IN POTS WE TRUST

The Processing of Clay and Symbols In Sub-Saharan Africa

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Abstract

Previous studies have illustrated the symbolic prominence of pottery making in sub-Saharan Africa. In many parts of the continent, the craft is explicitly connected to a series of other production activities and parts of the technical process often serve as a metaphor for explaining aspects of the human experience and to structure certain rituals. Barley goes as far as to speak of a 'potting model', one of many ways available to a culture to think about itself. It remains to be known, however, why African people specifically chose pottery making as a way to act upon/explain the world and why the activity is connected to specific realms of the human experience throughout the continent. Also, one may wonder whether potters' behaviour could in turn be influenced by metaphors, with steps of the *chaîne opératoire* becoming the locus of a symbolic discourse. In an effort to answer these questions, I attempted a systematic comparison of prohibitions and rituals connected to pottery in 102 sub-Saharan societies.

Key Words ◆ Africa ◆ metaphors ◆ pottery technology ◆ prohibitions ◆ symbolic thinking

In January of 1996, I was questioning Dowayo informants in northern Cameroon about the reasons for segregating both blacksmiths and potters. As usual, they told me that you should avoid marrying them, entering their compounds, or eating with them, because they were 'dirty' and could be 'dangerous'. Since I pressed to know more, an old man conceded that what farmers mostly feared was catching the 'bad cough' from them. 'They cough a lot', he said, 'it's their special disease.' As a faithful student of the Brussels' school of structuralism, I immediately wondered whether I was faced here with some kind of symbolic knot.

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A cough, I thought, must be metaphorically associated with the sound of the bellows, thus providing a symbolically relevant way of justifiying the segregation of blacksmiths. But, of course, I needed to confirm the hypothesis before toying with it further. So I questioned the man about the disease and its social repercussions. Why was coughing typically associated with blacksmiths, to begin with? From my point of view, his successive answers proved thoroughly disappointing. All he could suggest was that the dust, the smoke, or even the heat of the smithy, might provoke a hoarse cough. But no mention was made of the bellows. Quite baffled, I gave in and asked boldly if there couldn't be some connection between lungs and bellows and thus between the cough and the sound of the smithy. Instead of bursting into laughter as I fully expected, the man considered my question for a moment before answering. This, he said finally, was an interesting proposition and one that he personally was ready to endorse. However, he was unable to guarantee that such an association had ever actually been made, for as he put it, when ancestors leave you prescriptions they never take the trouble to explain the meaning. Were they thinking of bellows when they warned the farmers against the blacksmith's cough, or did they have something else in mind? Nobody living now could have told me.

Besides illustrating the reality of field enquiries, this anecdote seemed quite an appropriate way of introducing this article, for my main goal, somehow, is to reconstruct what ancestors could have had in mind when attaching social and symbolic prescriptions to pottery making but not taking the trouble to divulge their reasons. Comparing data collected in 102 African societies (Figure 1), I look for the underlying 'principles' structuring what initially appears as an infinite and illogical collection of themes. Concurrently, I try to situate pottery in respect to other realms of the human experience, which allows for a re-reading of behaviour usually deemed as primarily 'functional'. The general idea, which combines recent developments in the anthropology of technology and concepts borrowed from the structuralist approach, is that: (1) symbolic thinking may pervade every single part of a technical process, but (2) it is more easily 'read' in the set of prohibitions, metaphors and rituals that surround the activity (the specificities of which tend to offer a less 'blurred' picture than technical features), with the caveat that (3) the local materializations of symbols are considered in association rather than in isolation (in much the same way as pieces of a jigsaw puzzle). Although emphasizing one particular aspect of a single technology, I thus want to access the wider domain of social strategies and to illustrate facets of the dialogue between nature, culture and the material world.

That pottery making is a symbolically-invested activity in sub-Saharan Africa is not very big news. Indeed, as already showed by Barley

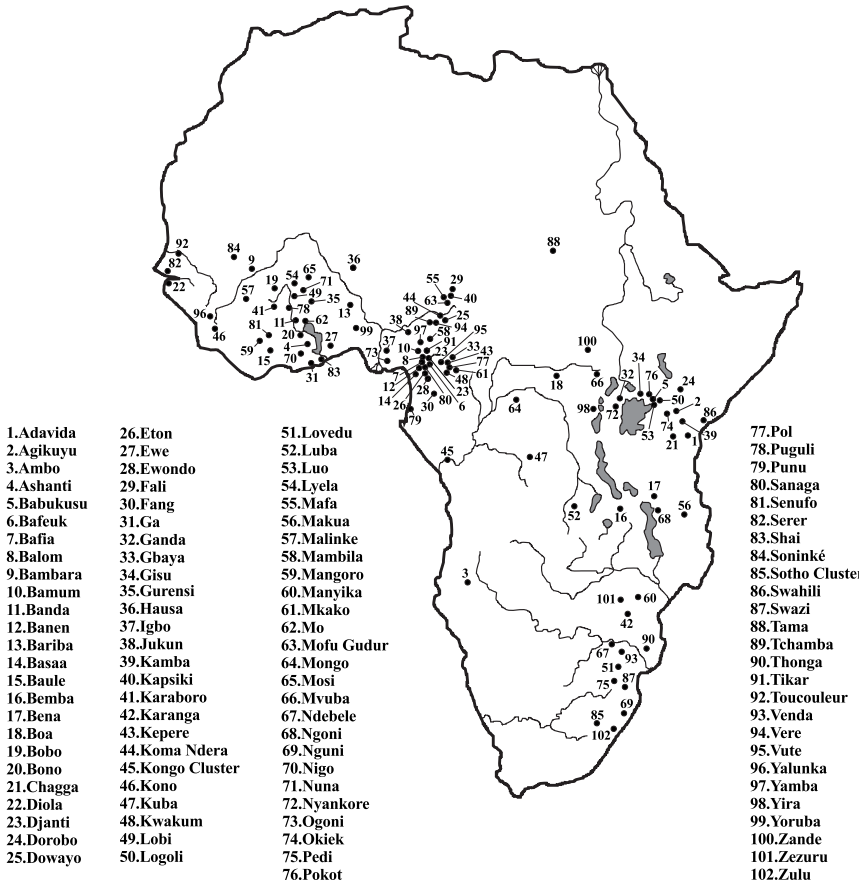

FIGURE 1 Location of the populations mentioned in the text

(1984, 1994) and others (e.g. David et al., 1988; Herbert, 1993; McLeod, 1984), potters are not only married to or associated with blacksmiths in many Sahelian societies, but may also stand as the principal midwives and/or sole providers of objects used during funerals, marriages and fertility rites, which place them as social actors of crucial importance. Moreover, parts of the technical process often serve as a metaphor for explaining aspects of the human experience and to structure certain rites of passage. The reason, as put by Barley, is that

> [p]otting involves a number of changes. It takes formless matter and shapes it. It transforms, through the operation of heat, from wet to dry, soft to hard, raw to cooked, natural to cultural, impure to pure. Broken pot can be reground and incorporated into new pots to show the reversal of time. Pots

> lend themselves to abrupt fracture to mark isolation, destruction, 'a clean break'. They are above all vessels and so may be used to refer to all manner of bodily cavities – heads, wombs, bellies, rectums. They lend themselves readily to discussion of spirit, conception, essence and the like. (1984: 99)

Pottery *chaîne opératoire* thus offers a useful tool for explaining natural processes and to structure cultural ones. This is what Barley calls the 'potting model', 'one of many ways available to a culture to think about itself' (1994: 138).

While not denying the relevance of such a proposition, I cannot help but feel frustrated by the way the 'model' is usually referred to. For instance, I suspect that it could rest on a richer semantic web than the set of binary oppositions enounced earlier. How else can we account for the symbolic prominence of pottery throughout the continent? Other technologies also involve a number of changes, yet they do not seem to be as frequently exploited for 'thinking the world'. Second, the various customs connected with pottery making and use do not all relate to 'transitory states', 'fertility', 'death' or 'bodily cavities'. If the hypothesis of a 'potting model' is to hold true – which I strongly believe – such a model would be built on deeper and more general principles. Finally, there is the question of its actual distribution. Barley is careful not to generalize and to quote only those societies in which explicit references are made to pottery products and *chaînes opératoires*. One may wonder, however, whether the materialization of symbols does always take a predictable form. If grounded in a deeper system of beliefs, shouldn't the model prove altogether less conspicuous and more widely distributed?

These hypotheses progressively arose as I questioned Cameroonian potters about the prohibitions they had to follow when manipulating clay (Gosselain, 1995, 1999). Regardless of their gender, social status or language affiliation, they usually quoted similar themes or, if original, themes which obviously belonged to the same semantic field. In comparing these prohibitions to those collected among other sub-Saharan populations, what I recorded were mainly similar conceptions, but also some isolated – and apparently incomprehensible – ones. In order to find their meaning, I started a systematic comparison of the available data, looking for the thread connecting the whole collection of prohibitions and liable to justify their existence. What follows is the result of this work.

Some anthropologists will undoubtedly blame me for taking short cuts and often pushing cultural specificities into the background. They should not get me wrong, however, for what I essentially seek with this article is to start a reflection about a topic which is worth much more than mere compilations (e.g. Drost, 1964) or illustrations within some gender-oriented study (e.g. Berns, 1993; Herbert, 1993). As for the inter-

pretative part of the study, it is only an intellectual game aiming at assembling pieces of the symbolic puzzle so as to get a coherent and (sufficiently) comprehensive picture.

CONTEXT OF POTTERY PROHIBITIONS

Although rarely mentioned in ethnographic accounts, prohibitions surrounding pottery making are very common in sub-Saharan Africa, as is usually the case with other human enterprises whose outcome always remains uncertain. They constitute an indissociable part of the craft and one that can be as openly discussed as any technical operation in the production sequence. In fact, most potters feel that everybody should be made aware of the prohibitions in order to avoid jeopardizing the craft by their mere presence should they be temporarily impure.

From a technical point of view, breaching a taboo may affect three stages of the manufacturing process: clay extraction (clay suddenly disappears, it loses its workability or it becomes unexploitable); drying (pots crack, even if sheltered from the sun); firing (pots explode during the process). These accidents relate to external factors such as local pedology or meteorological fluctuations, i.e. factors that potters can hardly master regardless of their knowledge or skill. But even if individuals have the capacity to explain their failures in functional terms, they always evoke the breaching of a prohibition if faced by an unexpected accident. As for diseases, bad luck or death, one can hardly impute natural causes to a technical failure.

Before going further, one should note that prohibitions are a very personal matter. Although all members of a society sometimes share the same concerns, individual or family beliefs are much more common and should be considered a standard. As stated by some Bafia potters of Cameroon, each family has its own beliefs – regarding pottery making or other activities – which are transmitted from generation to generation. Even if other people do not follow the same rules, what really matters is to respect the ones which were instated by her/his own ancestors (see Gosselain, 1992).

THEMES

In every area of the continent, the most frequently occurring prohibitions concern sexual intercourse, menstruation and pregnancy. For instance, numerous potters avoid making love on the eve of clay extraction, a prescription that is sometimes attached to the whole manufacturing process and may be followed by all people present.[1] Similarily, menstruating[2] or pregnant[3] women are not allowed to extract or manipulate clay, and sometimes even to touch unfired vessels. If people mostly

fear that such persons could harm the clay deposit or cause breakage during drying and firing, some of them also speak of potential danger for the woman or the foetus. Among Shai of Ghana, for example, potters could suffer premature menopause if they were to touch the clay when having their period (Quarcoo and Johnson, 1968: 70). Among Igbo of Nigeria, the shaping of vessels could result in a difficult childbirth for pregnant women (Barley, 1994: 92). And according to some Balom and Sanaga potters of Cameroon, they could give birth to a stillborn baby if they entered the clay pit (Gosselain, 1995: 311).

Another widespread prohibition concerns the gender of the people attending certain operations. Where pottery making is a female activity, men may be kept aside from the whole manufacturing process,[4] or from clay extraction,[5] drying vessels[6] or firing.[7] Among the Okiek of Kenya, potters say that men may not see an unfinished pot '. . . because they have killed. They have gone about killing animals, killed people (enemies), killed their relatives. So if they see it, it breaks. The pot dies.' (Kratz, 1989: 68). In other instances, they expose themselve to danger. Among Shai of Ghana, for example, they face sexual impotence if trying to shape a pot (Quarcoo and Johnson, 1968: 68). The same applies to Mangoro men of Ivory Coast, should they touch the clay saucer on which vessels are built (Traoré, 1985), and to Karanga men of Zimbabwe, should they attend a firing. In the latter case, it is said that a 'pot being fired is like a girl entering puberty, and if a man were to be present the "heat" of the uterus-jar would be transferred to him and he would "boil over".' (Evers and Huffman, 1988: 739). Among Ovambo of Angola, men speaking to a potter carrying her clay may become sick (Powell-Cotton, 1940: 42). Among Bariba of Benin, female potters say that men used to make pottery in the past but that they died from 'overall swelling'. Since women remained healthy, men thought that the spirit of the earth was angry at them and decided to stay away from the craft (Lombard, 1957: 17). Conversely, women may be kept aside where pottery making is a male activity, as among Yamba of Cameroon (Gosselain, 1995: 373), Kongo and Kwakongo of D R Congo (Volavka, 1977: 63) and Ganda of Uganda (Trowell, 1941: 63).

If gender is the main reason why people are sometimes forbidden to come near potters at work, age – as related to sexual maturity and fertility – also constitutes a recurring issue. Among the Karanga of Zimbabwe, a young girl is not allowed to attend clay extraction or firing, because 'the force within her that will someday cause her first menstruation, tearing her hymen, would cause the pot to crack' (Evers and Huffman, 1988: 739). In other groups, pubescent girls and sexually mature women are not allowed to attend certain stages of the technical process, to manufacture certain categories of vessels or to make certain decorations, for they could become infertile.[8] One should note, however,

that the involvement of post-menopause women in pottery manufacture may also stem from economic reasons rather than symbolic ones. Indeed, the craft may be primarily practised by widows and abandoned or neglected spouses as a way to cope with economic difficulties (e.g. Devisch, 1993; Hardin, 1996). Or young people may be prevented from making pottery for fear that they should earn an independent income (e.g. Spindel, 1989).

Besides adolescents and fertile women, other categories of people are sometimes forbidden to carry out operations such as clay extraction and firing, or prevented from visiting potters at work: twins or parents of twins,[9] uninitiated girls or boys,[10] people who do not have the skill to make pottery or who are not related to the potter,[11] children who are teething,[12] children who have drunk milk,[13] angry, jealous or mischievous persons,[14] unfaithful women,[15] polygamous people,[16] people who have shed blood,[17] lepers[18] and rainmakers.[19]

Remaining prohibitions involve food, things and matter that cannot touch clay, especially at the extraction site (meat,[20] meat cooked with gourd seeds or peanuts,[21] sesame,[22] kola nuts,[23] corn,[24] salt,[25] alcohol,[26] eggs,[27] matchetes, knives or axes,[28] iron tools,[29] dog faeces,[30] soot,[31] periods of time when one should avoid making pottery or carrying out operations such as clay extraction and firing (weekly ill-fated days,[32] mourning periods,[33] funerals and Ramadan,[34] times when the army is on campaign,[35] full moon,[36] waning moon,[37] first rains of the year,[38] time when beans are flowering and cowpeas, gourds and pumpkins are ripening[39]) or behaviour and actions that should be avoided in certain circumstances (to salute or to speak to a potter coming back from the clay pit,[40] to quarrel at the place where clay is extracted or with the person who owns the site,[41] to carry a corpse along the path leading to the extraction site,[42] to break wind or to defecate in the clay pit,[43] to steal clay from another potter,[44] to sell a used turntable,[45] to bring unfired vessels out of the village,[46] to count unfired vessels,[47] to name or to break unfired vessels,[48] to speak whilst extracting the clay, decorating a ritual pot or firing the vessels,[49] to sing or to whistle at the extraction site or near the firing place,[50] to spit on the firing place,[51] to drink water when shaping or firing the pots,[52] to breastfeed a child when extracting the clay[53]).

ADDITIONAL DATA AND PRELIMINARY COMPARISONS

A broad comparison of the prohibitions compiled so far shows that fertility constitutes a recurrent topic, whether under its ordinary form (pregnancy, eggs, rain, flowering, ripening of fruits, full moon or waxing moon), as a potential (menstruation, sexual intercourse, pubescent girls, sexually active women, male sexual power) or as an 'abnormality'

(twins). In most instances, these different forms of fertility are thought to be incompatible with pottery making: if combined, they could induce a series of technical, physiological and/or natural[54] disorders. Interestingly enough, many African people explicitly link human creation and/or human procreation to the process of pottery manufacture. Among Jukun and Yoruba of Nigeria (Barley, 1994: 47) or Mafa (David et al., 1988: 371) and Bafia (Leiderer, 1982: 74) of Cameroon, for instance, certain myths involve a deity who fashions Man or other individuals from clay. Among Ewondo of Cameroon (Laburthe-Tolra, 1981: 289) or Thonga of Mozambique and South Africa (De Heusch, 1982: 379; Junod, 1910: 127), gestation is compared to a firing and the newborn to a clay vessel which has gone through the firing process without cracking. In other societies, such as Bafia (Leiderer, 1982: 224) or Tikar (Timmermans, 1969: 75) of Cameroon, the head of a newborn is traditionally 'hand-moulded' or 'shaped' as a pot; i.e. rubbed and pressed slightly between the fingers in order to give it a regular shape. Elsewhere, as among Thonga, Lovedu, Sotho, Pedi and Zulu of southern Africa (De Heusch, 1982: 384–414), newborns are 'smoked' by hanging them upon a fire, where they are both smoked and sprinkled with water, or washed with water mixed with ashes: three operations that are strongly reminiscent of certain post-firing treatments used by sub-Saharan potters (e.g. Drost, 1967; Gosselain, 1995). In different parts of the continent,[55] the womb is also compared to a clay vessel in which the foetus is cooked in the same way as food. Conversely, Yoruba potters of Nigeria regard the clay pit as the womb or vagina of Iya Mapo, their professional deity (Beier, 1980: 52), or assimilate the twine bag used for storing and transporting vessels to a foetal sack (Fatunsin, 1992: 15). A Ndebele woman of South Africa also describes the initial soaking of dry clay as the union between a female (clay) and a male (water) element having to sleep together for a single night before the work can be started (Krause, 1985: 68).

Either in an implicit or explicit way, pots are frequently associated with human beings (Barley, 1994; David et al., 1988; Herbert, 1993; Ritz, 1989; Welbourn, 1984). For example, vessel ornamentation may parallel body scarifications and tattoos[56] (see also Buisson, 1930; Collett, 1993; Earthy, 1933; Evers and Huffman, 1988; Hauenstein, 1964; Roy, 1987), human body parts are sometimes symbolized on the vessel in order to specify its gender (David et al., 1988; Evers and Huffman, 1988; Sterner, 1989; Tremearne, 1910) or the parts of the vessel's shape are designated after body parts, a phenomenon that largely extends outside the African continent (David et al., 1988; Thass-Thienemann, 1973). In other instances, vessels are treated in much the same way as people: among Kapsiki of Cameroon, sherds of a ceremonial pot that has been broken accidentally are brought to the blacksmith who grinds them and gives them back to his wife (the potter) for making a new container (Jest,

1956: 49). In this group, as in many other Sahelian societies, one of the blacksmith's duties is to carry out funerals.

Besides procreation and body treatment, pottery is associated with other realms of the human experience. Barley has recently compiled a series of examples showing how, in different parts of the continent, pots 'may become an idiom in which the state and the major components of a marriage are expressed' (1994: 92). An illustration of this phenomenon is the *imbusa* custom, recorded by Clarke among the Bemba of Zambia:

> When a man marries a girl she makes a pot called an '*imbusa*'.[57] Before they have sexual intercourse, this is filled with water and the leaves of herbs, and each of them take hold of it and carry it and put it on the central fire in the hut. When they have finished their love-making, they go together and take the pot off the fire and wash their sexual organs. If the pot is broken, they are not allowed to have sexual intercourse until the pot is remade. The pieces of the old pot are ground up, mixed with new clay and a new *imbusa* modelled. (Clarke, 1931: 274)

Among Manyika of Zimbabwe, the bride's paternal aunt must check whether the girl is still a virgin. If such is the case, she fills a pot up to the brim with water and hands it over to the groom's paternal aunt. If not, she pours some water on the floor (Jacobson-Widding, 1992: 12). A similar custom is attested among Zezuru, a neighbouring group of the Manyika (Lawton, 1967: 236). Among Yoruba of Nigeria, the daughter of a potter who wants to leave her husband may carry all the vessels that she received as marriage gifts except her water and fire pots. These represent stability and permanence and she would move endlessly from one matrimonial home to another should she displace either of them (Fatunsin, 1992: 15).

Rites of passage are another event during which pots and pottery techniques may serve as metaphors. Among Dowayo of Cameroon, for instance:

> [t]he circumcision process climaxes with the piling up of the boys in a shelter of branches which is then fired over their heads – just as the potter bakes her pots. They are accompanied back to the village with flaming firebrands over their heads. All this happens on the day on which the rainchief's pots are dried by the first bushfire to inaugurate the dry season, the first day on which pots may be fired. (Barley, 1984: 98)

This explicit connection between circumcision and the firing process is also attested among Kono of Sierra Leone (Hardin, 1996), Gisu of Uganda (La Fontaine, 1986) and Luba of D R Congo (Petit, 1993). In these groups, the way of announcing to a mother that her boy died at the initiation camp is to tell her that the pot she gave, or asked to fire, has broken, and/or to break a pot at her doorstep.

As revealed by the previous examples, pottery may also be associated with death. Among the Karaboro of Burkina Foso (Virot, 1994) or the Nyankore of Uganda (Roscoe, 1922: 75), it is the custom to break the vessels of a woman who has passed away. A pot with a hole in its bottom may also be placed on her tomb. Among Dowayo of Cameroon, the water jar of a deceased woman 'is dressed as a human being and fermenting beer poured into it. The bubbling of the beer is regarded as indicating the presence of her spirit' (Barley, 1994: 88–9). In this group, skulls are removed and kept in special vessels for further ritual use (Barley, 1994), as among the neighbouring Koma (Frobenius, 1987) and Fali (Gauthier, 1979). Whole individuals may also be buried in a jar, a custom documented by archaeological excavations in the Inland Niger Delta, Mali (Bedaux and Lange, 1983), and in northern Cameroon (Gauthier, 1979; Holl, 1988). Such a burial method is also recorded among the Zezuru, Pedi and Venda of southern Africa, where it is reserved for infant twins sacrificed after delivery (Lawton, 1967: 167, 209, 236). Along the same line, the grave may be compared to a pot, as among Gurensi of Ghana where it is dug in the shape of a large vessel (Smith, 1989: 61) or Mofu Gudur of Cameroon where it is likened to a granary, a uterus and a pot at the same time, '. . . all appropriate abodes for the process of ancestralization through germination, gestation and possibly fermentation' (David, 1992: 193). Also, specially made vessels or daily use pottery often become receptacles for the spirits of the dead (e.g. Barley, 1994; Berns, 1993; Müller-Kosack, 1988; Sterner, 1989).

Summarizing all the instances where pottery is involved or where explicit references are made to its *chaîne opératoire*, it becomes clear that their common denominator is transformation: physiological transformation (conception, gestation, first teeth, sexual maturity, menstruation, menopause, death), cultural transformation (birth rites, initiation, marriage, funerals, 'ancestralization') and mythical transformation (the creation of humans). The evidence compiled so far shows that clay products or parts of the manufacturing process may serve as an instrument or a model in the course of cultural transformations or even as a metaphor for explaining certain physiological or mythical transformations. Such a technology being based on the combination and changing states of natural elements, its widespread use as a way of making sense of the world should not come as a surprise and could even account for the usual female connotation of the craft in sub-Saharan Africa. Indeed, if pots are persons and if clay has to endure the same transformation processes as people do throughout their life cycle (and vice versa), then women appear to be in the best position for carrying out the work or, at least, starting the process. But the existence of a strong symbolic connection between pottery manufacture and biological transformations also means that both domains are mutually incompatible, for such a closeness could

induce a dangerous imbalance if they were to be brought together. Hence, the existence of various prohibitions that aim mostly at separating what are perceived as antagonistic fields. Thus, we can understand the purpose of many other taboos presented earlier: as with biological transformations, pottery making is also incompatible with natural transformations (moon cycle, transition seasons, germination and plant growth), calendar transformation (ill-fated days, which are in fact 'transitions' between different cycles [see McLeod, 1984]) or transitory states (e.g. wartime, crossing from the village to the bush).

If not new (e.g. Barley, 1984, 1994; David et al., 1988; Herbert, 1993; McLeod, 1984) this line of interpretation has merit, at least, to account for much of the pottery prohibitions encountered in the field or in the literature, from the most obvious to the oddest ones. Some of them still have to be elucidated, however, and a lot remains to be known about the actual functioning of the prohibitions. If the association of two metaphorically connected processes or elements creates an imbalance, what is the exact nature of this imbalance? What underlying logic could explain, for instance, that making pottery whilst pregnant is at the same time dangerous for the woman, the foetus and the vessels?

HEAT CONTROL AS A POWERFUL METAPHOR

In his essay on the rites of passage in southern Africa, De Heusch (1982: 376–415) has provided a 'thermodynamic' (1982: 381) interpretation of the Thonga ideology, showing that the ritual concern is to fight against any form of heating in order to maintain the universe and human actions at a low and constant temperature (1982: 375). Among these people as among neighbouring groups, sexual intercourse, menstruation or sickness are explicitly thought to produce heat. And since pregnancy is compared to a cooking or a firing (see earlier), women must avoid any inopportune heating or cooling which would affect the baby. Twins, for instance, are said to be the product of an over-cooking, whilst premature babies are not sufficiently cooked and should be 'hardened' in the sun. Such an observation is of particular interest here since regulating temperature is not a mere notion from a potter's point of view: excessive heat or coolness may have detrimental effects on clay workability, drying, or firing. One can understand, therefore, why s/he tries to avoid any thermal fluctuation during the whole manufacturing process, from both the technical and symbolic angles. In this regard, staying away from people who recently engaged in sexual intercourse, from pregnant and menstruating women or from twins and twins' relatives would appear to be as fundamental as putting newly fashioned vessels in the shade for drying or sheltering the pots from the wind during firing. This line of reasoning was made explicit to me by Koma Ndera informants from

northern Cameroon, some 4000 km north-west of the Thonga area. As I enquired about the reasons why pregnant and menstruating women or children who are teething must be kept aside from the craft, they explained that those people were 'momentarily too hot' and that a potter had always to watch for any source of heat that could imperil the firing process (Gosselain, 1999).

Besides being shared by peoples living in different parts of the African continent (see also De Maret, forthcoming; Gausset, 1992), the 'thermodynamic philosophy' also concerns activities such as hunting, war, food processing or initiation. As for rites of passage, De Heusch (1982: 434–5) notes that the initiation of girls aims at cooling them from the heat of the first menstrual blood, whilst the initiation of the boys aims at 'warming' their sexuality. One should remember, also, that Karanga of Zimbabwe fear that a man would 'boil over' and lose his virility should he come too close to a girl entering puberty (Evers and Huffman, 1988: 739) or that the circumcision process climaxes with a simulated firing of pottery among the Dowayo of Cameroon (Barley, 1984: 98). In this regard, the fact that Karanga potters as well as Shai (Ghana), Ambo (Angola), Bukusu (Kenya) or Sotho (South Africa) prevent 'uninitiated', 'unmarried' or 'adolescent' girls from touching clay should make perfect sense. At the same time, if hunting and fighting are perceived as 'hot' activities, there is no wonder why men who have killed animals or people must be kept away from the craft among the Okiek of Kenya or the Bafia of Cameroon, or why no pottery may be manufactured when the army is at war among Ashanti of Ghana.

But there is more. In a study devoted to the notion of heat among Manyika of Zimbabwe, Jacobson-Widding (1989: 33–5) provides a list of things, persons, places, states and moments that are viewed as 'hot'. Interestingly enough, they include a series of the themes conveyed by pottery prohibitions: iron tools, crossroads, graves, the time at the end of the dry season, widows, drunk people, angry people, and the moment when two persons meet or salute each other. Salt also stands among 'hot things', a conception that is shared by Kuba of D R Congo whose myths tell how ashy salt was discovered after a disastrous fire and crystal salt after an overcooking (De Heusch, 1972: 121, 163). Despite their evident 'heat', hot peppers are not mentioned in Jacobson-Widding's list nor in any of the prohibitions encountered in the field or in the literature. Yet, Gbaya of Cameroon place them on the clay that needs to be dried before grinding and sieving in order to protect it and to accelerate its drying (Gosselain, 1995: 728).

Faeces is another 'hot element' cited by Jacobson-Widding (1989: 33). According to a Mambila potter of Cameroon, it is the dog's faeces that may not touch the clay, a matter that would be more especially connoted with heat as dogs are widely perceived as 'hot creatures'. On the one hand

they are associated with hunting, and on the other hand they display a perpetual excitation, particularly on the sexual ground. Among Ewondo of Cameroon, for instance, a boy with a widespread sexual reputation is said to be a 'true dog' (Laburthe-Tolra, 1981: 239). Among neighbouring Bafia, dogs which are eaten on special occasions must be previously beaten to death, for their blood and meat would retain a power – heat? – that would cause madness if they did not die of exhaustion.

Although illness numbers among the many states of heat through which the body may pass (Jacobson-Widding, 1989: 34; see also De Heusch, 1982) leprosy is, so far, the sole affliction cited by sub-Saharan potters.[58] Here again, I suspect that the danger may result from a redoubling of heat (illness + leprosy), as illustrated by the previous case (faeces + dog). Indeed, De Heusch (1972: 271) has shown that leprosy is conceived as a solar disease which burns the skin.

If there are 'hot things', 'hot persons', 'hot moments', 'hot places' or 'hot states', there may also be 'hot sounds' or at least sounds that are implicitly associated with heat. For instance, when some Cameroonian potters avoid fuelling the fire with millet stalks (Koma Ndera), placing corn cobs in the fire (Mambila), or making pottery when the bush is on fire (Eton and Sanaga), it is for fear that the sound generated by the smouldering plants or seeds would give rise to firing accidents. Since these sounds only appear in a context of heat, they may become its acoustic equivalent.

PROCESSING CLAY AND SYMBOLS

That most prohibitions connected with pottery making should implicitly or explicitly refer to a 'thermodynamic philosophy' is not very surprising. First, pottery is one of those pyrotechnologies where controlling heat and thermal fluctuations is of crucial importance for ensuring the success of the manufacturing process. Given such an imperative and the usual intricacy of technical and symbolic concerns in non-Western societies (e.g. Echard, 1983; Lemonnier, 1992), there is no wonder that the control is exerted from both a metaphoric and a practical point of view, and/or why pottery products and *chaînes opératoires* may serve as an efficient tool for explaining or structuring other processes implying heat. Second, a previous comparison of prohibitions and rituals recorded among Bantu iron workers of central and southern Africa also revealed the existence of a 'symbolic code' connecting heat, human procreation, cultural transformations and the technical process (De Maret, 1973, forthcoming; De Maret and Gosselain, 1993). Among the most explicit examples, one notes for instance that the 'hottest' part of sexual intercourse is regarded as a smelting process among Manyika of Zimbabwe (Aschwanden, 1982), that young women deemed to be 'frigid'

may be brought to the smithy to be 'warmed' in Rwanda (Lestrade, 1972), and that it is the smith who circumcises the boys among Songye of D R Congo (Van Overbergh, 1908). Additionally, a smith is forbidden to sleep with his wife when forging a spear among Nyakyusa of Tanzania, because 'when a woman conceives the fire blazes within her to forge a person, and the woman's fire and the smith's fire fight' (Wilson, 1957: 141). These same instances also hold true in many other African societies.

Besides reinforcing the hypothesis that a 'thermodynamic philosophy' lies behind much of the prohibitions related to pottery making and probably pervades contrasting realms of the human experience in Africa (see also De Heusch, 1972, 1982; De Maret, 1973, forthcoming; Gausset, 1992), this connection with metallurgy brings up another crucial question: the technical reification of symbolic concerns. For decades now, it has been repeatedly shown that African metallurgy is not simply about producing tools and weapons (e.g. Childs and Killick, 1993; Collett, 1993; De Maret, 1973, forthcoming; Dupré and Pinçon, 1995; Herbert, 1993; Rowlands and Warnier, 1993). A 'social product' in the true sense of the term, metalwork embodies beliefs about nature and culture that act as the main constraints when selecting or building processes which transform ore into artefacts. What remains to be known, however, is whether behaviour associated with more mundane technologies such as pottery making may also be affected by non-technical factors. Do sub-Saharan people actually 'invest' meaning in clay as they do in metal?

Although patchy, the evidence compiled so far tends to provide a positive answer, in showing that potting techniques do not only constitute 'socially acquired dispositions' (see Gosselain, 1998) but, as the occasions arise, genuine fragments of a deeper symbolic discourse. Starting with clay processing, one sees for instance that Gurensi potters of Ghana use a grog temper made from the eating bowls of deceased women. Instead of aiming at correcting some technical or functional shortcomings of the raw material,

> [t]he sherds preserve a link between the woman and her family on the one hand, and the Earth on the other. . . . In this capacity they are renewed, becoming part of another cycle of life. (Smith, 1989: 61)

A similar custom is attested among Kapsiki of Cameroon (Jest, 1956), as we have seen earlier, although the grog is made from broken ritual vessels rather than eating bowls. Among Gbaya and Vute of southern Cameroon, some potters explain that the raw material has to be prepared along the same line as cassava flour. For this reason, they break clay lumps into small pieces (as steeped cassava tubers), spread them on the ground until they are completely dry, grind them in a wooden mortar or on a grinding stone, sieve the resulting powder and hand knead the finer

portion in a basin, after moistening it. One should note that such a processing technique cannot be explained in functional terms, as revealed by a granulometric analysis of the raw materials (Gosselain, 1994, 1998). Among neighbouring Bafia, clay is usually pounded in a piece of trunk of the *iton* tree,[59] a species of prime importance in this society for it brings peace, quietude and mutual understanding to the community, and helps women throughout pregnancy and delivery (Gosselain, 1992; Leiderer, 1982). Concurrently, the fresh leaves of the *mwando* tree that Banen potters choose for shaping the upper part of the vessels also serve as a protecting charm for women in childbirth (Gosselain, 1995).

Regarding the firing process, Barley argues that it could essentially be for symbolic reasons that Dowayo potters avoid firing their pots in closed or semi-closed structures such as pits, ovens or kilns:

> [t]he Dowayo system makes great play of the opposition inside/outside. As part of this, it is highly unusual to cook outside, a hut being used as a kitchen even in the dry season. The only meals cooked outside are that of the first fruits (on the day the newly circumcised return to the village), and that by the body of a dead man before his skull is removed. Firing of pots in the open then serves to associate this process with processes of personal change of state and changes in time. There is, moreover, a strong identification of the threshing floor (a flat space in fields) with the potter's baking ground (a flat space in her garden). (Barley, 1984: 100–1)

Post-firing treatments constitute another 'joint' between technical and symbolic elements. For instance, we have seen earlier that the handling of newborns may parallel that of the freshly fired pots in some parts of the continent, with processes such as smoking, soaking or applying ashes. The latter technique is used by Tutsi and Hutu of D R Congo, who rub the ashes on their cow's udder so as to protect and 'waterproof' it. When asked why they also rub ashes on their vessels, neighbouring Twa simply answer '*Ni zo nka zaa njye*', 'These are my cows' (Kanimba, pers. comm.). Among Endo of Kenya, pots turn red during the firing and both potters and customers fear that they will break should anyone see them in such a state.

> Thus a potter immediately coats her cooled pots with dung. The women also look upon the dung . . . as a form of medicine . . . for the pots, to show that it has been made firm. As with house construction, the women's application of dung ensures the firmness and (male) protection of the pot. Also, as in house construction, 'natural' (clay) elements of female industry are balanced by a male element to produce the finished product. (Welbourne, 1989: 61)

The application of an organic mixture may also aim at 'aging' the vessels (in giving them an artificial patina), because people think that old pots are better than fresh ones, as an elder is better than an adolescent (Virot, 1994). In many instances, however, the techniques and ingredients

potters use for waterproofing the vessels are mostly reminiscent of recipes aimed at curing particular body disorders. As revealed by a survey of the ethnographic literature (Gosselain, 1995: 306–7), 16 out of the 26 plant species identified so far as the main constituents of pottery coatings are also used by healers for curing skin diseases (inflammation, rash, leprosy, scabies) or diseases characterized by discharges (diarrhoea, dysentery, gonorrhoea, menorrhagia, open wounds, pustules). Similarly, Koma Ndera potters of northern Cameroon explain that the macerated *Acacia nilotica* pods that they sprinkle on pots after firing are a powerful medicine used to 'cool down' and 'strengthen' objects and people enduring a process of change. For this reason, the same mixture is applied to a boy's penis after circumcision or to the gum of a child who is teething (Gosselain, 1999). Bafia people of southern Cameroon also use a decoction of *Bridelia ferruginea* for coating the vessels, healing circumcision wounds and curing diarrhoea or open wounds (Gosselain, 1995). That pottery may be treated in much the same way as the human body is further exemplified among Mafa of northern Cameroon, who burnish certain vessels with the same oil as the one used for oiling the body (David et al., 1988; see also Barley, 1994).

As might be apparent from the preceding, most records which correlate technical factors to symbolic concerns do not explicitly refer to a thermodynamic philosophy. Instead, they appear to stem from the classical association between pottery making and natural or cultural transformations on the one hand, and pots and people on the other. This does not necessarily raise questions about the hypothesis developed earlier for explaining potters' prohibitions, though.

In the first place, the thermodynamic philosophy more likely belongs to a wider, deeper and dynamic symbolic system – what is occasionally referred to as a 'symbolic reservoir' (David, 1992; MacEachern, 1994; McIntosh, 1989). This is in contrast to conceptions of a bounded, static and consciously shared style of thought; that is, a system having the capacity to structure 'aspects of material and non-material culture on a fairly large scale' (MacEachern, 1994: 214), while being concurrently subjected to constant redefinitions due to the specific needs of social groupings. Here, for instance, the system materializes as a pottery prohibition or ritual involving 'hot persons', 'hot things' or 'hot states' in a very explicit way; there, it shows through the implicit connection between different processes deemed to imply heat. But it may also affect other media (e.g. iron or food production), be expressed throughout other metaphors (dry/humid, hard/soft, . . .) or even take unpredictable forms due to the play of symbolic 'rebounds'. Simple and arithmetical as it may appear, the thermodynamic philosophy is thus compatible with cultural diversity, inasmuch as it always provides an opportunity to 'choose' *who* and *what* is 'hot'.

A second point of importance is that potting traditions (here defined by finished products, manufacturing techniques, beliefs, and attitudes toward actors and materials) do not necessarily constitute immutable and coherent systems. Rather, they incorporate elements of contrasting origins in a pattern that mostly depends on the respective history of social groupings, which means that they occasionally lack 'inherent logic'. It may happen, for instance, that a technique borrowed from a neighbouring people is slightly modified so as to meet local symbolic concerns: such could be the case among Ndera potters of northern Cameroon who obviously borrowed the idea of coating fired vessels with an organic mixture but 'chose' a plant with specific medicinal/cultural purposes to do it. On the other hand, independently-developed elements may be associated without further modifications. This could justify local discrepancies between the meaning respectively conveyed by prohibitions and technical processes, for example, or between the symbols attached to the process of making pottery and the social status of artisans.[60] Ultimately, and whether or not one agrees with the thermodynamic model developed in this article, the real issue is to realize that every step of a technical process – be it pottery making or any other mundane and 'functional' activity – may become the locus of a symbolic discourse. Granted, the same conclusion has already been reached by countless studies devoted to material culture, yet there remains a strong (if implicit) tendency to view processes of symbolic reification as 'adjunct' to more functional aspects of the *chaîne opératoire*; that is, to consider as potential abodes for symbolic expressions only those non-material parts of the craft. Everybody will agree that the 'choice' of a technical actor, of a manufacturing site or of a pattern of decoration does primarily relate to cultural pressures, for instance. But few scholars seem inclined to go a step further and to accept that the same can be said of critical operations such as clay selection and processing, firing, or post-firing. After all, these technical steps are supposedly governed by such a number of physical constraints that little room should be left for expressing non-functional concerns (see Gosselain, 1998 for a critique of this conception). With the examples presented in this article, however, it becomes apparent that symbolic expression may *also* take the form of a particular clay tempering or refining technique, of a way of agencing fuel and vessels during firing, or of a waterproofing recipe. While there is no denying that these technical features are perfectly 'fit' from a functional point of view, they also 'fit' in the wider scheme of social strategies and should thus be understood as full cultural products. Following Lemonnier (1992: 7), I believe that the question is not so much to determine where function stops and symbol (or style) begins, but to be aware of their remarkable intricacy. Indeed, making pottery and 'making sense' are two compatible, entangled, and above all, complementary processes.

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Notes

1. Diola of Senegal (Sall, 1997); Kono of Sierra Leone (Hardin, 1996); Bono of Ghana (Effah-Gyamfi, 1980); Yoruba of Nigeria (Fatunsin, 1992); Koma Ndera (Gosselain, 1999), Yamba, Tikar, Bafeuk, Djanti, Balom, Bafia, Banen, Sanaga, Basaa, Eton, Vute, Gbaya, Kepere, Pol, Kwakum and Mkako (Gosselain, 1995) of Cameroon; Zande of Sudan (Evans-Pritchard, 1937); Kongo Manyanga (Maquet, 1938), Mongo (Kanimba, 1996), Mvuba (Kanimba and Bellomo, 1990), Luba (Petit, 1998) and Boa (Franchet, 1913) of D R Congo; Fang and Punu of Gabon (Mihindou, 1985); Pokot (Brown, 1989a), Swahili (Wilding, 1989) and Kamba (Brown, 1989d; Lindblom, 1920) of Kenya; Chagga (Marealle, 1963) and Ngoni (Dorman, 1938) of Tanzania.
2. Senufo of Ivory Coast (Knops, 1980); Mosi of Burkina Faso (Sawadogo, 1989); Nigo (Huber, 1959), Banda (Cruz, 1996) and Ga (Bredwa-Mensah, 1996) of Ghana; Igbo of Nigeria (Barley, 1994); Koma Ndera (Gosselain, 1999), Mambila, Tikar, Vute, Bafeuk, Sanaga, Djanti, Balom, Bafia, Eton, Gbaya and Pol (Gosselain, 1995) of Cameroon; Mongo (Kanimba, 1996), Kongo Manyanga (Maquet, 1938), Kongo Ndibu (De Maret, 1974) and Luba (Petit, 1998) of D R Congo; Chagga (Marealle, 1963) and Ngoni (Dorman, 1938) of Tanzania.
3. Serer (Sall, 1996) and Diola Fogny (Sall 1997) of Senegal; Kono of Sierra Leone (Hardin, 1996); Malinke of Mali (Kanté and Erny, 1993); Bobo (Sanou, 1990) and Nuna (Banaon, 1986) of Burkina Faso; Mangoro (Traoré, 1985) and Baule (Gruner, 1988) of Ivory Coast; Bono (Effah-Gyamfi, 1980), Ga (Bredwa-Mensah, 1996), Nigo (Huber, 1959) and Shai (Quarcoo and Johnson, 1968) of Ghana; Dowayo (Barley, 1994), Koma Ndera (Gosselain, 1999), Tikar, Vute, Bafeuk, Sanaga, Djanti, Balom, Bafia, Gbaya and Pol (Gosselain, 1995) of Cameroon; Fang of Gabon (Mihindou, 1985), Kongo Manyanga of Congo Brazzaville (Mpika, pers. comm.); Yira (Bergmans, 1955) and Mvuba (Kanimba and Bellomo, 1990) of D R Congo; Chagga (Marealle, 1963) and Ngoni (Dorman, 1938) of Tanzania; Dorobo (Brown, 1989c) and Swahili (Wilding, 1989) of Kenya; Karanga of Zimbabwe (Evers and Huffman, 1988).
4. Senufo of Ivory Coast (Knops, 1980); Kongo Manyanga of Congo Brazzaville (Mpika, pers. comm.); Tama of Sudan (Arkell, 1939); Agikuyu (Brown, 1989d) and Swahili (Wilding, 1989) of Kenya; Sotho of Lesotho (Lawton, 1967).
5. Puguli of Burkina Faso (Some, 1990); Mangoro of Ivory Coast (Traoré, 1985); Igbo of Nigeria (Arua and Oyeoku, 1982).
6. Boa of D R Congo (Franchet, 1913); Okiek of Kenya (Kratz, 1989); Sotho Hlakwa of Lesotho (Lawton, 1967).
7. Bambara of Mali (Pâques, 1956); Kongo Ndibu (De Maret, 1974) and Yira

(Bergmans, 1955) of D R Congo; Bena of Tanzania (Culwick, 1935); Sotho Fokeng of Lesotho (Lawton, 1967).

8. Lobi (Schneider, 1993) and Mosi (Martinelli, 1994) of Burkina Faso; Malinke of Ivory Coast (Gruner, 1988); Ashanti of Ghana (Newman, 1976); Yoruba of Nigeria (Beier, 1980; Fatunsin, 1992; Ibigbami, 1978); Ovambo of Angola (Powell-Cotton, 1940); Babukusu of Kenya (Wandibba, 1989); Sotho of South Africa (Lawton, 1967).

9. Bamum, Tikar, Bafeuk, Sanaga and Eton of Cameroon (Gosselain, 1995); Luba of D R Congo (Petit, 1998); Logoli of Kenya (Barbour, 1989).

10. Shai (Quarcoo and Johnson, 1968) and Nigo (Huber, 1959) of Ghana; Yira of D R Congo (Bergmans, 1955).

11. Malinke of Mali (Kanté and Erny, 1993); Yalunka of Guinea (Appia-Dabit, 1941); Nguni of South Africa (Lawton, 1967); Swazi of Swaziland (Lawton, 1967).

12. Koma Ndera of Cameroon (Gosselain, 1999).

13. Yira of D R Congo (Bergmans, 1955).

14. Bafia and Bafeuk of Cameroon (Gosselain, 1995); Pokot of Kenya (Brown, 1989a); Thonga of Mozambique (Junod, 1927); Sotho-Kwena of Lesotho (Lawton, 1967).

15. Lyela of Burkina Faso (Schott, 1986); Mangoro of Ivory Coast (Traoré, 1985).

16. Mambila of Cameroon (Gosselain, 1995).

17. Bafia of Cameroon (Gosselain, 1995).

18. Vute of Cameroon (Gosselain, 1995).

19. Dowayo of Cameroon (Barley, 1983).

20. Adavida of Kenya (Soper, 1989).

21. Vute of Cameroon (Gosselain, 1995).

22. Eton of Cameroon (Gosselain, 1995).

23. The Tikar potters who quoted this taboo explained that touching kola nuts before manipulating clay prevents it from 'sticking'. They added that it is also forbidden for pregnant women to break a kola nut, because the foetus could have difficulties to 'stick together' and 'one would see the crack of the nut on her/his tongue after delivery' (Gosselain, 1995: 181).

24. Mambila of Cameroon (Gosselain, 1995).

25. Yamba of Cameroon (Gosselain, 1995); Kongo Manyanga of Congo Brazzaville (Mpika, pers. comm.); Mongo (Kanimba, 1996), Kongo Ndibu (De Maret, pers. comm.), Mvuba (Kanimba and Bellomo, 1990), Yira (Bergmans, 1955) and Luba (Petit, 1998) of D R Congo .

26. Yamba of Cameroon (Gosselain, 1995).

27. Bobo of Burkina Faso (Sanou, 1990); Yamba, Mambila, Banen and Bafia of Cameroon (Gosselain, 1995); Mongo of D R Congo (Kanimba, 1996).

28. Bobo (Sanou, 1990) and Nuna (Banaon, 1986) of Burkina Faso; Bafia of Cameroon (Gosselain, 1995).

29. Hausa of Niger (Lhote, 1977); Nigo of Ghana (Huber, 1959); Basaa of Cameroon (Gosselain, 1995).

30. Mambila of Cameroon (Gosselain, 1995).

31. Bono of Ghana (Effah-Gyamfi, 1980).

32. Toucouleur of Senegal (Appia-Dabit, 1941); Bambara (Pâques, 1956; Raimbault, 1980) and Soninke (Gallay, 1970) of Mali; Bobo of Burkina Faso (Sanou, 1990); Mangoro (Traoré, 1985) and Senufo (Knops, 1980) of Ivory Coast; Nigo (Huber, 1959), Ashanti (Browne, 1981; Rattray, 1927), Bono (Effah-Gyamfi, 1980), Mo (Owusu-Ansah, 1973), Ga (Bredwa-Mensah, 1996) and Shai (Quarcoo and Johnson, 1968) of Ghana; Igbo of Nigeria (Murray, 1972).

33. Mangoro of Ivory Coast (Traoré, 1985); Yoruba of Nigeria (Fatunsin, 1992); Pol of Cameroon (Gosselain, 1995).
34. Karaboro of Burkina Faso (Virot, 1994).
35. Ashanti of Ghana (Rattray, 1927).
36. Luba of D R Congo (Petit, 1998); Ganda of Uganda (Roscoe, 1965; Trowell, 1941).
37. South Sotho of Lesotho (Lawton, 1967).
38. Makua of Tanzania (Waane, 1977).
39. Kamba of Kenya; the plants or the fruits would rot if pottery was to be made at that time (Brown, 1989d; Lindblom, 1920).
40. Yambasa of Cameroon (Gosselain, 1995); Ngoni of Tanzania (Dorman, 1938); Ronga of Mozambique (Junod, 1927).
41. Lyela of Burkina Faso (Schott, 1986); Shai of Ghana (Quarcoo and Johnson, 1968); Banen of Cameroon (Gosselain, 1995); Ngoni of Tanzania (Dorman, 1938).
42. Bono of Ghana (Effah-Gyamfi, 1980).
43. Nuna of Burkina Faso (Banaon, 1995); Luba of D R Congo (Petit, 1998).
44. Lyela of Burkina Faso (Schott, 1986); Yoruba of Nigeria (Fatunsin, 1992); Sotho of South Africa (Lawton, 1967).
45. Shai of Ghana (Quarcoo and Johson, 1968); Ogoni of Nigeria (Jeffreys, 1947).
46. Ashanti of Ghana (Rattray, 1927).
47. Mangoro of Ivory Coast (Traoré, 1985); Yoruba of Nigeria (Fatunsin, 1992).
48. Yira of D R Congo (Bergmans, 1955).
49. Luba of D R Congo (Petit, 1998); Diola of Senegal (Appia-Dabit, 1941); Yoruba of Nigeria (Wahlman, 1972).
50. Lyela of Burkina Faso (Schott, 1986); Ewe of Togo (Tondeur, 1996); Ga of Ghana (Bredwa-Mensah, 1996).
51. Yira of D R Congo (Bergmans, 1955).
52. Dowayo of Cameroon (Barley, 1983); Yira of D R Congo (Bergmans, 1955).
53. Luba of D R Congo (Petit, 1998).
54. Besides having the potential to cause draught, to disturb the flowering and fructification of crops or to bring bad luck upon the whole community, pottery making could also induce an inversion of the biological roles, as revealed by several prohibitions. When Bariba of Benin forbid men to practice the craft (Lombard, 1957: 17), for instance, or when Bono and Shai people of Ghana are prevented from breaching a taboo during the manufacturing process (Effah-Gyamfi, 1980: 107) or to eat food that has touched the potter's turntable (Quarcoo and Johnson, 1968: 70) it is for fear that they should suffer local or overall swelling and possibly die from it. Shouldn't these afflictions be viewed as a symbolic pregnancy, in fact? If true, such a condition would be more especially dangerous as it affects males or unfertile females.
55. Kono of Sierra Leone (Hardin, 1996); Mosi of Burkina Faso (Martinelli, 1994); Ashanti of Ghana (McLeod, 1984); Yoruba of Nigeria (Fatunsin, 1992); Dowayo of Cameroon (Barley, 1983); Ganda of Uganda (Trowell, 1941); Fang of Gabon (Mihindou, 1985); Luba of D R Congo (Petit, 1993); Karanga (Evers and Huffman, 1988) and Manyika (Jacobson-Widding, 1992) of Zimbabwe.
56. This is especially likely to happen where potters are charged with tattooing children (and performing the clitoridectomy), as among the Nafana Senufo of Ivory Coast (Knops, 1980).
57. In Bemba language, '*imbusa*' also means 'newborn' or 'woman having just delivered a baby' (Anon., 1954: 416).

58. Either as a danger (lepers may not touch the clay among Vute of Cameroon) or as a consequence (Koma, Tchamba and Vere of Cameroon believe that a potter would catch leprosy if she was to break a taboo).
59. *Erythrophleum suavolens*.
60. Although not discussed in this article, it is worth noting that the social position of potters may vary considerably across the continent (Drost, 1968; Hoberg, 1997; Honegger, 1988; Tamari, 1991), even between social groupings whose prohibitions obviously convey the same symbolic meaning.

References

Anon. (1954) *The White Father's Bemba-English Dictionary*. London: Longmans, Green & Co.
Appia-Dabit, B. (1941) 'Quelques artisans noirs', *Bulletin de l'IFAN* 3: 1–43.
Arkell, A.J. (1939) 'Darfur Pottery', *Sudan Notes and Records* 22(1): 79–88.
Arua, I. and Oyeoku, O.K. (1982) 'Clays and Afikpo Pottery in South-Eastern Nigeria, *The Nigerian Field* 47(1–3): 27–38.
Aschwanden, H. (1982) *Symbols of Life. An Analysis of the Consciousness of the Karanga*. Gweru: Mambu Press.
Banaon, K.E. (1986) '*Poterie et société chez les Nuna de Tierkou (Boucle de la Volta Noire – Burkina Faso)*', Mémoire de maîtrise, Université de Ouagadougou.
Barbour, J. (1989) 'Western Bantu: Avalogoli', in J. Barbour and S. Wandibba (eds) *Kenyan Pots and Potters*, pp. 41–6. Nairobi: Oxford University Press.
Barley, N. (1983) *Symbolic Structures. An Exploration of the Culture of the Dowayos*. Cambridge: Cambridge University Press.
Barley, N. (1984) 'Placing the West African Potter', in J. Picton (ed.) *Earthenware in Asia and Africa*, pp. 93–105. London: Percival David Foundation.
Barley, N. (1994) *Smashing Pots. Feats of Clay from Africa*. London: The British Museum Press.
Bedaux, R.M.A. and Lange, A.G. (1983) 'Tellem, reconnaissance archéologique d'une culture de l'Ouest africain au Moyen Age: la poterie', *Journal des Africanistes* 52(1–2): 5–59.
Beier, G. (1980) 'Yoruba Pottery', *African Arts* 13(3): 48–53.
Bergmans, L. (1955) 'Kruiken en potten', *Ontwakend Afrika* 58: 21–8.
Berns, M.C. (1993) 'Art, History, and Gender: Women and Clay in West Africa', *The African Archaeological Review* 11: 129–48.
Bredwa-Mensah, Y. (1996) 'The Production and Use Patterns of Ga Pottery in the Lower Densu Valley, Western Accra Plains, Ghana', *Papers from the Institute of Archaeology* 7: 47–58.
Brown, J. (1989a) 'Pokot', in J. Barbour and S. Wandibba (eds) *Kenyan Pots and Potters*, pp. 53–9. Nairobi: Oxford University Press.
Brown, J. (1989c) 'Samburu Dorobo (Mathews)', in J. Barbour and S. Wandibba (eds) *Kenyan Pots and Potters*, pp. 77–80. Nairobi: Oxford University Press.
Brown, J. (1989d) 'Central Bantu: Agikuyu, Akamba', in J. Barbour and S. Wandibba (eds) *Kenyan Pots and Potters*, pp. 86–96. Nairobi: Oxford University Press.
Browne, A.W. (1981) 'Appropriate Technology and the Dynamics of Village Industry: a Case Study of Pottery in Ghana', *Transactions of the Institute of British Geography* 6: 313–23.
Buisson, E.M. (1930) 'La céramique Bamiléké', *Bulletin de la Société Préhistorique Française* 27(7): 380–83.

Childs, S.T. and Killick, D. (1993) 'Indigenous African Metallurgy: Nature and Culture', *Annual Reviews of Anthropology* 22: 317–37.
Clarke, H.S. (1931) 'Rough Notes on M'wemba Customs', *Man* 31: 274–5.
Collett, D.P. (1993) 'Metaphors and Representations Associated with Precolonial Iron Smelting in Eastern and Southern Africa', in T. Shaw, P. Sinclair, B. Andah and A. Okpoko (eds) *The Archaeology of Africa. Food, Metals and Towns*, pp. 499–511. London: Routledge.
Cruz, M.D. (1996) 'Ceramic Production in the Banda Area (West Central Ghana): an Ethnoarchaeological Approach', *Nyame Akuma* 45: 30–39.
Culwick, H.M. (1935) 'Pottery Among the Wabena of Ulanga, Tanganyika territory', *Man* 35: 165–9.
David, N. (1992) 'The Archaeology of Ideology: Mortuary Practices in the Central Mandara Highlands, Northern Cameroon', in J. Sterner and N. David (eds) *An African Commitment: Papers in Honour of Peter Lewis Shinnie*, pp. 181–210. Calgary: University of Calgary Press.
David, N., Sterner, J. and Gavua, K. (1988) 'Why Pots Are Decorated', *Current Anthropology* 29(3): 365–89.
De Heusch, L. (1972) *Le roi ivre ou l'origine de l'état*. Paris: Gallimard.
De Heusch, L. (1982) *Rois nés d'un coeur de vache*. Paris: Gallimard.
De Maret, P. (1973) *Le forgeron dans le monde bantou, statut, technique et symbolisme*. Mémoire de licence, Université Libre de Bruxelles.
De Maret, P. (1974) 'Un atelier de potière Ndibu au Bas-Zaïre', *Africa-Tervuren* 20(3–4): 49–54.
De Maret, P. (forthcoming) 'Metallurgies, Metamorphoses and Metaphores', in A.F. Robert, W.J. Dewey and C. Roy (eds) *Iron, Master of Them All*. Iowa: Iowa Studies in African Art.
De Maret, P. and Gosselain, O.P. (1993) 'From Gestation to Coronation: the Symbolization of Transmutation in Bantu Africa', unpublished paper presented at the conference 'Transformation, Technology and Gender in African Metallurgy', May 28–30, Cherwell Centre for Cross-Cultural Research on Women, Oxford, England.
Devisch, R. (1993) *Weaving the Threads of Life.* Chicago, IL: The University of Chicago Press.
Dorman, M.H. (1938) 'Pottery Among the Wangoni and Wandenhule, Southern Tanganyika', *Man* 38: 97–102.
Drost, D. (1964) 'Besondere Verhaltensweisen in Verbindung mit der Töpferhandwerk in Afrika', in E. Haberland, M. Schuster and H. Straube (eds) *Festschrift für A. E. Jenssen*, pp. 103–11. Berlin: Klaus Renner Verlag.
Drost, D. (1967) *Töpferei in Afrika: Technologie*. Leipzig: Akademieverlag.
Drost, D. (1968) 'Töpferei in Afrika. Oekonomie und soziologie', *Jahrbuch des Museums für Völkerkunde zu Leipzig* 25: 131–270.
Dupré, M.-C. and Pinçon, B. (1995) 'La métallurgie du fer: technique, symbolique et sémantique', *Cahiers des Sciences Humaines* 31(4): 825–48.
Earthy, E.D. (1933) *Valenge Women. The Social and Economic Life of the Valenge Women of Portuguese East Africa*. London: Humphrey Milford.
Echard, N. (1983) 'Scories et symboles. Remarques sur la métallurgie Hausa du fer au Niger', in N. Echard (ed.) *Métallurgies africaines. Nouvelles contributions*, pp. 209–24. Paris: Société des Africanistes.
Effah-Gyamfi, K. (1980) 'Traditional Pottery Technology at Krobo Takyiman (Techniman), Ghana: an Ethnoarchaeological Study', *West African Journal of Archaeology* 10: 103–16.
Evans-Pritchard, E.E. (1937) *Witchcraft, Oracles and Magic Among the Azande*. Oxford: Oxford University Press.

Evers, T.M. and Huffman, T.N. (1988) 'On Why Pots Are Decorated the Way They Are', *Current Anthropology* 29(5): 739–40.
Fatunsin, A.K. (1992) *Yoruba Pottery*. Lagos: National Commission for Museums and Monuments.
Franchet, (1913) 'La technique céramique chez les nègres de l'Afrique Centrale', *L'Homme Préhistorique* 11(1): 4–18.
Frobenius, L. (1987) *Peuples et sociétés traditionnelles du Nord-Cameroun*. Stuttgart: Franz Steiner Verlag.
Gallay, A. (1970) 'La poterie en pays Sarakolé (Mali, Afrique occidentale): étude de technologie traditionnelle', *Journal de la Société des Africanistes* 40(1): 7–84.
Gausset, Q. (1992) *Etude préliminaire des Wawa de l'Adamawa (Cameroun)*. Mémoire de Licence, Université Libre de Bruxelles.
Gauthier, J.G. (1979) *Archéologie du Pays fali, Nord Cameroun*. Paris: Editions du CNRS.
Gosselain, O.P. (1992) 'Technology and Style: Potters and Pottery Among Bafia of Cameroon', *Man* 27(3): 559–86.
Gosselain, O.P. (1994) 'Skimming Through Potter's Agenda: an Ethnoarchaeological Study of Clay Selection Strategies in Cameroon', in S.T. Childs (ed.) *Society, Culture, and Technology in Africa*, pp. 99–107. Philadelphia, PA: MASCA Research Papers in Science and Archaeology (Volume 11, Supplement).
Gosselain, O.P. (1995) *Identités techniques. Le travail de la poterie au Cameroun méridional.* Unpublished PhD, Université Libre de Bruxelles.
Gosselain, O.P. (1998) 'Social and Technical Identity in a Clay Crystal Ball', in M. Stark (ed.) *The Archaeology of Social Boundaries*, pp. 78–106. Washington, DC: Smithsonian Institution Press.
Gosselain, O.P. (1999) 'Poterie, société et histoire chez les Koma-Ndera du Cameroun', *Cahiers d'Etudes Africaines*, 139(1): 73–105.
Gruner, D. (1988) 'Töpferei der Baule (Elfenbeinküste)', *Paideuma* 34: 185–214.
Hardin, K.L. (1996) 'Technological Style and the Making of Culture: Three Kono Contexts of Production' in M.J. Arnoldi, C.M. Geary and K.L. Hardin (eds) *African Material Culture*, pp. 31–50. Bloomington: Indiana University Press.
Hauenstein, A. (1964) 'La poterie chez les Ovimbundu (Angola)', *Acta Tropica* 21(1): 48–81.
Herbert, E.W. (1993) *Iron, Gender, and Power. Rituals of Transformation in African Societies*. Bloomington: Indiana University Press.
Hoberg, I. (1997) *Le statut de l'artisan en Afrique orientale.* Mémoire de licence, Université Libre de Bruxelles.
Holl, A. (1988) *Houlouf I. Archéologie des sociétés protohistoriques du Nord-Cameroun*. Oxford: BAR International Series 456.
Honegger, M. (1988) *Ethnoarchéologie de la céramique en Afrique de l'Est: un bilan*. Travail de diplôme, Université de Genève.
Huber, H. (1959) 'Traditional Crafts in a Nigo village (Ghana)', *Anthropos* 54: 574–6.
Ibigbami, R.I. (1978) 'Yoruba Traditional Pottery: Its Ritual Context and Use', *Nigerian Fields* 43(3): 127–32.
Jacobson-Widding, A. (1989) 'Notion of Heat and Fever Among the Manyika of Zimbabwe', in A. Jacobson-Widding and D. Westerlund (eds) *Culture, Experience and Pluralism. Essays on African Ideas of Illness and Healing*, pp. 27–44. Uppsala: Centraltryckeriet.
Jacobson-Widding, A. (1992) 'Pits, Pots and Snakes. An Anthropological Approach to Ancient African Symbols', *Nordic Journal of African Studies* 1(1): 5–27.
Jeffreys, M.W.D. (1947) 'Ogoni Pottery', *Man* 47: 81–3.

Jest, C. (1956) 'Notes sur les poteries Kapsiki (Pays Kirdi)', *Notes Africaines* 70: 47–52.
Junod, H.A. (1910) 'Les conceptions physiologiques des Bantous sud-africains et leurs tabous', *Revue d'Ethnographie et de Sociologie* 1: 126–69.
Junod, H.A. (1927) *The Life of a South African Tribe*. London: Macmillan.
Kanimba, M. (1996) 'Ceramics from the Upemba Depression: a Diachronic Study', in M.J. Arnoldi, C.M. Geary and K.L. Hardin (eds) *African Material Culture*, pp. 103–29. Bloomington: Indiana University Press.
Kanimba, M. and Bellomo, R.V. (1990) 'Methods of Pottery Construction and Firing Techniques Observed in the Village of Bukokoma II, Zaïre', *Virginia Museum of Natural History Memoire* 1: 339–56.
Kanté, N. and Erny, P. (1993) *Forgerons d'Afrique Noire. Transmission des savoirs traditionnels en pays malinké*. Paris: Editions l'Harmattan.
Knops, P. (1980) *Les anciens Senufo*. Berg en Dal: Africa Museum.
Kratz, C. (1989) 'Okiek', in J. Barbour et S. Wandibba (eds) *Kenyan Pots and Potters*, pp. 64–74. Nairobi: Oxford University Press.
Krause, R.A. (1985) *The Clay Sleeps. An Ethnoarchaeological Study of Three African Potters*. Tuscaloosa: The University of Alabama Press.
Laburthe-Tolra, P. (1981) *Les seigneurs de la forêt*. Paris: Publications de la Sorbonne.
La Fontaine, J. (1986) *Initiation*. Manchester: Manchester University Press.
Lawton, A.C. (1967) 'Bantu Pottery of Southern Africa', *Annals of the South African Museum* 49(1): 1–434.
Leiderer, R.M. (1982) *La médecine traditionnelle chez les Bekpak (Bafia) du Cameroun, d'après des enseignements, les explications et la pratique du guérisseur Biabak-à-Nnong* (2 Vols). Sankt Augustin: Haus Völker und Kulturen.
Lemonnier, P. (1992) *Elements for an Anthropology of Technology*. Ann Arbor: Museum of Anthropology, University of Michigan.
Lestrade, A. (1972) *Notes d'ethnographie du Rwanda*. Tervuren: Musée Royal de l'Afrique Centrale.
Lhote, H. (1977) 'Technique des potiers de la région de Tessaoua (Niger)', *Notes Africaines* 153: 12–8.
Lindblom, G. (1920) *The Akamba in British East Africa*. Uppsala: Archives d'Etudes Orientales.
Lombard, J. (1957) 'Aperçu sur la technologie et l'artisanat Bariba', *Etudes Dahoméennes* 18: 5–60.
MacEachern, S. (1994) '"Symbolic Reservoirs" and Inter-group Relations: West African Examples', *African Archaeological Review* 12: 205–24.
Maquet, E. (1938) 'La poterie marbrée au Bas-Congo, quelques centres de fabrication', *Arts et Métiers Indigènes* 7: 6–9.
Marealle, P.I. (1963) 'Notes on Chagga Customs', *Tanganyika Notes and Records* 60: 67–90.
Martinelli, B. (1994) 'La technique et le style. La céramique par percussion au Yatenga (Burkina Faso) et dans la boucle du Niger', in *Techniques et esthétique*. Paris: Editions du CNRS.
McIntosh, R.J. (1989) 'Middle Niger Terracottas Before the Simplegades Gateway', *African Arts*, 22(2): 74–83.
McLeod, M.D. (1984) 'Akan Terracotta', in J. Picton (ed.) *Earthenware in Asia and Africa*, pp. 365–81. London: Percival David Foundation.
Mihindou, P. (1985) *Contribution à l'étude de la céramique ancienne du Gabon*. Rapport de Licence, Université Omar Bongo.
Müller-Kosack, G. (1988) 'Sakrale Töpfe der Mafa (Nordkamerun) und ihre kulträumlichen Dimensionen', *Paideuma* 34: 91–118.

Murray, K.C. (1972) 'Pottery of the Ibo of Ohuhu-Ngwa', *Nigerian Fields* 37(4): 148–75.
Newman, T.R. (1976) *Art et artisanat africains d'aujourd'hui*. Paris: Editions de la Courtille.
Owusu-Ansah, A. (1973) *The Pottery Industry of Bonakile*. B A dissertation, University of Ghana, Legon.
Pâques, V. (1956) 'Les "Samake"', *Bulletin de l'IFAN* 518(3–4): 369–90.
Petit, P. (1993) *Rites familiaux, rites royaux. Etude du système cérémoniel des Luba du Shaba (Zaïre)*. Thèse de doctorat, Université Libre de Bruxelles.
Petit, P. (1998) 'Ngoy, mère et fille, potières luba de Lenge (Katanga, Congo)', *Anthropos* 93: 363–79.
Powell-Cotton, A. (1940) 'Two Handicrafts of Portuguese Angola', *Man* 40: 2.
Quarcoo, A.K. and Johnson, M. (1968) 'Shai Pots', *Baessler-Archiv* 16: 47–97.
Raimbault, M. (1980) 'La poterie traditionnelle au service de l'archéologie: les ateliers de Kalabougou (Cercle de Ségou, Mali)', *Bulletin de l'IFAN* 42(3): 441–74.
Rattray, R.S. (1927) *Religion and Art in Ashanti*. London: Oxford University Press.
Ritz, U. (1989) '"Niemand zerbricht einen Wassertopf beim ersten tolpern": zur Analogie von Topf und Mensch bei den Asante (Ghana)', *Paideuma* 35: 207–19.
Roscoe, J. (1922) *The Soul of Central Africa*. London: Cassell and Company.
Roscoe, J. (1965) *The Baganda*. London: Frank Cass.
Rowlands, M. and Warnier, J.-P. (1993) 'The Magical Production of Iron in the Cameroon Grassfields', in T. Shaw, P. Sinclair, B. Andah and A. Okpoko (eds) *The Archaeology of Africa. Food, Metals and Towns*, pp. 512–50. London: Routledge.
Roy, C. (1987) *Art of the Upper Volta Rivers.* Meudon: A. & F. Chaffin.
Sall, M. (1996) *La poterie en pays sérère (Sénégal). Etude ethnographique des procédés de façonnage et des modes de distribution céramiques au Mbadane, Diéghem et au Siné*. Bruxelles: Documents du Projet Céramiques & Sociétés No. 4.
Sall, M. (1997) *Enquêtes sur la poterie diola au Fogny et au Kasa (Sénégal)*. Bruxelles: Documents du Projet Céramiques & Sociétés No. 7.
Sanou, S. (1990) *La céramique chez les Madare de Pala*. Mémoire de maîtrise, Université de Ouagadougou.
Sawadogo, B. (1989) *La céramique de Gourcy*. Mémoire de maîtrise, Université de Ouagadougou.
Schneider, K. (1993) 'La poterie chez les Lobi', in M. Fiéloux, J. Lombard and J.-M. Kambou-Ferrand (eds) *Images d'Afrique et sciences sociales. Les pays lobi, birifor et dagara*, pp. 175–9. Paris: Editions Karthala.
Schott, R. (1986) 'Töpferei bei den Lyela in Burkina Faso', *Archiv für Völkerkunde* 40: 5–34.
Smith, F.T. (1989) 'Earth, Vessels, and Harmony Among the Gurensi', *African Arts* 22(2): 60–5.
Some, T.D. (1990) *La céramique traditionnelle chez les Puguli de Nyeme (Province de la Bougouriba, Burkina Faso).* Mémoire de maîtrise, Université de Ouagadougou.
Soper, R. (1989) 'Eastern Bantu: Adavida', in J. Barbour and S. Wandibba (eds) *Kenyan Pots and Potters*, pp. 96–9. Nairobi: Oxford University Press.
Spindel, C. (1989) 'Kpeenbele Senufo Potters', *African Arts* 22(2): 66–73.
Sterner, J. (1989) 'Who is Signalling Whom? Ceramic Style, Ethnicity and Taphonomy Among the Sirak Bulahay', *Antiquity* 63: 451–9.
Tamari, T. (1991) 'The Development of Caste Systems in West Africa', *Journal of African History* 32(2): 221–50.

Thass-Thienemann, T. (1973) *The Interpretation of Language* (2 Vols). New York: Jason Aronson.
Timmermans, P. (1969) 'Les Tikar', *Africa-Tervuren* 15(3): 69–80.
Tondeur, F. (1996) *Le travail de la poterie au Togo. Description des chaînes opératoires*. Bruxelles: Documents du Projet Céramiques & Sociétés No. 3.
Traoré, A. (1985) *La mine d'argile est notre champ*. Abidjan: CEDA.
Tremearne, A.J.N. (1910) 'Pottery in Northern Nigeria', *Man* 10: 102–3.
Trowell, K.M. (1941) 'Some Royal Craftmen of Buganda, *Uganda Journal* 8(2): 47–64.
Van Overbergh, C. (1908) *Les Basonge*. Brussels: A. De Wit.
Virot, C. (1994) 'Terre Africaine', *La Revue de la Céramique et du Verre* 79: 23–46.
Volavka, Z. (1977) 'Voania Muba: Contributions to the History of Central African Pottery', *African Arts* 10(2): 59–66.
Waane, S. (1977) 'Pottery Making Traditions of the Ikombe Kisi, Mbeya Region, Tanzania', *Baessler-Archiv* 25(2): 251–306.
Wahlman, M. (1972) 'Yoruba Pottery Making Techniques', *Baessler-Archiv* 20: 313–46.
Wandibba, S. (1989) 'Western Bantu: Babukusu', in J. Barbour and S. Wandibba (eds) *Kenyan Pots and Potters*, pp. 47–51. Nairobi: Oxford University Press.
Welbourne, A. (1989) 'Endo', in J. Barbour and S. Wandibba (eds) *Kenyan Pots and Potters*, pp. 59–64. Nairobi: Oxford University Press.
Wilding, (1989) 'Coastal Bantu: Waswahili. The Zanj Potting Tradition of the Kenyan Coast', in J. Barbour and S. Wandibba (eds) *Kenyan Pots and Potters*, pp. 100–15. Nairobi: Oxford University Press.
Wilson, M. (1957) *Rituals of Kinship Among the Nyakyusa Age-Villages*. Boston: Beacon Press.

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