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# Hearth and home in the Iron Age of eastern Africa: ethnographic models, historical linguistics and archaeological evidence

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ABSTRACT

Except for work on the symbolism of iron technology, there have been few archaeological studies that provide insight into the social and symbolic dynamics of early farming/metal-working communities (or Early Iron Age societies) in eastern Africa. Most research has instead been directed toward determining the chronology of the spread of diagnostic ceramic traditions, interactions with herding and hunter-gatherer groups and, most recently, identifying the range of crop types cultivated and the date of their introduction. Where archaeologists have sought to answer such questions as 'What types of homes did people live in and how was this space organised?' or 'What were the gender divisions in society and the nature of relationships between young and old?', they have tended to rely on models developed from historical linguistics and ethnography. This paper provides an assessment of these models in the light of available archaeological evidence from the region, while also contrasting the under-theorisation of the archaeological record of early farming communities in eastern Africa with the approaches adopted by archaeologists working in southern Africa. Some suggestions for future research directions and changes in excavation methodologies are proposed.

KEY WORDS: Early Iron Age, early farming communities, Urewe, settlement space, symbolism, East Africa, historical linguistics, Central Cattle Pattern.

Simon Hall's research on the Holocene archaeology of southern Africa has spanned a wide range of topics from the Later Stone Age (LSA) to the era of colonial contact in the 18th and 19th centuries. Throughout, his research has been informed by a critical perspective on archaeology's interpretive processes and theoretical frames of reference, coupled with marked attention to the variability evident in the region's archaeological record. His early interest in the LSA prompted, *inter alia*, consideration of variations in LSA burial practices in the southern and eastern Cape (Hall & Binneman 1987) and analysis of the diversity of responses by autochthonous LSA hunter-gatherer-fishers to the introduction of pastoralism and the arrival of new populations (Hall 1986, 1990, 1994). Later, he also explored this theme with reference to the arrival of Early Iron Age (EIA) farming populations (Hall & Smith 2000; Hall 2010). In tandem with this research on forager–herder–farmer interactions and variability, he has also been at the forefront of research on the archaeology of Later Iron Age (LIA) Moloko, proto-Tswana and other ethnic populations whose archaeological footprint in later centuries was often marked by the construction of large stone-walled settlements—many of which were inhabited at the time of initial European colonial and missionary contact. The themes explored in this strand of his research have included material expressions of changes in gender relations, especially following colonial contact (Hall 1997, 1998), the archaeological evidence for the presence of a hunter-gatherer underclass within LIA settlements (Hall 2000), technologies of copper and iron production (Hall et al. 2006; Bandama et al. 2013; Chirikure et al. 2015), responses to climate change (Smith

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et al. 2007), skeletal evidence for population continuity across the EIA–LIA division (Warren et al. 2015), and the challenge of integrating written and material sources for interpreting the last 500 years of human history in southern Africa (Boeyens & Hall 2009; Hamilton & Hall 2012). In more recent outputs, he has turned his attention to broad syntheses of the political economy and identity politics of southern Africa over the last 1 200 years (Hall 2012; Moffett et al. 2020) and the enabling role of different classes of material culture in the construction of value (Moffett & Hall 2020).

Many intellectual 'red threads' run through this body of research (and his other publications not cited here). For this contribution, I wish to focus on just one of these, namely the necessity of integrating ethnographic, ethnohistoric and historical linguistic data sets into the interpretation of Africa's later Holocene archaeology, as well as the many challenges and pitfalls that come with this. Given Simon Hall's interest also in critical analysis of the theoretical models archaeologists use to interpret the past, and in the social and symbolic ordering of space and material practices at both the site and landscape scales of analysis (Hall 1998, 2012; Hattingh & Hall 2009), I focus in particular on the current challenges facing archaeologists wishing to draw inferences about the social institutions and organisation of early farming communities in eastern Africa. The archaeology of eastern Africa may seem rather geographically detached from developments in the southern part of the continent during the later Holocene, but they are connected by the interpretive model of Iron Age farming societies in southern Africa that has dominated the field since first articulated by Thomas Huffman in the 1980s (Huffman 1982, 1986) and robustly defended by him (e.g. Huffman 1993, 2001, 2004; Huffman & Whitelaw 2020), and others (e.g. Whitelaw 1994–95, 2013, 2020) in the ensuing decades. This cognitive model for structuring space and society is known in the literature as the Central Cattle Pattern (CCP). It has been hypothesised as having its origins among the first farming populations in eastern Africa, from whence the worldview subsequently spread southward with the expansion of Eastern Bantu language speakers (Huffman 1989, 1998), as part of the spread of the Chifumbazi Complex (Phillipson 1977). Identifying the genesis of the CCP settlement structure in eastern African contexts and the conditions under which it arose could thus shed fresh insight on the reasons for its apparent tenacity among those groups that expanded southward and whose descendants eventually settled in southern Africa.

## RESEARCHING EASTERN AFRICA'S EARLY FARMING COMMUNITIES

In common with other parts of sub-Saharan Africa, research on the archaeology of eastern Africa's early farming/metal-working communities (EFC/EIA) (or Early Iron Age to use the older terminology) has undergone several shifts in analytical and theoretical focus since research on the topic was initiated in the mid-20th century. As elsewhere, much of the initial research was aimed at establishing chronological and typological frameworks, while also seeking to relate continuities and changes to broader models that were used to document and explain the 'Bantu Expansion' (e.g. Nenquin 1967; Posnansky 1967; Soper 1971, 1982; Phillipson 1975, 1977).

In the 1960s and 1970s, the spread of Bantu languages, early farming communities and the knowledge of iron working were generally regarded as having been coterminous and to have occurred relatively rapidly because of population growth and incremental southward migration (Oliver 1966a, b; Oliver & Fagan 1978). As more data became

available and a wider range of possible sources was taken into consideration, it became increasingly apparent that the processes of demographic, linguistic, economic and technological change were vastly more complex than initially presumed and may well have operated independently of one another (e.g. Ehret 1967, 1972, 1982; Hiernaux 1968; Lwanga-Lunyiigo 1976; Phillipson 1976a, b; Gramly 1978; Vansina 1979, 1980; Nurse 1982). This in turn encouraged scholars to pay greater heed to the evidence for spatial and temporal variation in the rates of adoption and transformation, and to develop a more regional focus in their enquiries. As these studies accumulated, knowledge of the distribution and dating of early farming and iron-working sites in eastern Africa was substantially improved (Clist 1987; Van Grunderbeek 1988; Stewart 1993), ultimately prompting more socially informed interpretations of the variability exhibited within these ceramic traditions and those that followed (Lane et al. 2007; Ashley 2008, 2010).

Later debate coalesced around two issues. One of these concerned whether demic diffusion, as now strongly suggested by most molecular studies (e.g. De Filippo et al. 2012, Li et al. 2014; González-Santos et al. 2015), or language shift and cultural transmission provided the main stimulus for the southward spread of Bantu languages and attendant material practices (Vansina 1995; Robertson & Bradley 2000; Sikora et al. 2011). The other issue concerned the timing of the split between Western Bantu and Eastern Bantu languages, with some historical linguists favouring the older model of an 'early split' (e.g. Bastin et al. 1983) and others arguing for a 'late split' (Bostoen 2007: 194–8, 2018), which has now become the dominant position within historical linguistics. Determining the route or routes by which Bantu languages, genes, and material practices spread east and south is also directly tied to this, with some emerging molecular evidence to suggest that the rates of spread may have varied according to locality and habitat (Pakendorf et al. 2011; Grollemund et al. 2015). Expansion along the East African coastal route, for example, now appears to have been especially rapid (Semo et al. 2020).

Reconciling the very different types of data analysed by archaeologists, population biologists, historical linguists, and palaeoecologists to infer the directions, rates and processes of expansion of a mix of linguistic, genetic and material traits remains elusive. New syntheses sometimes offer contradictory interpretations; compare, for example, the reconstructions for the timing of different splits proposed by Currie et al. (2013) and Russell et al. (2014). Population admixture arising from earlier demic diffusion (Busby et al. 2016) and knowledge transmission through exchange networks and other forms of cultural interaction further caution against imposing singular interpretive models. Even if some of these debates can be resolved, it will still be challenging to establish whether the CCP model of settlement layout and its symbolic and ideological associations actually emerged among early farming and metal-using populations in eastern Africa or whether it evolved independently after Bantu-language-speaking farmers had established themselves in southern Africa. This is largely because, with the notable exception of studies of iron-smelting technology and its associated symbolism (Schmidt 1978, 2009; Schmidt & Avery 1978; Schmidt & Childs 1993; Reid & MacLean 1995; Schmidt & Mapunda 1997; Childs 1998; Barndon 2004, 2011) and some limited finds of clay figurines (Reid & Ashley 2008), other aspects of these early farming societies in eastern Africa, such as the nature of their social and political organisation,

burial practices, and age and gender relations remain poorly understood and, to a certain extent, neglected by archaeologists (although see Posnansky et al. 2005). This contrasts with the interest shown in many of these issues by linguistic historians (e.g. Schoenbrun 1993, 1998; Nurse 1997; Stephens 2009; De Luna 2016).

There are at least two likely reasons behind this archaeological neglect. The first of these is the continuing preoccupation among scholars from a variety of disciplines with 'origins'—the concern to identify the earliest archaeologically attested example of the presence in the region of a particular technological development, stylistic form, cultivar, domesticate animal, or material practice. Such discoveries often have high academic 'impact' and media coverage, and consequently continue to drive personal research agendas. Such research undoubtedly contributes new knowledge, especially when surveys and excavations target parts of the continent that have received minimal previous archaeological attention and thereby help fill in gaps in chronological and typological sequences. However, an over-emphasis on finding the earliest traces of a phenomenon can detract from the equally important tasks of building more comprehensive datasets and investigating individual sites in greater detail over several seasons of fieldwork.

A linked, second reason relates to excavation methodologies and, in particular, the continuing preference for the excavation of test pits rather than larger open areas. That this is intricately and recursively linked to the first reason should be immediately apparent. The excavation of test pits is a proven method for determining the depth and quality of preservation of archaeological deposits and providing a stratigraphic sequence from which samples can be drawn for dating and the construction of artefact typologies. This is precisely the type of information used to feed the debates on origins and rates of diffusion and settlement expansion. Admittedly, where several test pits are excavated across a site to sample different areas, the method can provide information about the spatial extent of a site and its internal organisation. This sampling strategy may even generate large enough samples of faunal, botanical and artefactual material to draw statistically valid inferences about economic, subsistence and technological practices. Unfortunately, such strategies have rarely been employed in the region. Even rarer are examples of large-scale area excavations of 'Iron Age' sites aimed at exposing complete house floors and other types of structural remains. This must surely limit our ability to make meaningful statements about the economic and social structure of early farming and metal-using communities, however compelling models derived from ethnography or historical linguistics might be. To illustrate this point, I turn now to a review of the archaeological data on settlement organisation from early farming sites in eastern Africa.

## EARLY FARMING AND METAL-WORKING SETTLEMENT EVIDENCE IN EASTERN AFRICA

From an archaeological perspective, the earliest dated sites in eastern Africa associated with the adoption of iron metallurgy in combination with crop cultivation are those on which Urewe ware occurs.[1] The term is derived from the type site of Urewe, situated

[1] Earlier dated archaeobotanical evidence for crop cultivation is found farther north in Sudanic Africa (Beldados et al. 2018) and knowledge of these crops and the crops themselves may have been

in Siaya District close to the Yala River in western Kenya, where examples of this type of pottery were first discovered (Leakey et al. 1948). Subsequent research throughout the region has demonstrated that Urewe ware had a wide distribution extending over roughly 400 000 km$^2$ (Clist 1987: 38), across much of Rwanda, Burundi, south-western Uganda, north-western Tanzania and western Kenya. On present evidence, the earliest Urewe sites all lie to the west and slightly south of Victoria Nyanza (Lake Victoria) and are especially concentrated around Buhaya in Tanzania and the Kivu-Rusizi River region in Rwanda and Burundi. Radiocarbon dates from several sites in these areas suggest an initial appearance between the 8$^{th}$ and 6$^{th}$ centuries BCE. The earliest dated sites on the eastern side of Victoria Nyanza, on the other hand, all appear to be younger by 700–1 000 years. Systematic surveys have also shown some areas to be devoid of Urewe sites, such as Mawogola in southern Uganda and Karagwe in northern Tanzania, despite their proximity to areas with a high density of Urewe sites (Reid 1994–95).

To date, the remains of only five structures, tentatively interpreted as the remains of either house floors or walling, have been reported from EFC/EIA sites in the region (Fig. 1). These are the structural remains at Rugamore Mahe (Schmidt 1978: 186–7) and KM2 in Buhaya, Tanzania (Schmidt & Childs 1985: 65–6), a possible house floor reported from Bukavu near the DRC–Rwanda border (Hiernaux & Maquet 1960: 62–3; Van Noten 1979: 69), traces of a puddled-mud floor recorded at Kasoga 2 in south-western Uganda (MacLean 1996: 71) and the possible wall remains of a house exposed in a test pit excavated at the Juani Primary School site on Mafia Island (Chami 2000: 212–3).[2]

The structural remains at these sites—with the exception of Juani Primary School—were associated with Urewe ceramics (as were those at Usenge 3). The remains at Juani were associated with Kwale pottery, which is typologically related to Urewe ware but slightly later in date and mostly found on sites close to the East African coast (Soper 1967, 1971). Of the Urewe sites, the only published plans are those of the Rugamore Mahe and KM2 house floors (Schmidt 1978: 227–8, figs 40–42; Schmidt & Childs 1985: 65, fig. 7), and even these are relatively schematic. From the available plan and accompanying description of the floor at KM2, the structure could conceivably have been of cone-on-cylinder type, with a clay or puddled-mud floor, some 3 m in diameter, surrounded by a series of upright wall-posts, although other reconstructions could be derived from the available evidence. The structural remains at Rugamore Mahe were located close to iron-smelting furnaces and comprised a black, charcoal-rich soil stain roughly 2 m in diameter, with a metre-long oblong extension to the south-west, surrounded by seven post holes of varying depth and profile. Schmidt (1978: 186–7) discounted the possibility of this being a dwelling, partly on the grounds of size, and suggested instead that it was an open-ended structure used to cover a special task area associated with iron production.

introduced to the region from this direction, whereas knowledge of metal working is currently thought to have spread from the west.

[2] The remains of a likely wattle-and-daub structure associated with Urewe ceramics were also exposed at Usenge 3 (Lane et al. 2007), but have yet to be reported in detail and are therefore not discussed here.

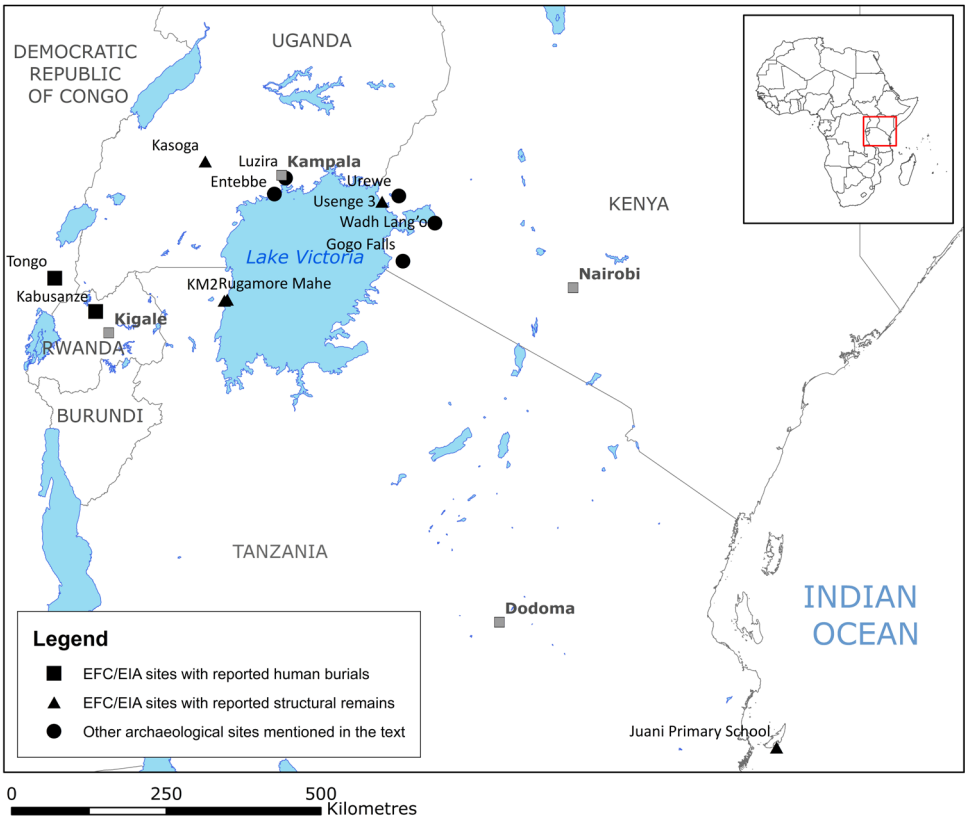


Fig. 1. EFC/EIA sites with reported structural remains or burial evidence and other Urewe sites mentioned in the text. Author: Stefania Merlo. Sources: Administrative layer: ICPAC Geoportal 2017; water bodies layer: World Bank 2018.

The remains exposed at Juani Primary School lay 20–40 cm below ground and consisted of two elements: an irregular length of stone walling composed of coral rubble bonded in clay, measuring at least 7 m long and ca 1.1 m wide, and three irregularly shaped postholes, two of which, from their position, may have been part of the wall construction, while the third lay to one side (Chami 2000: 213, fig. 4). Although the extent of the wall was not traced, from the section exposed, it appears to have formed part of a subrectangular structure, or possibly two conjoining or overlapping structures. Rectangular wattle-and-daub structures with packed earth floors were also in use at Unguka Ukuu, Zanzibar, by the 8th century CE (Sulas et al. 2019).

As Andrew Reid (1994–95: 304; see also Maclean 1998) noted nearly three decades ago, with such limited physical evidence to hand it is clearly somewhat premature 'to talk of "the Urewe house"'. Equally, since there have been so few area excavations of Urewe residential sites, there is little definitive information concerning their internal spatial organisation. Currently, the best evidence is from KM2 in Buhaya, where the possible house remains lay no more than 20 m west of a complex of iron-smelting furnace pits, although it is uncertain from the available radiocarbon dates whether the house remains were contemporary with the smelting activity (Schmidt & Childs 1985: 65–6).

There are still no reported instances of cattle byres unequivocally associated with Urewe or Kwale ceramics from eastern Africa. The thick grey ash-midden deposits exposed by Robertshaw in Trenches II and III at Gogo Falls may have derived from burning cattle dung, based on the phytolith content. Urewe pottery was recovered from the upper levels of both excavation units but this was also associated with Pastoral Neolithic Elmenteitan pottery (Robertshaw 1991: 73–6). Subsequent excavations at the site confirmed that there had been taphonomic disturbances and possible admixture across occupation horizons (Karega-Mũnene 2002).

The sample of faunal assemblages from Urewe sites is also very limited; this is partly due to preservation issues, especially on the western side of Victoria Nyanza. Also, there are very few detailed faunal reports. Of those sites producing faunal remains associated with Urewe ceramics, three stand out: Usenge 3, Wadh Lang'o and Gogo Falls, all on the Kenyan side of Victoria Nyanza. These are all multi-period sites with pre-Urewe horizons.

Wadh Lang'o produced the deepest stratigraphy, with over 2.5 m of archaeological deposits spanning initial occupation of the area during the ceramic Kansyore Late Stone Age (LSA), with successive horizons of Pastoral Neolithic (PN) Elmenteitan, EFC/EIA Urewe, Middle Iron Age (MIA) and historic Luo occupations (Lane et al. 2007; Ashley 2008; Prendergast 2008). Differences in technology, dominant tool types and raw material preferences are evident in the lithic assemblages from the different horizons. The ceramic traditions are also distinctive, although there was a degree of overlap between different horizons in terms of the composition of ceramic assemblages: the lowermost Elmenteitan deposits contained Kansyore ceramics, and likewise Elmenteitan ceramics were present in the lowermost Urewe levels (Ashley 2008; Prendergast 2008). Domestic ovicaprines were present at the site from the lowest levels, in association with LSA Kansyore ceramics, and became increasingly dominant through the Elmenteitan and Urewe phases of occupation (Prendergast 2008). Cattle bones were present from the Elmenteitan levels and also occurred in association with Urewe ceramics, but in both cases were relatively scarce. Fish and wild fauna were also exploited throughout the different phases of occupation of the site (Lane et al. 2007; Prendergast 2008).

At Gogo Falls, which also spanned the LSA Kansyore, PN, Urewe, MIA and historic Luo phases, there was greater evidence for some stratigraphic mixing. In the areas excavated by Karega-Mũnene (2002), cattle bones were present in the Kansyore horizons alongside remains of caprines and wild terrestrial fauna and fish and occurred throughout the overlying deposits. Unlike at Wadh Lang'o, cattle dominated the faunal assemblages recovered from this part of the site across all horizons. In contrast, in the areas excavated previously by Robertshaw (1991), the Elmenteitan horizons yielded a significant quantity of caprine faunal remains (Marshall & Steward 1995). As at Wadh Lang'o, both Robertshaw (1991) and Karega-Mũnene (2002) report the co-occurrence of different ceramic traditions at levels suggestive of some degree of social interaction (assuming that the ceramic traditions represent expressions of distinct social identities).

Usenge 3, situated to the north of the Winam Gulf, lacked PN horizons. Initially occupied during the ceramic Kansyore LSA, the site also yielded evidence for early adoption of domesticates (ovicaprines) although in lower percentages than at either

Gogo Falls or Wadh Lang'o, with cattle occurring after the adoption of Urewe ceramics (Lane et al. 2007). An intriguing feature of this site is the possibility that the transition from Kansyore to Urewe ceramics represents a change in stylistic preference among a former hunter-gatherer-fisher Kansyore community rather than actual population replacement (Lane et al. 2007; Ashley 2008).

Overall, the faunal assemblages from all three sites indicate the presence of domestic livestock before the introduction of Urewe ceramics, with cattle present at all three sites in relatively low numbers but possibly becoming economically more important over time. In the absence of clear evidence for a structuring of space around any form of cattle byre or other evidence for their distinctive treatment, however, it is difficult to argue that cattle were more highly valued socially or ritually during the Urewe phases of occupation than in previous phases of site occupation, at least on current evidence.

The location and arrangement of burials and the nature of any accompanying grave goods also have the potential to offer insights into the structuring of EFC/EIA society in eastern Africa, as has been argued for southern Africa (e.g. Boeyens et al. 2009; Hattingh & Hall 2009; Huffman 2012). Here too, however, the empirical evidence is limited, as very few EFC/EIA burials associated with Urewe ware have been reported. Of these, reports of 'more than 60 skeletons' associated with Urewe ceramics at the site of Tongo in the eastern Democratic Republic of Congo (Misago & Shumbusho 1992: 70) have yet to be described in detail. More information is available concerning the burials found in proximity to one another at the site of Kabusanze in southern Rwanda (Giblin et al. 2010; Watts et al. 2020). In 2007, excavations at the site uncovered the remains of a partially disarticulated adult, probably male, with cut marks suggestive of deliberate disarticulation, buried at the base of a pit associated with 'a concentration of Classic Urewe ceramics and iron and shell artefacts' (Giblin et al. 2010: 279). Higher up in the pit fill, about 0.5 m above the adult burial, was the burial of a neonate. Flotation samples taken from the burial fill yielded the charred remains of a wild flowering plant and wood charcoal. A charcoal sample from the burial pit yielded a date of 1 630±26 BP (OxA–19518), calibrated to 417–554 cal. CE (Giblin et al. 2010: 278).

In 2019, further excavations at the site uncovered another adult burial, also in a pit, located ca 2 m from the feature excavated in 2007. As with the other adult burial, the surviving skeletal elements were partially disarticulated and exhibited cut marks and other signs of perimortem damage. Unfortunately, it was not possible to estimate the age or sex of the burial from the surviving remains. The only possible grave good recovered from the pit fill was a single circular bone or shell bead (Watts et al. 2020: 826).

The combined evidence from the different burials and their wider context suggested to the excavators that mortuary practices at the site 'involved some initial reduction of the body, followed by the retention or circulation of the disarticulated remains before their final deposition' (Watts et al. 2020: 831).

## SPATIAL MODELS OF EARLY FARMING SITES IN EASTERN AFRICA

Despite the limited nature of the available archaeological evidence, there are at least two contrasting models of the internal organisation of EFC/EIA sites associated

with Urewe and Kwale ceramics and the social, symbolic and ideological significance of their spatial structuring.

*The Central Cattle Pattern*

If the arguments made on the basis of typological continuities between Urewe and Kwale ceramics and those associated with EFC/EIA sites in southern Africa (Huffman 2007) are accepted, then EFC/EIA sites in eastern Africa could have shared a similar spatial organisation and the associated symbolic connotations of distinctions between left/right, front/back and centre/periphery. It has been argued that these structural oppositions—as well as those that link control of cattle with male power and grain, and cooking and household space with women—comprised different elements of a particular worldview shared by speakers of Eastern Bantu languages (Kuper 1980; Huffman 1982, 1986, 1993).

As will be well known to archaeologists of southern Africa, the core component of the Central Cattle Pattern settlement layout, as the term suggests, is the location of cattle byres at the centre of the settlement (or settlement subsection, such as a ward). The reasons for this spatial pattern have to do with the central importance cattle are said to have had within these societies as both economic and symbolic resources. Supporters of the model argue that cattle provided the main element of bridewealth exchanges, were more highly valued socially and economically than other kinds of livestock and agricultural produce, and featured prominently in various rites of passage and annual rituals of social renewal. Combined with these cultural evaluations of cattle, the central location of the cattle byre is said to have had a determinant effect on the location of other elements of the settlement. Elements and practices that were linked conceptually with cattle were located either in or adjacent to the byre, whereas those that were conceptual opposites were located away from cattle byres. Houses, for instance, which ethnographically were more closely associated with female activities, were typically arranged in an arc or circle around the cattle byre. On the other hand, the court, being a male domain, was generally situated immediately adjacent to the byre. Similarly, adult male burials were more commonly placed within the cattle byre, whereas adult females and uninitiated children tended to be buried in the compound, and stillborn babies and infants beneath the house floor. Age seniority and status also influenced the location of individual houses relative to one another. Typically, the house of the senior wife, or compound of the senior male, was located directly opposite the entrance to the settlement. This position was also generally upslope from the entrance and in many ethnic groups was situated on the western side, creating an association between the concepts senior, up and west and their opposites—junior, down and east.

The relevance of the CCP model to the interpretation of EFC/EIA sites in eastern Africa, which pre-date the earliest Iron Age sites in southern Africa by up to 1 000 years (Russell & Steel 2009), lies partly in the typological links archaeologists have drawn between Urewe ware and other Iron Age ceramics across eastern and south-central Africa. Specifically, ceramic assemblages recovered from sites in eastern, central and southern Africa exhibit a number of similarities, suggesting that the ceramic styles found farther south on the continent developed out of those that first emerged in west-central and eastern Africa. At the macroscale, these ceramics are considered to

belong to the Chifumbazi Complex (Phillipson 1977), which in turn has been subdivided into at least two broad traditions, known as Kalundu (associated with the Western Stream Bantu expansion) and Urewe (Central and Eastern Stream). Urewe Tradition ceramics are further subdivided into two branches—Nkope (Central Stream) and Kwale (Eastern Stream)—each with a series of facies sharing various stylistic features, such as decorative motifs and placement (Huffman 1989, 2007). The earliest of these in southern Africa are the Broederstroom, Mzonjani and Silver Leaves facies; typological comparisons between these and Urewe and Kwale ceramics, in particular, have been used to support claims that EFC/EIA settlements in eastern Africa would have been structured according to CCP principles. Cattle were also the key medium by which men obtained wives and children, through payment of bridewealth, and hence status and power in EFC/EIA societies in East Africa, as well as farther south, would have been congruent (Huffman 1998).

*Settlement space and historical linguistics*

Parallel with these arguments, an alternative model of EFC/EIA settlement space, village layout and house shape has been proposed by Christopher Ehret (1998) based on his linguistic reconstruction of proto-Eastern Bantu (or Mashariki, as he terms this linguistic grouping). In particular, Ehret suggests that the 'very earliest Mashariki would have built *rectangular houses* with gabled roofs, arranged these houses in small village-sized settlements of probably a single street, and had few kinds of out-structures' (Ehret 1998: 114–5, my emphasis). The linguistic evidence on which this interpretation is based is somewhat tenuous, however.

Further linguistic data presented by Ehret, nonetheless, suggest that during the last millennium BCE, various changes in settlement layout and house shape occurred. These changes, Ehret argues, arose from interactions between Mashariki Bantu and their Central Sudanic and Eastern Sahelian (Sog) neighbours to the west and east of the Great Lakes region. As a result, various loanwords for new styles of house, settlement layout and building techniques, derived from these other language groups began to appear in the Mashariki lexicon. These include the Eastern Sahelian root word **bágá* for 'to enclose with a fence', which in Mashariki came to refer to 'livestock enclosure', and the Central Sudanic root word **omba*, probably meaning to sit or stay (and hence 'to dwell'), from which the new Mashariki root word for 'house', **umba*, appears to have been derived (Ehret 1998: 114–8). Great Lakes Bantu speakers living to the west of Victoria Nyanza also appear to have 'created wholly new architectural forms for their houses and for the enclosures that surrounded them' (Schoenbrun 1998: 92). Here too, a key development seems to have been greater use of fences to differentiate residential domestic space from the wider landscape, although these innovations are marked by a different root (**ngó)* and also new terms for the main gateway (**mareembo*) (Schoenbrun 1998: 93). Despite such innovations, the linguistic evidence suggests that settlements still retained a linear structure with individual homesteads, now more clearly demarcated by fencing, aligned along ridgeways rather than around a central cattle byre (Ehret 1998: 118; Schoenbrun 1998: 93).

The social importance of houses, it is claimed, is also revealed by reconstructed proto-Bantu kinship terms. One in particular, **kòlò*, seems to have connoted 'clan' in a wide number of instances; in at least one subgrouping it carried the more specific

meaning of 'matriclan' (Ehret 1998: 149). Another relict term, **lòngó*, on the other hand, which may have originally meant 'a line of objects', later became associated with the concept of a 'lineage', possibly even 'patrilineage' (Ehret 1998: 150). It seems then, if we can accept these reconstructions, that the early Mashariki populations may well have practised some form of parallel descent system, that only later gave way to the unilineal descent systems that characterise most ethnographically documented Bantu-language-speaking societies. This aligns with Jan Vansina's (1995) earlier suggestion that Proto-Bantu societies traced descent bilaterally, and with a more recent phylogenetic comparative study of kinship terminology that found the strongest initial associations between Hawaiian-like kinship terminology and ambiline descent systems in Proto-Bantu (Guillon & Mace 2016). The flexibility that bilateral and ambiline descent systems provide would also have had adaptive advantage during a period of socio-economic and ecological transition, enabling assimilation of individuals from different communities including neighbouring hunter-gatherers (Guillon & Mace 2016: 9–10).

As their control over both their social and ecological landscape improved, however, unilineal descent systems (both patrilineal and matrilineal) may well have been preferred. Among Great Lakes Bantu speakers, for example, a range of terms 'distinguishing between "father's people" and "mother's people"' were already in use toward the end of the last millennium BCE, including many terms that could be used to refer to the children of an individual's mother's sister (Schoenbrun 1998: 96). Critically, a cluster of terms began to be used to emphasise patrilineal descent, among them the form **mwìhwá*, 'child of female clanmate', which Schoenbrun (1998: 97) argues signified 'a child or children that the wife's people … considered "lost" to them and gained by their son-in-law'.

While such linguistic data hint at an early shift to a preference for patrilineal descent (as might be expected if the CCP evolved within East African EFC/EIA contexts), there is limited support for the co-evolution of kinship terminologies in tandem with such changes to descent systems (e.g. patrilineal societies preferentially adopting Omaha systems and matrilineal ones leaning toward Crow systems) (Guillon & Mace 2016). Moreover, wholescale adoption of a patrilineal ideology among Great Lakes Bantu speakers seems to have occurred much later, at least in the Kivu Rift Valley, where terms with patriarchal idioms including the Proto-Kivu root *nzu* ('patrilineage') start to assume greater significance over more amorphous concepts for kin groups (such as those for 'clan') only in the late 1st millennium CE (Schoenbrun 1998: 134–5). As documented by Stephens (2009) for North Nyanza speakers, even after patrilineal descent became the norm, the kin networks traced through maternal lines remained socially and ritually important. Similarly, farther south in East-Central Africa, gendered divisions of labour associated with food production had emerged among Sabi and Botatwe speakers by the second half of the 1st millennium CE; these associated cattle closely with males, although female roles and matrilineal ties remained both socially and ritually important (Saidi 2010: 128–44).

Intriguingly, in his discussion of Mashariki, Ehret (1998: 151) also argued that the 'actual oldest Bantu root word for a tangible house' (**júbò*) served along with the word for 'belly' as the dominant metaphor for the lineage. Since both terms have explicitly female connotations in other contexts, he suggested that in their earliest

manifestation, Mashariki societies may have been 'originally matrifocal and matrilineal'.[3] In their reconstruction of kin terms in early Bantu languages, Hage and Marck (2011) also infer that these communities were predominantly matrilineal and matrilocal. Critically, they also argue that the proto-word for 'house' had female associations. Among speakers of Great Lakes Bantu to the west of Victoria Nyanza, on the other hand, metaphors linking the house with the body, especially women's bodies, seem to crystallise somewhat later—only after ca 500 CE—as part of a process of agricultural expansion and consolidation, stimulating 'later developments in unilineal descent systems' (Schoenbrun 1998: 98).

The influence of Central Sudanic and Eastern Sahelian speakers on the EFC/EIA Mashariki populations during the last millennium BCE is also attested by the presence of a wide range of Sudanic and Sahelian loanwords for livestock, items of material culture, cereals and various economic practices. Although Ehret does not provide a reconstruction of the Mashariki term for bridewealth, he does argue that the linguistic data suggest that Mashariki populations acquired their knowledge of cattle from a variety of neighbouring non-Bantu-language-speaking peoples, including Southern Nilotes to the east of Victoria Nyanza, and Central Sudanic and Eastern Sahelian speakers to the west and north of the Nyanza basin, from whom the early Mashariki groups may also have obtained their knowledge of cereal cultivation (Ehret 1998: 87). The implication of these linguistic data, if Ehret's interpretations are correct, is that neither cattle keeping nor cereal cultivation were indigenous elements of proto-Bantu economies.[4]

More specifically, Ehret has argued that cattle and other domesticates may have been adopted by different clusters of Bantu language speakers on at least three separate occasions from different neighbouring populations. Thus, the South Nyanza subgroup of Early Kaskazi speakers residing around the southern shores of Victoria Nyanza appears on linguistic grounds to have adopted cattle keeping from neighbouring Southern Cushitic speakers, likely associated with the Pastoral Neolithic material culture documented for these areas from around 1500 BCE (Lane 2013). The Great Lakes Bantu subgroup (including Burundi, Rwanda, Ganda, Nyoro, Luhyia and Gusii), on the other hand, may have obtained livestock from a combination of Central Sudanic, Eastern Sahelian and even Southern Cushitic speakers (Ehret 1997, 1998). Moreover, in the Great Lakes region, it is only in centuries nearer the BCE/CE transition and after the development of a number of daughter languages out of Mashariki that the number of cattle terms in the various Eastern Bantu languages began to proliferate. Here again, Schoenbrun's detailed study of developments in Great Lakes and West Nyanza Bantu is informative, with root words such as **gànà* ('large herd of cattle') and **musumba* ('young man/herder') being added to the West Nyanza farming vocabulary *only* after ca 500 CE. Farther south, proto-South-East Bantu speakers adopted livestock through interaction with neighbouring Khoekhoe speakers, judging from the linguistic

[3] It needs to be noted, however, that the term can also be gender neutral in other contexts of use.

[4] Intriguingly, there is some linguistic evidence to suggest that speakers of Western Bantu languages may well have adopted cereal cultivation at an early date and via different interaction networks compared with Eastern Bantu speakers (see Bostoen 2006–07).

ancestry of generic words for cows and sheep and the term for 'milk milked from an animal' (Ehret et al. 1972; Ehret & Kinsman 1981).

One possible reading of such evidence is that it was only at this juncture (i.e. after 500 CE) that cattle began to assume social importance among East Bantu agropastoralists. The spatial distribution of these linguistic terms also suggests that the major direction of spread was along the Western Rift and across eastern Zambia (Ehret 1998: 271–4). In other words, more or less across the same territory associated with the Nkope Branch of the Urewe Tradition, *rather than* the Kwale Branch from which Broederstroom pottery and its earlier variants were derived (Klapwijk & Huffman 1996; Huffman 1998: 60). Phylogenetic reconstructions also support the view that those early Bantu-language-speaking communities that subsequently integrated cattle into their economies usually switched to a patrilineal descent system (Holden & Mace 2003),[5] although Vansina (2004) draws the opposite conclusion for Njila speakers in the south-west. He argues that once they had become agropastoralists and 'because cattle were to be inherited in the matrilineal line', Njila 'organized themselves into exogamic matrilineages' (Vansina 2004: 139), although he provides no clear statement on why cattle had to be inherited matrilineally in this case.

## CONCLUSION

Taken together, these historical linguistic reconstructions suggest, firstly, that the very earliest Urewe ware sites may not have been organised along CCP lines and, secondly, that many of the core social traditions and values associated with the CCP could have been derived over several centuries from neighbouring non-Bantu-language speakers. Although these observations tend to undermine the case for an initial association between Western Stream/Kalundu Tradition sites and the CCP ideology (as originally argued by Huffman 1989; see also Huffman 2007: 335), when it comes to a consideration of the Eastern Stream/Urewe Tradition, the two models are not entirely incompatible. This is because it is possible that the CCP may have evolved as part of the later diversification of Mashariki Bantu, either around the Nyanza Basin prior to the southerly expansion of the various daughter languages (if the early-split model is favoured) or even farther south (if the late-split model is preferred). Novel Bayesian phylogeographic analysis of the linguistic data, favouring a late-split model following early expansion of Western Bantu speakers through the Central African rainforest around 2400 BCE, lends support to such an argument (Koile et al. 2022). While not explicitly explored by the authors, their new reconstructions of the timing of different linguistic splits also raises the possibility that the genesis of the CCP might well have been at the southern end of Lake Tanganyika/northern end of Lake Nyasa/Malawi (see especially fig. 3 in Koile et al. 2022), which was likely also a key corridor for the spread of domesticated cattle into southern Africa (Lander & Russell 2018). Targeted archaeological surveys and excavations aimed at testing this hypothesis should be prioritised, given the dearth of relevant archaeological information from this area currently available.

[5] As also argued for by Ehret (1998: 219–20) with specific reference to changes to Khoekhoe descent systems following a shift to cattle keeping.

A great deal clearly hinges on dating and there is no reason to believe that the earliest dated archaeological sites of a particular ceramic tradition represent the remains of first-generation settlements; at best, the dates provide only an indication of the date by which a presence had been established. It should also be evident that in order to provide archaeological tests and possible confirmation of these models, many additional large-scale, area excavations are required at various points around Victoria Nyanza and across much of western and coastal Tanzania. Another critical task is to determine when cattle, as opposed to small stock, became integral components of the economies of these early farming communities. Cattle bones are rarely attested on EFC/EIA sites in southern Africa prior to ca 450 CE, and even then, are mostly found on sites located south of the Limpopo River (Lander & Russell 2018). Given this, it remains conceivable that the CCP and its symbolic and ideological associations emerged here once EFC/EIA communities had become established, after an initial period of flux and experimentation with different forms of dwelling in the landscape (Badenhorst 2010; see also Huffman 2010). This hypothesis is to some extent supported by recent research on Nguni history that points to a 'slow', *in situ* revolution in cattle management and the symbolic elaboration of cattle during the Late Iron Age, rather than a rapid transformation (Jimenez 2020, 2022).

Certainly, more conclusive evidence for the material manifestation of the CCP at EFC/EIA sites in eastern Africa is needed before we can accept the argument that it was there that its genesis occurred. Of course, absence of evidence is not evidence of absence and concerted efforts to test this hypothesis through the adoption of appropriate excavation strategies, dating programmes, sampling strategies, and zooarchaeological, geoarchaeological and archaeobotanical studies are needed in the region if this debate is to advance. Equally, the possibility that EFC/EIA communities in eastern Africa followed a different socio-cultural trajectory to their counterparts farther south, in part because of the greater diversity of the ethnic and economic mosaic in which they found themselves, also needs to be kept in mind, especially given the principles of the CCP. Even if they existed initially, the principles of the CCP do not appear to have played such a dominant role in structuring settlement space and the symbolic ordering of societies in later centuries. The limited burial evidence associated with Urewe ceramics similarly hints at different practices and symbolic expressions of the deceased's identities than has been documented for EFC/EIA societies in southern Africa.

Alongside these limitations, there is a need for closer collaboration between archaeologists, linguistic historians, historical linguists and population geneticists than is currently the case. While the last few decades have seen an increase in the number of studies that seek to integrate these different strands of evidence as they relate to reconstruction of the spread of Bantu languages, iron metallurgy, farming and domesticated plants and animals, the interpretations that are offered often appear rather one-sided and dominated by rather singular narratives of continuity and change. While all of these lines of research have much to contribute to understanding relevant sequences, process and patterning, they also deal with quite different entities that require different forms of 'source criticism', convey information about different kinds of processes and events, and have their own particular strengths and limitations. Integrating such different lines of evidence requires greater mutual

understanding of and respect for each discipline's approach (Gonzales 2018), as well as more frequent constructive—albeit also critical—conversations about how insights drawn from one field might help improve the interpretive strategies of the others. Appropriate models for doing this are provided by Kathryn de Luna and Jeffrey Fleisher (2019) in their exploration of the intersections between archaeology and historical linguistics, and are illustrated by some of the more recent studies of the complex relations between words and things (e.g. Bostoen 2007; Saidi 2010; Ricquier 2014; De Luna 2016, 2017).

As a final observation, while there has been much debate over the antiquity of the CCP in southern Africa over the years, there has been remarkably little effort invested in explaining its genesis, whether this was in eastern Africa or farther south. Moreover, while the CCP model played an important role in advancing study of the archaeology of early farming societies in southern Africa by moving research beyond narrow chronological and typological concerns (which is only recently happening in eastern Africa), there are many other issues about these societies we still know very little about, many of which have been raised at different times by Simon Hall and merit much greater attention over the coming years.

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