they named the Northern Territories. In 1919, agreements signed in the Treaty of Versailles after the German defeat in World War I formally sanctioned the division of German Protectorate of Togoland into two territories—the British Togoland and French Togoland—which along with the British colony of Gold Coast, were the main administrative divisions until the independence of Ghana in 1957 and Togo in 1960 (Fig. 3).

By the beginning of the twentieth century, with the arrival of the first European colonisers and the imposition of British rule, drastic changes were made to the political and social structure of the societies found in our study area. Aiming to implement an efficient colonial system according to the peculiarities of the area, the British Colonial Government favoured the imposition of power and chieftaincy over the rest of the ethnic groups inhabiting the territory by means of the so-called indirect rule. It implied the allocation of subchiefs from the traditionally hierarchical groups—the Mamprusi, in our case—in the territories previously occupied by acephalous communities, giving rise to a period of friction (Pul 2003).

Towards the 1950s, important changes at the socio-political level took place, first by the establishment of the autonomous government (1951–1957) and later with Ghana's independence in 1957. During this period, the Convention People's Party (CPP) led by Kwame

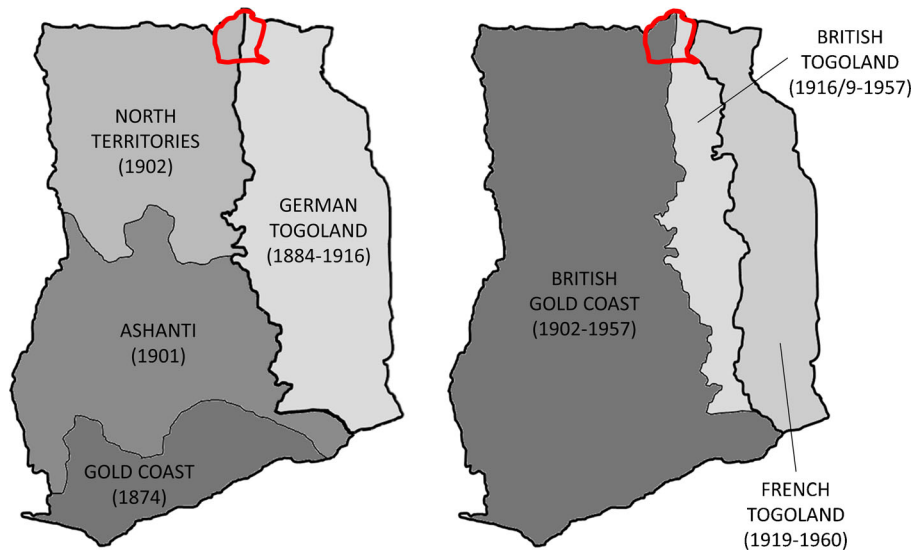


Fig. 3 Maps showing the evolution of administrative borders from 1874 to 1960

Nkrumah tried to centralise political power in the national government. It was the beginning of a process aimed at collapsing the traditional chieftaincy system, understood as a remnant of the colonial period (Pul 2003). This process has had enduring consequences in the study area as it modified the power relations existing among the different ethnic groups.

Between 1966 and 1979, as a result of political instability following a military coup d'état, this orientation was modified again and a process leading to the restoration of the chieftaincy system ended with the Chieftaincy Act of 1971 and the resolution of the Committee on Ownership of Land and Positions of Tenants in Northern and Upper Regions, popularly known as the Alhassan Committee (Pul 2003; Jönsson 2007). These legislative changes substantially altered the importance and basic shape of the Chieftaincy institution in the modern Ghanaian state. In particular, two essential aspects were approved. First, it was confirmed for the first time the domination of the ethnic groups traditionally considered acephalous by those considered hierarchical. Second, it meant the creation of the National House of Chiefs and various Regional Houses of Chiefs, which became the main administrative bodies in the Chieftaincy institution. The Act granted these bodies absolute power over decisions regarding the organization of chiefdoms without interference from the Ghanaian state (Pul 2003; Jönsson 2007).

This pro-chieftaincy phase was temporarily interrupted during the military government of Jerry

Rawlings (1981–1992). However, in 1992, national and international pressures resulted in the adoption of a new constitution by which the fourth Ghanaian republic was established, the multiparty democratic system restored and the Chieftaincy Act of 1971 recovered without subsequent amendments. The role of traditional chiefs as guarantors of the customary values and norms was thus accepted in the Ghanaian political system. The chiefs assumed jurisdiction over many customary practices, including marriage and divorce, inheritance and especially important today, rights to land ownership. In this way, they began playing an important role in the current Ghanaian political system, which also offered them representation in various institutions of the modern state at the national, regional and district levels.

In the territory we are studying, the approval of the 1992 Constitution meant the consolidation of Mamprusi power over the rest of the ethnic groups. The constitutionally approved Chieftaincy model led to a conflictive situation. Out of the three dominant ethnic groups living in the territory (B'moba, Konkomba and Mamprusi), only one, the Mamprusi, recognized the status of Paramount Chief and therefore has a leading role in the Regional House of Chiefs. It is interesting to note the difficulties and tensions raised by this situation, particularly regarding the Konkomba and B'moba groups. Although they represent 17.3 and 2.7 % of the population in the Northern Region, respectively (and are the majority in some districts), the two groups do not have political recognition in the traditional chieftaincy

system, whereas there are less representative groups in terms of population—such as Mamprusi, Gonja (both with 7.3 %) or Nanumba (with 2.5 %)—that have access to political power.

The issue of claims for quotas of political power within the traditional Chieftaincy system is closely related to disputes over land ownership, as land is an essential economic resource in these eminently agricultural societies. Traditionally, chiefs settled claims over the ownership of land in northern Ghana based on three main criteria: previous settlement in the territory, conquest and property agreements (Pul 2003). However, conclusions of the Alhassan Commission, which were approved in 1978 and later included in the 1992 Constitution, vested the authority for the settlement of land disputes in the Regional House of Chiefs. Conclusions of the commission, which was composed mostly of members of the four ethnic groups with full political power within the Chieftaincy institution in the Northern Region (Dagomba, Mamprusi, Gonja and Nanumba), clearly discriminated against groups who had not recognized a Paramount chief, as the case of Konkomba and B'moba (Jönsson 2007).

Thus, the particular form the chieftaincy system adopted has important implications for the communities living in our study area. For instance, in the case of the northwest area of the Bunkpurugu-Yunyoo district, locally known as the traditional region of Pib-Ri, although the B'moba are clearly the majority in demographic terms, descendants of the Sala clan, who are Mamprusi, manage and control the region. This means that the chiefs of the other ethnic groups are subordinate to the Mamprusi chief of Bende. At the same time, the Sala claim to be the legitimate owners of the territory, arguing that they were the first settlers of the territory. Although this claim is sanctioned by the current political system, some B'moba communities contest it. Another important land-related conflict situation is found between B'moba and Kombas communities living in the district of Bunkpurugu-Yunyoo. Conflict over the land ownership between the communities has occasionally erupted into violence they cannot solve, as they have no legal authority to decide on land property issues.

Finally, to this complex and tense political situation related to the rights of land ownership has been added a new element, the recent processes of commercialization of the critical resource, land. The perception among many of the ethnic groups in northern Ghana that land is traditionally an inalienable right that “belongs to the

dead, the living and the unborn” (Pul 2003, p. 62) is changing rapidly as a result of the development of the market economy. Thus, the land has become an important source of income for chiefs and ethnic groups that wield full political power systematically denying minority groups access to the traditional political power.

It appears, therefore, that ethnic relations in northern Ghana have a long and complex history. The Ghanaian political system over the last 30 years has shown its effectiveness in maintaining stability and allowing the development of society, combining successfully a modern Western-style democratic government model with a traditional Chieftaincy system but is not without contradictions. In this regard, we argue that ethnicity is an important social identity that structures the daily life of the communities in our area of study. We will analyse in the rest of this paper how ethnic identities influence pottery production, distribution and acquisition in the region.

Research Strategies

As noted in the “Introduction,” we designed a strategy, which includes the analysis of production, distribution and acquisition processes, for proper understanding of the exchange systems and pottery distribution and acquisition patterns identified in the area. Thus, during six field campaigns carried out between 2009 and 2015 different productive units, we studied distribution centres (connected to markets) and the acquisition patterns manifested by consumers.

Pottery Production Processes and Places

The analysis of the production contexts was centred in the characterisation of the *châines opératoires* associated with the different pottery types modelled and the individuals participating. Furthermore, the pottery-making areas were documented using the concept of productive strategy (García Rosselló 2008). This concept includes—as well as the production systems aforementioned—vessel form and function, organisation of production, control over production, socialization and learning processes in use, subsistence base of the group and infrastructure needed for production. Finally, pottery-exchange systems inasmuch as distribution places were identified. All in all, we interviewed and reconstructed the productive systems of ten Kusasi potters from the Burkane Zar-Zua and Zaare settlements

(Garu-Tempene district) and 11 Komba potters from 11 different productive and habitation units located in Nasua Tambi and Nabal settlements (Bunkpurugu-Yanyoo districts), Tamanku settlement (East Mamprusi district), Pibuni settlement (Chereponi district) and Kumbuang settlement (Gushiegu district).

Pottery Distribution Patterns

We interviewed 36 female sellers, both middlepersons and potters, from 20 different stalls in a total of 13 markets (Gbintiri, Bimbago, Gbingbande, Nasuan, Bende, Jimbale, Mambabaga, Bunkpurugu, Nakpanduri, Nanjong 1 and Nanjong 2 in the Bunkpurugu-Yunyoo district of the Northern Region; Garu in Garu-Tempene district and Bawku in Bawku municipality, both of them in the Upper-East Region). The variety of ceramic types distributed by each stall, the provenance of vessels, the means of transport used, the social context of the seller and the system used for purchase were documented. In this way, we identified the type of ceramic products available at redistribution centres—including decorative patterns, forms and morphometric features—as well as the guidelines that articulate stalls and the way pottery is distributed throughout the territory. In each stall, questionnaires were made to both sellers and customers aiming to reconstruct the distribution patterns, the profile of the sellers and the exchange systems.

The analysis of the stalls operating in the markets has proved a key tool to tackling pottery distribution as well as people mobility in the study area. Following the mobility paradigm proposed by Sheller and Urry (2006), we understand that a specific material culture participates in the articulation of people mobility, together with a series of connectivity infrastructures which influence the peculiar way a society conceptualises the space in which it moves. From this starting point, the recording strategies used facilitated reconstructing the spatial view of the groups inhabiting the study area as much as observing the role of the technology, infrastructures and means of transport implied in the mobility of both pottery and people. In this sense, particular attention was paid to the kind and characteristics of means of transport and road networks connecting pottery production areas, as well as to distribution and consumption centres.

The importance of the market lays in its definition as the place where most of the pottery is distributed, becoming true interconnectivity nodes between

production and consumption areas. This node should not be seen in a physical way defined by road and path networks, though. The same temporality of the markets (every 3 days in the case of small ones and 6 in the largest) highly determines the exchange rhythm in the study area. Markets may be also conceptualised as true nodes of social connectivity as, together with the exchange of certain goods such as pottery, several important social relations are generated in these spaces, many of them of an interethnic nature. Seen in this light, mobility and connectivity infrastructures are shown as more complex entities than the mere existence or the analysis of certain roads, means of transport or markets. They become categories where the material and social aspects which ultimately organise most social dynamics related to pottery distribution and acquisition converge.

Acquisition Patterns

In order to enquire into the acquisition patterns of consumers, the ceramic materials present in 21 dwellings were recorded. Seven of them were dwellings located in settlements where pottery is produced (Nasua Tambi and Nabal in Bunkpurugu-Yunyoo district; Kpatia and Burkane Zar-Zua in Garu-Tempene district). The other 14 were dwellings located in nonproducer settlements (Bende and Nanjong 1 in Bunkpurugu-Yunyoo district). The sample included Mamprusi ($n = 6$), B'moba ($n = 6$) and Fulani ($n = 2$) dwellings, all of them in nonproducer settlements and Kusasi ($n = 3$), Komba ($n = 3$) and Fulani ($n = 1$) dwellings in producer settlements. This analysis complements the results from distribution centres as it incorporates the perceptions and needs of the users regarding pottery.

These patterns were recorded in a questionnaire which included the use, origin, place and form of acquisition of each piece of pottery present in the different households, as well as its decorative type and morphometry. To identify the origin of the vessels stored in these domestic contexts, the following general categories were established: (a) acquired at a market, (b) directly bought in a potter's house, (c) in commodatum (i.e., a loan which implied the obligation to give the vessel back when the agreement or the work arranged is finished), (d) inherited vessels, (e) unknown way of acquisition. The category "commodatum" specifically describes the situation of the Fulani ethnic group regarding the provenance of vessels (see below for further discussion).

A total of 1091 vessels (658 from producer areas and 433 from nonproducer areas) were analysed using this protocol and the information about pottery distribution was completed with a detailed study of the provenance of each individual vessel kept in the different domestic contexts. The typology, durability, function and use of the pottery were also systematically recorded, as they may provide information about consumers' preferences, type of ceramic products distributed and pottery mobility dynamics.

Pottery Production Strategies

This section refers to the production places and pottery-making strategies confirmed in the study area. As mentioned elsewhere (Calvo et al. 2011, 2013, 2014; Javaloyas et al. 2016), production strategies—as much as the social relations between producers, intermediaries and consumers—have an active influence on pottery distribution patterns. Hence, the context where production takes place and the physical properties of ceramics are elements to be taken into account as they affect, for instance, the distance of vessel distribution and the volume of goods in circulation as well as their demand.

Pottery production in the study area is restricted to women from the Komba and Kusasi ethnic groups. In both cases, they produce handmade pottery in domestic contexts, alternating this craft with house chores and agricultural activities. Pottery production is, thus, a part-time seasonal activity, mainly performed during the dry season (mainly from December to June). Although it is restricted to certain domestic units, in neither case is it possible to consider it as intensification or a specialised activity due to the sporadic productive tempo and the fact that it is freely chosen by any women and family according to their interests and traditions.

Although Kusasi and Komba pottery productions are both carried out in domestic contexts, they clearly differ in the manufacturing techniques applied (García Rosselló 2010; Javaloyas et al. 2016), except for the use of some tools and convex moulds to model the base. Komba potters use clay mixed with grog and model the vessels by horizontal overlapping coils which are alternated between the internal and external surface and joined by pressing each end, smoothing them horizontally. This operation generates mostly thick-wall pottery, which is later fired in surface structures partially excavated on the soil, where the fuel, the oxidiser and the pottery are in close

contact. Each potter individually performs this activity, though another woman may in an exceptional case help. The capacity of the firing structures is variable and can be increased or reduced if needed. However, the average capacity can be defined in four large and 12–14 small- and medium-sized vessels in each firing.

On the other hand, the Kusasi potters documented in the Garu-Tempane area model their pottery with nontempered clay, although they mix dry and wet clay to prepare the paste. The modelling process for the body consists of the application of overlapping coils, making horizontal lines joined by pressing one of the ends and then the lower joining. They are eventually modified by a spiral movement on the same coil during pressing. This system generates thinner walls than in the case of Komba pottery, and, as will be discussed, lighter products. The firing takes place in one-chamber kilns with adobe structures where the fuel, the oxidiser and the pottery are partially in contact. The use of this kind of structures requires the cooperation of four to six women and has a capacity ranging between 10 and 12 large vessels ($\varnothing = 47\text{--}66$ cm) and, depending on the size, 12 and 20 small ($\varnothing = 10.5\text{--}15$ cm) and medium-size ($\varnothing = 20\text{--}24$ cm) pieces (Fig. 4).

These two modelling systems generate differences in both products and productive strategies. The kind of modelling and paste preparation used by Komba potters

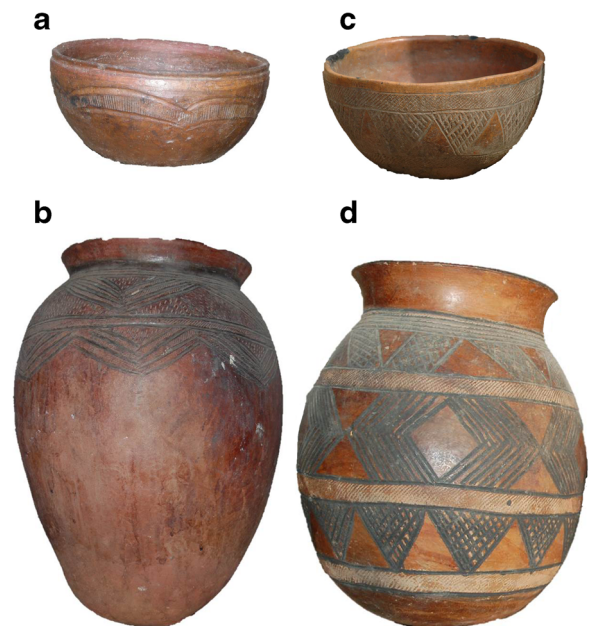


Fig. 4 Komba and kusasi bowls and large storage vessels. Note the differences in the decorative patterns

require a higher time investment to make a vessel, compared with Kusasi production strategies in Garu-Tempene. Likewise, the firing structures used by Komba and Kusasi potters significantly differ regarding capacity. The kilns of the latter allow firing of a larger number of pieces in each event. A second element to consider regarding firing is that the one-chamber kiln reduces the contact area between fuel and products, providing a better control of thermal shock on the vessels and preventing direct contact with flames.

Finally, it is important to mention that the different traditions in pottery production manifested by these ethnic groups have a spatial manifestation, as the Kusasi and Komba productive domestic units are distributed in two separated geographical regions. On the one hand, Kusasi producers are located to the north of the Gambaga Escarpment, between Garu and the border with Burkina Faso. On the other hand, Komba potters live to the south of the escarpment, between Jimbale and the Oti River. Both groups are geographically separated by a buffer area that is settled by other ethnic groups, such as the Mamprusi, B'moba or Fulani, who do not produce pottery and thus acquire and consume the vessels made by their neighbours.

Pottery Distribution and Acquisition Patterns

Two large divisions of pottery distribution and exchange systems were documented. These comprise areas where pottery is produced and areas where it is only consumed. This difference demands organising the discourse in two sections: the first one is focused on distribution systems and address the role of the production area as well as the markets where pottery is redistributed. In the second section, the acquisition strategies followed by consumers and their perception of material reality is discussed. These conclusions are drawn from a specific area where pottery is not made, the Bende region, which includes Bende and Nanjong 1 settlements.

Pottery Distribution and Acquisition Patterns in Producer Areas

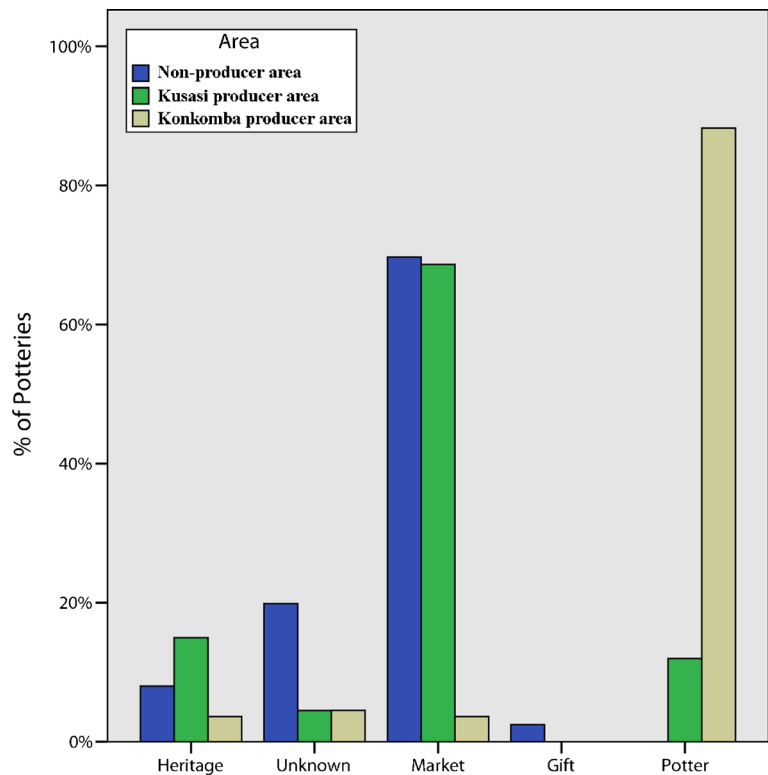
We documented three patterns regarding pottery exchange systems (Fig. 5): families who produce and consume pottery, families who buy the vessels directly in the potter's dwelling and families who acquire the products in markets or redistribution centres. However,

there are evident variations in the distribution systems depending on the Komba or Kusasi origin of the products.

In the case of Komba products, from the potters inhabiting in Bunkpurugu-Yunyoo district, distribution is basically restricted to residential territory and its surroundings. In this territory, two models can be differentiated. On the one hand, some productive centres supply the rest of the domestic units in the village and nearby settlements where pottery is not produced. In these cases, the households hardly attend the markets to buy vessels. In the second case, some domestic units which are far from productive centres attend the markets where Komba potters sell their products. In both cases, we understand there is a local distribution of pottery, as the sale and acquisition take place between producers and consumers of the same ethnic group and inhabiting the same territory.

Though Kusasi pottery (vessels produced by potters affiliated to the Kusasi ethnic group) in Garu-Tempene is widely distributed around the production area, we observe that the dispersion of vessels largely transcends the territory occupied by the manufacture locus and potter's residence. Hence, the Kusasi consumers prefer to acquire the pottery in the local markets at Zaare and Garu, for example. These markets are classified as local because they are located at less than 4 km away from the sellers' residence, a distance easily travelled back and forth in a day. The different stalls in these markets are operated by sellers from the same origin and offering similar vessels. The Garu market is a good example of this distributional model, where up to 22 Kusasi potters were also sellers. These women were gathered in three major stalls according to their provenience and the size, form and function of the pottery they sold. For instance, a group of 16 potters of the same village occupied only one stall specialised in the sale of large storage containers which had been transported to the market in donkey carts. In this case, the women gathered according to social connections supported by the solidarity ties existing amongst them. On the other hand, there was a second stall with four potters who sold pottery both at their unit and the market, where they offered small- and medium-sized pottery for preparing and presenting foodstuffs. In this case, the vessels were transported to the market on foot, one pot inside the other. The last case documented consisted of isolated stalls where only one potter sold her goods along with some agricultural products.

Fig. 5 Main categories of pottery purchase modalities recorded in the Garu-Tempane area and in pottery producer and nonproducer areas in the Bunkpurugu-Yunyoo district



We recorded a further strategy in the most populated centres which also acted as important pottery redistribution points. This is the case of Garu, where four stalls bordered the access routes to the settlement and were devoted to the sale of Kusasi pottery. These stalls, managed by former potters or potters' relatives, concentrated a high number of vessels from various origins and were focused on redistributing pottery to more distant markets, far from the Kusasi production and jurisdictional area.

Hence, the distribution strategies detected in the Garu market worked in two levels: in the first level, potters transported the pottery from the production unit to the nearest markets (usually by cart or on foot, depending on the amount and the size of the products), and a second level where the pottery was transported by motor vehicles or donkey carts from the main markets, such as Garu and Bawku, to secondary ones such as Gbintiri and Nakpanduri.

There was thus a redistribution of Kusasi pottery to local markets, many of them quite distant from the production units. This redistribution was generally in the hands of middlewomen from foreign origins, including B'moba in the Nakpanduri market, and Moshi in the Bunkpurugu market. In this redistribution system, Garu

played a crucial role, as these middlepersons attended the market and the bordering areas of the city to buy the pottery directly from potters or indirectly from the stalls at the entrance, to later redistribute it to further markets. This was the procedure in some of the stalls located in the Bimbago, Bende and Bunkpurugu markets, to the south of the Gambaga Escarpment. A second strategy was documented in several stalls in Gbintiri, Nasuan, Mambabaga and Jimbali markets. Here, all the stalls were occupied by Kusasi sellers who had bought the goods in Garu. Similarly, there were also two sellers of Kusasi pottery in the Nakpanduri market who bought the products directly from a potter in Garu. All kinds of Kusasi pottery were sold here, although large containers were dominant.

We may conclude thus that potters had several strategies available to distribute their products. They used to sell part of their goods in local markets or in domestic units near their residence and production places (Calvo et al. 2011, 2013). Another part of the products—particularly in the case of Kusasi pottery—was distributed by middlepersons who tended to gather around stalls strategically located in the main roads entering the market. The activity of middlepersons favoured the

distribution of the vessels to a longer distance, thus increasing the number of consumers of Kusasi pottery. This wider distribution may be directly in their hands, as they sell the products in more distant markets or, alternatively, offer the pottery to new intermediaries—sometimes from a different ethnic group—who in turn would distribute them in the markets near their residence area.

The data available showed that the volume of pottery sold and the participation of different markets in distributional networks also depended on the size of the settlement they were located in. Thus, the markets in larger settlements such as Garu and Bawku—in Kusasi territory—had a larger attendance of buyers and sellers. Hence, in these nuclei there was a heavier circulation of pottery which, at least in these cases, coincided with a wider geographical dispersion of the products. In these settlements, most pottery entered and left the markets by paved roads, which facilitated a more fluid presence of motor vehicles throughout the year. These same vehicles were later used to carry the pottery to smaller markets, enlarging the geographical distribution of the products (Calvo et al. 2011, 2013).

The situation of the Komba people living in Bunkpurugu-Yunyoo district differed radically, due to the unpaved roads, the limited number of motor vehicles and the absence of major settlements. In this case, the markets were placed in road crossings rather than near large settlements. Gbintiri and Jimbale, where some Komba potters of the area attended to sell their products without the intervention of middlepersons or additional means of transport are good examples of markets of reduced size and limited pottery distribution. As will be discussed later, the scenario of the Komba communities was closely related to the complex situation of the different ethnic groups. The unfavourable situation of these communities in terms of infrastructure mirrors the historical lack of political power (traditional, linked to the chieftaincy institution, and “modern,” linked to the independent state) of the Konkomba communities, as opposed to the relevance of the Kusasi group in the Upper East Region.

Pottery Distribution and Acquisition in Nonproducer Areas (the Bende and Nanjong 1 Settlements)

So far, we have restricted the discussion to the identification of distribution patterns between production areas and redistribution or acquisition points in regions with evidence of pottery making. The discussion will be

complemented in this section by that of the models identified between redistribution points and domestic units in nonproducing areas. Our focus will be on a specific study area—Bende and Nanjong 1 settlements, in the Bunkpurugu-Yunyoo district—where a significant (12) number of domestic units was analysed. None of the ethnic groups living in Bende or in Nanjong 1 made pottery; they acquired it in the nearby territories where it was produced: the Kusasi area to the north and the Komba to the south.

Bende is composed of some 250 dwellings housing extensive families. Most of these families are Mamprusi, although the settlement may be considered multiethnic in practice due to the presence of families—and particularly, women married to Mamprusi men—from the B'moba, Fulani, Konkomba, Kusasi and Busanga groups. Meanwhile, mainly B'moba families inhabit Nanjong 1, although as in the Mamprusi case there are women from another ethnic groups.

Both settlements, separated only by a few meters, are located in Bunkpurugu-Yunyoo district. This district presents a multiethnic population in a mosaic pattern with settlements inhabited mainly by different ethnic groups of which the B'moba and Komba are the majority. However, the minority Mamprusi hold the traditional political power (related to Chieftaincy institution) and consider themselves the legitimate owners of the territory, justified in the oral tradition which states they were the first group to settle in the area (García Rosselló et al. 2012).

In the domestic units analysed, most of the pottery documented (>70 %) was purchased at the markets (Fig. 5), due to the lack of local potters who may have sold them directly in the productive units. An estimation of the distance travelled by the consumers analysed to acquire pottery (Fig. 6) indicated that some vessels (19 %) were purchased less than 1 km from the settlement, in the weekly markets held in Bende and Nanjong 1. Another small percentage (6 %) came from the Jimbale market, some 13–15 km away, where both Komba and Kusasi pottery could be found. Finally, a small proportion of the pottery (9 %) was purchased some 19–23 km away, in the Nakpanduri and Bunkpurugu markets. However, most of the vessels originated in the Kusasi area (49 %), basically in Garu and to a lower extent in Bawku, some 42 and 73 km respectively from Bende and Nanjong 1. Lastly, we recorded a few vessels (3 %) from the Zebilla market, more than 100 km away, where Kusasi products were also sold.

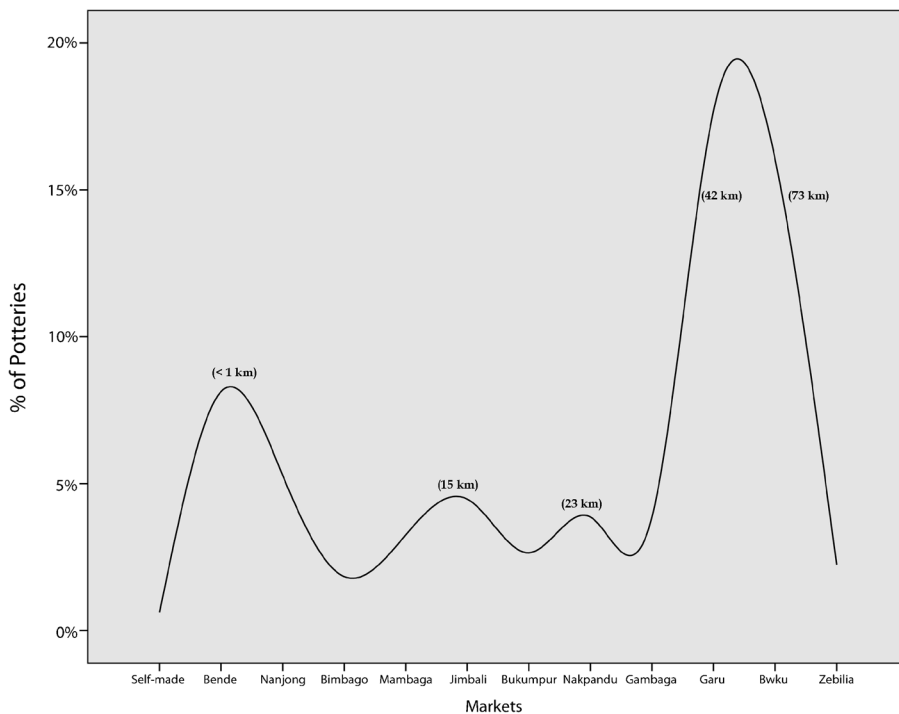


Fig. 6 Pottery purchased in the Bende and Nanjong 1 settlements. The horizontal axis represents the different importing villages and the vertical axis corresponds to the percentage of pottery from exporting villages in the total sample of household assemblages

These data prove that geographical proximity was not a key element to explain the acquisition of pottery in the nonproducer area studied, as only 9.3 % of the vessels were of Komba origin despite the proximity to their settlements (<15 km). In absolute terms, regardless of the ethnic origin of their owners, most vessels (76.8 %) were associated with Kusasi pottery purchased at long distances. Similarly, most Komba pottery was owned by women of the same ethnic group who transported their family dowry—consisting of a set of large storage vessels—to their husband’s residence after marrying.

Summing up, the acquisition of pottery in Bende and Nanjong 1 mainly took place at the markets. The distribution pattern observed was characterised by the purchase of most pottery items at medium or long distance centres (>40 km) located near the production units. This demonstrates—as has already been described in other papers about pottery distribution (Longacre and Stark 1992; Stark 1992; van der Linden 2001)—that many different variables other than geographic proximity (such as mobility; social,

family or ethnic relations; consumers’ preferences) may influence the way pottery is distributed throughout the territory. Thus, the main question to be raised is, why did consumers in the Bende and Nanjong settlements prefer Kusasi instead of Komba pottery?

In addressing this question, we wish to suggest that the preference for Kusasi ceramics is influenced by economic aspects, a more affordable price of the pottery produced by this ethnic group. Nevertheless, informants pointed out that the price (although considering the existence of dynamic bargaining) of the ceramics produced by the Kusasi and Komba is virtually the same in the market. The consumer’s perception is that the differences in the price and economic value of both types of ceramics are not significant. The price of a large storage vessel at the time of the fieldwork was in both cases around 20 GH ₵, while the medium-size pots and the small bowls cost around 5 and 0.5 GH ₵, respectively. In view of this, we would like to explore how the physical traits of vessels and the reputation of both pottery and potters relate to consumer’s preferences.

Reputation: Pottery, Artisans and Ethnicity

As we have argued, the distributional and acquisitional patterns documented did not only depend on the set of physical qualities involved in pottery, mobility infrastructures, transport systems, settlement spatial organisation, production scale or technology. Rather, in this connecting network, consumers' perceptions regarding the ceramic universe also participated. As demonstrated by several authors (e.g., Aronson et al. 1994; Arthur 1997), consumer preferences have great influence in consumption patterns and therefore in the way pottery is distributed. Such preferences are intimately associated with potters' reputation and social position, their ethnic groups and the historical-political circumstances of each group, as much as with the whole social relationships established amongst them (Choksi 1995; Neupert 2000).

In order to understand these elements, we used the concept of reputation—already applied to some pottery distributional studies (e.g., Sillar 1997; Longacre et al. 2000; van der Linden 2001)—as a tool to coherently integrate the materiality of the ceramic products and the dynamics of interethnic and intraethnic relationships derived from the historical-political framework of the communities studied. Hence, we followed a double strategy. On the one hand, we enlarged on the perception of the ceramic products and, on the other, on their maker's reputation, as defined by the potter's identification with a specific ethnic group.

The analysis of these two guidelines exclusively considered the Bende and Nanjong 1 settlements. The multiethnic and nonpottery-producing nature of these villages constituted the ideal framework to integrate the different dynamics behind interethnic relations and their link to the ceramic universe.

Materiality and Reputation of Ceramic Goods

People's perception of materiality affects the election of the artefact (MacGregor 1999; Hurcombe 2007). With this idea in mind, in our case study, we performed an emic study of the consumers' perceptions of the pottery produced by each ethnic group, in order to deepen our knowledge and understanding of this relationship by attempting to define the reputation of the ceramic products and the producers as well.

The consumers interviewed argued that Kusasi pottery was of a superior quality. This perception promoted a

particular concept of the ceramics elaborated by each ethnic group. Whereas Komba pottery was considered heavier and more fragile, Kusasi items were perceived as lighter, stronger and, thus, more durable. As we commented in the section about production strategies, pottery qualities are related to certain *performance characteristics* (Braun 1983; Schiffer and Skibo 1997) which depend on the techniques and materials used. These characteristics may affect, for instance, vessel weight and, thus, condition certain aspects such as transportation (Skibo et al. 1989). In this sense, previous works on pottery distribution (see, for example, Longacre et al. 2000) indicated that specific perceptive features of the vessels—like visual (based on surface treatment) or acoustic aspects—may influence the selection of a ceramic product. These performance characteristics largely determine the qualities of the vessel, which in turn determine its reputation. In our case, the reputation of the ceramic products was, according to users, clearly determined by factors such as vessel hardness, durability and weight.

Thus, in order to determine from an etic perspective if the differences between Komba and Kusasi productions effectively matched the consumers' perceptions, a series of analysis on the material reality of the vessel were performed. First, the weight of both Kusasi and Komba products were compared. Additionally, their hardness and durability were tested through firing curves and fabric petrographic observation.

Regarding pottery weight (see Calvo et al. 2013, Table 1), we could generalise some conclusions from the analysis of the bowl (open convex-base vessel with a maximum diameter in the opening), typically used for the individual consumption of food. These vessels shared a rather similar morphometry and functionality in both Komba and Kusasi productions. A Kusasi bowl weighted some 840 g and measured 17 cm in max.

Table 1 Representation of the ceramic types used in the Bende area according to the owner's ethnic group

Owner ethnic group	% Konkomba pots	% Kusasi pots	% other (B'moba)
Kusasi ($n = 46$)	4.3	95.7	–
Mamprusi ($n = 188$)	13.8	84	2.2
Konkomba ($n = 43$)	21	76.7	2.3
Fulani ($n = 18$)	38.9	50	11.1
B'moba ($n = 138$)	1.4	92	5.8 (B'moba) 0.7 (Ashanti)

diameter, 9 cm in height and 9 mm in wall thickness, with a capacity of 1.1 litres. Alternatively, a Komba bowl of similar characteristics ($\text{Ø} = 18$ cm, height = 10 cm, capacity = 1.4 litres and wall thickness = 12 mm) weighed 1380 g. Furthermore, Komba bowls had a capacity 27 % larger than their Kusasi counterparts, with an added 64 % weight and 33 % wall thickness. These variations may be related to the differences in modelling strategies and implied an increase in the amount of material used, and, consequently a heavier vessel in the case of Komba pottery. This difference in weight may be significant in the consumers' preferences when using and manipulating both products.

As aforementioned, the differences between the reputation of Kusasi and Komba pottery may also be related to the greater hardness and resistance of the former and the subsequent increase in durability. In this sense, we postulate that the increased hardness and resistance of the vessels are related to a higher firing temperature, as seen in the measures shown by the pyrometer during several firing curves (Calvo et al. 2013): Kusasi pottery was fired at a higher temperature and for a longer time. These firing conditions favoured a stronger final product with thinner walls (Tite et al. 2001). Moreover, the stronger the fabric—fired at a higher temperature—the higher the energy needed for fracture (Müller et al. 2009).

Pottery durability is also related to the amount and kind of temper and inclusions present in the fabric and its capacity to prevent the generation and propagation of fractures along vessel walls when in use due, for instance, to thermal shock, as seen in cooking pots. Different types of fabric have a diverse capacity to minimise the energy needed for fracture propagation, conditioning its expansion. This energy can be reduced by increasing the amount of temper used in a wider fracture surface, so the inclusions are able to absorb and reduce the stress generated. Thus, fractures tend to be restricted to the border of the element, preserving the fracture area by means of static growth and the dissemination of the energy into secondary fractures. This property of the fabric to absorb energy is called *toughness* and extends the use life of the vessel. In pottery fired at low temperatures—such as the ones recorded here—an increase of the effective fracture surface constitutes the best alternative to improve fabric resistance and vessel durability (Steponaitis 1984; Bronitsky and Hamer 1986; West 1992).

As well as firing curves, the pastes used to make pottery may explain pottery behaviour and durability in case of fracture. Hence, we detected a clear difference

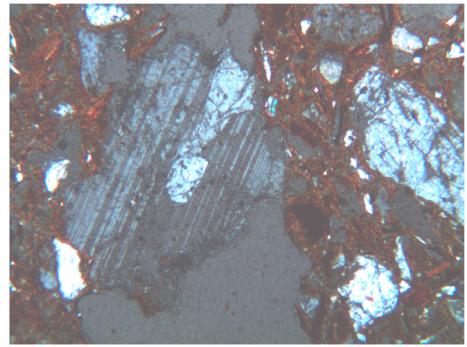


Fig. 7 Microphotograph of a thin section of a Kusasi pottery sherd with abundant inclusions associated to igneous rock fragments in a coarse sand fraction (image width = 3.8 mm; XPL; photo: by authors)

in fabric textures between Kusasi and Komba pottery in the production areas related to clay composition. Kusasi pottery presented coarser textures with an important proportion (20 %) of inclusions, particularly coarse sand (coarse/fine_{10 μ} = 70:30) up to 3.3 mm wide and 1 mm of mode, mainly fragments of acid igneous rocks which were naturally present in the clay (Fig. 7). Alternatively, Komba fabrics were characterised by a lower amount of temper (5 %) and a dominance of very fine particles (coarse/fine_{10 μ} = 30:70), the largest size identified being 0.4 mm and the mode of 40 μm, that is, included in the silt fraction. Komba potters incorporated grog to the paste to increase its consistency (Fig. 8). However, grog is composed of phyllosilicates, so the fracture would go through the inclusion reducing its capability to stop fracture propagation (West 1992). A series of experiments (Müller et al. 2009) demonstrated that the fracture resistance of a vessel directly increases with the amount of non-plastic inclusions. Summing up, the larger number of inclusions in Kusasi pastes minimised the propagation of dangerous fractures which may break

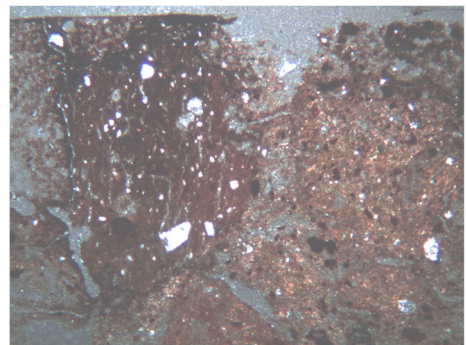


Fig. 8 Microphotograph of a thin section of a Komba sherd with scarce and very fine inclusions as well as a grog fragment (image width = 3.8 mm; XPL; photo: by authors)

the vessel. It mainly implied an increase in fracture surface, resulting in potentially stronger pottery. When using pastes with abundance of mineral coarse grains, the propagation of the fracture was reduced as a larger amount of energy is absorbed by increasing the diameter, the perimeter and the length of the particles.

As a conclusion, the analysis of the materiality in itself confirmed the differences in weight, hardness and durability perceived by the buyers of pottery. Hence, due to the increased weight, wall thickness and fragility of Komba ceramics, they were interpreted as more rudimentary and of a lower quality.

Artisans' Reputation and Its Relation to Ethnicity

The concept of reputation should not be just restricted to the way products are perceived and understood; they must also include the situation of their makers. It is important to introduce this aspect, as it is a key element to understand consumers' elections when purchasing pottery.

As mentioned, we assume that the reputation of the potters is intimately related to the perception of their original ethnic group. In turn, we argue that the reputation of the group depends on the complex and varied historical, social and political dimensions this social identity has amongst the modern communities living in our study area. Hence, it is essential to study the roles of the political relations and social practices amongst the different ethnic groups and the implications of such practices to understand pottery buying, distribution and use patterns.

At this point, we deem it important to reiterate the historical, fluid, contingent and relational concept of ethnicity that we use. From our point of view, there are no single Mamprusi, Konkomba or B'moba identities (although they share common features) but different communities (and even different individuals) managing multiple, diverse and even conflicting ethnic identities. That is, being Mamprusi is not perceived in the same way by the communities living in the centre of Mamprugu territory as do other communities, as in our case, situated at the eastern end of the territory, which are a minority with respect to B'moba and Komba communities. Given this starting premise, our references in this section to Mamprusi, B'moba and Konkomba identities specifically relate to those, which broadly pertain to the communities located in the Bunkpurugu-Yunyoo district.

In the next subsections, we explore the dynamics of pottery acquisition of the different ethnic groups in order

to identify and analyse whether different ethnic identities influence the patterns of ceramic acquisition.

Mamprusi Ethnic Group

The Mamprusi consumers living in Bende mainly acquired Kusasi pottery, reaching a proportion of 84 % (Table 1), although they also purchased Komba pottery in lower numbers (14 %). We have mentioned that the significantly higher percentages for Kusasi pottery acquisition against Komba one should not be exclusively considered in terms of mobility or geographical vicinity, as some Komba markets, such as Jimbale, were nearer Bende than the Kusasi ones (Fig. 1). Having in mind the historical and political context discussed, we have to consider that this pottery acquisition pattern can also be attributed somehow to the relations between Mamprusi and the other ethnic groups, especially the Komba and Kusasi, who are the pottery-making groups.

Regarding the relations with the Komba groups, our interviews confirmed that Mamprusi and Komba communities in Bunkpurugu-Yunyoo district see each other as "brothers" due to their political alliance against the B'moba groups regarding land ownership and their relationships have usually been friendly (Tait 1962). Despite this alleged filial relation, the sociopolitical situation of the area shows that the relationship between Mamprusi and Komba groups, though peaceful, is unequal. Some scholars affirm that the latter are autochthonous residents of this territory (Dawson 2000; Tait 1962) but, in terms of traditional chieftaincy system, they are under the regional control of the Mamprusi chief of Nalerigu, the Na-yeri. In addition to asserting, as in the case of Bende, that they were the first to settle in the territory, the Mamprusi, at a regional level, have systematically blocked every effort the Komba made to gain political independence at the chiefdom level, causing some tensions and problems (Pul 2003).

Furthermore, there are other sociopolitical factors that may affect the perception of the Komba by Mamprusi groups, and thus, of their pottery. The Komba communities in the area mainly settle in peripheral rural areas with poor communication. This situation reduces the access to educational and health facilities (Jönsson 2007), commodities highly valued by the Mamprusi, who regard the Komba as rather marginal, a perception that, in a way, is also transferred to the pottery and the potters. Being a minority group in the area has also limited the Konkombas' ability to gain recognition in the assembly districts system.

On the other hand, there appears to be a more equal relation and visualisation between the Kusasi and the Mamprusi who inhabit the Bunkpurugu-Yunyoo district. First, the Kusasi do not share the same space as the Mamprusi, which minimizes conflict between them. The Kusasi have their territory to the north of the Mamprusi kingdom, between Gambaga Escarpment and Tenkodogo in Burkina Faso (Hilton 1962). It is important to remark, however, that there were a series of disputes between these two groups for the control of territory in some areas like Teshie and Bawku, in the Upper East Region (Awedoba 2009). Although the Mamprusi of Bende are generally in favour of the Mamprusi from Bawku, they do not consider conflict in Bawku as having direct impact on their relationship with their Kusasi neighbours. Second, Kusaal, the Kusasi language, is of a Moore-Dagbane root, like the Mampruli language. Unlike the Komba, the similarity in language allows a fluid understanding between the Mamprusi and the Kusasi. Third, the Kusasi people exhibit certain urban behaviour—as well as the Mamprusi—as many of them are concentrated around villages or markets such as Bawku, Pusiga, Zebilla, Garu and Zaare. Fourth, according to oral narratives about the origins of Mamprusi groups, the first sovereign and founder of the different Mole-Dagbane kingdoms had his residence in Pusiga, inside Kusasiland; thus, the origin of the Mamprusi groups is unmistakably connected to Kusasi territory and population. Finally, it should be taken into account that the Kusasi ethnic group has political representation in the National House of Chiefs and, thus, certain political and administrative equality with the Mamprusi.

This situation shows that, unlike the Komba, Kusasi groups have important administrative figures, some lineage shared with the Mamprusi, and a judicial figure in the modern Ghanaian state which positions them in an equality situation. These aspects cannot be neglected when studying the complex relations participating in the modern processes of pottery distribution between the Mamprusi, on the one hand, and the Komba and Kusasi production groups, on the other. Their consideration also helps understand Mamprusi perception and use of pottery, both Komba and Kusasi vessels.

B'moba Ethnic Group

Similar to the case of the Mamprusi ethnic group, we detected that B'moba people living in Nanjong 1 also showed a clear preference (Table 1) for Kusasi (92 %)

rather than Komba pottery (<2 %). Although the criteria for the perception of its materiality already discussed are perfectly congenial and could apply to this case as well, we should also insist that this election seems to be mainly related to certain social and political ties. B'moba and Konkomba communities have longstanding bitter conflicts over land ownership, which gave rise to the wars of Pitu, Mango and the Guinea Fowl (Staniland 1975; Ladouceur 1979; Bogner 2000; Brukum 2001; Tonah 2005b; Weiss 2005). Due to these conflicts, the exchange and establishment of social relations between the individuals of these ethnic groups are sporadic and undeveloped. These sociopolitical relations explain why—aside from the aesthetic, perceptive and functional aspects of Kusasi pottery—B'moba individuals clearly preferred this pottery over Komba vessels, despite the longer distance to Kusasi selling locations.

Fulani Ethnic Group

In the case of the Fulani ethnic communities living in the Bende settlement, some distinctive features regarding the distribution and consumption of pottery seem, from our perspective, to be also intimately related to cultural and sociopolitical issues. The first question to be considered is the reduced number of pottery documented in Fulani dwellings (mean = 8.6; Table 2) and the few items owned by women from this ethnic group (mean = 5.5), a much lower quantity than in the rest of the groups studied (Table 3). This peculiar feature may be related to their particular culinary traditions, quite different from the ones shared by the other agrarian communities, considering the exclusive pastoral lifestyle of the Fulani. Although our research in this area is in a preliminary stage, we noticed clear differences regarding the spatial organisation of domestic kitchens, which may point to that direction. The higher mobility, as well as the nomadic way of life of this ethnic group, may also condition the number of vessels owned as a mechanism to cope with their belongings when moving.

Table 2 Mean number of pottery items per dwelling for the different ethnic groups (excluding producing houses)

Kusasi	34
Mamprusi	48.6
Konkomba	35
Fulani	8.6
B'moba	29.8

Table 3 Mean of vessels per women for the different ethnic groups (including the potters; there is no separation into areas)

Ethnic group	Mean	Std. deviation	<i>n</i> women	Lower bound	Upper bound
Konkomba	10.5	6.61	13	6.4	14.6
Kusasi	15.3	12.29	6	9.3	21.3
Mamprusi	20.2	5.38	6	14.1	26.1
B'moba	7.7	6.18	16	4	11.4
Fulani	5.5	2.12	2	–	–

Secondly, it is informative that the Fulani possessed a larger number of B'moba pottery than the other ethnic groups considered (Table 1). As aforementioned, there are no production centres for this pottery in the study area, the nearest ones being located in Togo. According to our informers, this representation could be related to the high mobility of the Fulani resulting from their transhumant lifestyle.

Furthermore, the representation of Komba pottery in Fulani's hands almost equalled the amount of Kusasi pottery (Table 3). In order to understand the high concentration of Komba pottery in Fulani domestic places, we should briefly note their dependence as well as the conflicts existing between the families of this ethnic group and the agrarian communities they live with. The many interviews carried out during our fieldwork evidenced that the main reason justifying the relationships between these groups is based on the cattle herding activities which the Fulani carry out for the farmer communities. Fulani groups hire themselves out as shepherds for the agrarian communities; in exchange for their work, they receive a house—including pottery essentials—and a portion of the animals and secondary products. Additionally, small amounts of money may be occasionally paid.

Nevertheless, the relations between the Fulani and the agricultural groups (i.e., Konkomba, Mamprusi and B'moba) are far from completely peaceful (Tonah 2002; Integrated Regional Information Networks (IRIN) 2010). The roots of many conflicts are buried in the cultural differences existing between these communities, particularly, the problems resulting from combining agriculture and herding. Furthermore, it should be remembered that the Fulani are a nomadic group who despise any attachment to a fixed territory, a trait which clearly contrasts with the interest in the territorial control shown by the rest of the communities in the area

(Colson 1997; Bogner 2000; Dawson 2000; Lentz 2000; Brukum 2001; Tonah 2002, 2005a; Pul 2003; Maasole 2006; García Rosselló et al. 2012).

Such differences imply a rather negative perception of the Fulani by the agrarian communities (Integrated Regional Information Networks (IRIN) 2010), which is easily appreciated in many situations. For instance, it is seen in the spatial distribution of the settlements, where all the Fulani domestic units located in Mamprusi and Komba areas are restricted to the borders of the village, at the very edge of the living space. Furthermore, the organisation of the political power also mirrors this marginal situation. In the Mamprusi area in Bende, for example, these groups do not participate in the decision making process, unlike some individuals from other agricultural ethnic groups such as the Busanga, who end up assimilated and actively participating in the sociopolitical life of the community. Finally, this situation is also present in some basic social relations like marriage. Marriage to a Fulani spouse is not considered socially acceptable. Our research in Bende documented up to nine interethnic marriages, between Konkomba, B'moba or Kusasi women and Mamprusi men; no interethnic marriage including a Fulani member was documented, though.

In conclusion, depending on the nature of the relation established between the Fulani and the agricultural ethnic groups, the space and domestic essentials (including pottery) are mainly provided by the owners of the cattle the former are responsible for. Despite the dominance of Kusasi pottery amongst Fulani groups, we observed that the agricultural communities gave them large numbers of Komba pottery (Table 1). Our hypothesis is that the agricultural groups preferably assigned the Fulani what they perceptively considered low-quality pottery. This preferential distribution results are evident when comparing the total percentages of Komba pottery in the Bende area. A similar situation is also manifested in other aspects of material culture. The paradigmatic case can be the houses assigned to the Fulani—built by the agricultural communities—which represent the poorest preserved dwellings of the sample analysed due to lack of maintenance, a situation Fulani groups routinely complain about.

Komba Ethnic Group

The presence of Komba pottery in Bende may be explained in two different ways. It could be the result of

direct purchase in the Jimbale market, where nonproducer groups attend periodically to acquire vessels. Direct purchase of the pottery at the production site, resorting to the social networks and family connections existing between Komba and Bende women may also be a factor. Women living in areas where pottery was not produced often bought Komba vessels directly from the potters when they visited and stayed with their relatives. These women were in contact with the artisans through family ties and obtained the pottery they needed from their ancestral homeland. They also often contacted intermediaries who may be connected to the potters by family ties to buy vessels on request. Finally, other women, who were related to the potters through social links, could buy the products either from the potters or from nonproducers.

The latter seems particularly relevant for explaining the presence of Komba vessels in the Mamprusi area (Table 1). The Bende region was characterised by a large dominance of Kusasi pottery. However, the largest representation (21 %) of Komba ceramics was found in domestic contexts inhabited by members of this same ethnic group or in the places they used. By contrast, Komba vessels were only marginally associated with Kusasi (4.3 %) and B'moba (1.4 %) women. In short, over 1/5 of the products owned by Komba women were produced by potters from their same origin. The presence of these vessels in Bende could be explained, as noted, to be the result of the pottery being acquired through networks that are based on parental and ethnic links manifested in the visits and permanence with relatives.

Within the study area, dowry may represent the best example of these social relations that are closely linked with women's birthplaces, marriages and daily life that influence ceramic distribution, especially for the Komba (Calvo et al. 2011). When a woman marries, she gets a collection of storage vessels for personal use, which involves the purchase, usually by the bride's mother, of many vessels embedded with a strong social meaning. Beyond the daily domestic use of pottery in food management and consumption, women's dowry consists of vessels in which they store personal belongings and grains. These ceramics, acquired at her homeland, create strong ties for the owner, which are manifested in a long life expectancy (typically over 10 years) and a high symbolic value. This is justified because a woman or her parent acquires the vessels when she marries, moves to her husband's house or after giving birth to

her first child. It is a clear example of the articulation of ceramic distribution through social networks instead of geographic and economic variables and the existence of road infrastructure.

Conclusions

In this article, we tried to postulate strategies and methodologies for the study of pottery distribution and acquisition from an ethnoarchaeological point of view, a topic of heated debate since the beginning of this discipline. As mentioned at the outset, our main objective was to integrate perspectives of a materialist nature with more idealistic ones. Thus, we aimed to draw a study strategy which would integrate elements typical of both fields into a coherent whole for a deeper and more complex understanding of the relations established between material culture and the identities and social practices of the human communities who use it.

By appealing to a case study in specific areas in the Upper basin of the White Volta river (northeastern Ghana), therefore, we developed a complex analytical proposal which included a series of variables of a materialist nature, such as the physical characteristics of pottery (including technology and morphometry), the distance from production centres to distribution areas and distributional strategies, including their materiality (such as means of transport and road network).

At the same time, we combined this variable with others of an idealist origin. Specifically, we focused on the influence of ethnic identity in the models proposed, integrating the complex and varied historical, social and political dimensions of this type of identity for the communities living now in the Bunkpurugu-Yunyoo district. We understand that, in addition to ethnicity, a number of other identities and social practices may influence pottery production, distribution and consumption patterns. However, the aim of this paper was not to draw the complete picture of the pottery universe in our study area but rather to provide new reflections to contribute to the current debate about pottery distribution.

Thus, the results of our study differentiated two large areas with different characteristics: producing and non-producing regions. In the former, we documented a clear dominance in the purchase of pottery made by women from the same ethnic group as the consumers. However, there were substantial differences in the channels used to acquire the vessels. Hence, in the Gare-Tempame

suburbs, Kusasi dwellers mainly acquired pottery in redistribution centres like markets, which presented a wide diversity of stalls with varied potters' profiles. On the other hand, the Komba groups inhabiting the southern area of the Bunkpurugu-Yunyoo district mainly resorted to the production centres and, to a lesser extent, to the market nearer the residential area.

These different strategies in the procurement of ceramic goods were related to the multiple variables defining pottery production strategies, road infrastructure, the means of transport used, the urban/rural or concentrated/dispersed nature of the settlement pattern and the importance of the settlements present in the territory. As seen, in this case the factors, which had influence over the different pottery distribution patterns, were basically related to material considerations. However, many of them were in turn articulated around ethnic identities. Thus, we believe that the different production strategies on the one hand and the existence of mobility infrastructures on the other were intimately related to ethnic identities.

Secondly, in the nonproducing area, we studied there was a clear majoritarian use of Kusasi pottery from the Garu-Tempene area by consumers of all ethnic groups. The higher representation of this kind of pottery in the area must be related to a larger-scale production, as well as the existence of certain mobility infrastructures which facilitated its transportation to longer distances, increasing both production and distribution.

However, together with those variables, there were important differences regarding the percentages of use of either Komba or Kusasi ceramic products. We understand that these differences may be explained, in part, by the direct influence of ethnic identities and their historical-political implications as much as the social relations they imply. Aiming to study this aspect, we resorted to the concept of reputation, both of ceramic products and of the potters themselves. This conceptual tool was intended to include both material and ideal features.

We started working with the concept of reputation for pottery productions by appealing to a twofold analytical strategy: an emic and an etic perspective. The objective of this proposal was to relate the materiality of pottery to the reality perceived. In this way, the preference for Kusasi pottery production by Mamprusi and B'moba consumers in the Bende area was documented. From an emic perspective, our informers indicated that Kusasi pottery was of a better quality and had a higher

reputation due to certain qualities, certain *performance characteristics*: Kusasi pottery was lighter, stronger and long-lasting. The etic analysis applied later focused in testing the ceramic properties to check if their materiality matched the users' perceptions. The results of our analyses coincided with the reputation ascribed to each of the pottery productions.

In a second stage, we studied the reputation of the potters from each ethnic group, from the point of view of the rest of the ethnic communities in the area. The discussion here was interested in the complex interethnic and social relationships which articulated the daily practice of these communities. Thus, we explained the important differences regarding the relative amount of one or other pottery production in the habitation and consumption places.

From this idea, the lower acceptance of Komba pottery by the Mamprusi families from the Bende settlement was not only related to the better reputation of Kusasi pottery but also to the undervalued perception of Komba communities. The latter are perceived as having a highly rural and dispersed settlement and less access to political power. In this sense, the amount of pottery consumed by the Fulani was significant, representing the higher percentage of Komba pottery. It should be remembered that these groups establish complex social relations with the Mamprusi who provide them with domestic essentials, including pottery. This pottery was in this case generally Komba, the one with a lower reputation.

In the case of B'moba users, two interesting questions should be noted. First, they were the group who owned the lower number of Komba pottery; in this case, we believe that the lesser acquisition of this kind of pottery could be, in part, linked to the dramatic political conflicts regarding land ownership between both ethnic groups in the last decades.

In contrast with the relatively negative perception that both Mamprusi and B'moba bear against the Komba, the Kusasi enjoy a larger prestige, both in political and social terms. Furthermore, they are not in open conflict with the communities living in the Bende and Nanjong 1 settlements. In our opinion, these aspects are translated to the reputation of their pottery, fomenting a larger disposition to consume the pottery produced by this group.

Finally, it is important to mention that along with the interethnic relations, the differential distribution of the varied ceramics was also influenced by intra-ethnic ties, that is, the way pottery was distributed was also influenced

by the social ties existing between the women of the different ethnic groups inhabiting the Bunkpurugu-Yunyoo district, and their relatives and other individuals of the same ethnic group. Thus, Kusasi women owned the higher percentages of this type of pottery, whereas Komba women had a larger number of pottery produced by their own ethnic group in domestic contexts. In both cases, we documented that the women in both ethnic groups built strong ties with their paternal family, spending some time in the father's house, which may largely explain these differences. This situation also explains the percentage, though quite reduced, of B'moba pottery owned by this group. This pottery was not produced in nearby areas and must be explained by the sociopolitical and familiar ties of these communities with the Moba living in Togo, the place of origin of this production.

Our objective responds to the need to evaluate pottery life history as a whole, trying to understand both the materiality of vessels and the perceptions and social relationships between consumers and producers. We recommend this strategy so as to understand the complex mechanisms behind pottery distribution and consumption. This allows observing a highly dynamic, complex and contingent collage of pottery distribution and acquisition patterns where both material and ideal factors actively participate.

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