<http://www.diva-portal.org>

Postprint

This is the accepted version of a paper published in *Social Analysis: Journal of Cultural and Social Practice*. This paper has been peer-reviewed but does not include the final publisher proof-corrections or journal pagination.

Citation for the original published paper (version of record):

Pemunta, N. (2014)

The 'gendered field' of Kaolinite clay production: performance characteristics among the Balengou.

Social Analysis: Journal of Cultural and Social Practice, 58(2): 21-41

<http://dx.doi.org/10.3167/sa.2014.580202>

Access to the published version may require subscription.

N.B. When citing this work, cite the original published paper.

Permanent link to this version:

<http://urn.kb.se/resolve?urn=urn:nbn:se:lnu:diva-33442>

THE ‘GENDERED FIELD’ OF KAOLINITE CLAY PRODUCTION: PERFORMANCE CHARACTERISTICS AMONG THE BALENGOU, WESTERN REGION, CAMEROON

Abstract

This paper examines the ‘gendered field’ of Kaolinite clay production and its integration into the local socio-cultural universe of the Balengou of the Western region of Cameroon. Kaolinite clays are produced and mainly ingested by women-especially during pregnancy so as to produce “beautiful and handsome babies who are clean”. They also serve as herbal additive, have symbolic roles and are believed to be imbued with sacred qualities in peacemaking, matrimonial and widowhood rituals. Although “geophagy”- is associated with harmful health effects, the various affordances offered by kaolinite clay as a valuable object of material culture constitutes a specific entanglement of ‘nature’ and ‘culture’. This study makes a modest contribution to the literature on the “politics of value” and on the relationality of human/non-human interactions.

Key words: kaolinite clay, ‘gendered field’, socio-cultural, geophagy, human/non-human interactions, communal rituals, “politics of value”.

Introduction

Geophagy, the intentional and frequent ingestion of soil and other pieces of the lithosphere, commonly regarded as a form of pica - an appetite for non-food substances - is a widely reported practice, especially among people in the tropics (McElroy and Townsend, 1989, Sheppard, 1996, Brand et al. 2009, Ekosse et al. 2010, Geissler, 2000). Common in Sub-Saharan Africa, Asia, the Middle East and parts of Latin America (Fellmann et al, 1997), this widespread nutritional habit cuts across age group, race, sex,

geographic region and time. Particles of soil ingested include- fine clay soils, soils from the edges of termitaria, edges of paths and gullies, materials from the walls of huts and chalk-like soft stones. They may also be inadvertently ingested through pathways including dust adhering to plants and to hands that ultimately is transferred to the mouth (Geissler, 2000).

This paper uses the gendering of kaolinic clay production as a useful prism to examine how the physical manipulation and ideational construction of this material artifact elicits specific reactions and is valued for ingestion, ethnomedicine, aesthetics and rituals among the Balengou. The multiple uses of this artifact of material culture places it at the intersection of ‘nature’ and ‘culture’- as mediating human/non-human interactions and thus- to be imbricated in “the politics of value” (Appadurai, 1986).

Background

Balengou village- one of the thirteen villages comprising the Nde Division- is a sub clan of the larger Bamileke ethnic group of the Western Grassfields region of Cameroon. Although a homogenous cultural group, the Bamilekes are however made up of different chiefdoms with diverse origins (Djatou 2003).

It is a patriarchal society characterized by a gendered division of labor in the production cycle and the feminization of poverty. Men produce cash crops while women concentrate on the production of foodstuff and the excesses are sold. Some of the people including the Chief practice polygyny. Women have limited jurisdiction in terms of decision-making and in the exercise of power and authority. They further suffer from low literacy and income levels and have limited access to quality health care. Additionally, high birth rate constitutes a bane on women’s health and well-being. They also face decreasing agricultural yields and, land degradation, and therefore have to labor extensively in the fields. They do most of the farming, are also excellent traders managing several businesses including- the sale of farm products, food vending and kaolinite clays. Like in most of Africa, the Balengou women were victims of the

informalization that eventuated from the Structural Adjustment programs (SAPs) of the 19980s. They were pushed into deeper poverty as large numbers of formal sector employees and civil servants were pushed out of work in a country where the government is the main employer. Unemployed people, rural-urban migrants and school-leavers of both genders sought employment in the informal economy and increasingly took up 'female occupations'-particularly in the retail trade.

Balengou is a medically pluralistic society characterized by the co-existence of both traditional and modern medicine. The people practice religious syncretism and ancestral worshipping. Traditionally, they believe that all things have souls- including objects and even immaterial concepts. As human interference can affect souls, the aim of religion is to restore equilibrium through an elaborate system of prescriptions and taboos.

Relationality of human/non-human interactions

Humans both act and think through material objects calling for the need to adopt a relational perspective in the analysis of material artifacts and human agents as a way of characterizing their complex interdependencies (Knappett 2005) and for understanding 'the way that the people we study create a world of practice' (Miller,1998:19). The interplay between material forms and social practices as well as a broader understanding of the interrelationship between humans and objects, and relations between agency and materiality in the constitution of social realities results into a transformative potential. The social and the material realms are closely intertwined and social practices and discourses are at the interface between them (Maran and Stockhammer, 2012:1-2, Bucheli, 2002, Thrift, 2000, Ingold, 2000). Following Gell's (1998) concept of distributed agency, people attribute agency to material artifacts. This is evident in the Balengou's use of kaolinite clay as food, ethnomedicine, for reproduction, for cementing matrimonial relations, for peacemaking and for widowhood rituals and practices. As materiality kaolin clay unconsciously ...act[s] as a secondary agent. As Ian Hodder maintains, humans are intentional in their

creation of objects and a person's creation of an object automatically imbues that object with a certain purpose that its creation aims to fulfill. People use the material objects they produce, whether intentionally or unintentionally, to manipulate their worlds. Literally speaking, humans construct objects and intentionally give these objects an agenda, and, in turn, imbue them with an agency of their own (Hodder, 2003:32). Nevertheless, agency is just one way of thinking about human/material interactions. A broader conception of material agency is necessary for capturing the interrelationship between humans and objects. Ingold (2010:94-95) intimated that we consider the 'vitality of materials' and their interaction in the 'generative currents of the world'. The decisive role of the habitus, individual agency and the material world has been variously emphasized (see Bourdieu, 1982, Latour, 1986, 2007, Warnier, 2006, 2007, Law, 1992). This emphasis invites us to shift from discourses and codes towards practices and the intimate entanglement between humans and their surroundings on the basis of those practices. In our interaction with objects, a dialogue develops in which humans or objects trigger or influence human action (Maran and Stockhammer, 2012:2-3). Bucchli (2002) also intimates that material culture is the framework within which we interact with the world and serves as an essential concept in understanding people and society.

I generated qualitative data through individual in-depth interviews using semi-structured questionnaires, focus group discussion sessions, informal interviews and participant observation. Most of the interviews were conducted in French, but for three interviewees- they were conducted in the Balengou language. Through systematic and purposeful sampling, two categories of respondents were selected: 39 women, from a sample of 47 and 8 men were interviewed. Additionally, 3 biomedical doctors, 5 alternative healers and a voluntary health worker were also interviewed. Data was voluntarily elicited from a total of 55 respondents between November 20th and December, 23rd, 2003. This study is complemented with data from a mixed method qualitative study of widowhood rites and practices- a domain in which kaolin plays a central role- conducted between October and December, 2009. Through

the prism of several overlapping cultural domains in which kaolin is imbricated in the broader theosophy,¹ of the Balengou: food and ethnomedicine, reproduction, matrimonial relations, peacemaking and widowhood rituals and practices, this paper analyses the gendering of kaolinic clay production, its regulation and its ingestion by women. The chasm between scientific knowledge which presents kaolinite clays as dangerous to women and children's health and local cultural practices involving this artifact of material culture shows that it is intertwined with the whole cultural political economy of the Balengou people.

Biomedical and local perceptions of kaolin

Cultural, medicinal, psychological, physiological and nutritional reasons have been forwarded to account for geophagic tendencies (see for example, Brand et al. 2009, Ekosse et al. 2010a, b). Kaolinite clays are widely consumed by women and children to assuage hunger, supply nutritional deficiencies or as folk medicine (Brand et al. 2009). It is usually believed that geophagy can supply minerals otherwise deficient in diets or can counteract nausea or diarrhea. However, heavy clay consumption can also cause serious ailments, including intestinal blockage, anemia, growth retardation and zinc deficiency among some geophagic individuals (Louba et al. 2004, Fellmann et al. 1997, Anderson, 1991, Horner et al. 1991, Grigsby, 1999).

There is however disagreement among biomedical actors in the study area as to whether or not kaolin is detrimental to human health. Kaolinic clays, one group maintains, contains a large quantity of calcium necessary for calcium fortification for the bones, catalyzing the secretion of chlorhydric acid and for attenuating gastric ulcer. Many pregnant women confirmed that the ingestion of kaolinite clay calms down nausea. One medical doctor corroborated their view:

You know, kaolin dries up the bucal mucus from excessive secretion of saliva and you know that in the first trimester of pregnancy, the salivary

gland is in perpetual activity. Women are always feeling like vomiting and kaolin therefore comes to dry up the excess saliva in the mouth and these women hold it in high esteem for this reason (Dr. Awung, Interview of 06/12/2003, Balengou Integrated Health Centre).

On the contrary, other medical doctors pointed out that the consumption of kaolinic substances can instead aggravate gastric ulcer. There is therefore the need to advise pregnant women against consuming it because clinical analyses have demonstrated that “kaolin has an undesirable effect on the organism of a woman” (Dr Njimele). A pregnant woman certainly requires iron for her child and the child receives this iron through the mother but other health enhancing food items can meet this need. A pregnant woman who consumes excessive kaolinite clays is exposed to iron shortage and anemia. The practice of geophagy is said to supply 17-55% of recommended pregnancy supplementation of calcium, magnesium, zinc, iron, copper, manganese, selenium, potassium, nickel and cobalt (Hunter et al. 1984). Though rich in micro-nutrients, these elements are not necessarily absorbed by the gastro-intestinal system (Hooda et al. 2004). According to Eastwood (1999), iron deficiency anemia, heavy metal poisoning, lead toxicity/poisoning not only affects the consumer, but also affects an unborn baby in pregnant females. Mariamma for instance, later became aware that her child died from anemia because of her excessive consumption of kaolinite clays: ‘It was much later, that I came to understand that it was because I had eaten too much kaolin that my baby did not survive. However, I continue to consume it, but not like before’ (Mariamma, 32years old).

A gynecologist, Frida Awa, of the Bafoussam Provincial hospital corroborated the view voiced by the above-mentioned informant: ‘When the mother is anemic, the baby suffers from a delay in growth that can lead to abortion, a death in vitro because of lack of sufficient nourishment’.

Mariamamma's excerpt quoted above recognizes that consuming kaolinite clays can be dangerous for the health of a child in the mother's womb. Her continuous ingestion of this substance like other women seems to suggest that the extraction and subsequent consumption of kaolinite clays is embedded in a complex cultural, social, economic and biophysical context, linked to the very identity of women as individuals. Geophagic women reported that they have a preference for soft, silky and powdery clays because gritty clays are believed to negatively affect the dental enamel of consumers. The clays are processed through pounding, sieving and grinding. Grinding instead renders the toxic elements contained in the geophagic clays readily available for absorption (Ekosse et al. 2010b:80651). To mitigate the harmful effects, they often submit the clay to heat treatment (boiling, baking and burning). Heat treatment improves the palatability of geophagic clays, enhance desirable colors, and kill micro-organisms, bacteria and other pathogens. However, pyrothermic micro-organisms may likely persist in the clays (Ekosse et al. 2010b).

Kaolin as food and medicine

Kaolin's perceived nutritional and medicinal value gives it a place of choice in women's health in particular and in the health system of the Balengou people in general. By health system, I mean a coherent system of beliefs, norms, social arrangements, institutions and patterns of interaction that are believed to enhance the health of a given population by providing explanations and solutions to a people's health problems (Kleinman 1980). Women often become very worried whenever they crave for, but cannot find kaolinite clays because they consider it to be a symbol of life. It is believed that "kaolin facilitates the maintenance of the child in the womb of the woman" (Sabiadou, Focus Group of 26/11/2003). Additionally, there is an ethnomedical rationalization that its consumption relieves and prevents nausea during pregnancy:

Kaolin smells like sand. I like this while I am pregnant because it prevents me from vomiting. It is for this reason that I am attracted to it. When I don't eat it, I am very much ill at ease. I experience vertigo' (Ramatou, 27 years old)

When I wanted kaolin during my pregnancy, nothing could stop me from it. I had to have it, no matter the cost' (Chantale).

In their analysis of the dialectic relationship between humans and things, Maran and Stockhammer (2012:2-3) note that objects can trigger practices or have an agency of their own. They become 'agents that are able to trigger or influence our action... Although the objects do not speak, they address our senses (smelling, seeing, tasting, and feeling) in such a powerful way that our worldviews cannot be understood without including materiality and social practices in our analyses'. Most women go about their daily activities with pieces of kaolinite clays in their bags which they ingest at certain intervals. As a routine act, these women maintain that even ground from mud bricks has a nice taste, does not contain any micro-organisms and is therefore not dangerous to the human organism. This position is contrary to biomedical evidence. Similarly, Tiokou (1993:165) maintains that whenever Bantou women crave for, but cannot find kaolinite clays, especially during pregnancy, they dig into the walls of brick buildings, extract and ingest earth particles. In the same vein, McElroy and Townsend (1989:187) observe that Black women in the Southern United States often select the most desirable clays from road construction sites for ingestion during pregnancy.

While socio-cultural factors such as physiological benefits underpin geophagic behavior, food items do not only respond to biological need but are also and more importantly, endowed with certain socio-cultural perceptions depending on their perceived performance characteristics. This contradicts the unilineal view among nutritionists that "eating/food" is only intended to satisfy nutritional needs. Victor Turner pointed out that human bodily experiences (the 'organic') is the main origin of cultural

classifications and symbolic meaning (the 'superorganic'), but he also demonstrated that individual experience and body are inseparable from relations between people and their shared stock of cultural knowledge, and that it is only within these socio-cultural structures that bodily experiences become meaningful (1967:89-91). Bodily experiences thus trigger cultural production but cultural models also shape experience and motivate (or suppress) practices, while people's actions affect the material world. The relationship between the human body and specific practices should not be reduced to a 'natural instinct' reified in 'tradition' but studied in its own right. This calls for the need to find out what "to eat" signifies for a given society because culture "determines food habits, tastes, codes, and culinary techniques..."(Ela,1982:144).The motivation for eating a particular food item might include-ethnomedical beliefs, religious and ritual purposes, as well as the construction of self and body image. Some people consume kaolinite clays for pleasure, out of imitation, out of curiosity and yet, others as a prophylaxis against certain illnesses. Thrift (2000:492) concedes that relationships are the key to understanding how soils influence people who create and use them. People and things are intertwined in networks wherein they are mutually transformative (Ingold, 2000). Similarly, Bucheli (2002) also sees material artifacts as the way we interact with the world and as an essential canvass for understanding people and society because our unconscious relationship to the things we work and live with create and reify traditions.

Some respondents reported that during famine, they feed children with a mixture of kaolinite clays and boiled potatoes. They also feed their hens with a mixture of kaolinite clay powder and salt. Ironically, research has shown that the ingestion of this mineral substance impacts negatively on women's health. Epelboin (1990) for instance, reported that geophagy caused stunted growth among African immigrant children in the Eastern Parisian neighborhood. Despite the obvious harmful effects of ingesting excessive kaolinite clays, many Balengou women argue that they have ingested it from "time immemorial" and have

never had a problem. In line with Bourdieu's concept of habitus, it might be stated here that through repeated usage over generations, these women have acquired a set of schemes of dispositions, perceptions, and appreciations, including taste for kaolinite clays, which tends to orient their consumption practice and give them meaning (Bourdieu 1992). The habitus is both a "structured structure"-the effect of the actions of, and [their] interaction with, others [other women]- and a "structuring structure"-it suggests and constrains their future actions (Bourdieu, 1992). The explanation for this complicity lies within Bourdieu's habitus, which mediates the relationships between humans and society, producing patterns of behavior whose limits are shaped by society's norms and implicitly, if unwittingly, accepted by individuals. Critically, the habitus is embodied, that is, "located within the body and affects every aspect of human embodiment." (Shilling 1993:129). To them, it is rather the so-called *Kalabar chalk* from Nigeria which is toxic. They rather maintain that kaolinite clays instead help in enhancing their health. This shows competing knowledge systems between local and scientific knowledge, science and tradition, a gulf between patients and healers.

Kaolinite clays in Balengou are not only ingested but are also believed to have an aesthetic value. The powder is used as a purgative by pregnant women to ensure the production of "beautiful and handsome babies who are clean". They maintain that kaolinite clay slurry cleans the body of the neonate in the mother's womb, and prevents both premature birth and abortion, thereby maintaining a child's health. A concoction comprised of certain herbs and a quantity of kaolin clay and water that is believed to be imbued with sacred qualities and imaginary power is produced by a female specialist after an appropriate ceremony of appreciation to the ancestors. As a ritual custodian, she ensures the transmission and circulation of this knowledge from one generation of kins and affines to another virtually for free and in the treatment of outsiders for a fee. Its administration to non-family members though an economic exchange, is embedded in the idea of 'giving-without-losing'-a dynamic also found in all Aboriginal ritual circulations as well as other contexts (see among others Glowczewski, 2002: 287, Werner and Bell, 2004,

Godelier, 1999). This form of ritual knowledge as I was told is enacted only by female herbalists. In reality, “this sacred knowledge cannot be “given” in exchange because it enters as a validation of the social position of individuals and it can move among individuals only as it devolves within the group for which it provides ethical legitimization” (Werner and Bell, 2004:xiv). Similarly, Godelier characterizes ritual knowledge as ‘things not given but kept’ (Godelier, 1999). However, ‘the sacred does not monopolize the domain of things not subject to alienation’ (Werner and Bell, 2004: xiv). The slurry is administered to a pregnant woman three times a day to “remove bad water” from her womb. It is also believed to clean the intestines, to act as therapy against stomach ache, digestive problem and to attenuate diarrhea. As Brand et al. (2009:11) maintain “white clay largely consists of kaolin which has the ability to absorb toxins and bacteria and is therefore commercially manufactured and sold as a remedy against diarrhea”.

Traditional practitioners also make elaborate use of kaolinite clays in their therapeutic practices: protection from personalistic agents and divination. According to Cecile Helman’s folk model of disease causation, theories of illness can be divided into two broad categories: personalistic and naturalistic. In a personalistic system, illness is believed to be caused by the intervention of a sensate agent who may be a supernatural being (a deity or dead ancestor) or a human being with special powers (a witch or a sorcerer). Illness may be linked to transgressions of a moral and spiritual nature. If someone has violated a social norm or breached a religious taboo, he or she may invoke the wrath of a deity, and sickness a form of divine punishment is the result. The sick person's illness is considered to be a direct result of the malign influence of these agents. In naturalistic causation, illness is explained in impersonal terms. When the body is in balance with the natural environment, a state of health prevails. However, when that balance is disturbed, illness results. Often, people invoke both types of causation in explaining an episode of illness, and treatment may entail two corresponding types of therapy (Helman, 1990, 1981).

For example, the parents of twins- “Tanyi”(father) and “Manyi”(mother) and the children themselves consume kaolinite clay slurry as a shield against evil spirits. For most concoctions in the traditional pharmacopoeia, kaolin clays are widely used to fortify the medicine. Female tradi-practitioners,² called *megni ntsi* equally use kaolin powder for their incantations and for fortune telling. They ward off bad luck using a concoction of water, herbs and kaolin. The people further maintain that kaolin replenishes an individual’s blood and is therefore a “native” antidote against anemia unlike *kalabar chalk* which is believed to rendering people anemic. Tradi-practitioners further use it to shield individuals against malevolent spirits. While some biomedical practitioners are of the opinion that the ingestion of Kaolinite clay substances is dangerous for women’s health, most traditional healers use kaolinite products widely for various therapeutic processes.

The different competing positions exposed above shows that the ingestion of kaolinite clays is not totally negative from the informant’s emic,³ perspective. Most lay people, for instance, Mami Sabina, were of the opinion that “kaolin is not a chemical product that can be found in pharmacies because it has not been tolerated by “specialists”. Among the Balengou, the use of Kaolin products is much more cultural in the sense observed by Le Thanh Khoi (1992:145) “every culture has as end product the preservation and perpetuation of the society and has as a result, elaborated an appropriate science and a medical technology, with which to extract their resources from the milieu”.

The gendered field of kaolin exploitation

The kaolinite clay mine is found in the sacred forest of the Tchila neighborhood. This area is seen as animated by spiritual power and the people maintain dialogue through ritual prescriptions. They have a spiritual and emotional attachment to it because it gives them a ‘sense of place,’ ‘place attachment,’ ‘place identity’ and ‘exists within a larger socio-political milieu’ (Manzo 2003, see also Gosselain 2000). Access

to the kaolin site is only possible in the dry season- November to May- partly because of the slippery and muddy nature of the terrain and the social need to regulate access by excluding some women as well as a mechanism of controlling and channeling women's involvement in other processes of social reproduction. Women have monopoly over the extraction of kaolinite clays and are the main consumers. The gendering of this space dovetails with the distinction between *female* capital- "the gender advantage derived from being perceived to have a female (but not necessarily) feminine body and feminine capital-the gender advantage derived from a disposition or skill set learned via socialization or simply when members of a particular field recognize one's body as feminine ... as a precondition for access within particular occupations" (Huppatz 2009:50). According to a myth recounted by several informants, it was a woman who discovered kaolinite clays and introduced it to other women who ingested, and appreciated the taste of this substance. "As we can see, it was a woman who discovered the availability of kaolin in Balengou, probably explaining why it is said to be 'women's business'" (Jean Claude). They use gendered rudimentary tools for the mining of both soil and rock materials: diggers, knives and hoes. Selective hand grabbing is then used to do away with visible impurities and undesirable earthly materials, and to sort geophagic clays from the ore. Mining is achieved through surface collection, pit extraction or gallery. These techniques resonate with those used by potters in Africa (Gosselain and Smith 2005, Ekosse et al. 2010:80651b). This suggests that both kaolinite clays and the tools used for their extraction are constitutive elements of a feminine form of capital. Soil also symbolizes female, life-bringing forces (Geissler, 2000). Technology provides insights into relations between humans and things and may be viewed as a form of transformation whereby the social and the material necessarily instantiates the other. The mutual becoming of people and things is resonated in the perception of simultaneous transformation of both material and human bodies (Dobres, 2000:149:50).

Additionally, the feminization of kaolinite clay extraction seems to be an indirect mechanism of confining and keeping women within the private sphere of the household where they can take care of children. However, as “capital bearing objects” whose value accrues to the primary groups to which they belong (for example, husbands or the family) (Skeggs 2004), women use the proceeds accruing from kaolinitic clay extraction to provide for the education of their children and for the well-being of their families. Through this, they have reconfigured gender relations within the household. Furthermore, men use the availability of kaolinite clays- a gendered source of livelihood-as an economic transaction in which the opportunity to have access to the kaolin clay mine is offered in exchange for women’s hand in marriage⁴. Kaoline clay has a dual affordance in matrimonial relations since it is also used to bless the bride and groom and to induce the former’s fertility during the matrimonial ritual between both the latter’s and the former’s lineage groups (see below). Additionally, cash from the sale of this material artifact also helps to maintain family stability and to avoid conflicts between husband and wife. “There is very little divorce here in Balengou thanks to kaolin. This prevents women from demanding too much (money) from their husbands” (Chief of Balengou). Despite the lack of hard statistics since most of these women do not keep records, most participants pointed out that they have sponsored their children to university level, built houses, and started businesses from proceeds accruing from the sale of kaolinite clays. As we shall see below, regulatory norms embedded in symbolic thinking and prohibitions ensure the sustainability of the kaolinite clay mine given the centrality of this cultural artifact to the whole socio-cultural universe of Balengou society.

The social regulation of kaolinite clay exploitation

The exploitation of kaolinite clays in Balengou as a common pool resource is regulated by certain social norms. Prohibitions concern menstruation, pregnancy, and mourning as these transformative states are believed to harm the clay deposit. In his discussion of prohibitions followed by Cameroonian potters in

manipulating clay, Gosselain (1999:206) observes that (1) symbolic thinking permeates any single part of a technological process (2) it is clearly visible in the set of prohibitions, metaphors and rituals associated with the activity ('the specifics of which tend to offer a less 'blurred' picture than technical features') with the resulting effect that (3) material forms as symbols should be considered in association rather than in isolation-just as the pieces of a jigsaw puzzle. This creates a dialogue between nature, culture and the material universe. The exclusion of men from clay extraction is analogous with their keeping aside from clay extraction or from the whole pottery making process in various Sub-Saharan African societies (see also Gosselain, 1999: 210). A woman must be at least 40 years old, must have taken an active part in the meeting of exploiters during the preceding five years and be initiated upon the provision of chickens, goats and a quantity of the "peace plant"(scientific name: *sesamum indica L.*) before she can gain access to the mine. This resonates with the view among the Karanga of Zimbabwe according to which a young woman is not allowed to attend to clay extraction or firing because 'the force within her that will someday cause her menstruation, tearing her hymen, would cause the pot to crack' (Evers and Hoffman, 1988:739,cf Gosselain,1999). A woman must not also be pregnant showing ambivalence between kaolin clay mining and human reproduction (Gosselain, 1999:211, Fredricksen, 2011: 294). Similarly, Gosselain's (1993) analysis of prohibitions and rituals among Bantu iron workers of South Africa, shows a symbolic code 'connecting heat, human procreation, cultural transformation and technical process. Gender/ed and age restrictions shows the transmission of clay knowledge by female members between generations as well as women's 'economic prime mover' for continuing to mine clay'(Fredricksen, 2011: 293) which is now a means for extra income. As insights from pottery manufacture suggests, it is most probable that the involvement of mature women in clay mining, may also stem from economic rather than symbolic reasons: for spouses as a way to cope with economic difficulties. Women collect the clays themselves. A ritual comprising of hens, goats, and palm oil and other ritual items preceded by the

offering of appropriate performative words to the ancestors to safeguard the exploiters, to ensure the abundance of kaolinite clays and to avoid sickness and death in the community is conducted at the clay source before it can be dug out.

Another regulatory mechanism is the institutionalization of a sacred day prohibiting exploitation and restrictions on the opening of the mine. It is formally opened from 6 am to 5 pm daily from May to December annually. The clay brought home is stored in spaces associated with women's activities (see also Fredricksen, 2011:293). The prohibition of restrictions on access to the mine is enforced through negative ritual sanction: "*If you go there, you will see*". Prohibitions such as weekly ill-fated days (Gosselain, 1999:211) related to clay mining are meaningful taking into consideration that the ancestors are not only seen to inhabit the places where they lived and died as people in villages and graves, but are also believed to traverse the woods and streams and watch over the use of resources in them (Landau, 1993:10). Moreover, each quarter takes it turn to exploit kaolinite clays on particular days as laid down by the Association of Women Exploiters of Kaolin, Kumbam which ensures coordination.

Although an entirely female activity, 'the prestigious and protected category of the women of the palace' (Warnier, 2007) are however excluded from the mining of kaolinite clays. The Chief will be faced with a conflict of interest and impartiality in mediating between an ordinary woman and one of his wives in the event of a conflict. His wives are further believed to have mystical powers symbolized by the bracelets that they wear on their necks and ankles, and because of the rites performed at the mine, it is out of bounds to them. In line with Warnier (2007:162) it can be suggested that 'the sacredness of the royal body and taboo on touching it' is also associated with royal wives and is symbolically imbricated in their exclusion from clay extraction. This, and alongside the exclusion of pregnant women suggests the linking of taboos to the experience of the female body as lacking closure, and therefore to a thermodynamic logic

in which human bodies are containers with hot and cool substances to be kept in a state of equilibrium (Friedriksen, 2011: 296). Furthermore, royal wives are believed to be a special class of women who are not poor by local standards and should therefore not fight over the exploitation of kaolinite clays with ordinary women. A commonly shared theme that permeates/underpins prohibitions is transformation: physiological transformation (conception, gestation, first teeth, sexual maturity, menstruation, menopause, and death), cultural transformation (birth rites, initiation, marriage, funerals, 'ancestralization' and mythical transformation (the creation of humans). Clay products or parts of the manufacturing process may serve as an instrument or a paradigm in the process of cultural transformation or as a metaphor for explaining certain physiological or mystical transformations. Such a technology that is anchored in the combination and dynamics of natural elements, its popular use as a way of explaining the world should not be surprising and could be an explanatory path for the usual feminization of the craft in Sub-Saharan Africa(Gosselain,1999)

While respondents consistently pointed out that the aim of regulation is to prevent women from concentrating on the exploitation of kaolinic substances at the expense of food crop production- when perceived from the standpoint of hidden structures of oppression- it might be suggested that the covert aim of regulation is to enable women to assist their husbands in the harvesting of both arabica and robusta coffee and in preparing the soil for the planting of eucalyptus. Although from "time immemorial", Balengou men felt that kaolinite clay was a natural resource that ought to be the preserve of the womenfolk while the men preoccupy themselves with other productive economic activities, its gendered exploitation is increasingly justified by extra-local factors. The economic doldrums orchestrated by the structural adjustment program tremendously transformed gender roles and women's contribution to the household income through the provision of children's school needs, nutrition and health peaked. This

gendered economic activity is clearly justified by the people's survival needs and changing circumstances within the Cameroonian economy.

Before 1988, the government of Cameroon pursued a pro-natalist policy by giving incentives- family allowances and free maternal and childcare services to families. As from 1988 however, a protracted economic meltdown set in and led to a change of policy from pro-natalism to limited births for fear of disequilibrium between existing natural and financial resources, and the need to ensure responsible parenthood. Families began facing enormous problems with the feeding and education of children. Generally, they were faced with low living standards which became more accentuated in 1993 when the government which is the main employer, slashed the salaries of civil servants by 65 %, rendered many breadwinners unemployed and simultaneously devalued the currency. Against the backdrop of the ensuing social and economic hardship, Balengou women readily and increasingly turned to the kaolin mine for a solution. They intensified the extraction, washing, drying and selling of kaolinite clay products in large quantities so as to meet up with their immediate needs. In other words, they became conscious of their own natural resources and the need to harness them. Apart from being an economic resource, kaolinic clays serve as valuable symbolic ritual objects for widowhood rites, social integration and conflict resolution. This dovetails with the view that physical objects are drawn into particular roles and that the human subject must be understood simultaneously in terms of biological animacy, psychological agency and social personhood. Objects are not physical but also deeply perceptual, psychological and social (Knappett, 2005: 9, 17-18, see also Maran and Stockhammer, 2012).

Ritual usage

Kaolinite clays are intimately intertwined with various rituals: social integration, conflict resolution, marriage, widowhood rituals and practices because of their perceived performance characteristics and symbolic value. They can thus be said to be useful in the simultaneous transmission and inscription of

social memory and community as a relational entity (made up among other things) by networks of people and affordances functioning at multiple spatial and temporal scales (Salisbury, 2012). Miller (1987:85-108) intimates that the importance of objects is not because they are obviously there or obviously constraining/enabling, but rather because in many cases, they are not obviously there. In other words, objects are most powerful when they are acting through our subconscious, as part of an external environment that both habituates us and simultaneously incite us to act. As soil, Kaolinite clays “forms part of the background on which social things happen, rather than being an integral part of those social happenings...soils and soilscape play a central role in the formation of memory, identity community and worldview” (Salisbury, 2012:24). Materiality is not only a reflection of social reality, but also plays an important role in constitution of social reality (Miller, 1998a, Thomas, 1991). The ‘production’/ ‘construction’ of material artifacts is inclusive of social action: ‘the construction of landscapes and cosmologies...’. Jordan observed that material culture involves ‘the bringing of symbolic meaning to physical matter, either through physical transformations or the incorporation...into symbolisms of social practices’, which includes cultural landscapes as well as artifacts (Jordan, 2003:276).

Social integration

The Balengou theosophy is based on the cult of the ancestors. The ancestors are seen as intermediaries between the worlds of the dead (“living dead”) and the living. Despite conversion to Christianity or Islam, the Balengou have therefore not forsaken their ancestral sacrifices. Ancestral veneration is intrinsically linked to the traditional African worldview (Nyamti 2005:65) or *weltanschauung*. In their worldview, life is understood as a “sacred power” or a “vital force” (Tempels, 1949:30, Kirwen, 2005:24). Accordingly, the people remain attached to their ancestors through everyday symbolic and cultural practices usually involving prayers, offerings, and sacrifices with kaolinic clay substances as ritual objects. The omnipresence of the ancestors and their ability to influence daily life is summarized by the view that: “to feed the ancestors is a precondition for ensuring soil and women’s fecundity”. This mutuality is a tacit

recognition that physical entities are beings in the world alongside other beings- including humans, plants and animals sharing membership in a dwelt-in-world (Olsen 2003:88). Similarly, Ifeanyi Menketi (2004:2004:117) maintains that in traditional African societies,⁵ we have a believe system that is fully committed to material agency, but is based on an extended notion of what is embraced by the material universe. In his analysis of nature, agency and causation, he appropriates what he calls ‘an expanded notion of material causation’ (2004:129). He places the notion within the complex interaction between human actors and non-human entities and objects. Following Fredriksen (2011:284) the implication is that while persons inhabiting the physical world have causal powers, this ability for action is shared by non-human agents, and they all belong to the same undifferentiated plane of material causation. Humans and non-humans therefore possess their powers in a commonly recognized way, and exercise them in an action field understood as a durable part of the material universe. In this light, the fundamental dichotomies and asymmetries that contribute to define the modern condition, including nature/culture and human/non-human have never been established (González-Ruibal, 2006:110-111). Even the exploitation of kaolinite clays is marked by rites that are meant to protect participants and to ensure the slow transformation of the individuals through a progressive passage from the exterior to the interior for them to successfully accomplish the task.

Symbol of peace

The Balengou use large quantities of kaolinite clays in the resolution of conflicts between various members of the community. Kaolin is presumed to symbolize peace, friendship and conviviality. *“Every act of benediction is done with kaolinite powder. It is a symbol of peace and friendship”* (Chief of Balengou). During the celebration of marriage, symbolic marks are made on the forehead and chest of the bride and bridegroom, a concoction comprised of kaolinite clay powder, palm oil, the blood of a sheep and

other ritual items is used to bless the couple, and to induce the woman's fertility for the perpetuation of the man's lineage group. The ancestors are implored to be witnesses to the marriage. Children are also blessed using kaolinite clay powder whenever they are about to travel. The aim is for them to live in peace, be safe and to have good luck while away from home. Sediments play a central role in the process of the construction of community through the practices of soilscape formation, sensual experiences and through social memory (Bourdieu, 1977, Evans, 2003, Ingold, 2000) in which soil both gives and is given meaning and becomes a medium of expression, relying strongly on symbols about the world (Salisbury, 2012:37). Following Cohen (1985:14), one of the most important things about symbols is that they allow those who interact with them to supply some of their meaning. Cohen focuses on the symbolic structure of community as well as the set of values and conventions that give meaning and a sense of identity to its members. Kaolin clay provides some of the symbolism and acts as a medium for the communication of ideas of community and tradition that lead to the experience of community.

Widowhood rites

The Balengou widowhood ritual serves as a boundary marker between a dead husband and his wife/wives.

Kaolinite powder is used as a symbolic object of governmentality and purity to establish order. Upon the death of a polygynous man, his widows are submitted to a test of innocence as part of the rite of widowhood by elderly widows who are active agents in charge of reproducing the patriarchal order by administering this ritual with exactitude to new widows. The people believe that a man's death might be orchestrated by one or through a conspiracy between his wives so as to own his property and become "happy widows". The ritual is called "fo" (white), and is a symbolic representation of one of the fundamental colors of kaolinite clay. The widows are individually expected to solemnly prove their innocence with regards to their husband's death through a ritual bath in a river. They are each given a

calabash smeared with kaolinite powder to take to the stream and to allow the calabashes there after the ritual bath. If someone among them is guilty, her calabash will mystically return and meet her. This test of innocence is analogous to the use of oracles among the Azande as an effective means of diagnosing witchcraft, *benge*. A poison is fed to baby chickens and the chick's death or survival provides the oracle's answer. The Azande also use *benge* to judge other evidence in a court before a chief (see Evans-Pritchard, 1966 for a detailed account). Widows are also shaved and kaolin powder is smeared all over their bodies. They are secluded at home for nine days to avoid pollution from contact with the outside world and are prohibited from having sexual intercourse. They are then brought to the river for a purification bath, after which each woman is given a piece of bamboo on which kaolin powder is smeared for protection. They are supposed to keep it until they leave the confinement home when traditional healers, *meAgni tse*, will bless and fortify them. They are scarified using razor blades and a concoction that includes kaolin powder is applied onto the wounded surfaces. They can henceforth appear in public places. Today working class women are subjected an abbreviated version of this ritual and instead of mourning their late husbands for three months, this is usually done in a week. Unlike in the past, today some women invoke their religious beliefs and tacitly refuse to submit themselves to the ordeal of widowhood rite.

The various objects of material culture imbricated in widowhood rites and practices resonate with Warnier's (2007:158) notion of 'technology of containers'. The widow's body can be conceived as a container where gestures and substances are worked upon through the medium of the calabash that is attributed to every widow, the journey to and from the stream, the confinement in a house, the skin of the widows, the surface of the calabash smeared with kaolin slurry and even the protective bamboo walking stick. Drawing from various lines of analysis and the literature on praxeology and subjectivation, Warnier (2001, 2006) argues that material culture mediates bodily practices—it is a sensory-affective-motor

medium, where perception, emotion, and motion are inextricably tied. Commenting on this process of subjectivizing governmentalities', Warnier notes: "Being a subject is not primarily being what one chooses to be, but constructing one's drives in a material world and gaining access to the moral law in one's relationship to others, under a number of constraints" (Warnier 2006: 12).

Death and mourning are forms of cultural transformations underpinned by prohibitions in which kaolin clay powder serve as an instrument in the quest for explanation and purification. The existence of a strong symbolic connection between death, widowhood, sexual prohibition and pollution tends to suggest that these domains are mutually incompatible. The widow's body is perceived as lacking closure and therefore polluting justifying the need to exclude her from contact with the outside world through confinement "for such a closeness could induce a dangerous imbalance if they were brought together". Hence, various prohibitions are aimed mostly at separating perceived antagonistic fields during 'transitions' between different cycles (Gossellain, 1999:214-215). This resonates with De Heusch's (1982:376-415) 'thermodynamic interpretation' of the Thonga ideology demonstrating that 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). Similarly, Mary Douglas (1980) uses the concept of "dirt" for anything that threatens established cultural categories, such as the distinction between unpurified widows and other members of community since 'as representation', as "a medium of social values" and as "community", the human body requires ritual purification once boundaries are violated (Turner, 1995).

Conclusion

The various ways in which kaolinite clay holds value for the construction and maintenance of women's identity as individuals and to the Balengou as a community: nutritional, ethnomedical, economic, emotional, aesthetic and spiritual shows that clay as materiality is a useful prism through which to understand social relationships. In other words, people and things are entangled in mutually transformative

networks (Thrift, 2000:492, Ingold, 2000, Knappett, 2005, Gell, 1998). Although kaolinite clays are produced and largely ingested by women, they maintain social relationships in which these clays often play a role, in perpetuating the continuity of the Balengou community thereby relating it to the whole cultural complex. Interpretations of the various affordances offered by clay as soil should reflect on the role that it plays, consider the possibility that it retains ‘culturally imbued meanings’ and ‘contributes to identity formation’. As a culturally constructed concept, clay reflects potential affordances and more abstract cultural meanings (Salisbury, 2012:28) within the context of communal rituals where it plays a central role in the formation of memory, identity, community and worldview (Salisbury, 2012:24,28). It is imbricated in various processes of cultural transformation, thereby inviting us ‘to understand the ways that the people we study create a world of practice’ (Miller, 1998:19). As Gell intimates through his concept of distributed agency, people attribute agency to material, often unconsciously and the material then acts as a secondary agent (Gell, 1998:20-21). This calls for an engagement with clay as materiality in ways that recognise the transformative potential resulting from the interplay between material forms and social practices (Knappett, 2005:1) as well as a broader understanding of the interrelationship between humans and objects as well as relations between agency and materiality in the constitution of social realities (Maran and Stochhammer, 2012:1-2).

As an ‘object of economic value’, kaolinite clays *reveal the social relations that help create and define such objects:...what creates the link between exchange and value is politics, construed broadly. ...commodities, like persons, have social lives.* The performance characteristics of kaolinite clays shows that value may be ascribed by society at large or it may be intensely personal and subjective (Appadurai 1986:3). Economically, kaolinite clays bring much needed revenue that is used in ameliorating the living conditions of families thereby serving the interest of patriarchy. Its gendered exploitation give women some agency, leverage and autonomy, leading to the enhancement of their social positions and

their role in the economic, social, cultural and political set up of their community. Perceived from the perspective of the gift (Smith 2005:1-13) kaolin as an object of material culture is imbricated in a market transaction since Balengou men use its availability as a snare with which to lure women from other villages into marriage. Though of great socio-cultural value, the ingestion of Kaolinite clays could be detrimental to the health and well-being of women and children. This calls for the need to sensitize the population on the harmful health effects of kaolin on women and pregnant women. Other viable and less risky economic activities need to be identified as one way of empowering Balengou women.

Notes

¹ Worldview as expressed in terms of the sacred and the profane through people's relationship with objects of material culture and the various uses they imbue these objects with as well as the reaction it elicits within a given cultural domain.

² General category for practitioners of traditional African medicine, usually involving diviners, midwives, and herbalists. They are also called traditional doctors, medicine men or herbal practitioners.

³ Internal logic, explanation given by insiders within a culture, unlike the etic perspective of outsiders.

⁴ See Smith (2005:1-13) on the economy of the gift.

⁵ 'Traditional' is used as a shorthand to describe the enduring features of African epistemology before contact with the West. The concept of tradition does not however preclude innovation and change since certain cosmologies, ontologies, socio-cultural orders have remained resilient over time (see Hobsbawm and Ranger 1992).

References

- Appadurai, Arjun. 1986. "Introduction: Commodities and the Politics of value". Pp.3-63. in *The Social life of things: Commodities in cultural perspective*, ed. Arjun Appadurai. Cambridge: Cambridge University Press.
- Bourdieu, Pierre. 1992. *The Logic of practice*. Nice, R (trans.).Cambridge: Polity Press.
- Bourdieu, Pierre. 1977.*Outline of a Theory of Practice*. Cambridge: Cambridge University Press.
- Brand, Catherina. E, Linda De Jager, Georges-Ivo E. Ekosse. 2009. "Possible Health Effects Associated with Human Geophagic Practice: An overview". *Medical Technology*. SA. Vol. 23(1):11-13.
- de Heusch, Luc.1980. "Heat, physiology, and cosmology: Rites de passage among the Thonga". Pp. 27-43 in *Explorations in African Systems of Thought*, eds. Ivan Karp and Charles Bird S. Blomington: Indiana University Press.
- Djatou, Medard. 2003. L'ALBINOS dans les représentations et pratiques culturelles des Ngante et Langou de L'ouest. Cameroun. Université de Yaoundé 1. Mémoire de Maîtrise en sociologie.
- Dobres, Marcia-Anne.2000.*Technology and Social Agency: Outlining a Practice Framework for Archaeology*. Oxford: Blackwell.
- Douglas, Mary. 1966[1980]. *Purity and Danger: An Analysis of Concepts of Pollution and Taboo*. London: Routledge and Kegan Paul.
- Eastwood, Martin. 1999. *Principles of human nutrition*. London: Chapman and Hall.
- Ekosse, Georges-Ivo. E. 2010a. "Kaolin deposits and Occurrences in Africa: Geology, Mineralogy and Utilization". *Applied Clay Science*. Vol. 50(2): 212-236.
- Ekosse, Georges-Ivo E, L de Jager, and V Ngole. 2010b. "Traditional mining and mineralogy of geophagic clays from Limpopo and Free State provinces, South Africa". *African Journal of Biotechnology* . Vol.9 (47) :8058-8067.

Ela, Jean Marc. 1982. *L'Afrique des villages*, Paris: Karthala.

Epelboin, Alain. 1990. "Géophagie, culture et prévention des accidents domestiques". Pp. 15-30 in réflexions anthropo-épidémiologiques à propos du saturnisme d'enfants africains vivant dans l'EST paissent" in *migrations-santé*, no 62 .

Evans-Pritchard, Edward. E. 1972. *Witchcraft, Oracles and Magic Among the Azande*, London: Oxford University Press.

Fellmann, Donald J, Arthur Getis, Judith Getis. 1997. *Human Geography. Landscapes of human activities*. New York: Brown and Benchmark Publishers.

Fredriksen, Ditlef. P. 2011. "When Knowledges meet: Engagements with Clay and Soil in Southern Africa". *Journal of Social Archaeology*, 11(3):283-330.

Fredriksen, Ditlef. P. 2009. Transformations in clay. Material Knowledges, thermodynamic spaces and the Mokolo sequence of Late Iron Age (AD1300-1840) in Southern Africa. PhD Diss, Department of Archaeology, History, Cultural Studies and Religion, University of Bergen.

Geissler, Wenzel P. 2000. "The significance of earth-eating: Social and Cultural Aspects of Geophagy among Luo Children". *Africa*, 70(4):653-682.

Gell, Alfred. 1992. "The technology of enchantment and the enchantment of technology". Pp. 40-64 in *Anthropology, Art and Aesthetics*. eds. Jeremy Coote and Anthony Shelton. Oxford: Clarendon Press.

Gell, Alfred. 1998. *Art and Agency: An Anthropological Theory*. Oxford: Oxford University Press.

Godelier, Maurice. 1999. *The Enigma of the Gift*. Chicago: The University of Chicago Press.

Glowczewski, Barbara. 2002. "Culture Cult: Ritual Circulation of Inalienable Objects and Appropriation of Cultural Knowledge (Northwest and Central Australia)". Pp. 265-288. in *People and Things: Social Mediations in Oceania*, eds. Monique Jeudy-Ballini and Bernard Juillerat. Durham, N.C: Carolina Academic Press.

-
- González-Ruibal, Alfredo. 2006a. "The past is tomorrow. Towards an archaeology of the vanishing present". *Norwegian Archaeological Review* 39(2):110-125.
- González-Ruibal, Alfredo. 2006b. "The dream of reason. An archaeology of the failures of modernity in Ethiopia". *Journal of Social Archaeology* 6(2):175-201.
- González-Ruibal, Alfredo. 2009. "Vernacular cosmopolitanism: An archaeological critique of universalistic reason". Pp. 113-139. in *Cosmopolitan Archaeologies*, ed. Lynn Meskell. Durham, NC: Duke University Press.
- Gosselain, Olivier. P, Smith, Alexandra-Livingstone. 2005. "The source. clay selection and processing practices in Sub-Saharan Africa". <http://www.ulb.ac.socio/anthropo/OGosselain/TheSource.pdf>. Accessed 27 Jan, 2011.
- Gosselain, Olivier. P. 2000. "Materializing identities: An African perspective". *Journal of Archaeological Method and Theory* 7(3):187-217.
- Gosselain, Olivier. P. 1999. "In pots we trust. The processing of clay and symbols in sub-Saharan Africa". *Journal of Material Culture* 4(2):205-230.
- Harvey, Philip. WJ, Patricia B Dexter and Ian Darnton-Hill. 2000. "The impact of consuming iron from non-food sources on iron status in Developing Countries". *Public Health Nutrition*. Vol. 3(4):375-383.
- Helman, Cecile. 1990. *Culture, Health and Illness*. Oxford: Butterworth-Heinemann.
- Helman, Cecile. 1981. "Disease Versus Illness in general practice". *Journal of the Royal College of General Practitioners*. Vol. 31:548-552.
- Hobsbawm, Eric and Terence Ranger. 1992. *The Invention of Tradition*. Oxford: Oxford University Press.
- Hodder, Ian. 2003. "The Social" in *Archaeological Theory: An Historical and Contemporary Perspective*. Pp. 23-42 in *A Companion to Social Archaeology*, eds. Lynn Meskell and Robert Pruecel. Malden MA: Blackwell.

-
- Horner, R., Lackey C., and Kolasa K. 1991. "Pica practices of pregnant women", *Journal of the American Dietetic Association* 91, 34-8.
- Hunter, John. M. 1973. "Geophagy in Africa and in the United States: A Culture-Nutrition Hypothesis". *Geographical Review*. Vol. 63(2): 170-195.
- Huppatz, Kate. 2009. "Reworking Bourdieu's «capital»: Feminine and female capitals in the field of paid caring work". *Sociology*, 43(1):45-66.
- Ingold, Tim. 2000. *The Perception of the Environment. Essays on Livelihood, Dwelling and Skill*. London: Routledge.
- Kirwen, Michael C. 2005. *African Cultural Knowledge, Themes and embodied beliefs*. Nairobi: Mias Books
- Kleinman, Arthur. 1980. *Patience and healers in the context of culture: an exploration of the borderland between Anthropology, Medicine and Psychiatry*. California: University of California Press.
- Knappet, Carl. 2005. *Thinking Through Material Culture: An Interdisciplinary Perspective (Archaeology, Culture and Society)*. Pennsylvania: University of Pennsylvania Press.
- Landau, Paul. S. 1993. "When rain falls: rainmaking and community in a Tswana village, c.1870 to recent times". *International Journal of African Historical Studies*, 26(1):1-30.
- Latour, Bruno. 2007. *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford University Press.
- Latour, Bruno. 1999. *Pandora's Hope. Essays on the Reality of Science Studies*. Cambridge, MA: Harvard University Press.
- Latour, Bruno. 1993. *We Have Never Been Modern*. New York: Harvester Wheatsheaf.

-
- Latour, Bruno. 1986. "The Powers of Association". Pp. 264-280 in *Power, Action and Belief: A New Sociology of Knowledge? Sociological Review Monograph*, Vol. 32, ed, John Law. London: Boston and Henley, Routledge and Kegan.
- Law, John. 1992. "Notes on the Theory of the Actor-Network: Ordering, Strategy and Heterogeneity". *Systems Practice* 5,379-393.
- Le Thanh, koi. 1992. *Culture, créativité et développement*, Paris: Armand Colui.
- Louba, Alfred, Wenzel Geissler, Benson Estambale, John Ouma, Pascal Magnussen. 2004. "Geophagy among pregnant and lactating women in Bondo District, western Kenya". *Transactions of the Royal Society of Tropical Medicine and Hygiene*. 98: 734-741.
- Manzo, Lynne C. 2003. "Beyond house and haven: toward a revisioning of emotional relationships with places". *Journal of Environmental Psychology*, 23:47-61.
- Maran, Joseph and Philipp Stokhammer W. (eds). 2012. *Materiality and Social Practice. Transformative Capacities of Intercultural Encounters*. Oxford and Oakville: Oxbow Books.
- MCelroy, Ann, and Patricia Townsend K. 1989. *Medical Anthropology in Ecological perspective*. Boulden, Westview Press.
- Menkiti, Ifeanyi.A.2004. "Physical and metaphysical understanding: Nature, agency and causation in African traditional thought". Pp. 107-135 in *African Philosophy: New and Traditional Perspectives*, ed. Lee M. Brown. Oxford: Oxford University Press.
- Miller, Daniel. 2005. "Materiality: An introduction". Pp. 1-50 in *Materiality*, ed. Daniel Miller. Durham, NC: Duke University Press.
- Nyamiti, Charles. 2005. "Studies in African Christian Theology, Jesus Christ, the ancestor of Mankind: Methodological and Trinitarian Foundations", Vol. I, Nairobi: CUEA Publications.

-
- Salisbury, Roderick. B. 2012. "Engaging with soil, past and present". *Journal of Material Culture*, 17(1)23-41)
- Skeggs, Beverley. 2004. "Context and background: Pierre Bourdieu's analysis of class, gender and sexuality". Pp.19-34. in *Feminism after Bourdieu*, Eds. Lisa Adkins and Skeggs Beverley. Oxford: Blackwell.
- Smith, David H. "Introduction: Doing Good", Pp.1-13, in *Good Intentions: Moral Obstacles and Opportunities*, ed. David H. Smith. Bloomington: Indiana University Press.
- Tempels, Placid.1949. *Philosophie Bantoue*. Paris : Présence Africaine.
- Thomas, Julian. 2004. *Archaeology and Modernity*. London: Routledge.
- Tiokou, Ndonko, F. 1993. Représentations Des excréments. Etude comparative des déchets du corps chez les populations de la savane et de la cote du Cameroun. Munster, Hamburg: Litverlag.
- Turner, Victor. 1992. *The Ritual Process: Structure and anti-Structure*. Chicago Il: Aldine Publishing Company.
- Warnier, Jean-Pierre. 2007. *The Pot-King. The Body and Technologies of Power. African Social Studies Series 17*. Leiden: Brill.
- Warnier, Jean-Pierre. 2006. "Inside and outside: Surfaces and containers". Pp. 186-195 in *Handbook to Material Culture*, eds. Christopher Tilley, Webb Keane, Susanne Kuechler, Mike Rowlands and Patricia Spyer . London: SAGE.
- Werner, Cynthia and Duran Bell. 2004. *Values and Valuables: From the Sacred to the Symbolic*. Oxford: Rowman and Littlefield Publishers, Inc.