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Archaeological ceramics from eastern Africa: past approaches and future directions

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Ceramics are an essential part of the Holocene archaeology of eastern Africa and the development of increasingly complex typologies has rightly played a key role in our understanding of chronology and social identity. However, this focus on taxonomies can also be restrictive, as we lose sight of the communities who made and used the ceramics in our endless search to classify and re-classify ceramics. Focusing on ceramics from the Great Lakes and Rift Valley (Kansyore, Pastoral Neolithic and Urewe), we critique past approaches to ceramic analysis, and suggest future studies should better recognise their social role. We end with a case study of Kansyore ceramics, emphasising function and use.

Keywords: Ceramics; Kansyore; Pastoral Neolithic; Urewe; eastern Africa; function; typology

Les céramiques forment une partie essentielle de l'archéologie Holocène de l'Afrique orientale, et le développement de typologies de plus en plus complexes a, à juste titre, joué un rôle clé dans notre compréhension de la chronologie et de l'identité sociale. Toutefois, cet accent sur les taxonomies peut aussi être restrictif, car dans notre quête sans fin pour classer et reclasser les céramiques nous perdons de vue les communautés qui les ont fabriquées et utilisées. Dans cet article, nous considérons les céramiques de la région des Grands Lacs et de la Vallée du Rift (Kansyore, Néolithique pastoral et Urewe), examinant les approches appliquées anciennement à l'analyse de la céramique et suggérant que les études futures devront mieux reconnaître le rôle social de la céramique. Nous terminons par une étude de cas des céramiques Kansyore, insistant sur leur fonction et leur usage.

Introduction

Ceramics represent the backbone of any archaeology of the recent past of eastern African. It is therefore appropriate that this fiftieth anniversary issue of *Azania* should dedicate a paper to ceramic studies. Indeed, this journal has been at the heart of eastern African ceramic research since its inception, be it early type-site descriptions, such as Susannah Chapman's (1967) discussion of Kansyore in only

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the second issue of *Azania*, or the seminal typological studies of scholars such as Soper (1971) on Early Iron Age ceramics or Collett and Robertshaw (1983) for Rift Valley types. More recently, with an expanded geographical and temporal remit, *Azania* has addressed ceramic studies further afield with special issues on West African ceramics (Gijanto and Ogundiran 2011; Haour *et al.* 2011). Nevertheless, we believe that alongside this celebratory tone, we should also adopt a critical stance to the state and condition of ceramic research in eastern Africa. Notwithstanding the undoubted contribution of ceramic research to our broader archaeological understanding, there have been under-currents of disaffection, as scholars have questioned how and why we use ceramics in our discipline. Over the years several scholars have engaged with these issues (Stewart 1993; Karega-Münene 2003; Croucher and Wynne-Jones 2006; Wynne-Jones 2007; Ashley 2010; Fleisher 2010; Grillo 2014; Lane 2015). Drawing inspiration, in part, from these studies, this paper reviews past approaches and presents some thoughts on new directions. We have been deliberately selective; we cannot do justice to the full range of research undertaken on topics in this field. Rather, we have chosen to focus on ceramics of the Rift Valley and Great Lakes region with which we are familiar (Kansyore, Pastoral Neolithic, and Urewe), offering a case study of Kansyore ceramics at the end of this paper (see Figure 1). We recognise that this decision omits regionally significant ceramics and important debates, which space limitations cannot accommodate. Nevertheless, our intention here is not to provide an exhaustive litany of ceramic typologies and dates, but rather to explore in broad strokes potential avenues for future ceramics research.

Ceramic studies in the Great Lakes and Rift Valley

The decision to concentrate on the Great Lakes and Rift Valley is not entirely self-serving; this region bears witness to some of the key social transitions in the Holocene of eastern Africa, as sites occupied by early ceramic-using hunter-gatherers, and later by pastoralists and farmers, crisscross the landscape.

The earliest known ceramic type in eastern Africa, Kansyore pottery, dates to between *c.* 8000 and *c.* 2000 BP and is associated with a delayed-return hunter-gatherer economy focused on aquatic resources (Karega-Münene 2002; Dale *et al.* 2004; Dale and Ashley 2010; Prendergast 2010). Sites are found across a wide region that incorporates western Kenya, northern Tanzania and southern Uganda, with a possible local variant, Lokabulo, found in South Sudan (see Figure 1). Site distribution favours river banks and lacustrine shores (although this is not necessarily the case in northern Tanzania), driven presumably by accessibility to shellfish and fish, the remains of which are found in high densities and suggest site re-use, as well as semi-sedentism.

To the north, in the Rift Valley, the generally accepted narrative has the first pastoralists, who produced 'Nderit' pottery, appearing in the Turkana Basin *c.* 4500 BP, at the same time as we see the construction of megalithic 'pillar sites' (Hildebrand and Grillo 2012; Grillo and Hildebrand 2013). Nderit ceramics have been found at sites as far south as northern Tanzania, suggesting that at least some of this group may have later moved down through the Central Rift Valley (Gifford-Gonzalez 1998). In a subsequent phase of what collectively becomes known as the Pastoral Neolithic, highly specialised pastoralist groups occupy central Kenya and northern Tanzania, moving into some territories where Kansyore-producing hunter-gatherers likely already resided (Bower 1991; Lane 2004; Marshall *et al.* 2011). The ceramics produced, used and discarded by these herding groups were abundant and varied, and

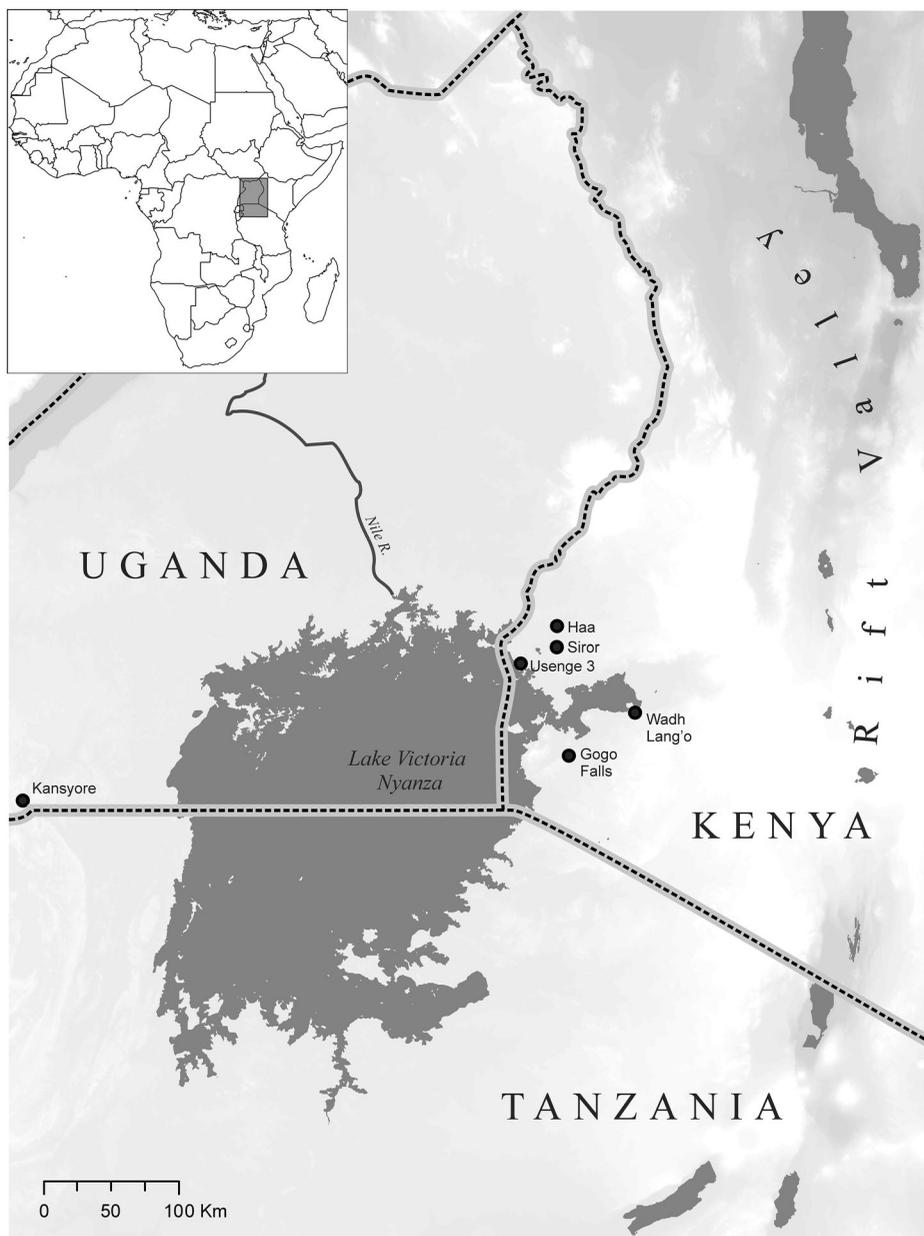


Figure 1. Eastern Africa showing the sites mentioned in the text.

archaeologists have been trying to make sense of them since the 1920s by classifying them, reclassifying them and then classifying them again (Karega-Münene 2003).

To the west of Lake Victoria Nyanza from *c.* 2500 BP a new kind of pottery, Urewe, starts being used in Rwanda, Burundi and northwestern Tanzania (Clist 1987; Van Grunderbeek 1988; Ashley 2010). Later found in Uganda and western Kenya from *c.* 1600-1200 BP, these ceramics have traditionally been associated with a new group of iron-using, farming communities speaking Bantu languages during

a period referred to as the Early Iron Age. Temporal and spatial overlaps between Kansyore and Pastoral Neolithic ceramics also occur in western Kenya at multi-component sites such as Gogo Falls (Robertshaw 1991; Karega-Münene 2002), Wadh Lang'o (Lane *et al.* 2007) and Usenge 3 (Lane *et al.* 2006, 2007). Archaeologists have thus recently argued for a dynamic landscape of shifting social and economic interactions between hunter-gatherers, pastoralists and later agriculturalists throughout these regions (e.g. Karega-Münene 2003; Lane 2004; Lane *et al.* 2007; Wright 2011; Prendergast *et al.* 2013). Central to archaeological interpretations have been the distinctive ceramics, which have shaped chronologies, site identification and cultural attribution alike.

Ceramic classifications

The earliest ceramic studies for eastern Africa tended to be descriptive, as a handful of pioneer scholars sought to find material similarities between widely separated pockets of archaeological research. Leakey *et al.* (1948; see also Hiernaux 1960; Van Noten 1979) recorded Urewe ceramics, Chapman (1967) defined Kansyore (see also Pearce and Posnansky 1963), and Louis Leakey (1931) described the 'Stone Bowl culture', which later became a sub-facet of the Pastoral Neolithic. Such a qualitative approach is not surprising; these practitioners were shaped by a broadly culture-historical school of thought that sought to map culture units through material culture distributions. The first attempt to describe and classify the ceramics of eastern Africa's prehistory systematically was made by Posnansky (1961), who reviewed an enormous body of evidence from throughout central Kenya and Uganda and proposed a standardised nomenclature for identified types, preferring names associated with type sites rather than designations referring to specific ethnic groups or attributes of the ceramics themselves (e.g. Urewe instead of 'Dimple-based' pottery). However, in many respects Posnansky's (1961) categories were still based on qualitative descriptions, a pattern continued by Sutton (1964) when he presented a new typological system for the pottery of Kenya's highlands. Ceramics were grouped into three classes: Class A (primarily a Pastoral Neolithic type known then as Elmenteitan); Class B (which includes both the earliest Pastoral Neolithic type, originally named 'Gumban A' by L. Leakey (1931) and then 'Nderit' by Wandibba (1980) and a 'Hyrax Hill variant' later classified as 'Maringishu'); and Class C (rouletted Iron Age ceramics).

By the late 1960s, and inspired by the wider processual urge to quantify and test, prehistoric ceramics in eastern Africa were approached with an eye towards more structured analyses and taxonomies. Using an attribute analysis approach also popular in southern Africa at the time (e.g. Huffman 1970), Soper (1971) calculated the degree of relationship between Early Iron Age ceramics (including Urewe) from eastern and southern Africa, measuring the relative frequency of morphological and decorative attributes to map the putative spread of Bantu language speakers and their ceramics. Urewe was re-affirmed by this study as the earliest manifestation of Early Iron Age ceramics in eastern Africa. In subsequent decades, very few scholars engaged with a refinement of the Urewe typology, with Van Grunderbeek (1988) being a notable exception. However, even she was still unable to determine any clear intra-Urewe spatio-temporal patterning, despite recognising variability; there were simply insufficient data to allow time-sensitive typologies. Recent work on variations within the Urewe corpus has been published by Posnansky *et al.* (2005; see also Posnansky 1972), who argue for a late 'Devolved Urewe' variant, now termed

‘Transitional Urewe’ by Ashley (2010; cf. Giblin 2013 for Rwanda), which begins to appear *c.* 1200 BP and seems to reflect localised variants of Urewe ceramic styles.

For the Pastoral Neolithic, the ceramic typology that has found greatest traction among archaeologists is the one developed by Wandibba (1980) in the 1970s–1980s, also referred to in Bower and Nelson (1978) and Bower *et al.* (1977). Wandibba’s sherd-based study classified ceramics from the Central Rift Valley in Kenya into groups labelled by type-site, on the basis of general forms and decorative patterns. ‘Nderit Ware’, ‘Remnant Ware’ (the aforementioned ‘Elmenteitan’ pottery), and ‘Narosura Ware’ became terms associated with ostensibly distinct cultural groups in the Pastoral Neolithic, while the less-common ‘Akira Ware’ and ‘Maringishu Ware’ refer to distinctive vessel types the cultural provenance of which is still somewhat unclear. Ambrose (1984) generally accepted these categories and tied ceramic, lithic and settlement evidence together to argue for the existence and recognisability of (aceramic) Eburran 5 hunter/gatherer, Elmenteitan pastoralist and Narosura-producing Savanna Pastoral Neolithic (SPN) populations in the eastern African archaeological record.

A later study by Collett and Robertshaw (1983), also inspired by southern African statistical methodologies, employed multivariate analysis of decorative motifs, decorative techniques, location of decorative elements on vessels and vessel forms. This study generally reinforced the validity of Wandibba’s categorisations, but a new set of names for ceramic ‘traditions’ were proposed to replace Wandibba’s ware types: ‘Olmalenge’ was the term invented to replace ‘Nderit’ and ‘Maringishu’, ‘Oldishi’ was to replace ‘Narosura’ and ‘Oltome’ was associated with ‘Kansyore’ pottery. Elmenteitan pottery was left without being renamed, but Collett and Robertshaw recognised similarities between Elmenteitan assemblages and Iron Age ceramics from Deloraine Farm. The ‘nonsense names with an African flavour’ (Collett and Robertshaw 1983: 121) never caught on, however, and Africanist archaeologists generally still follow Wandibba’s (1980) taxonomy for Pastoral Neolithic ceramics (e.g. Lane 2011: 109–128).

For Kansyore ceramic analyses, little had changed until recently from the days of early research. Additional insights from new excavations added to a descriptive picture of Kansyore (e.g. Soper and Golden 1969; Mosley and Davison 1992), albeit one that lacked quantitative definition (although see Collett and Robertshaw 1983). Dale (2007) recently pioneered a *chaîne opératoire* approach to Kansyore and attempted to trace diachronic change using variations in decorative technique and frequencies. Based on only a handful of sites, however, this study has only been a first attempt and there is a well recognised gap in the middle of the 6000 year sequence (Dale and Ashley 2010).

More recently, publications about ceramics in eastern Africa are still being written primarily to clarify essential points of culture history and chronology in regard to existing typological schemes (e.g. Prendergast *et al.* 2014). Over 20 years ago, in a review of Great Lakes Iron Age ceramics, Stewart (1993) was concerned by the dominance of typological approaches and questioned the epistemological foundation for an archaeology based on such classifications. Despite the passage of time, and with few exceptions, little seems to have changed.

Critique of typological approaches

We empathise with, and appreciate, the ambition that archaeologists have to classify eastern African ceramics in ways that increasingly improve our ability to discuss

particular culture-historical sequences. Ceramic typologies are created (or at least *should* be created) to serve some useful purpose (Adams and Adams 1991). This purpose is very often to settle chronological questions, although a relative paucity of well-dated sites in eastern Africa has, in part, confounded the development of ceramic typologies useful in that regard. We therefore tend to associate Kansyore with the early Holocene, Pastoral Neolithic ceramics with the middle Holocene and everything after in the late Holocene with the ‘Iron Age’ or ‘Pastoral Iron Age’. Problematically, this simplified chronological framework is used despite evidence that Kansyore pottery, for example, was likely produced for 6000 years during the Holocene, spanning cultural milieux that include periods of ceramic production by hunter-gatherer, pastoralist and farming peoples.

In practice, newly found or analysed artefacts get pigeonholed into recognised types and ceramics that fail to match existing categories, such as Sutton’s (1964: 31) “Unclassifiable Pottery”, are often described tangentially or simply ignored. In eastern Africa, ceramic analysis has tended to end at this identification of sherds to particular ware types. Existing categories are thus reified, the end result being a system that precludes consideration of how and why the production, use and discard of ceramics identified to a particular ware type has changed over time — or not. For Kansyore ceramics, despite the best efforts of scholars such as Dale (2007), the category is monolithic, with little recognition of variation despite its 6000-year time span. The simple attribution of sherds to the Kansyore ware type acts as a stepping-stone towards wider discussion of socio-economic structures, but archaeologists have rarely stepped back to consider the meaning of the category ‘Kansyore’ itself.

Indeed, archaeologists in eastern Africa tend to employ ceramic typologies as a way of attributing the production of excavated sherds to archaeological ‘cultures’, such as the Kansyore, the Elmenteitan and others. Lane (2015) has recently critiqued the ways in which archaeological cultures in eastern Africa, as defined by ceramic variability, are implicitly associated with bounded ethnic and linguistic identities. We note that pots have served as proxies for prehistoric peoples in other subtle ways as well, as when ‘Nderit’, ‘Ileret’ and ‘Narosura’ pottery identified at sites on the Tanzanian coast are said to be evidence for pre-Bantu-speaking agricultural/pastoralist ways of life (Chami and Kwekason 2003).

If the goal of ceramic classification is to ‘search for and locate types and to place them within schemes of relatedness’ (Sørensen 2015: 86) we must also, as Sørensen notes, discuss what we really want those schemes to mean. In the example of Pastoral Neolithic ceramics, competing typologies and sub-divisions are seen as acceptable ends in themselves, with little attention directed toward what such categories might mean, beyond vague associations with pastoral identities and/or subsistence practices. Even if we accept (rightly or wrongly) that Pastoral Neolithic ware types represent definable ‘cultures’, existing typologies are still merely a framework for understanding past social dynamics.

We therefore argue that eastern African ceramic typologies could be used not only to better define the broader time periods/cultural entities discussed above, but also to describe and explain transitions within and between them. Why does the Kansyore typology remain so consistent across time and space? What is the significance of the variability in manufacturing techniques, decorative style and vessel forms recognised amongst Pastoral Neolithic ceramics? Did exchange of pottery (or food/drink/goods carried within) play a role in cementing relationships

between hunter-gatherer and incoming pastoralist peoples, as postulated for ‘Akira’ ware (Robertshaw 1990: 200), or farming peoples? In the end, how have ceramics influenced trajectories of social transformation, migration and stasis in eastern Africa for the last 8000 years? Ultimately, we argue that typologies for prehistoric ceramics in eastern Africa should be created and continuously revised not as culture-historical ends unto themselves, but as tools to help us understand the materiality of eastern African lives.

Production to use: a new ceramic ontology?

Current approaches, which focus on taxonomies and spatio-temporal mapping of ceramics and putative identities, bar us from examining an arguably simpler world of ceramics — how and why they were made and used. This ‘simpler’ approach can, it is recognised, sometimes require new specialist skills and methodologies — we need a new programme of archaeometric research to fully explore the technological and functional worlds of ceramics and potters. However, at the heart of this shift is not just the application of a new suite of scientific techniques (though this would also be nice!). Rather, it is a new ontology of ceramics, an ontology that recognises the place of ceramics as made and used objects that directly interacted and interfaced with the people we seek to know. Methodologies must change, but, more importantly, so too must the questions we ask of ceramics.

While there is widespread recognition in archaeology that ceramic production technologies can provide important insights into questions as diverse as provenance, specialisation and even identity, archaeometric studies of ceramics in Sub-Saharan Africa as a whole remain rare, especially when compared to analyses of other material culture categories. For example, within eastern Africa, there have been long-standing and rich discussions linking metal technologies with socio-symbolic meaning and behaviour (Iles and Lyaya 2015) and there have been numerous chemical provenancing studies of obsidian (Merrick and Brown 1984; Ndiema *et al.* 2010), and glass beads (Robertshaw *et al.* 2010; Wood 2012). However, despite the centrality of ceramics to almost any archaeology of the recent past, there are only a handful of studies in this region that examine production and technology using material science methodologies (e.g. Langdon and Robertshaw 1985; Grunderbeek *et al.* 1982; Mercader *et al.* 2000; Smith 2004; Oteyo and Doherty 2006).

This *continued* omission from our eastern African methodological arsenal is perhaps particularly surprising given the interpretive insight and global impact that regional ethnoarchaeologies of ceramic production and technology have had. Perhaps most notable is the work of Olivier Gosselain and colleagues in central Africa, specifically Cameroon, where, using the idea of the *chaîne opératoire*, saliency is recognised in every stage of the production process (e.g. Gosselain 1992, 1998, 2000). Every technological choice, far from being environmentally determined, is culturally constituted, and thus a potential mirror to social institutions, practice and structure. Others, such as Dietler and Herbich (1998), working among Luo potters of western Kenya, demonstrate how potters express dominance, allegiance, subservience and even rebellion through their choices of ceramic style. As these insights from ethnoarchaeology demonstrate (see also Hodder 1982; Wynne-Jones and Mapunda 2008), productive contexts are socially charged and are thus potentially powerful sources of archaeological insight. However, despite high levels of recognition for eastern African ethnoarchaeology on a wider stage, these insights are

rarely brought to bear when it comes to interpreting the eastern African archaeological record (although see the *chaîne opératoire* approaches in Dale 2007; Ashley 2010). In contrast, southern African ceramic research in the last decade has increasingly embraced the interpretive scope and potential of materials science for answering archaeological questions. Petrology and clay chemistry have been used to source ceramics from Botswana in order to explore regional patterns of production and exchange (e.g. Wilmsen *et al.* 2009), X-Ray Diffraction (XRD) and Scanning Electron Microscopy (SEM) have been used to examine and compare details of clay processing and sourcing across Early Iron Age and modern ethnographic contexts in South Africa (Fowler *et al.* 2011) and experimental laboratory-based work on distinctive ceramic pore structures has aided the identification of vessel forming techniques in Zimbabwe and South Africa (Lindahl and Pikirayi 2010). As these examples hint, new methodological applications could be productively explored in eastern Africa as well.

One area of interpretive attention that does not necessarily entail a complex new analytical method is that of function and use. Various analytical techniques can be used to identify organic residues on pot interiors and in their fabrics (e.g. Barnard *et al.* 2007), but these applications have only rarely been employed in Sub-Saharan Africa (although see Copley *et al.* 2004; Dunne *et al.* 2012; Fewlass 2015). However, as a growing number of scholars in eastern Africa have recently shown, basic typologies can also be usefully re-examined through the lens of function, without the need for expensive techniques. Fleisher (2010), for example, has explained shifts in Swahili ceramic morphology and frequency as a result of the growing political importance of feasting. Crucially, at the heart of his argument is the evidence from ceramic morphology and decoration, where a rapid increase in open bowl forms, from 16% in the period AD 700–1000 to a staggering 70% by *c.* AD 1400–1500, suggests an increasing emphasis on serving food (Fleisher 2010: 210). He argues that open bowl forms are suited to food serving and display, reflecting a communal level of (feasting) consumption. He also suggests that emphasis on the *internal* decoration on these ceramics reiterates the importance of the *contents* of the vessel; there is a decorative intimacy for those close enough to see into/reach into the bowl. Similarly applying the idea of ‘food histories’, Ashley (2010) has argued that Urewe ceramics can also be viewed as mnemonic devices to reinforce social belonging within a domestic, familial context, as daily use of the distinctive pottery acts as an unconscious iteration of belonging. Taking this further, Robertshaw (2012) has explored the affective importance of Urewe ceramics within power relations and ritual events. He notes the deliberate deposition of Urewe ceramics in symbolically charged contexts (Giblin *et al.* 2010; see also Ashley 2010), and argues that ‘this internment of pots was an integral component of a performance redolent with both meaning and sensory affect’ (Robertshaw 2012: 104).

In the long-term, we need to build collaborations with materials scientists and experiment with new analytical methods. However, we can start to develop new approaches to ceramic function and use with the tools and evidence already available to us. As such, we attempt to put these ideas into practice here with a case study of Kansyore ceramics. This study draws on existing typologically focused research, but applies a new interpretive slant that challenges *a priori* assumptions about the role of ceramics within Kansyore-using societies.

Kansyore ceramics

Research background

Perhaps one of the more surprising aspects of Kansyore ceramic typology is its relative consistency over such a long period; put simply, Kansyore ceramics look very similar regardless of time or space. Vessels are medium-sized hemispherical or globular bowls, with tapered rims and rounded or slightly pointed and thickened bases (Figure 2). Rim diameters are fairly consistent, with Dale (2007: 246) recording an average of 24 cm from Siror, which tallies well with evidence from Wadh Lang'o, and Haa, which have an average of 26 cm and 24 cm respectively, and an overall range of 18–35 cm (Figure 3).

Morphological variations do exist. For example, a very small 'pipkin' (a small thumb-pot, approximately 5 cm high) excavated at Wadh Lang'o (Ashley 2005: 406; Figure 4) appears to be unique. Slightly more common are polygonal vessels, first identified by Robertshaw (1991) at Gogo Falls, in which rims are spurred to produce a sub-triangular phalange (Figures 2a-b, 5 g). It is conceivable that these rim features may have served as handles, but they are not found frequently, with only a handful of occurrences recorded at Gogo Falls, Siror, Haa and Wadh Lang'o (Robertshaw 1991; Ashley 2005; Dale 2007). Decoration is distinctive and extensive, and it is not uncommon for decoration to extend across the body (Figure 5; although see high incidence of plain sherds at Siror; Dale 2007: 234). Dale and Ashley (2010)

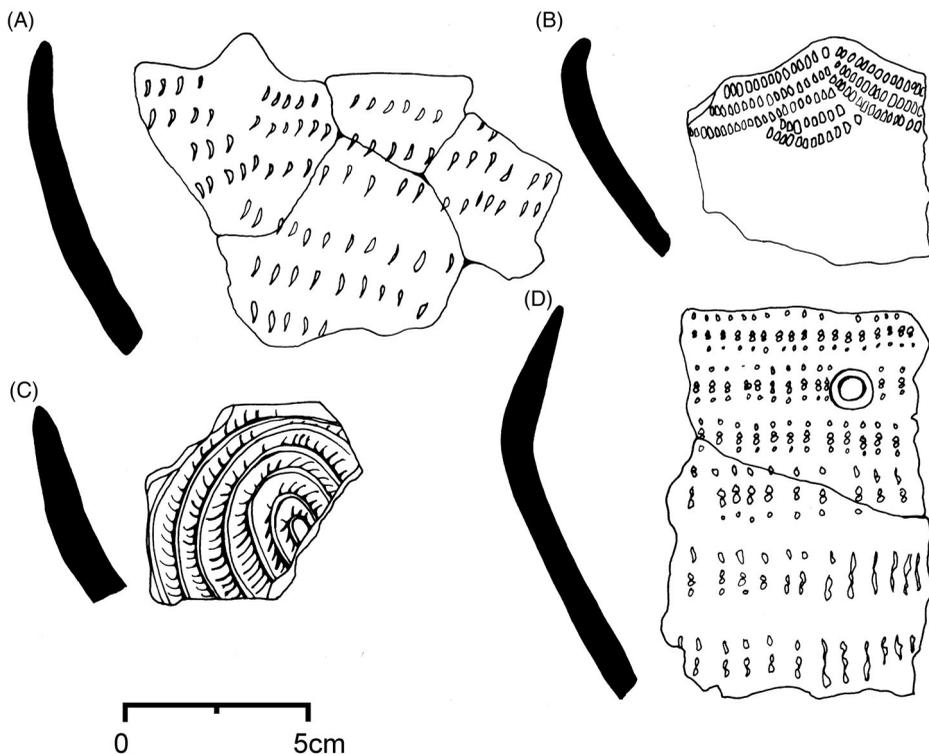


Figure 2. Kansyore ceramics: A) polygonal bowl from Haa; B) polygonal bowl from Wadh Lang'o; C) bowl from Haa; D) hemispherical bowls with slight shoulder from Haa.

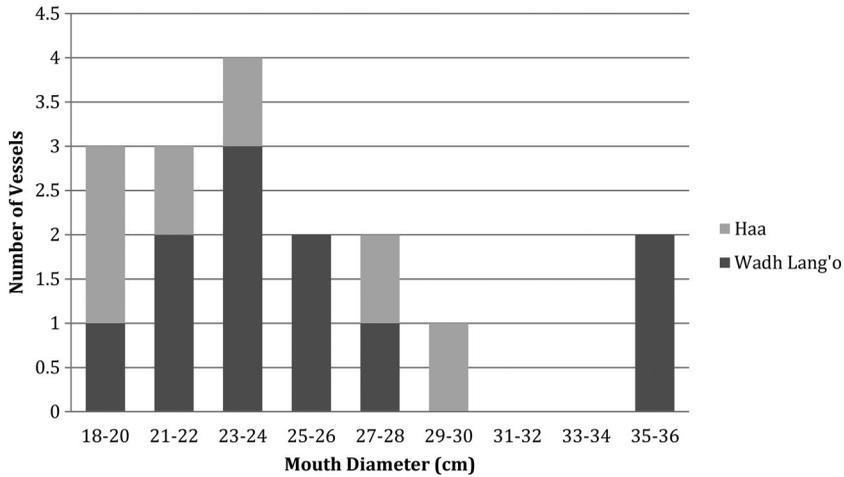


Figure 3. Chart showing the mouth diameters of Kansyore bowls from Haa and Wadh Lang'o.

categorise the decorative techniques used into rocker, impressed, incised and appliqué sub-divisions, with eight major motif designs including, for example, serrated zigzags.

The broader chronology for, and distribution of, Kansyore ceramics are now fairly well established. Prendergast (2008) has argued that Kansyore pottery found at sites surrounding Lake Victoria Nyanza represents an early manifestation and that a later southern frontier extends into northern Tanzania and the Lake Eyasi area (Prendergast *et al.* 2013: 517). New radiocarbon dates from both regions have confirmed this hypothesised sequence (Dale 2007; Lane *et al.* 2006: 7; Prendergast *et al.* 2014), although a paucity of sites in the 'middle' period remains an issue. Recent research has reconstructed a compelling picture of socio-economic structure and organisation.

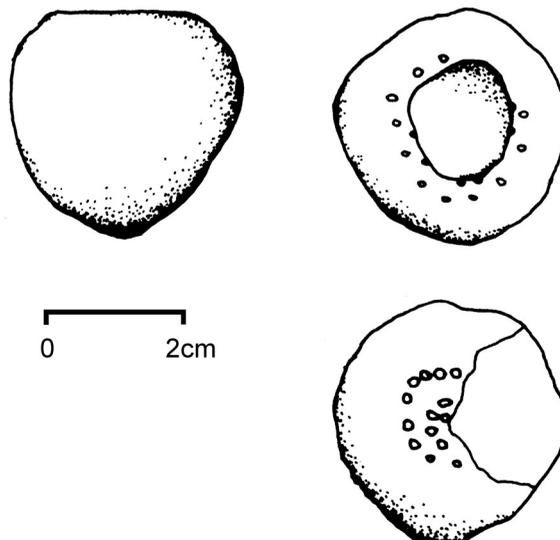


Figure 4. 'Pipkin' from Wadh Lang'o.

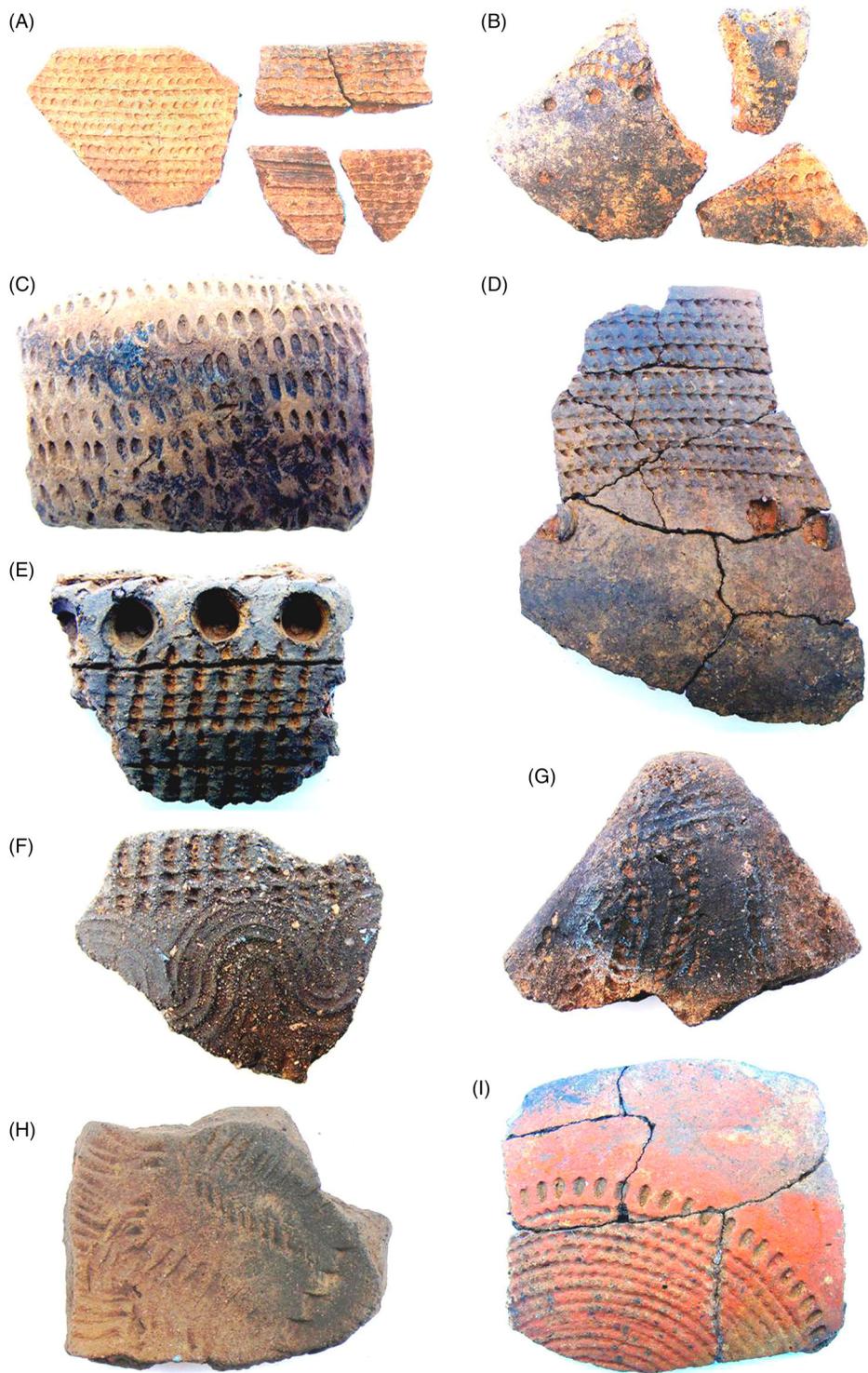


Figure 5. Kansyore sherds showing the decorative range used: A-B) (early) Kansyore sherds from Usenge 1 showing limited decoration; C and F) Kansyore sherds from Wadh Lang'o; D-E) Kansyore sherds from Usenge 3; G) Kansyore spurred rim from Haa; H) Kansyore sherd from Haa showing internal decoration; I) Kansyore sherd from Usenge 3 with red slipping.

A bimodal distribution of sites between riverine and lacustrine locations has long been proposed, with Robertshaw (1991) suggesting that both were ‘magnet locations’ because of their abundant aquatic resources. More recently, Prendergast (2010) and Prendergast and Lane (2010) have argued that this distinctive spatial pattern represents seasonal occupation. Riverine sites are thought to have been chosen for the wet season, when fish were spawning up the rapids, while during the leaner dry season lacustrine shores provided temporary accommodation with access to both shellfish and species such as lungfish (*Protopterus aethiopicus*), which aestivate in the shallow reeds (see also Seitsonen 2010 for supporting evidence from an analysis of associated lithic assemblages).

This picture of seasonally determined semi-sedentism and aquatic subsistence specialisation has led Dale (2007) to argue that Kansyore ceramic users were delayed return hunter-gatherer-fishers, occupying and re-occupying sites over extended periods and generations. Building on this premise, and utilising ethnographic insights from Okiek honey-collectors, Dale *et al.* (2004) have developed an ‘ownership model’ in which signifiers of ownership such as site re-use, burial at sites and long-term storage (in ceramics) are used to indicate a *moderate* delayed return socio-economic structure. Within this structure, the hierarchical tendencies of extreme delayed return economies such as the Jomon of Japan (Habu 2004) are not in evidence, yet small scale inequalities, borne out of differential ownership, indicate an increasingly unequal hunter-gatherer society.

Kansyore ceramic function and use

In the last few decades global research has recognised both the prevalence and the diversity of ceramic-using hunter-gatherer and pastoralist societies, deconstructing the traditional notion that the invention of ceramics was part and parcel of the shift to a settled farming lifestyle (Barnett and Hoopes 1995; Rice 1999; Beck 2009; Jordan and Zvelebil 2009; Grillo 2014). Accordingly, explanations for the adoption of ceramics have also diversified. At their core is the recognition that the physical characteristics of pottery enable new food technologies, which have nutritional and social benefits. Pots are watertight and fire resilient, thus allowing long-term boiling or fermenting of goods, which can detoxify harmful foods and/or release nutrients from otherwise unpalatable or hard-to-process resources (Arnold 1985; Rice 1999; Beck 2009). For example, Rice (1999: 32) makes the link between early ceramic production and shellfish consumption (cf. Jordan and Zvelebil 2009, 52). Shellfish are nutritious, but not energy expedient if each shell needs to be opened individually. Boiling in a pot is a quick and effective method of mass-processing, as shellfish open in the heat and none of their nutrients are lost in the associated broth or stew. These culinary innovations bring social changes, as cooking in a pot requires less supervision and maintenance than cooking on an open fire, freeing up time for other activities. Meanwhile, soups and stews made in pots can be used to wean infants, thereby facilitating a higher birth rate, and providing an important source of child nutrition. There are clear functional advantages to cooking with ceramics.

The development of Kansyore ceramics, including their rapid uptake and subsequent widespread use, can probably be linked to these nutritional and culinary developments. Shellfish processing would have become easier, while the fish staples of the riverine sites would also have been amenable to pot cooking. Indeed, the idea that

early ceramics in eastern and northeastern Africa are part of a ‘soup, porridge and fish stew revolution’ (Haaland 2007: 169; cf. Sutton 1977) is not new.

Perhaps more problematic is the idea that fish resources were also being preserved for storage in Kanyore pots against future consumption, as suggested by the ‘ownership’ model (Dale *et al.* 2004: 368). Cooked or uncooked fish, even if stored in pots, would soon spoil in the region’s equatorial climate. Prendergast (2008: 288–289) has speculated that fish may have been salted using the Kanyore pots. However, more recent histories of fish processing and preserving techniques in Lake Victoria Nyanza suggest that drying or smoking strategies are more effective and popular with local fishermen, and in neither case would a clay pot be necessary (Dobbs 1927: 103; Maar *et al.* 1979: 113–116). Indeed, Kanyore ceramic morphology seems to militate against such a storage function. Given the known size ranges of Kanyore pots, it is hard to imagine how larger species such as lungfish would fit into them. Size estimates for lungfish at Wadh Lang’o indicate that each fish would have weighed between 9–11 kg (Prendergast 2010: 91), making them fairly large in relation to the average Kanyore vessels. Smaller species such as *Clarias* sp. (1.2–2 kg) and cichlids (0.3–0.5 kg) may have fit more easily into Kanyore pots, but with lungfish constituting 15% of fish remains from Wadh Lang’o¹, the unsuitability of Kanyore pots for their storage cannot be discounted. Indeed, the essential morphology of Kanyore ceramics, with their open, unrestricted mouths (Figure 6), make them a poor candidate for any sort of long-term storage. As numerous scholars have noted (e.g. Henrickson and McDonald 1983; Rice 1999; Ashley 2010), storage vessels typically have narrow apertures to reduce evaporation, spillage and accessibility to vermin. In contrast, the openness of the Kanyore ceramic mouth seems a better fit with known cooking or serving vessel shapes, which require unrestricted access to the contents. The seeming self-evident truths that Kanyore pottery was part of a

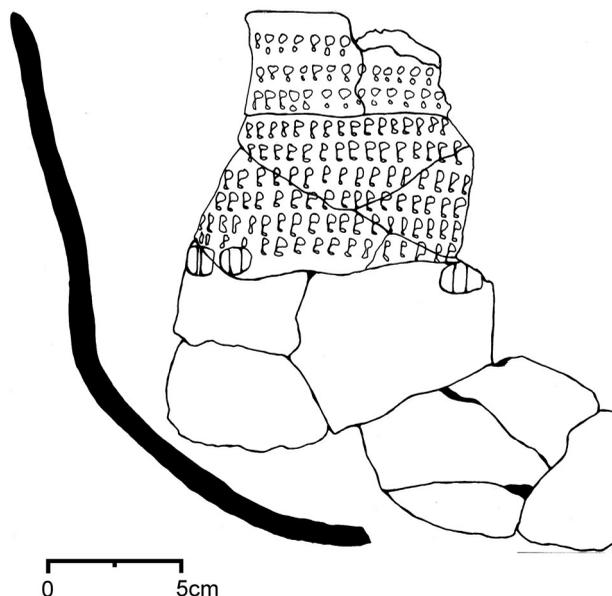


Figure 6. Kanyore bowl with unrestricted mouth, Usenge 3.

long-term food processing and storage strategy must come under the deepest scrutiny — the ceramic shapes simply do not fit.

Function does not, however, have to be exclusively utilitarian or practical; we can instead explore the *social* function of ceramic production and use (Rice 1999). Indeed, Brian Hayden (1995, 1998) has argued that the very emergence of ceramics in hunter-gatherer or trans-egalitarian societies can be linked to political aggrandisement and a culture of feasting. He distinguishes between ‘practical’ technologies that are ‘meant to solve practical problems of survival and basic comfort’ (Hayden 1998: 2) and ‘prestige’ technologies that ‘solve a social problem or accomplish a social task’ (Hayden 1998: 11). For Hayden, hunter-gatherer ceramics are ‘prestige’ technologies, developed to facilitate feasting events in which inequality and indebtedness are publicly realised by the host and patron, ‘used this way ... [ceramics] create or support relationships that make hierarchical economic, social, and political organization possible’ (Hayden 1998: 12).

In a similar vein, Ingold (1983) has developed the notion of ‘social storage’ (see also Rice 1999). For Ingold, there is a difference between ‘practical’ storage and ‘social’ storage. In contrast to ‘practical’ storage, which emphasises the utilitarian function of holding goods in reserve for future need, social storage is about the short-term, as pots and other vessels are used to hold food and drink as it is prepared and consumed. Social capital is acquired through such acts of food provision, sharing and consumption, reiterating social bonds and networks. Cooking and serving food thus becomes a form of (social) storage for the future:

“Storage in its quite distinct social sense refers neither to the physical activity of setting stuff aside, nor to the organic accumulations that result, but to the *appropriation* of materials in such a way that rights over their future distribution or consumption converge on a single interest. In this sense, the store has to be considered in its aspect as a property or wealth, and storage as a concomitant of social relations of distribution” (Ingold 1983: 561, original emphasis).

Crucially for our discussion here, the social capital enjoyed by such acts of consumption and sharing does not, according to Ingold, lead to, or require, differentiated hierarchies, which are implied by Hayden’s model. The ability to *provide* brings social renown and peer recognition, which do not necessarily translate into material wealth and political gradations — small scale, kin-based communities can act and re-enact such relations of esteem on a daily basis through consuming shared foods, but still ‘effecting an ideological separation between the categories of “givers” and “receivers”’ (Ingold 1983: 563).

Ingold’s perspective on storage as essentially short-term and socially orientated, works better with Kanyore ceramic morphology than traditional notions of long-term ‘practical’ storage. The size ranges of Kanyore ceramics suggest an enduringly small to moderate scale of sharing and eating, as befits family- or extended family-level consumption rather than large-scale feasting. An average-sized Kanyore vessel with a mouth diameter of 25 cm would have a volume capacity of approximately eight litres.² This is consistent with the volume capacity of Urewe jars (the most frequently found form which have an average diameter of 17 cm), which Ashley (2010) has argued are used for family-level consumption. In contrast, Entebbe ceramics, which succeed Urewe in the western Lake Victoria Nyanza basin, have an average volume range of up to 48 litres and are believed to represent extra-ordinary consumption beyond the

household level (Ashley 2010). The size and morphology evidence therefore suggests consumption and sharing that was still anchored in the family or extended family and did not form part of an aggrandising political structure leading to inequality and hierarchy.

Yet alongside this seemingly flat political structure, subtle demarcations do occur through ownership. The propensity for early hunter-gatherer ceramics to be heavily decorated is widely noted, prompting Rice (1999: 36) and Ingold (1983: 561) to argue that such differentiation is a form of individualisation and marking that publicly denotes personal possession. Ingold further suggests that in a scenario of undifferentiated foods, where the resources collected by one individual cannot be visually distinguished from those of any other hunter-gatherer-fisher, the individuality of the vessel acts as a signal of ownership of both the pot and its contents and, crucially, also the ability to provide. The extensive surface decorations on Kansyore vessels may also be seen in this regard, with the increasing range and complexity of decoration being used to signal ownership of contents of the vessel, but also, on a longer-term basis, ownership of the vessel itself. One of the hallmarks of Kansyore sites is the sheer volume of ceramic remains found at sites, prompting original arguments around site re-use and notions of long-term storage. However, given the arguments presented here, it seems unlikely that vessels were being left at sites with stored contents against future need. Rather, it could be that Kansyore ceramics were cached at the sites as 'site furniture' (Beck 2009: 332). To illustrate this, Dale *et al.* (2004: 350–351) describe how modern Okiek leave objects and tools used in hive construction and maintenance at seasonally occupied houses in the mountains, curated for future need during the honey-collecting season. A similar scenario is posited for Kansyore-using communities, whereby ceramics would be stored at seasonally occupied sites in anticipation of a return and a future need for vessels in which to prepare and serve foodstuffs. Decoration on the ceramics would then have been a means of identifying and re-possessing the ceramics left at these sites.

The provisional interpretations presented here do not intrinsically challenge previous explanations for Kansyore-using communities; there is much overlap between the 'ownership model' (Dale *et al.* 2004) and the idea of ceramics as facilitators of social storage and capital. Nevertheless, by looking explicitly at the ceramics themselves we have tried to add another strand to this discussion, interrogating seemingly axiomatic truths of ceramic use to help build a picture of social organisation within Kansyore-using communities. The next step must be to test these ideas against new evidence, particularly from new archaeometric analyses. Ideas about site use and re-use could be explored through ceramic sourcing (XRD, petrology, SEM) and the identification of movement of objects — were Kansyore ceramics produced (and used) locally, or transported seasonally? Were they, in fact, cached at sites as argued above, or carried to sites as needed? Did all Kansyore communities practise the same kind of delayed return system, or might those who inhabited the drier landscapes around Lake Eyasi, which today are home to groups of 'immediate return' hunter-gatherers, have had a different settlement system to those living around Lake Victoria Nyanza (and thus a different use for ceramics)? Meanwhile, the crucial issue of what Kansyore ceramics were used for could be explored through residue and use-wear analyses. Future steps such as these would certainly allow for a more informed and substantiated discourse.

We have chosen to talk about Kansyore communities here, but ethnoarchaeological study of pastoralist ceramic use in Kenya (Grillo 2012, 2014) similarly shows that

long-held assumptions about the kinds of material culture used by mobile, herding populations can be equally problematic. Heavy, easily breakable cooking pots can indeed be part of a highly mobile lifestyle, enabling herders to process meat and bone soups, wild plant resources and other foods, particularly in times of drought. *A priori* assumptions about ceramic function and use cannot simply be made, nor can function and use be ignored. By embedding ceramics within a wider social context of use and consumption, we can expand the interpretive role of ceramics from passive signifiers of chronology or ill-defined identity, providing useful insights into wider socio-political and cultural dynamics. As this case study suggests, everyday ceramics and everyday foods can be part of a nuanced and symbolically charged pattern of life (e.g. David *et al.* 1988) and pottery a useful tool to explore these structures.

Conclusion

There have been periodic calls for an archaeology of ceramics in eastern Africa that addresses social issues (e.g. Gifford-Gonzalez 1998), but response has been limited. Lost in the confusion over culture-historical details are the people who made, used and discarded this pottery so long ago. What need would hunter-gatherers, pastoralists and/or farmers have had for these pots in the first place? How, why and were the pots being traded, exchanged, moved over the landscape or passed down through generations? What did these pots mean to women and men, their families and their communities? These questions can be asked of the ceramics, *if* we adapt our methods and ideas. This does not require a rejection of typology; as we argue above, typology is an essential component of our research and has continued usefulness (e.g. Fleisher and Wynne-Jones 2011; Pawlowicz 2013). Nevertheless, it does require a more critical reflection on how we build, use and understand our typological categories. In order to do this, and push ceramic archaeology forward, we must make this a conscious pursuit. Despite their recognised centrality to archaeological interpretation, ceramics are too often seen as adjunct analyses, as unproblematic tools for facilitating site identification and cultural attribution, but not as a complementary source of insight into social organisation. We need a new generation of targeted ceramic studies that take a theoretically informed and problematised approach to analysis. We need novel methods that open up new insight and evidence. However, alongside these analytical changes, we must also expand our intellectual horizons to look at alternative interpretive approaches, foregrounding the recognition that ceramics are objects that were made and used, not just tools of the archaeologist.

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Notes

1. This percentage is based on the MNI for Trench I excavated in 2000 as part of mitigation work by the National Museums of Kenya and reported in Prendergast (2010: 89–91). The NISP count for the same assemblage represents 7%. Prendergast also notes that lungfish were noticeably abundant in the lowermost layers, becoming rarer higher in the sequence.
2. Volume capacity has been calculated according to the formula used in Ashley (2005).

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