

Ceramic Decoration, Ethnicity and Political Economy in the Inland Niger Delta of Mali

Jerimy J. Cunningham

Few issues have perhaps been as consistently problematic for archaeology as the pursuit of ethnic identity in the material record. As Jones (1997) has pointed out, archaeological studies of ethnicity are the final stage in a line of research that began with the quest to identify races, then moved on to cultures and culture areas, and has finally arrived at questions about ethnic groups. With some consistency, archaeology has focused on stylistic variation as the window through which distinct peoples could be identified in the past. As an aspect of variation that is adjunct to the ecological or adaptive constraints that impacted past technologies (i.e., that is adjunct to that which is “functional”), style is thought to be free of utilitarian constraints in ways that make it amenable to ethnic symbolism (Cunningham 2003a). One of the convenient shortcuts in this long tradition of archaeological research has been the relatively constant equation of ceramic decoration with the social worlds of the past. Recent research may have found that even mundane technological choices are impacted by social factors like identity; yet, decorative variation in ceramics remains the most logical playground for the expressions of identity and the default avenue of inquiry for those seeking identities in the past. In the following paper, I wish to draw upon my recent ethnoarchaeological work to assess the equation of decorative patterning in ceramics with identity. This research was stimulated initially by an analysis of ceramic variability from the Van Bree site, conducted as part of a MA project supervised by Mike Spence at the University of Western Ontario, which suggested that factors such as the scale and intensity of ceramic production had an important influence on the final character of decorative variation in

the early-Late Woodland of SW Ontario. It also prompted me to undertake a critical exploration of the concept of “style” in archaeology (Cunningham 2003a) and then into ethnoarchaeological work aimed at untangling the causal complexity that affects regional ceramic patterns. My doctoral project focused on the exchange and consumption of household vessels in the Inland Niger Delta (IND) of Mali. In the IND, I observed two examples of significant changes in “adjunct” ceramic decoration, changes that closely mimic the patterns archaeologists often attribute to migrations or conquests. Despite the fact that potting traditions in the region are ethnically embedded, these changes resulted not from radical social change, but rather from processes related to labor and its extraction within household political economies. I begin by looking briefly at the role that ethnoarchaeological knowledge plays in archaeology, move on to an exploration of the factors that affected the changes I observed in my fieldwork, and then conclude by assessing the implications of this research for current attempts to identify ethnicity in the archaeological record.

Ethnoarchaeology and Archaeology

At this point in archaeology’s history, any discussion of ethnoarchaeological findings must include some preamble about the role ethnoarchaeology plays within archaeological research. Ethnoarchaeology has the misfortune of being conceived both as necessary to archaeological studies and somehow always deficient in meeting its objectives. Both processual and postprocessual archaeologies may have kicked off their respective

research programs with ethnoarchaeology projects (e.g. Binford 1978; Hodder 1982); but since then ethnoarchaeology has faced sharp critique. Simms (1992) famously described ethnoarchaeology as little more than an obnoxious spectator or a trivial pursuit, while Ann Stahl (1993) exposed ethnoarchaeology's soft underbelly by pointing out that ethnoarchaeological work often relies on assumptions anchored in unilinear evolution. More recently, ethnoarchaeology has been chastised for both its eclecticism (Arnold III 2000) and its continued tendency to produce cautionary tales (Kuznar 2001). Others have dismissed ethnoarchaeological studies entirely, finding them to be ethically bankrupt (Gosden 1999; Jones 2002).

Many of ethnoarchaeology's current problems are a product of its birth in the positivist epistemology put forward by the New Archaeology (Cunningham 2009a). Indeed, its perceived shortcomings emerge from its failure to meet the expectations set out for it by the New Archaeology, expectations that by and large were never achievable. Ethnoarchaeology moved from its initial position as an intriguing archaeological side-project to become the vanguard of the New Archaeology's scientific study of the past. Ethnoarchaeology would provide the linking principles that would tie the behavioral phenomena referenced in the social theory archaeology used – effectively a tri-part model of culture proposing ecological determinism – to the material patterns that were observed in the archaeological record. By going to the field and documenting unambiguous causal relations between material culture and these behaviors, ethnoarchaeologists provided the means for positivists to deductively test their interpretations (Binford 1983:14, 54). Relations between material patterns and human behavior were expected to be directly apprehensible through bottom-up programs of “theory building” (Binford 1981). Unlike archaeology, which needed background theories and deductive programs of theory testing to establish interpretations, ethnoarchaeology could be an inductive pursuit. As a project of “theory building” (rather than “theory testing”), the middle range theories ethnoarchaeologists created from inductive study would be independent of archaeology's explana-

tory theory. Despite the critiques of positivism made by Kuhn (1996), Binford could thus suggest that archaeology achieved a methodological form of “objectivity” (Binford 1983: 45-55) because it relied on middle range theories during testing that were independent of archaeology's general theory. The benchmark for ethnoarchaeology's success would thus be its ability to identify – through inductive, ethnographic study – unambiguous relations between material culture patterns and human behavior.

It now goes without saying that the view of ethnographic research put forward by the New Archaeology – as the simple, a-theoretical recording of human behaviors – contrasts quite sharply with contemporary anthropological approaches. Many anthropologists are deeply skeptical about their ability to create an “objective” account of human behavior from observation alone (e.g., De Certeau 1984; Geertz 1973; Marcus and Fischer 1986). Behavior does not come pre-packaged into discrete units (for which a “material correlate” could be identified), but is continuous and inherently ambiguous. The problem is even more pronounced when we consider that, in archaeology, “behaviors” are usually structural phenomena rather than the sort of discrete events typically seen in daily human practice. Identifying specific behaviors, their causal antecedents, and their material correlates would thus seem to require a level of theorization that is *at least* as developed as that used by archaeologists to interpret the material record.

Many archaeologists nonetheless seem to have bought into the positivist outlook, going into the field for relatively short periods to try and document some interesting behavioral-material relation (see David and Kramer 2001 for discussion). Not surprisingly, they often returned from the field armed with results that suggested the causal forces impacting both behavior and material culture were much different than those proposed in archaeological theories. Many archaeologists responded to these findings by dismissing ethnoarchaeology as senselessly eclectic and a nihilistic producer of cautionary tales. Rather than a deficiency in ethnoarchaeology, however, much of the problem lies in the positivists' underestimation of the difficulties of ethnographic research (Cunningham 2003b).

The consequence has been that, for unrepentant positivists, ethnoarchaeology became the scapegoat for the failure of their grand vision, while for anti-positivists, ethnoarchaeology became the poster child of scientism.

As a consequence of its ties to the New Archaeology, much of the received knowledge about ethnoarchaeology is even now distinctly anachronistic. Many archaeologists still seem to feel that ethnoarchaeology's role is to identify law-like relations between behavior and material culture¹, despite the fact that the positivism that underwrote this role no longer has widespread support. Recent research has instead identified a slew of congruencies in once polarizing epistemic positions between processual and post-processual archaeology (Hegmon 2003; Kosso 2001; Trigger 1998, 2003a, 2003b; Tschauner 1996; VanPool and VanPool 1999; Wylie 2002). Minor terminological differences still exist (e.g., advocacy of "metaphor" versus "analogy"), but current research seems to have settled on a distinctly post-positivist approach. At the heart of the post-positivist epistemic vision is the realization both of the constructed nature of our investigations and of a series of procedures for counteracting the tautologies that always threaten to emerge. Data may always be identified in the light of background knowledge and theories, but that data may still resist our wildest flights of fancy, creating networks of resistances that challenge poor interpretations (Shanks and Tilley 1987). More explicit and proactive techniques increase the poignancy of these resistances. Theories do frame archaeological data, but no theory is so encompassing and logically seamless that it determines every aspect of the empirical word that can be used as evidence for that theory (Wylie 2002). Fragmentation occurs among different theories and the diverse datasets that they bring into being, creating opportunities for independence in testing procedures that defy vicious tautologies. Interpretations that "tack" between independent theories and datasets and are able to triangulate independent lines of evidence build interpretive security.

¹ For example, some researchers still feel ethnoarchaeology should get on with the job of "mapping" relations between behavioural phenomena and material patterning (Arnold 2003).

Ethnoarchaeology has an important role in this new post-positivist environment because ethnographic studies can provide independent support for archaeological theories. Archaeology and ethnoarchaeology are two distinct research "tacks" (Wylie 2002). Archaeological research interprets the material record in the light of background theories about human action and its ties to material culture, while ethnoarchaeology makes a complementary tack that assesses the same theory in ethnographic contexts. Rather than a theory-free quest for unambiguous material correlates, ethnoarchaeology is a significant aspect of archaeological research because it offers an independent context in which the *same* theory archaeologists use to interpret the material record can be tested and refined. This theory includes not only general propositions about human action ("general theory"), but also mid-level theories that seek to balance empirical and theoretical content and even low-level theories that focus on behavioral-material relations. Ethnoarchaeology is a useful complement to archaeology because its research contexts – i.e., studies of daily practice – are unique from archaeology's more structured vision of human action, creating the sorts of data-theory independencies that build confidence in our conceptual frameworks.

It is in this light that I offer the following discussion of ceramic variability. No single ethnographic setting will ever serve as a perfect (or even marginally perfect) analogue (or "metaphor") for a particular archaeological context. But ethnographic research in a number of different settings may document the causal forces that can impact ceramic decoration and suggest testing strategies (i.e., independent lines of archaeological evidence) that may allow archaeologists to select between those options.

Ceramic Change in the Inland Niger Delta

Ceramics in the Inland Niger Delta are produced by casted women potters who work out of their own homes. The Inland Niger Delta sits on the northern periphery of the Mandé cultural sphere and its social structure is often interpreted in relation to

Mandé's tri-part caste system of nobles and farmers, craft specialists, and slaves. These castes transect the ethnic divisions present in the region (see Figures 1 and 2). Craft producers are typically situated in an ambiguous social position, both revered and shunned because of their control over transformative technologies (Conrad and Frank 1995; Frank 1998; LaViolette 2000). Typically, they are described as endogamous; however, recent changes in the local economy – specifically the decreasing demand for smelted iron – have meant that many potters are now married to local farmers. Indeed, ethnicity and caste both seems much more fluid than has traditionally been assumed, especially in the upper delta (Amselle 1998; Conrad 2002; Cunningham 2005: Ch. 3).

Potters in the study area tend to reside in one of two ethnic groups, each of whom follows distinct operational sequences in the production of their pottery (Gallay and Huysecom 1989; Gallay, et al. 1998; Huysecom 1994a, 1994b; LaViolette 2000; Mayor 1994, 2003). Somono

numu potters tend to use concave ceramic molds to form the base of a vessel and then build up the sides through the use of coils. These potters employ slow wheels in their production. Slow wheels are conical vessels that pivot on an oiled indentation in the floor of a work space. The wheel is filled with fine grog that supports a ceramic mold and the wheel is spun by one hand while the other is used to form the pot. Potters form the vessel initially by pressing the clay into the mold with their hand. As coils are added to the rim, potters use wet leather and elliptical pieces of calash with one hand to smooth out the sides as the vessel is slowly turned. Once formed, vessels may be decorated with incision, rouletting, stamps, and incising; or, they may be formed and then directly set out to dry and await painting.

In contrast, Fulani (Peul) *griot* potters do not use a slow wheel and instead tend to use convex molds in association with a paddle and anvil technique to form their vessels. Small pots are

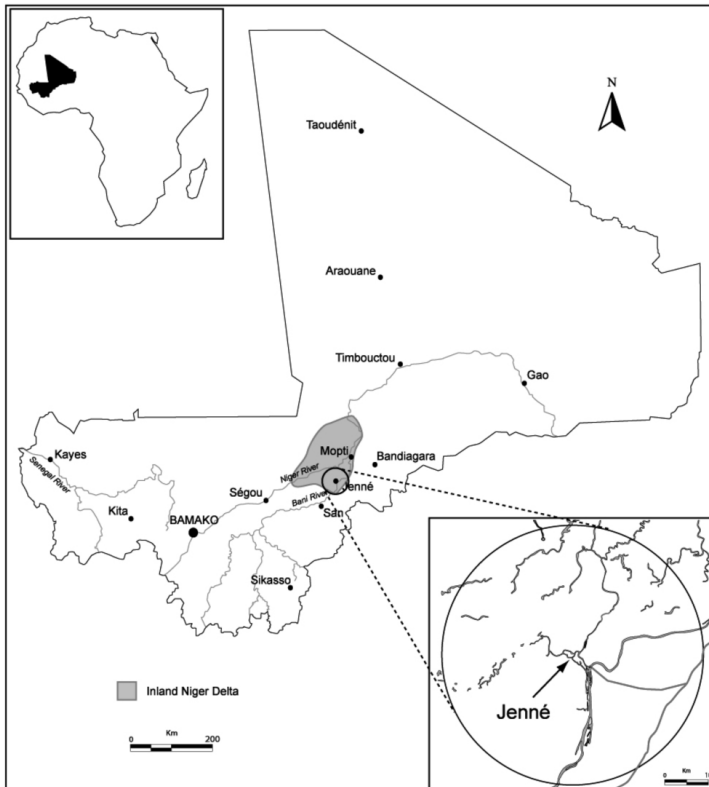


Figure 1. The study area.

Figure 2. Examples of water jars from the inland Niger Delta. Griot water jars for sale in Jenné (top left); current Forgeron jars for sale in Jenné Market (top right); a traditional Forgeron jar (bottom left); Kotimé's water jar (bottom right).



formed by being pressed into a concave wooden mold to form the base and then the upper portions of the vessel are formed by adding coils and using a paddle and anvil. Larger vessels begin as a flat pancake of clay that is draped over a convex mold – typically a broken vessel similar to that being made – and pounded into form. Once the base is dry, it is removed from the mold and coils of clay are added and the form is made with the assistance of a hammer and anvil. The wheel technique used by *numu* potters allows them to make a far wider range of vessel forms than typically are produced by *griot* potters, but the higher density of Griot pots makes their water vessels highly sought after because of its cooling properties.

Pots are fired by both groups in open bonfires that are fueled by cattle-dung and straw. Both of

these fuels are available only at the end of the harvest, which restrict most pottery production to the dry season (see below). Potters use a number of different marketing strategies to market their wares. They sell in their own village, through local markets, through sales trips to neighboring villages, through the use of franchises, and occasionally through pirogue-based itinerant marketing and even itinerant production where potters relocate with their tools to produce in another village. Water jars are relatively unique vessels in the Inland Niger Delta. Generally, they appear in two distinct varieties that are produced by potters in both ethnic groups. First, they may be “courtyard vessels” which are large jars placed in the cookhouse or in a shady part of the courtyard. These pots contain water for cooking, washing and other domestic

tasks. In contrast, “drinking vessels” are smaller and typically are conveniently placed on a patio attached to the house or in the corner of the antechamber of a room block. In comparison to water storage jars, which are modestly decorated, water pots for drinking are highly decorated and proudly displayed.

Both Griot potters and Forgeron potters produce “drinking vessels”, although they are markedly different in both their form and decoration. Griot jars tend to be spherical in shape, do not possess either a defined neck or a footring, but do have a short lip. The paddle and anvil technique used by Griot potters produces thin and densely walled vessels that are famous for keeping drinking water ice cold, although they tend to sweat water quite quickly. Griot drinking jars tend to have red triangular and diamond shaped designs painted down the upper half of the vessel in horizontal bands with the occasional boss adornment. In contrast, Forgeron potters produce larger spherical vessels that possess handles placed at the mid point of the body, a footring, and sometimes a tall neck. Currently, the upper 1/3 of Forgeron pots is red slipped, with horizontal bands of triangular, naturalistic or text-based decoration covering the mid-section of the body. Both Forgeron and Griot potters will occasionally make their bands of decoration stand out by painting the designs over a white slip.

While Griot pottery seems to have remained largely similar throughout the latter half of the 20th Century, current Forgeron pottery is undergoing some rapid changes. Two significant shifts in Forgeron drinking jars are evident. First, most water jars originally seemed to have possessed long necks, where as now up to half of the Forgeron vessels for sale throughout the region do not. Second, these vessels seem to have originally been decorated with highly elaborate incised and stamped designs that ran from the lip right down to the base of the pot. In contrast, current drinking jars – both necked and un-necked versions – are almost always decorated with just painted designs. Older vessels with tall necks and stamped or incised designs are present in households throughout the region and many of the potters who were interviewed possess the tools to

make these pots and said they could do so if they were specially ordered. However, incising and stamping was no longer a part of their everyday production.

Toward Thick Descriptions of Ceramic Change

One of the more problematic aspects of ethnoarchaeological work has been a tendency to not fully embed potters’ production within the modern economic and cultural context in which they live. The fact that pottery predates other materials in the region has often meant that archaeologists treat it as a “traditional technology” – something left over but largely intact from the bygone, pre-colonial era. However, craft producers rarely continue to produce craft items, or consumers continue to buy them, just because of inherent traditionalism. Understanding current craft production thus means an explicit consideration of how people have adjusted to the post-colonial settings in which they live. If these sorts of connections are ignored in order to make ethnoarchaeological findings look more “traditional”, i.e., more like a hypothetical archaeological situation, then an artificial picture of craft production is created. In the Inland Niger Delta, pottery production does occur within casted hierarchies and ethnically defined technological traditions, but that production is an *economic* activity. Women produce pots because it allows them to generate the income they need to meet their obligations within patrilineal households. For this reason, it is important to contextualize pottery production in the broader economic system before moving on to a consideration of the causal forces affecting change.

Potters currently face an economic squeeze. On the one hand, the Malian cash economy is making it increasingly difficult to barter pottery for the services needed to produce their pottery. Whereas teamsters used to be given a large pot such as a water jar in exchange for hauling their firing materials and clay to the potters firing location or workplace, now teamsters demand a fixed cash payment. On the other hand, potters have

seen the amount they receive in exchange for their pottery fixed according to an absolute cash value. Previously, the amount given in exchange for a pot was prone to fluctuate. For example, within their home village, potters would often give away pottery during the fall (during the planting and weeding periods of the agricultural calendar) and then receive a “re-gift” of cereals after the harvest. Although the re-gift of rice is expected by both parties when the pot is given away, the delayed nature of the exchange takes the social form of “gifting” (after Smart 1993). The important consequence for potters was that there was rarely an explicit assessment of equity in the exchange. Grain prices, for example, tend to drop during and immediately following the harvest, which enabled potters to receive between 50 and 100% more cereal in return for pots they had “gifted” than they would otherwise normally receive for a direct exchange. As a result, potters are quick to enter into delayed forms of reciprocity and focus additional effort in selling their pots during this period. Several potters noted that they would often gain more cereals than they needed for their own annual consumption and thus would resell it later in the dry season when grain prices returned to normal. Unfortunately, cash now provides an easy way to compare value. Most consumers are unwilling to enter into delayed forms of reciprocity and prefer to pay cash or “cash value” for pottery during the harvest rather than negotiate for a quantity of grain. As a result, potters are getting less in return for their vessels at the same time they are being asked to pay cash for production expenses.

In addition to the impact of the cash economy, ceramic production has also been deeply effected by industrially produced, functional equivalents of many pot forms, including plastic buckets, enamel serving dishes and aluminum caldrons. Nonetheless, when considered as a group, pottery remains a major component of most household tool kits. In a census of 100 households in the region, pottery made up over 40% of the vessels that were identified. In general, the persistence of pottery in the economy is a function of its low cost and availability. Industrial objects typically must be paid for upon possession and requires an

amount of cash that demands dedicated saving or a windfall. It also usually requires a visit to one of the region’s larger markets. In contrast, potters are ubiquitous throughout the region and engage in extensive marketing strategies that bring their inexpensive pottery to the doorsteps of many consumers. Potters are also willing to engage in barter and delayed reciprocal exchanges, which means that rural farmers can still get pottery when they do not have the time, cash or surplus cereals needed to acquire more desirable industrial items.

Yet, the vessel forms present were primarily those that have resisted the impact of industrial materials. For example, consumers clearly prefer to own plastic wash kettles instead of ceramic wash pots, yet wash pots remain popular because of their availability and inexpensiveness. Large ceramic cook pots, used to prepare rice and other cereals, have largely been replaced by aluminum caldrons. They now make up less than 1/6th of the total number of caldrons identified in the census. Ceramic serving dishes have almost entirely been replaced by enamel servers and potters noted that now they only made ceramic serving vessels when they were specially ordered, typically by people the potters described as “traditionally minded.” In contrast, traditional ceramic medicine preparation pots are relatively common and are explicitly sought by consumers because *marabous*-healers feel that traditional medicines must be brewed in “traditional vessels” to be effective.

Water jars were the second most frequently found vessel type in the census and by far are the most important type of pottery in contemporary Malian households. Water jars remain an important component of most households both because of its continuing functional uses as well as its important role in marriage trousseaus. Water jars face little direct competition from industrial equivalents. Although thermoses and other insulated water storage containers can be bought locally, these items require ice to cool the water and keep it at a pleasant drinking temperature. Several enterprising families now sell ice in Jenné, where there is a relatively reliable generated power system, but outside of Jenné there are few sources of regular power. In these areas, water jars

continue to be the preferred way of keeping water cool. Water jars are also an important part of the marriage trousseaus that accompany a bride into her husband's extended patrilineal family. Typically, water jars are gifts given to a bride from her mother. The mother, in turn, may have received it as a gift from a local potter-friend or may have special ordered it along with a collection of other small pots from a well-reputed potter. These pots are proudly displayed either in the front room of a household or on the patio. They are highly decorated and several women stated that they needed to be beautiful so they would encourage her new husband to drink the water she has brought to the compound. Water jars from Mopti, a commercial center some 100 km NE of Jenné, are particularly desirable as marriage pots. These vessels are typically decorated from the midline up with a red slip that is burnished to high gloss. Text is placed in relief around the center of the body, often stating the bride's name or the phrase "*Souvenir de Mopti*." Water jars are also a central component of hospitality; visitors are usually seated on the patio or front room and quickly offered water from the jar so they can refresh themselves. Thus, water jars are an important part of both the transference of the products of women's labor (hauled water) to her husband. They also figure metaphorically in the subtle politics of polygamous, patrilineal households where women often vie with their co-wives for equal attention and access to patrilineal resources. A husband who drinks more often from one wife's water jar spends more time in her house and with her children.

It is within this context that we can understand the decorative shifts that have occurred. The change from tall necked to un-necked pots seems partially a consequence of the relative importance of new materials. Two specific factors were often reported by both potters and consumers. Consumers now seem to prefer closing their vessels with a plastic or stainless steel plate rather than with the ceramic lid that usually accompanies the pot. Lids are prone to break because they are handled so frequently throughout the day. Plastic plates, or more extravagantly, high-gloss stainless steel plates, were generally thought to be

a more durable, appealing and fashionable lid. However, tall-necked pots often have a larger mouth than the diameter of the average plate, which means that if a plate is used, it often rest low down in the neck and is hard to remove. Plates are much more easily used in association with un-necked vessels with a smaller mouth. Un-necked pots also leave the plates in plain view, whereas plates set into a tall necked pot can only be seen from a high viewing angle.

In a similar way, the cups used to retrieve the water from within the vessel seem to impact vessel consumption. Originally, water seems to have been retrieved from the pot with the assistance of a calabash spoon that could reach down the long necks. Now, however, consumers prefer to use plastic or stainless steel cups, or in more impoverished households, used tin cans. For example, one of the consumers interviewed during the census had recently discarded the water jar she had received from her mother for her marriage and replaced it with a new, un-necked jar from Jenné. When asked about this purchase, she stated that she has recently bought an expensive stainless steel cup for drinking, but both she and her children were having trouble getting the cup down the tall neck of her old pot to reach the water. As a result, she explicitly went to purchase a new jar so she could continue using the cup.

What is perhaps most surprising is that in both these cases, ceramic changes are not due to specific changes in desirability related to the pots themselves, but are caused by the more generalized desire to use industrially produced materials in association with the pots. Household vessels of all types are uniquely women's objects and seem to symbolically represent their owner. The marriage trousseaus that accompany a bride to her new household do not just include her water jar, but now also typically include an extravagant display of enameled serving dishes. Enamels seem to have taken over the role once played by calabashes in the trousseau, which were given to the bride as gifts from her and her mother's social network and represented in a relatively direct way the social capital she could draw upon (see Cooper 1997). The expense of enamels, however, makes their possession more than just a measure of social capital.

They are also an overt demonstration of the wealth that the bride can draw upon; wealth that is manifest in a form that she controls (Cunningham 2009b). As economic power becomes a significant component of the Malian social environment, new materials that possess economic value have achieved a dominant position in the local aesthetic. When not in use, cups are placed upside down on the plate-lids used to close the jar, becoming part of its overall presentation. Plastic and stainless steel plates add to the aesthetic value of a water jar, whose absolute beauty now is partially a measure of its expensive and industrially-produced accoutrements. Beautifully decorated water jars may still encourage a husband to drink the products of his wife's labor, but when he does so, it is with a stainless steel cup that attests to his wife's social and economic power. The shift to un-necked vessels thus reflects the increasing importance of industrially produced items in comparison to pottery.

Faced with the devaluation of their products, potters have actively sought to limit the labour they invest in potting. They have done this by replacing time-consuming incised and stamped decorative techniques with painted designs. Potters noted that consumers continued to cherish stamped designs, but they were unwilling to pay extra for pots with these treatments. When highly decorated vessels were offered in markets next to less expensive, painted items, consumers would tend to choose the least expensive vessel. The dilemma is most acutely felt by a young potter from Soa named Fatumata. Fatumata was trained at the town of Dia by her grandmother. Her pots are incredibly uniform and undeniably beautiful, with a glossy finish, bands of relief and the phrase "*Vive L'Armée*" embossed around the pot at the midline.² By her estimation, it takes her about three times longer to make these pots compared to a painted water jar and she normally asks almost double the price of a painted jar. Although consumers are quick to show interest in these jars, they move on when the price is stated and usually buy a cheaper jar. At the time

of the interview, Fatumata was considering halting her production of these pots because she said that people were too poor to buy her wares.

It's important to note that potters are not seeking to limit labor investments in potting because they are the ruthless calculators of inputs and outputs often implied by formal economic models (although they are certainly shrewd business women), but because labor is a scarce and contested resource. The patrilineal families into which potters marry have a hierarchical system of labor allocation. Daughters in law are expected to carry out most domestic tasks not only in their nuclear family's own home, but also in the extended family's central household. These tasks include cleaning the house, hauling water and preparing collective meals. In houses with several junior daughters in law, work for the extended household is partitioned on a daily rotation. For families with just one or two daughters in law, however, the labor demanded by her husband's family can be extreme. On work days, women rise early and spend their entire day serving the extended family. Just preparing an evening meal may take more than four hours of work. Independent economic activities, such as potting, must take place in the "free-time" women have when not committed to the extended family.

Adding to this problem is the collapse of iron production and a marked tendency for potters' husbands to engage in agricultural work. At one time, potters' husbands were dedicated craft producers, typically iron workers, who gained their staple cereals through trade. However, the drought that has hit the Sahel since the 1970s has significantly reduced the surpluses agriculturalists have produced. Additionally, the abundance of high quality scrap iron in the local economy has eradicated most local smelting. Those iron workers who continue to work in the trade often do so intermittently, shifting their focus from iron smelting to smith-work. Faced with diminishing returns and few agricultural surpluses, many former iron workers have adopted agricultural production – either as a way of supplementing their iron work or as a complete replacement to craft production.

² The phrase probably reflects a special order made by the army to her grandmother for a number of vessels. Her grandmother now includes the phrase on all her pots and taught Fatumata to do the same. The phrase is remarkable because both Fatumata and her grandmother are illiterate.

This shift is dire for potters because agricultural production significantly increases demands on their labor, both from field related work and from associated household chores. In the deep water channels of the delta known as the Pondori, potters who once followed itinerant, pirogue-based marketing strategies with their mothers have abandoned the practice because it conflicts with the time of the year when they are needed to help with weeding and the harvest. Instead of stockpiling pottery during the dry season and then using pirogues to sell it during the floods, potters now focus almost entirely on selling during the dry season by donkey cart and horse-drawn wagon because this is when agricultural demands on their labor are much lighter.

Discussion

In contrast to archaeological maxims that see decorative variability as a straight forward and rather unproblematic reflection of social affinities, the findings here point to the myriad of factors that may create decorative elements. The New Archaeology's optimism about ethnoarchaeology's ability to find unambiguous material correlates relied on the hope that material culture should partition out into a simple and cross-culturally relevant series of "decodes". For every process in human society – such as ethnic symbolism – there should be an associated material pattern – such as ceramic decorative styles. Binford argued that most of society should partition in similar ways: technomic, sociotechnic, and ideotechnic variability in material culture would directly reflect the adaptive, sociological and ideological behaviors of past societies (Binford 1962, 1965). In stark contrast, what I hope is most explicit in the preceding account of decorative changes in Mali is that something "as simple" as a change in decorative variation actually results from a highly complex *mélange* of processes. The implication is that rather than one-to-one relations between pattern and process, material patterns are summative: they represent the cumulative effects of a number of interaction causal forces.

Two broad lessons emerge from this study. First, not only are material patterns the result of several processes, but the importance of these processes may shift over time. At one point, the decorative variation studied here may have been strongly influenced by concerns with ethnic symbolism, but in Mali's current postcolonial and globalized setting, household politics and the economics of labor have come to have a definitive impact on ceramic variability. Second, these shifts in importance are rarely confined to a single aspect of material culture. As we have seen, the impact of household labor extraction is not just tied to decorative variation. Women also consume household vessels because they assist them in negotiating their position within their husband's family. A bride's collection of enamels reminds her husband's family about the social and economic resources she has at her disposal, allowing her to resist overexploitation despite her inherently marginalized position within the household's political economy. Beautiful decoration on water jars is less important now than it once was because the economic capital displayed through a collection of industrial materials is an important part of personal identity. Potters, just like other women in the region, are embedded in these political economies and face the systematic extraction of their labor by their husband's family. As their husbands shift to agricultural production, more of their labor is appropriated for the household, which reduces the time they have for potting. Faced with less time to pot, an economic squeeze, and a clientele unwilling to pay for elaborate decorative treatments, potters have shifted from stamped and incised designs to more quickly and easily produced painted decorative elements. Political economies have such a diverse impact on different elements of pot production and consumption because it is one of the most salient aspects of women's experiences in this context at this particular time. In Bourdieu's (1977:164-169) terms, women's position in the household has reached a point of heterodoxy in which it is the subject of explicit concern and negotiation.

Like pebbles dropped in ponds, we would thus expect that those processes that have a dominant

impact on a social setting are not restricted to one facet of material variability, but instead create waves of change that travel through diverse facets of material culture. Moments of severe adaptive stress, ethnic conflicts, or economic change likewise should manifest themselves archaeologically not just in specific material patterns, but in changes throughout a wide range of material residues. By tacking between independent lines of evidence that have been partially impacted by such cultural phenomena, archaeologists would be able to identify the presence of causal forces – like those originating in household political economies – that are responsible for material patterning. For this reason, it is perhaps important that ethnicity is not narrowly equated with decorative variation. Doing so has the effect of, on the one hand, oversimplifying the number of causal forces that go into creating a decorative pattern and, on the other, leaving other lines of evidence for ethnicity unexplored.

Conclusion

Ethnoarchaeology exists to aid archaeological interpretation. Yet, it will never provide archaeology with the list of material-to-behavior decodes that the New Archaeology once hoped. What ethnoarchaeology can do, however, is to seek to understand the relationship between human action and material patterning so that this knowledge can be used by archaeologists to develop the methods and conceptual frameworks that facilitate the best possible interpretations of the past. As I have shown, the default (yet anachronistic) assumption that patterns in material culture isomorphically relate to specific processes, such that decorative variation could always be a measure of past ethnicities, is inconsistent with the ethnographic record. The patterning observable in decorative variation may result from a variety of causal antecedents, including ones that are particular to specific times and places. The key to identifying which of the various alternatives are responsible for a particular pattern found in the archaeological record is a question that can only be answered by expanding the research and seek-

ing other lines of evidence – other material patterns – that should be present if the process suggested in the interpretation was in operation.

References Cited

- Amselle, J.-L.
1998 *Mestizo Logics: Anthropology of Identity in Africa and Elsewhere*. Translated by C. Royal. Stanford University Press, Stanford.
- Arnold III, P. J.
2000 Working Without a Net: Recent Trends in Ceramic Ethnoarchaeology. *Journal of Archaeological Research* 8(2):105-133.
2003 Back to Basics: The Middle-Range Program as Pragmatic Archaeology. In *Essential Tensions in Archaeological Method and Theory*, edited by T. L. VanPool and C. S. VanPool, pp. 55-66. Foundations of Archaeological Inquiry, J. M. Skibo, general editor. University of Utah Press, Salt Lake City.
- Binford, L. R.
1962 Archaeology as Anthropology. *American Antiquity* 28:217-225.
1965 Archaeological Systematics and the Study of Culture Process. *American Antiquity* 31:203-210.
1978 *Nunamiut Ethnoarchaeology*. Academic Press, New York.
1981 *Bones, Ancient Men and Modern Myths*. Academic Press, New York.
1983 *Working at Archaeology*. Academic Press, London.
- Bourdieu, P.
1977 *Outline of a Theory of Practice*. Translated by R. Nice. Cambridge University Press, Cambridge.
- Conrad, D. C.
2002 *Somono Bala of the Upper Niger: River People, Charismatic Bards, and Mischievous Music in a West African Culture*. African Sources for African History; v.1. Brill, Boston.
- Conrad, D. C. and B. E. Frank (editors)
1995 *Status and Identity in West Africa: Nyamakalaw of Mande*. Indiana University Press, Bloomington.
- Cooper, B. M.
1997 *Marriage in Maradi: Gender And Culture in a Hausa Society in Niger, 1900-1989*. Heinemann, Portsmouth, NH.
- Cunningham, J. J.
2003a Rethinking Style in Archaeology. In *Essential*

- Tensions in Archaeological Method and Theory*, edited by T. L. VanPool and C. S. VanPool, pp. 23-40. Foundations of Archaeological Inquiry, J. M. Skibo, general editor. University of Utah Press, Salt Lake City.
- 2003b Transcending the "Obnoxious Spectator": A Case for Processual Pluralism in Ethnoarchaeology. *Journal of Anthropological Archaeology* 22:389-410.
- 2005 Household Vessel Exchange and Consumption in the Inland Niger Delta of Mali: An Ethnoarchaeological Study. Unpublished Doctoral Thesis, McGill University.
- 2009a Ethnoarchaeology Beyond Correlates. *Ethnoarchaeology* 1:115-136.
- 2009b Pots and Political Economy: Enamel-Wealth, Gender and Patriarchy in Mali. *Journal of the Royal Anthropological Institute* (N.S.) 15:276-294.
- David, N. and C. Kramer
2001 *Ethnoarchaeology in Action*. Cambridge World Archaeology. Cambridge University Press, Cambridge.
- De Certeau, M.
1984 *The Practice of Everyday Life*. Translated by S. Rendall. University of California Press, Berkeley.
- Frank, B. E.
1998 *Mande Potters and Leather-Workers: Art and Heritage in West Africa*. Smithsonian Institution Press, Washington and London.
- Gallay, A. and E. Huysecom
1989 *Ethnoarchéologie Aafricaine: Un Programme d'Étude de la Céramique Récente du Delta Intérieur du Niger (Mali, Afrique de l'Ouest)*. Document du Département d'anthropologie et d'écologie, Université de Genève; 14. Université de Geneve, Genève.
- Gallay, A., E. Huysecom and A. Mayor
1998 *Peuples et Ceramiques du Delta Intérieur du Niger (Mali): Un bilan de cinq années de missions (1988-1993)*. Verlag Philipp von Zabern, Mainz.
- Geertz, C.
1973 *The Interpretation of Cultures*. Basic Books, New York.
- Gosden, C.
1999 *Anthropology & Archaeology: A Changing Relationship*. Routledge, New York.
- Hegmon, M.
2003 Setting Theoretical Egos Aside: Issues and Theory in North American Archaeology. *American Antiquity* 68(2):213-243.
- Hodder, I.
1982 *Symbols in Action: Ethnoarchaeological Studies of Material Culture*. Cambridge University Press, New York.
- Huysecom, É.
1994a Djenne: une Région aux Productions Céramiques Très Diversifiées. In *Djenne: une ville millénaire au Mali*, edited by R. M. A. Bedaux and J. D. van der Waals, pp. 122-130, Leiden.
- 1994b Identification Technique des céramiques Africaines. In *Terre Cuite et Société: La Céramique, Document Technique, Économique, Culturel*. Rencontres Internationales d'Archéologie et d'histoire d'Antibes. vol. XIV. Éditions APDCA, Juan-les-Pins.
- Jones, A.
2002 *Archaeological Theory and Scientific Practice*. Cambridge University Press, Cambridge.
- Jones, S.
1997 *The Archaeology of Ethnicity: Constructing Identities in the Past and Present*. Routledge, London.
- Kosso, P.
2001 *Knowing the Past: Philosophical Issues of History and Archaeology*. Humanity Books, Amherst, NY.
- Kuhn, T. S.
1996 *The Structure of Scientific Revolutions*. 3rd Edition. The University of Chicago, Chicago.
- Kuznar, L. A.
2001 Introduction to Andean Archaeology. In *Ethnoarchaeology of Andean South America: Contributions to Archaeological Method and Theory*, edited by L. A. Kuznar, pp. 1-18. International Monographs in Prehistory, Ann Arbor, MI.
- LaViolette, A. J.
2000 *Ethno-archaeology in Jenné, Mali: Craft and Status Among Smiths, Potters and Masons*. BAR International Series, Cambridge Monographs in African Archaeology 49. Archaeopress, Oxford.
- Marcus, G. and M. Fischer
1986 *Anthropology as Cultural Critique: An Experimental Moment in the Human Sciences*. University of Chicago Press, Chicago.
- Mayor, A.
1994 Durées de vie des Céramiques Africaines: Facteurs Responsables et Implication Sarchéologiques. Paper presented at the Terre Cuite et Société: La Céramique, Document Technique, Économique, Culturel, Antibes.
- 2003 Use of Ethnoarchaeology for a Better

- Understanding of Ceramic Production, Diffusion and Consumption Modalities: The Mali Example. In *Ceramic in the Society*, edited by S. Di Pierro, V. Serneels and M. Maggetti. Proceedings of the 6th European Meeting on Ancient Ceramics. Department of Geosciences, Mineralogy and Petrography, University of Fribourg, Fribourg.
- Shanks, M. and C. Tilley
1987 *Social Theory and Archaeology*. Polity Press, Cambridge.
- Simms, S. R.
1992 Ethnoarchaeology: Obnoxious Spectator, Trivial Pursuit, or the Keys to a time Machine? In *Quandries and Quests: Visions of Archaeology's Future*, edited by L. Wandsnider, pp. 186-198. Occasional Paper. Center for Archaeological Investigations, Southern Illinois University., Carbondale.
- Smart, A.
1993 Gifts, Bribes, and Guanxi: A Reconsideration of Bourdieu's Social Capital. *Cultural Anthropology* 8(3):388-408.
- Stahl, A. B.
1993 Concepts of Time and Approaches to Analogical Reasoning in Historical Perspective. *American Antiquity* 58(2):235-260.
- Trigger, B. G.
1998 Archaeology and Epistemology: Dialoguing across the Darwinian Chasm. *American Journal of Archaeology* 102:1-34.
2003a *Archaeological Theory: The Big Picture*. Grace Elizabeth Shalhit Memorial Lecture Series. Department of Anthropology, Brigham Young University.
2003b *Artifacts & Ideas: Essays in Archaeology*. Transaction Publishers, New Brunswick, N.J.
- Tschauner, H.
1996 Middle-range Theory, Behavioral Archaeology, and Postempiricist Philosophy of Science in Archaeology. *Journal of Archaeological Method and Theory* 3(1):1-30.
- VanPool, C. S. and T. L. VanPool
1999 The Scientific Nature of Postprocessualism. *American Antiquity* 64(1):33-53.
- Wylie, A.
2002 *Thinking from Things: Essays in the Philosophy of Archaeology*. University of California Press, Berkeley.

