In A. Roddick & A. Brower Stahl (eds) Knowledge in Motion: Constellations of learning across time and place, pp. 36-66. Tucson: University of Arizona Press, 2016.

1

The World Is Like a Beanstalk

Historicizing Potting Practice and Social Relations in the Niger River Area

Olivier P. Gosselain

In the first monograph ever devoted to Nigerien arts and crafts, Yves Urvoy (1955:figs. 54–55) provided two black-and-white drawings of pottery vessels from southwest Niger. Respectively attributed to "Zarma" and "Fulbe" potters, they have nearly identical shapes and painted décors. "In the whole Djerma [Zarma] area," Urvoy wrote, "only this particular type may be found." He added, "The absence of other types among Djerma is puzzling" (1955:53; my translation). This laconic comment was based on field observations made between 1926 and 1932.[1] Barring the random appearance of photographs and postal cards in the following decades, it was our sole information on southwest Nigerien pottery traditions until the end of the 1970s (Anquetil 1977; Etienne-Nugue and Saley 1987).

I have always been puzzled by Urvoy's puzzlement. Granted, the illustrated pots look familiar and their siblings are still commonly found in southwest Niger and northern Benin. But they hardly epitomize "Zarma"—let alone "Fulbe"—pottery. Similar vessels are produced or used by other groups in the area, and more importantly, the illustrated vessels occupy a marginal position in the regional pottery repertoire. In recent decades, the bulk of the vessels produced have been large and medium water jars, with long everted necks, globular or ovoid bodies, complex polychrome décors, and, often, vertical handles and indented lips. These jars count among the most prized pottery objects in markets. Called *tallam*—from the Zarma word *tala* (to decorate)—they herald the technical and aesthetic skills of local potters and stand prominently in courtyards and women's rooms.

How could Urvoy miss them? Failures in field observations and sampling strategies cannot be excluded. However, his work proves generally reliable for other areas of the country. Also, the vessels illustrated in his

monograph are probably cooking pots. Aluminum vessels gradually replaced them during the second half of the 20th century, making their marginal position in current assemblages understandable. But water jars were undoubtedly also in use in the early 20th century. Why not mention them? For years, I could not shake off the impression that local pottery traditions had been subjected to important changes throughout the 20th century, including perhaps revitalization and functional reorientation. It seems likely that many African artisans adapted rapidly and profitably to economic and material changes accompanying colonization (Byfield 2002; Gosselain 2015; Schildkrout et al. 1989; Wright 2002). For some, colonization was just another phase in a long series of transformations from which new opportunities could/had to be seized (Stahl, this volume).

My interest in the history of local pottery traditions was recently reactivated. As part of the "Crossroads of Empires" European Research Council project[2] (Haour et al. 2011), I made a systematic study of craft activities along the Beninese bank of the Niger River and identified the southern boundary of the polychrome pottery production zone, as well as some two- or three-generations-old vessels whose shape and décor strongly evoked vessels illustrated in Y. Urvoy (1955). The history of local artisans revealed multiple relations with southwest Nigerien potting communities (many of which I had previously visited)—which explained the sharing of technical and aesthetical practices—but also distinct processes and trajectories that shaped different social and material environments. The time had come to reconsider the data collected in Niger between 2002 and 2010, and to confront them with those collected in Benin since 2011.

This chapter is an attempt to reconstruct the history of what I refer to as the "Niger River Polychrome Tradition" (NRPT). I explore the various contexts within which potters develop social relations, are exposed to other ways of doing, and may be led to transform practice. Such contexts delineate a "geography of practice" (Wenger 1998:130) that includes places directly connected to pottery making (the "practice settings") as well as places situated within a larger space (the "social space") shaped by historical, social, and ecological processes. We will see how the circulation of people, things, and ideas within and between these places channeled, for more than a century, the propagation of practices associated with the NRPT. But first of all, some contextual background is needed.

Contextualizing the Niger River Polychrome Tradition

The NRPT is mainly produced in southwest Niger, on the river's eastern bank, with marginal extensions on the western bank, from the Say to northern Benin. It spreads over three geo-historical zones (Haour et al. 2011; Olivier de Sardan 1984): Zarmaganda, Zarmatarey, and Dendi (Fig. 1.1).

Several languages are spoken within the area: Zarma, Songhay, and Dendi (Songhay language grouping, Nilo-Saharan family); Tamasheq (Berber language grouping, Afro-Asiatic family); Hausa (Chadic language grouping, Afro-Asiatic family); and Fulfulde (Atlantic language grouping, Niger-Congo family). Most of the potters concerned speak Zarma, Dendi, or Tamasheq. The other languages are only marginally represented among NRPT producers.

Geographically, the NRPT spreads over three large fertile valleys: the Niger River to the west, the *dallol*[3] Bosso in the middle, and the dallol Fogha to the east. The three areas have attracted farmers and pastoralists for centuries (Bako-Arifari 2000; Beauvilain 1977; Fuglestad 1983; Olivier de Sardan 1984; Séré de Rivière 1965). More densely peopled than adjacent areas, they stand as major communication axes (partially overlapping with national routes) along which people, animals, and goods travel together with technical knowledge and aesthetic representations.

The Potters

Along the northern portion of the Niger River and in part of Zarmatarey, pottery making is in the hands of "Bella" women. This name is an exo-appellation used by Zarma and Songhay to reference either former Tuareg slaves (*iklan*) or Tuaregs in general. It subsumes a variety of identities, historical trajectories, and life ways. For instance, most Tamasheq-speaking Bella are pastoralists, who range across Sahelian regions of Mali, Burkina Faso, and Niger and who never engage in pottery making. Potters are found among sedentary Bella, descendants of slaves settled along the river and the central dallol Bosso between the 18th and 19th centuries, when Tuaregs ruled the area (Bernus 1981; Olivier de Sardan 1984). This slave origin tends to be hidden nowadays, the emphasis placed instead on "Tuareg roots," patronymic affiliations, and geographical origins. In

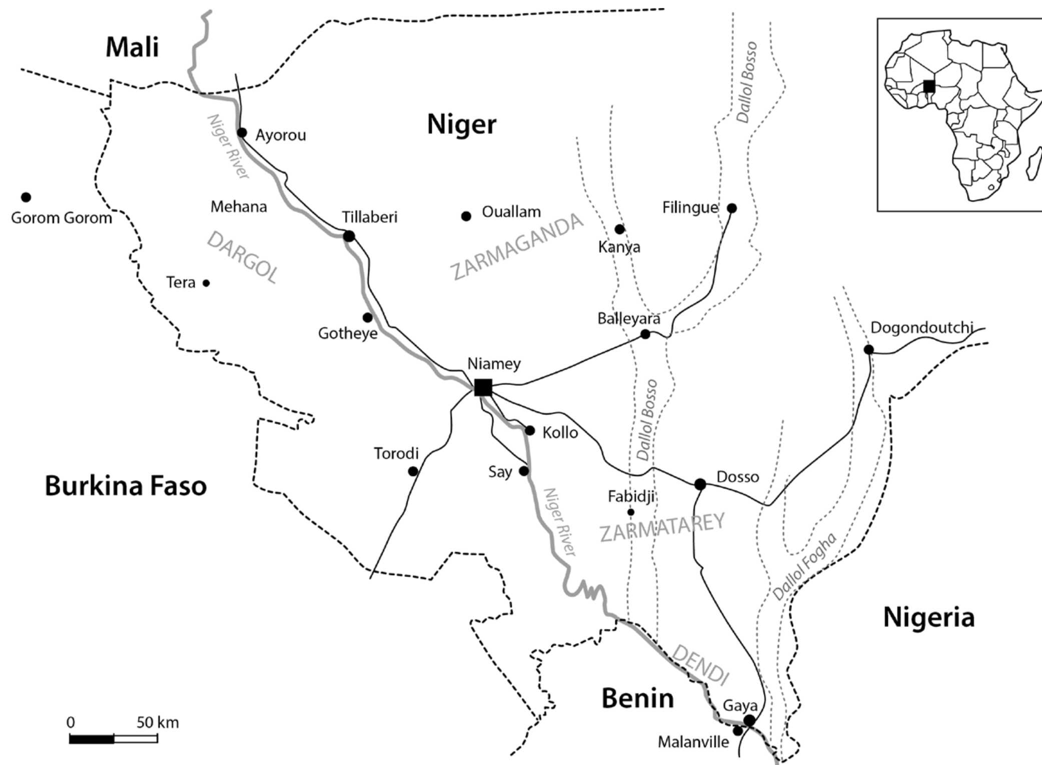

Figure 1.1. The Niger River area discussed in the chapter, with main geographical features and indication of historical regions mentioned in the text. Illustration by Olivier Gosselain and Anja Stoll.

the Niamey area and central dallol Bosso, Bella are hardly distinguishable from their Zarma and Songhay neighbors, whose language they increasingly adopt. Besides Tuareg patronyms, all that remains from their former condition is the dismissive way in which non-Bella sometimes refer to them (especially along the river's northwestern bank).

In Zarmatarey and Dendi, most of the female potters interviewed belong to the *debey boro*[4] subgroup of "household captives." Descending from slaves acquired through warfare or trade, these captives remained attached to the family that owned their ancestors who could neither be sold nor freed (Olivier de Sardan 1984:43–50). While they could carry on any activity (even warfare), and generally did so alongside those who owned them, they were exclusively in charge of craft activities. Their specialized technical knowledge contributed (and still contributes) to their social identity in both positive and negative ways. Technical skills demarcated debey boro from "inferior slaves," commonly viewed as "slaves

without skills" who were reduced to the meanest tasks (Olivier de Sardan 1984:55–56). But possessing such skills also had its drawbacks, since craft practice heralded a captive status. This situation still resonates. In the Dendi area, for instance, I met a potter who had to fight with her husband to continue making pots after relocating to his home village. She saw economic opportunity in the fact that nobody practiced the craft locally; however, her husband feared that doing so would reveal her captive origin. The same applies to weavers, to the extent that their professional appellation—*ćakey*—is interchangeable with the term debey boro and univocally associated with a slave status (Smolderen 2013).

The social world of debey boro has internal divisions. One concerns the hierarchy between artisans who inherited their trade from parents and those who learned it from non-relatives. The former are viewed as more skillful, and they openly scorn the latter (Olivier de Sardan 1984:55; see Corniquet 2011:98–99). Second, blacksmiths tend to think of themselves as socially "higher" than other craft people. They generally enjoy a good economic position; they were formerly attached to chiefdoms rather than individual families; they transmit their knowledge within kin-based networks; and many claim to have been initially trained by a "blacksmith aristocracy" that possessed iron smelting skills as well as related esoteric knowledge and magical charms (Olivier de Sardan 1984:57).

In this context, potters' identities and practices seem rather fluid. For instance, pottery making is not constitutive of any specific social category. Debey boro potters are, above all, members of the blacksmith, weaver, or woodcarver subgroup as wives and daughters of male artisans who possess unrelated technical knowledge. Their social world also seems more open to improvisation and reformulation than those of weavers or blacksmiths. In the southern part of the study area, for example, many potters herald themselves as "Bella" without being related to this group. This distances them from the pejorative "debey boro" in contexts where Bella, as relative newcomers in the social landscape (below), have a less salient captive status and are widely perceived as "masters of pottery" (Gosselain 2008a:157–158). This is particularly the case in village communities with large proportions of non-Zarma inhabitants, where Zarma-speaking potters are probably freer to reformulate social relationships and boundaries. Freeborn women have also increasingly appropriated pottery making within the study area. Usually sharing the same

clay sources and market places as "captive" potters, they stress that they only recently adopted the trade because, as put by an informant, "pottery is money. It's not a slave issue anymore." As noted above, this view is far from unanimously shared, as even the potters concerned maintain the distinction between "freeborn" and "captives" in other contexts. Yet it reveals a possible breach in the social circulation of knowledge and collective attribution of technical roles in Zarmatarey and Dendi. From the nobles' point of view, the situation seems natural, as knowledge was acquired from "their own" captives—that is, from (albeit fictively) kin-affiliated persons. From the captives' point of view, things can be more problematic. Some indeed speak of "stolen knowledge," "competition," or the "lower technical mastery" of their freeborn counterparts.

Potters' social position differs in the Zarmaganda area. Here the craft is theoretically open to everyone—as is blacksmithing or weaving—and none of the artisans interviewed bore a specific social status. As in other areas of the African continent, family ties, friendship, and neighborly relations are the main structuring forces behind knowledge circulation. This peculiarity finds parallels in technical practices (see below) and confirms that the area witnessed a distinct history from other parts of the Zarma-speaking area (e.g., Gado 1980; Olivier de Sardan 1984).

Finally, a word on the existence of several Hausa and Fulbe women among NRPT potters. The former live in the northeast of the NRPT-producing zone, and although linguistically affiliated to communities from south-central Niger and northern Nigeria, they are socially and economically connected to Zarma-speaking populations of eastern Zarmaganda. Fulbe potters are encountered around Say and Torodi. Motivated primarily by economic concerns, their role in the trade remains marginal.

Potting Practices

Considered from a morphological and ornamental point of view, the NRPT appears relatively homogeneous and spatially bounded (Fig. 1.2). However, several variations are witnessed among its producers, especially at the level of *chaînes opératoires*. These variations, ranging from minor (painting tools and recipes) to important (fashioning techniques), are summarized in Table 1.1. Comparison and mapping reveals that the NRPT comprises a "core" technical tradition that combines use of sorted grog[5] (often in association with millet husk) as tempering materials; converging

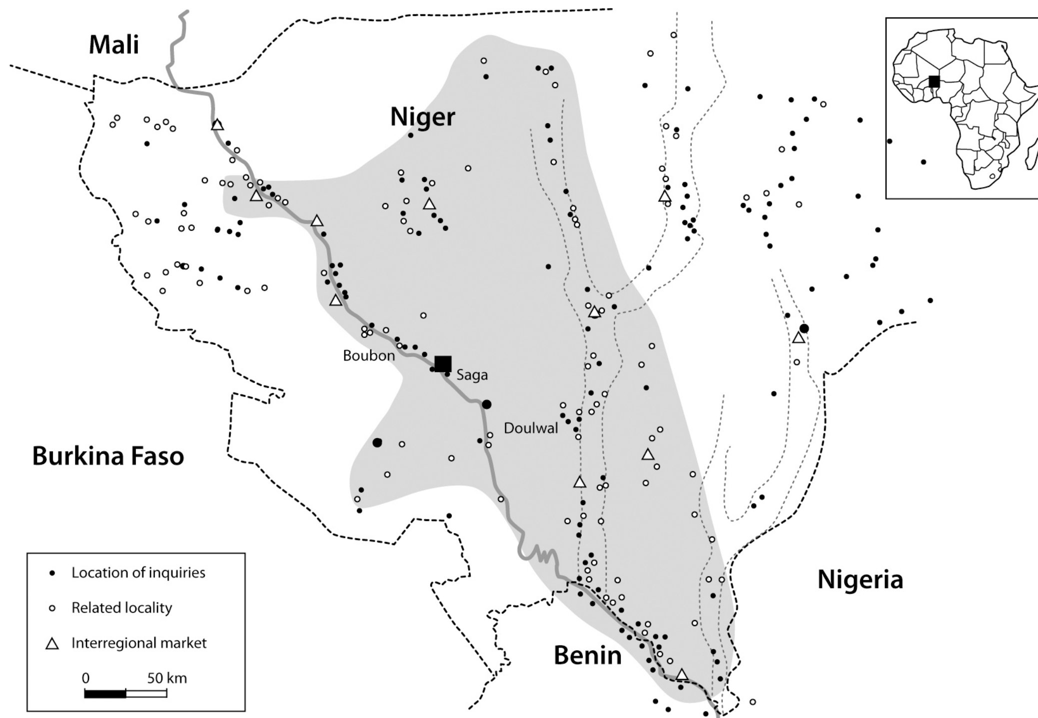

Figure 1.2. Location of the villages listed between 2002 and 2014 and main localities to which they are related. The shaded area corresponds to the NRPT-producing zone. Illustration by Olivier Gosselain and Anja Stoll.

pounding (Gosselain 2010:673) for fashioning the lower half of the vessels, and coiling and beating for the upper half; an iron blade (together with wooden sticks and millet ears and stalks) for applying mineral pigments; and firing of vessels in circular depressions with millet stalks and husk. This "core" tradition is distributed along the River Niger as well as across Zarmatarey and Dendi—that is, essentially within Bella and debey boro communities. Some of its constitutive elements are also recorded outside the NRPT distribution zone, especially on the western bank of the river, where the technical repertoire of Songhay blacksmiths/potters includes sorted grog and converging pounding. They produce similarly shaped pots, thus demarcating from the NRPT at the level of ornamental techniques and repertoires only (rolled impressions, grooving, and occasional application of monochrome painting). So too is there a more marginal tradition within the NRPT distribution zone, confined to the Zarmaganda area (where potters do not belong to any socio-professional subgroup). Here, raw clays are usually tempered

Table 1.1. Nature and distribution of technical variants associated with NRPT *chaînes opératoires*. In the case of clay processing and painting recipes, variants mainly stem from a combination of materials.

	Techniques/tools/materials	Number of variants	Spatial patterning
Tempering materials	- Other clay(s) - Grog (possible sorting according to vessel parts) - Millet husk - Rice husk - Donkey dung	16	Micro-regional (clusters of villages)/ local (individual villages or districts)
Fashioning techniques	- Converging pounding + coiling & beating - Convex molding + coiling & beating	2	Macro-regional
Painting materials	- Ochers - Kaolin - Natron - Gum arabic	4	Micro-regional (clusters of villages)
Painting tools	- Millet ear - Millet stalk - Wooden stick - Iron blade	2	Macro-regional
Firing structures and fuels	Circular depression; millet stalks + millet husk	?	?

with additional clay(s) and/or unsorted grog; the lower part of the vessel is fashioned by convex molding and the upper part by coiling and beating; iron blades are never used for painting; and vessels are fired in circular depressions with millet stalks and husk.

Among NRPT producers, social boundaries—and especially social hierarchies—thus materialize in two technical traditions. This fact points toward the centrality of social affiliation in the "genealogies of learned practices" (Roddick, this volume). Yet such technical materialization is only tangible in manufacturing contexts, and mainly in the potters' workshops. Through the sharing of similar vessel shapes and ornamental motifs, NRPT potters "mask" their various affiliations on finished products and contribute—deliberately or not—to a homogenous material landscape. Moreover, micro-regional or local variations are liable to appear in both traditions, depending on the manufacturing step or the element considered (Table 1.1). The addition of gum arabic to mineral pigments, for example, is only observed in four clusters of neighboring villages situated along the northern portion of the river and the central and southern dallol Bosso. Similarly, specific combinations of tempering materials vary between pottery-producing villages at a micro-regional level, with a spatial distribution that does not necessarily match that of gum arabic. Sometimes, different clay-processing recipes are even used in the various districts of a village (Gosselain 2008b:71–72).

Micro-regional and local variations are also recorded in pottery forms and décors. Longer necks prevail in pottery-producing communities situated along the northern portion of the Niger River. Here, water jars also tend to have two flat vertical handles that join the base of the neck to the lip. Around Mehana, vertical handles cohabit with horizontal ones, the latter placed on the vessel's shoulder in frequent association with a notched clay cordon. A "basic composition" of décor (Fig. 1.3a–c) occurs across the zone, one enriched by (or substituted for) two variants. The first occurs in potting communities along the river north of Niamey. It is characterized by a combination of horizontal and vertical ornamental zones, the main one containing various geometrical—and occasionally figurative—motifs (Fig. 1.3d). The second occurs within a handful of neighboring villages and is characterized by a higher number of ornamental zones, a greater diversity in motifs and figures,

Figure 1.3. Examples of polychrome water jars produced within the study area: a) Kaw Kaw; b) Doulwal; c) Bobiel; d) Tagbati; e) Sona Kado; f) Koutoukalle Kado. Photos by Olivier Gosselain (a–c, f) and Marie Brisart (d, e).

and an extension of the decorative zone over most, or all, of the vessel's body (Fig. 1.3e–f).

In short, while NRPT vessels are stylistically distinct from those produced in neighboring regions, scratching their surface reveals a less homogenous world than initially presented (also Stahl, this volume). We are faced with a classic example of a "heterogeneous aggregate," whose components seem to develop independently and at contrasting scales. The problem is to make sense of this multiscalar phenomenon and, more importantly, to transcend the binary opposition between "spatial" and "social" propinquity when seeking to explain technical and aesthetic dynamics.

A Relational Perspective on Spatial Distributions

Given my interest in bottom-up processes and life histories in the analysis of Nigerien pottery dynamics (Gosselain 2008a, 2008b, 2015), I have tended to eschew the question of scale discussed elsewhere in this volume (also Knappett 2011; Stark 1996). Instead, I preferred, and still prefer, to focus on *categories* of spaces in exploring the geographical embeddedness—or "nesting" (Stahl, this volume)—of potting practice. Tentatively regrouped under the "social space" umbrella, which may be likened to Kaplan's (1973) concept of "cognitive maps," these categories comprise the *space of experience* and the *space known*. The first corresponds to places frequented (and thus "experienced") through daily activities, social interactions, economic exchanges, or travels and around which a person's sense of identity and belonging develops together with practical knowledge and representations. The second category of space is *representational*. It concerns all the places that a person knows vicariously, for example from kin, friends, foreigners, or even the media. Second-hand knowledge generally reinforces a person's sense of belonging but also enriches his/her cognitive repertoire.

Unsurprisingly, the scale of "spaces of experience" and "spaces known" may vary tremendously from one person to the next. They are also likely to expand, contract, or freeze throughout a person's lifetime, or across generations (Sassaman, Stahl, this volume). But the challenges of dealing with such heterogeneity and instability can be overcome by approaching spatial embeddedness from a *relational* rather than a scalar perspective (Lave 1993, 2011; Roddick and Stahl, this volume). A space of experience may indeed be conceived as a constellation of places where concrete relations between people, things, materials, and environment are constituted. This is comparable to Wenger's (1998:130) notion of a "geography of practice," in which "places"—or "localities"—correspond to incipient communities of practice that emerge not only from physical proximity or frequency of interaction but also, more importantly, from learning.

In her study of social interactions and knowledge exchange within a dozen Nigerien potting villages, Corniquet (2011, 2014) has identified several such localities. Closely connected to pottery chaînes opératoires, they correspond to what she calls "practice settings": physical spaces that are necessarily and regularly frequented by artisans in the course of their

Figure 1.4. Potters selling water jars on the Koukoumani market, north of Niamey (Niger). Photo by Olivier Gosselain.

activity where interactions may occur with varying networks of people. In the social world of activity of Nigerien potters, three practice settings are common: weekly markets (Fig. 1.4), clay extraction sites, and firing sites. The first two usually bring together potters from villages located within a 15 to 30 kilometer radius; the third corresponds to intra-village groupings of several potters around firing structures. Corniquet observed that all these practice settings shape potting practice, though their scope and meaning depend on the type of relations taking place. Casual or more regular encounters between potters from different villages may lead to a micro-regional homogenization of tools, clay-processing techniques, and pottery styles, the latter especially sensitive to interactions with customers and retailers in market places. They consequently generate supra-communal "constellations" of practices (Wenger 1998; Roddick and Stahl, this volume). Firing groupings imply more intimate relations between potters and sometimes develop along dividing lines

within village communities (i.e., kin or friendship ties). They usually involve a strong bonding of participants and the emergence of micro-technical variants not necessarily restricted to the firing process itself.

Corniquet (2014:273) equates the latter (along with domestic workshops not discussed here) to "communities of practice," thus emphasizing the importance of mutual engagement and face-to-faceness. This is congruent with Lave's (2011) analysis of apprenticeship among Vai and Gola tailors in Monrovia, in which individual workshops are identified as the main loci of emerging social and material relations. Detailed ethnographies, as those carried out by Lave or Corniquet, are invaluable in making us understand how practice, learning, and meaning emerge in such micro-scale contexts and give rise to shared repertoires. Yet we lack a similar understanding of the mechanisms through which repertoires are liable to develop at larger time and spatial scales (Roddick and Stahl, this volume). This is where the three modes of belonging proposed by Wenger (1998:173–181)—engagement, imagination, and alignment——prove useful when considered in conjunction to social spaces (also Harris, Sassaman, Schoenbrun, Stahl, this volume). In the case of pottery activity, we have seen that artisans invariably frequent different practice settings: clay sources, workshops, firing places, markets. As far as engagement is concerned, their "pottery taskscape" (sensu Ingold 2000:195; also Michelaki et al. 2014) thus corresponds to a constellation of "localities." But given the variety of ecological and socio-historical circumstances underlying the spatial distribution and interrelations of such localities (see below), it seems useless to associate practice with any predetermined scalar unit, be it "micro" (e.g., Corniquet 2014) or "meso" (Knappett 2011; see Roddick and Stahl, this volume). Importantly, the situations from which learning and belonging emerge in practice settings are not disconnected from other realms of the participants' experience. As Dreier (1996:114) notes, situations are always embedded in "the overall societal structure of possibilities and actions. . . . So even [their] immediate 'internal' connections . . . are socially mediated in a concrete and particular way." Part of this mediation derives from the work of "imagination" (Wenger 1998:175–178), through which participants rely on their direct and vicarious knowledge of the world to broaden their perception of practice (e.g., by envisioning historical continuities, connections or disconnections with other communities,

or possibilities for change). Another part of the mediation concerns the work of "alignment" (Wenger 1998:178–181), through which participants coordinate their actions with members of other communities, without necessarily engaging with or even knowing them. This form of belonging not only expands practice beyond the confines of practice settings or taskscapes but also makes it "fit within broader structures" (Wenger 1998:174). This latter notion is crucial, for if a potter's experience and life trajectory undeniably differ from other members of her/his society inasmuch as it mobilizes specialized knowledge, places, and materials, they never reduce to such dimensions: a potter also lives in a historically constituted world inhabited by others, with whom s/he shares experiences, representations, and a larger array of social mediations.

I turn now to explore the "world" inhabited by NRPT producers in order to see how engagement, imagination, and alignment develop in conjunction with social spaces. Confronting the current distribution of NRPT practices, potters' life histories, and accounts of broader historical processes, my aim is to provide a glimpse of the "rhizomic networks" (Stahl 2013:55) that contributed to the creation, diffusion, and adaptation of a unique pottery tradition along the Niger River.

Spatial Relations Within the NRPT Producing Area

Beside observing technical processes and collecting information on vessels, my field enquiries aimed at reconstructing the social space of individual potters by identifying the many "localities" to which they were connected. Most concerned their taskscape and larger space of experience: clay sources, market places, place of initial learning, residency locations of kin and friends, places frequented during temporary sojourns (e.g., seasonal migrations), and so on. Other kinds of connections pertained to their "space known": unvisited places of origins of parents and ancestors and production centers/areas evoked by relatives or visiting strangers, among other possibilities. Bearing in mind that my research methods and familiarity with local contexts improved steadily between 2002 and 2014, thereby creating micro-regional imbalances in the quality of the data collected,[6] and that no interview was systematic enough to ensure that all the places frequented and known by a person were mentioned, available information reveals the geographical

embeddedness of potters' social spaces, as well as macro-regional movements of people.

Three conclusions arise from the comparison of available data: 1) connections between localities inhabited, frequented, or known by NRPT potters are essentially confined to the NRPT production area—with the exception of the river's northwest bank where a small consumption "pocket" extends outside the production area; 2) connections are especially intense along the geographical axes of the Niger River and the dallol Bosso; and 3) while some discrete micro-regional constellations of interconnected localities may be identified, none are completely isolated from one another. Whether through intense or loose ties, the whole NRPT area thus appears to be interconnected. This conclusion is important, for it provides a first clue in regard to the stylistic homogeneity observed within this large, socially heterogeneous area. Yet it is not an explanation in itself. The spatial network thus revealed not only compresses temporalities and types of relations between places and people but also does not inform on *why* relations vary in intensity, develop in specific directions, or do not cross certain boundaries. To do so, we must identify the structuring—and often mutually reinforcing—factors underlying the spatial movement of people, the constitution of individual social spaces, and the circulation of knowledge.

Macro-regional Relations

Most macro-regional relations in the study area are ancient and associated with historical events or processes. Without going into details, southwest Niger and north Benin were insecure areas throughout most of the 19th century (Barth 1859; Fuglestad 1983; Gado 1980; Olivier de Sardan 1984). Slave raids, looting, and wars that opposed chiefdoms or populations led to a state of quasi-permanent warfare, inducing important movements of people. In the Saga district of Niamey, for example, ancestors of the Bella potters are said to have come from Sona (about 100 kilometers upriver) when the Zarma warrior Issa Korombe sacked the area in the second half of the 19th century. Certain regions, such as the river's western bank in north Benin, served as refuges for fleeing people. Oral testimonies indicate that potters' families from the Doulwal and Baleyara areas (in Zarmatarey) took refuge in southern Dendi during the 1880s–1890s, where they settled either permanently

or temporarily. Descendants of refugees from the Baleyara area are also found on the river's eastern bank, notably in the debey boro village of Kaw Kaw (dallol Fogha). Droughts and famines also contributed to large-scale movements of people (Alpha Gado 1993). Potters notably evoked the *gaasu borgu* (1870) and *ise-neere* (1900–1903) food crises, the first pushing Bella from the Tillaberi area to resettle around Doulwal and Torodi, and the second leading blacksmith families from the north of Niamey to resettle in the dallol Bosso.

Whether related to warfare or famines, refuge areas were not chosen randomly. Beside obvious ecological reasons—the presence of shallow aquifers in the dallol Bosso and dallol Fogha, or dense forests in southern Dendi—decisions were also socially motivated. For instance, Doulwal, Toryo, and Kaw Kaw are villages inhabited (and probably founded) by captives. Debey boro and Bella migrants arriving from the north found not only people already engaged locally in similar activities but also, more importantly, people of similar condition with whom they could intermarry. The concentration of captive communities in the dallol Bosso and dallol Fogha—and the consequent "attractiveness" of these areas for debey boro living in other regions—is also related to salt exploitation. By the middle of the 19th century (Barth 1859:639–640)—and probably earlier—thousands of captives were extracting natron and rock salt in the southern portion of both dallols under control of Zarma, Fulbe, and Tyenga masters (Lovejoy 1986:129–134). Tuaregs from the Baleyara area also controlled extraction sites in the dallol Bosso where they settled their own slave families (Lovejoy 1986:34). A large network of captive communities had thus developed in connection with salt exploitation in the southern study area, channeling the Bella and debey boro migrations of the late 19th–early 20th centuries (cf. Mills, this volume).

Permanence of Spatial Relations

The gradual stretching of Bella's and debey boro's social spaces ensured that, by the last decades of the 19th century, the stage was set for the homogenization and propagation of their currently associated potting practices. However, the ornamental style so characteristic of NRPT does not seem to have developed earlier than the 1930s. While the historical processes evoked above may account for the propagation of technical practices such as converging pounding, tempering clay with sorted

grog, or painting with an iron blade, this is not the case for aesthetic practices—at least in their current incarnation. And yet they are distributed over a similar territory, as if they followed the same propagation path. How to account for such a permanence of spatial relations, despite changing historical circumstances?

Part of the answer lies in the geographical characteristics of the area, which include attractive zones (shallow aquifers, fertile lands, salt deposits) and structuring axes along which people, animals, and goods circulated for centuries. Such characteristics are constant landscape features that have long channeled the farmer and herder practice—most notably their migrations and settlement strategies—in similar fashion to the Amazonian "culture of water" evoked by Harris (this volume). This reminds us that landscape is not just "background" but a key element in the history of practice (Ingold 2000; Michelaki et al. 2014; Sassaman, this volume).

Social status, as related to life ways, values, and craft practices, must also be considered. A good example is the way in which sedentary Bella have maintained social ties over large areas through marriage exchanges, probably because their nomadic roots (and slave status) led them to foster blood over land ties. The matrimonial networks of Bella potters consequently spread over a large area and continue to bind the Tillaberi area to the diverse migratory destinations of their ancestors. Among debey boro, craft activities such as iron smelting, forging, or weaving were frequently associated with dry season itinerancy. Due to the changing availability of raw materials and the willingness to find better economic opportunities when local markets were saturated, whole families—including potters—often resettled in villages that had previously been frequented on a seasonal basis. This has contributed to maintenance of ancient macroregional relations, especially since the seasonal migrations of craft migrants developed across a space known through oral histories shared by kin or members of their socio-professional subgroup.

Although the Zarmaganda area seems less intensively connected to other parts of the NRPT-producing zone, it nevertheless provides another example of the permanence of relationships with distant areas. In Kanya, a large and reputed pottery center of Zarmaganda, pottery making was introduced by debey boro from the Baleyara area who migrated northward in the 1920s during a decade of abundant harvests known

locally as *harey-bane* or *wa barka* (Alpha Gado 1993:54). Some of their descendants claimed to have relatives in central dallol Bosso and to have sojourned there for family reasons or during the famine of 1984. For the last three decades, the river region has also been gradually incorporated in the "space known" of Zarmaganda potters, due to the development of market gardening that attracted a growing number of seasonal migrants from the area (Bastin 2008; Gosselain 2008a:168).

Micro-regional Relations

Shifting temporal and spatial scale, I now focus on the effects of weekly peripheral markets on the development and maintenance of micro-regional relations. Markets are prominent features of a potter's space of experience or taskscape and, importantly, are places where boundary objects (Wenger 1998:129; Crown, Roddick, Stahl, this volume) circulate between unrelated production sites. Two types of markets exist in the River Niger region: "interregional" and "local" (Sauvy 1948:1–2). The first correspond to places where pastoralists and agriculturalists living in a radius of one to several days' walk exchange goods from distant areas, notably craft products. The second are places where people living in a radius of half a day's walk exchange locally produced goods. During the first half of the 20th century (and probably earlier), the main interregional exchange poles along the Niger River were Ayorou, Mehana, Gotheye, and Say (Bastin 2008; Sauvy 1948). While still important, they were gradually overcome by Niamey in the second half of the 20th century as the city grew and acquired an urban status. Similarly, the Fabidji market in the southern dallol Bosso lost its major status—one that prevailed at the turn of the 19th and 20th centuries—to the benefit of Dosso, a town situated at the intersection of major tarmacked roads. In recent decades, local markets also boomed in densely peopled areas and along major roads, while others situated too far from modern communication routes died.

Available information regarding potters' visits to interregional and urban markets reveals several well-bounded zones of interconnections (Fig. 1.5). One spreads over both banks of the river, around and between the Gotheye and Niamey markets, which are exclusively supplied by NRPT producers (who also supply a dozen local markets situated in-between). This zone was initially more fragmented: oral testimonies indicate that Saga was a major pottery market before the economic

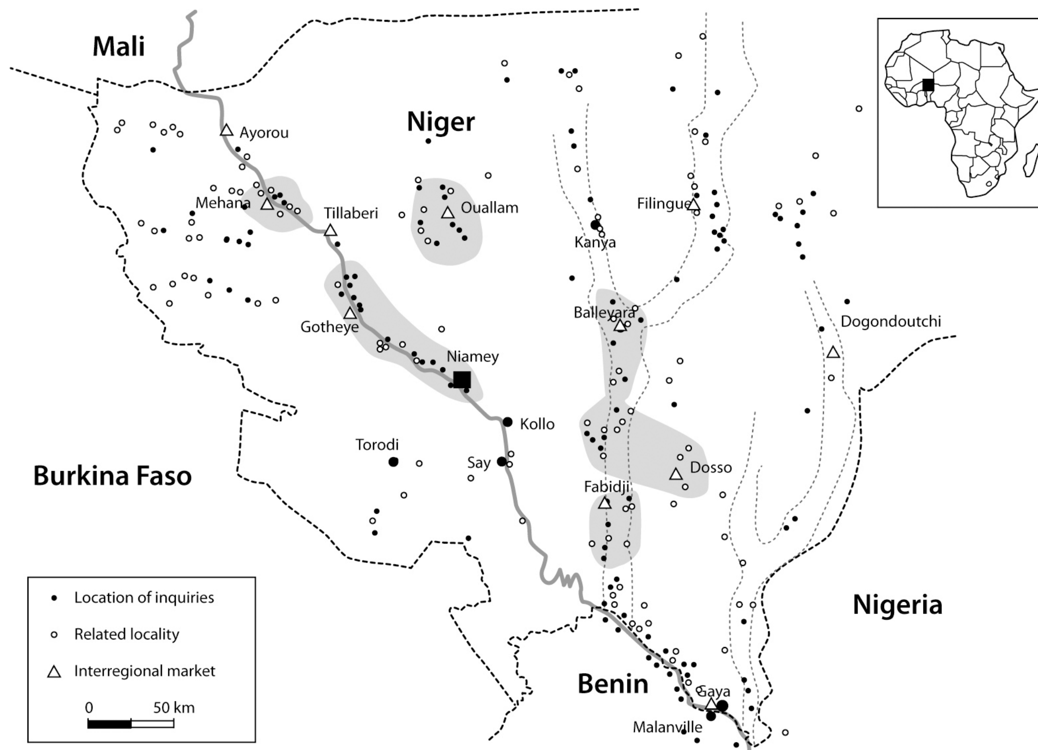

Figure 1.5. Location of interregional markets within the study area and corresponding zones of interconnections with pottery-producing villages (shaded areas). Illustration by Olivier Gosselain and Anja Stoll.

development of Niamey, and only during the last decades of the 20th century did regular interactions take place between potters of the Gotheye and Niamey areas. The current zone of interconnections thus results from the fusion of two spaces that formerly developed at a smaller scale. Interestingly, the spatial distribution of some of the technical variants evoked above fully or partially coincides with this new zone of interconnections. For example, potters add gum arabic to painting materials throughout the zone, contrary to neighboring communities situated up- and downriver. Such sharing most probably results from a recent process of alignment, in which the physical characteristics of pottery vessels (here, the shininess and good adherence of mineral pigments) "created fixed points around which to coordinate activities" (Wenger 1998:187). This occurred through weekly encounters involving a level of participation that must have been low but sufficient enough to allow learning. The shared practice of tempering clay with unsorted grog in a series of

potting villages related to the Niamey market illustrates the nature of such participation. At the time of my inquiries, one of these villages, Boubon, had become the main purveyor (with Saga) of the Niamey pottery market, as well as a substantial reference for potters of neighboring communities. When Boubon potters stopped sorting grog according to the vessel part to be manufactured, the practice was rapidly adopted in neighboring communities. As explained by a potter from Tagbati: "We don't use different preparations anymore; it was too much work. People in Boubon do the same. They were the ones who told us to do like that. We met on the Niamey market and talked: 'We do like this, we do like that.' That's how it happened." This process of alignment probably involved a greater degree of participation than reification (sensu Wenger 1998:58–61), but it was preceded by work of imagination; new technical possibilities came in association with positive technical identities (the "skilled" potters of Boubon[7]). They became "good to think" and thus "good to adopt." Customers may have reinforced this process by favoring Boubon products and attributing to them better qualities, as was the case around the southeastern market of Dosso, where customers' views on the quality of raw materials and clay-processing recipes forced potters in a 100 square kilometer area to start exploiting a particular extraction site and change processing recipes when making vessels aimed at an external clientele (Gosselain and Livingstone Smith 2005:33–34). An interesting feature of the work of alignment is its possible permanence after the circumstances from which it was born ceased to exist. This seems to be the case in southern dallol Bosso, where the addition of gum arabic to painting materials is observed in villages that were formerly connected to the ancient interregional market of Fabidji but whose potters now entertain loose relationships.

In the northwestern study area, around the Mehana market, regular interrelations between Songhay and Bella potters did *not* engender an alignment of practices but, rather, a deliberate un-alignment. Polychrome vessels made by Bella of the eastern bank are the sole pottery products sold in the Mehana market. Villagers from the western bank, and notably Songhay potters of the blacksmith subgroup, frequently buy them. Yet, despite valuing these vessels (often offered as marriage gifts), they never attempt to copy their decoration, in contrast to observations in other regions (Gosselain 2008a:172–173). This may stem from

the low esteem in which members of the blacksmith group hold other craft people, especially those bearing a "slave" status (Olivier de Sardan 1984:57). Copying Bella vessels would blur a meaningful boundary and threaten to situate them publicly at a lower level of the social hierarchy. Imagination is once again at play here. Fueled by a stereotypical association between social status and craft products, it reinforces preexisting constellations of practices and partially explains the western boundary of the NRPT producing area.

Intra-village Relations

Another meaningful spatial context among NRPT potters is the village district where they reside and work. This spatial context is not in itself a "practice setting"—it comprises two of them, the workshop and the firing place—but it corresponds to a place where frequent interactions occur between artisans and, more importantly, to a spatial manifestation of social boundaries. With the exception of the Zarmaganda, where potters' compounds are indistinctly situated alongside other compounds, most Bella and debey boro potters live in specific districts, spatially demarcated from the living places of "freeborn" people. Along the Niger River, and specifically in the Gotheye area, a distance of several kilometers may separate Bella districts from "freeborn" districts that therefore appear as independent villages. In the dallol Bosso and dallol Fogha, districts are usually situated at visual distance from each other (never farther apart than .5 kilometer), and the separation demarcates not only freeborn people from captives but also various categories of captives (e.g., blacksmiths, weavers) and migrant communities (e.g., Hausa, Bella).

Due to population movements, intermarriages, and recent processes of technical borrowing, pottery making is currently practiced within all (or most) districts of pottery-producing villages, irrespective of social boundaries. The social world of many Bella and debey boro potters has thus been heavily transformed throughout the 20th century, with the sharing of a pottery tradition and practice settings (extraction sites and market places) increasingly counterbalanced by situated practices that express contrasting forms of belonging. While relations developing in shared practice settings tend to generate technical and aesthetic homogeneity, I believe that the mutual engagement of potters bearing different

social status had the opposite effect in the study area. This may explain why social hierarchies systematically coincide with the use of distinct clay-processing recipes in pottery-producing villages with marked social and spatial divisions (Gosselain 2008b:71–72). Here, interviews reveal that processes of belonging often involve coordinating, at the district level, practices drawn from "dormant repertoires" constituted through interpersonal exchanges within potters' spaces of experience and usually exploited for coping with changing ecological circumstances (e.g., a shortage of millet husk leading to the use of rice husk or grog alone). This strategic reformulation of known possibilities clearly combines imagination and alignment. Yet it also differs from the preceding examples inasmuch as the work of alignment is not confined to pottery activity but aims at fitting within a broader structure—here, social status. Ironically, such a "larger-than-pottery" process of belonging materializes in the micro-scalar distribution of technical variants, since the meaning to which it is associated emerges from local power relations (see Corniquet [2014:216–218] for a similar observation in relation to firing groupings in south-central Niger). Only when local variants (or innovations) are integrated into other forms of belonging—as those evoked in previous sections—do they have the ability to propagate at a larger scale.

Aesthetic Hegemonies

Up to this point I have examined the dynamics of NRPT in relation to social spaces and forms of belonging associated with various practice settings, emphasizing techniques. I turn now to explore other "extensive, societal connections" (Dreier 1996:114) in relationship to aesthetic practices. A first question pertains to their origin and structuration. What is the aesthetic landscape within which NRPT potters operate? What were the sources of their inspiration? Let us start with an interesting observation of Olivier de Sardan (1973:426, 1984:37–38) pertaining to body aesthetics: in southwest Niger, nobles and freeborn often describe captives as having crooked fingers, spread toes, thick fingernails, hard and gnarled muscles, a thick neck, tough flesh, rough skin, and a stiff, disgraceful gait. By contrast, masters are said to have slender and parallel fingers, contiguous toes, thin fingernails, flexible and well-formed muscles, a slender neck, soft flesh, smooth skin, and a supple gait. Nobles

and freeborn standards of beauty clearly derive from Tuareg and Fulbe body stereotypes, two hegemonic populations of the 19th century (Olivier de Sardan 1984:38). A notable parallel exists between pottery and body standards of beauty within the NRPT distribution zone: a “pretty” pot must be perfectly symmetrical and rounded, with a slightly elongated body, slender neck, thin lip, smooth surface, and carefully executed décor “that catches the eye as does an elaborated hairdressing or a nice cloth.” NRPT potters thus operate within an aesthetic landscape where preferences are not only connected to larger realms of experience but also expressed through a basic set of rules. When shown pictures of vessels made in neighboring regions, NRPT potters and customers usually criticize some of their attributes. Looking at a short-necked water jar from south-central Niger, a dallol Bosso potter told me that it was “well made,” but she immediately added, “Why did they forget to put the neck?” Similar reactions emerged during interviews in villages along the Niger River and in dallol Fogha, where foreign pots were unanimously described as “too stocky,” “disharmonious,” and “lacking a proper neck.” Basic ornamental rules were also apparent: necks should be vertically zoned and bodies horizontally zoned, necks are adorned with bicolored line beams, beams or large bands divide body zones, and painted delimitation of the lip extends on interior and exterior surfaces. Moreover, several motifs are so recurrent as to seem mandatory: triangles, trapezes, lozenges, and beams of lines forming angles or crosses. While their ordering allows for numerous variants that potters often liken to individual, communal, or regional signatures, the sharing of similar color ranges and organizational patterns ensure that NRPT vessels retain a family likeness throughout the Zarmatarey, Dendi, and Zarmaganda areas and is perceived as such by both potters and customers. This large-scale distribution clearly stems from an initial process of alignment between Bella and debey boro communities, but the chronology and specifics of this process remain unclear. Judging from field observations and interviews, the sole certainty is that customers must have played a crucial role here, by favoring ornamental innovations that fulfilled their aesthetic expectations. I return to this point shortly.

Other decorated elements of their material world are a source of inspiration for NRPT potters, especially leather goods, wooden utensils, clothes, or blankets manufactured by, or for, Tuaregs and Fulbe. It is at

this level that the aesthetic imprint of these formerly hegemonic populations is most strongly felt, to the extent that some NRPT jars are notably close to Berber vessels produced on the other side of the Sahara or that some Bella or debey boro vessels seem to have been painted by Fulbe artisans. As shared artifacts whose ornamental characteristics were positively connoted, Tuareg and Fulbe objects thus played a role of "boundary objects" (Wenger 1998:105–108) whose large-scale circulation enabled the coordination of aesthetic practices between unrelated communities. Other types of boundary objects have been recently mobilized in ornamental practices: schoolbook pictures; alphabet letters tattooed on the foreheads of young women (an emerging body fashion in the 2000s, especially in urban contexts); or women's wax prints. Bella informants from the Mehana area explained, for example, that a new wax print, inspired by the design of grass mats made in the Say area, was launched by the Nitex society (Niamey) in the late 1960s–early 1970s. It became a craze in the Niger River area, and some potters frequenting Mehana markets reproduced its key elements (checkered pattern, Teutonic crosses) on water jars. Warmly received by customers, the style spread rapidly through the network of potters connected to the Mehana market and still prevails in the area. Such aesthetic alignment emerging from the frequenting of market places may account for other local decorative variants, such as the combination of horizontal and vertical registers on the vessel body (Fig. 1.3d) or the multiplication or ornamental zones (Fig. 1.3e–f) in potting communities situated along the river north of Niamey. It also reveals a link between textile and pottery designs that is probably both common and ancient. For example, the bicolored line beams painted on the neck of water jars is remarkably close to a recurring motif on the highly prized marriage blankets formerly woven by debey boro and Fulbe slaves. Geometrical figures on these blankets parallel the most widespread—and apparently ancient—motifs on NRPT vessels. We could be faced here with an original source of inspiration for potters of the Niger River area.

Regarding recent examples of ornamental innovation (Fig. 1.3d–f), a question remains: why are such processes unequally distributed within the study area? The spatial distribution of stylistic variants shows that ornamental practices are more dynamic along the Niger River—especially north of Niamey—than in other regions. Part of the answer probably

Figure 1.6. A young potter painting a polychrome water jar with a knife in Koutoukalle Kourtey, north of Niamey (Niger). Ornamental grammars and repertoires have complexified and been consistently enriched in the area since the 1970s. Photo by Olivier Gosselain.

lies in the area's economic and social context. But another process is at work, one that brings us back to the potters' aesthetic landscape: besides clothes, hairdressing, and other body ornaments, a major aesthetic manifestation for rural Nigerien and Beninese women is their personal room decorated with elements of their marriage trousseaux. The phenomenon is widespread in the Sahel (Cooper 1995; Cunningham 2009; Gosselain et al. 2008) and has recently followed a similar path: decorated calabashes formerly piled up or suspended in the room have been replaced by enamelware (cups, basins, casseroles) carefully set on shelves and cabinets. This led to an overall shift from a monochrome and textured aesthetic environment to a polychrome, smooth, shiny one. Yet in several regions—most notably in insular Wogo[8] villages north of Niamey—room decoration also included wall painting, richly decorated woven blankets, and painted water jars (Etienne-Nugue and Saley 1987; Olivier de Sardan 1969). While the foreign origin and quantity of exhibited articles are common

indexes of taste and wealth in southern Niger and northern Benin (Gosselain et al. 2008:22–25), Wogo and their neighbors clearly placed (and continue to place) emphasis on locally produced goods and ornamental systems, with a marked taste for polychromy, symmetry, and exuberant compositions (Fig. 1.6). This context has undeniably favored design innovations and ornamental sophistication of vessels used as marriage gifts. It has led, notably, to the emergence and subsequent alignment around market places of increasingly complex compositions.

Conclusion

"The world is like a beanstalk," a Dendi informant once told me after retracing the various migration routes followed by his ancestors. "You sow a seed and stems grow in every direction." He cautioned me against worrying too much about mobility logics, motivations, or obstacles. In his opinion, people could just go *anywhere*, and did so across centuries. While I like the metaphor, I think that the man was wrong: beanstalks do not grow naturally in *every* direction. They need good soil, favorable weather, light, support structures, caring; such elements determine not only their robustness but also the orientation of their stalks. The same applies for people and practice. This is why the theoretical path traced by Lave (1996, 2011; Lave and Wenger 1991) is so important, for in drawing our attention to the *relational nature* of practice, we are compelled to open the contexts within which individual subjectivities emerge and transform concurrently with learning.

Here I have accordingly tried to untangle the constitutive elements of the context within which NRPT potters operate and the processes that shaped their everyday practices. A combination of historical, ecological, and social factors contributed, from the second half of the 19th century onward, to the development of multiple relations and transformations throughout the study area. In regard to the "rhizomic networks" (Stahl 2013:55) of NRPT, a first category of factors relates to existing geographical connections (through migrations, marriage, and trading activities) along important structuring axes such as fertile valley and main communication roads. Spatial anisotropy thus partially accounts for the current distribution of potting practices associated to NRPT. But it does not suffice insofar as it potentially concerns all the

populations of the Niger River region (not specifically craft people) and an area considerably larger than the NRPT distribution zone.

To understand why the potters' social spaces developed in particular directions—with implications for circulation of potting practice and representation—two other factors must be considered. One pertains to power relations. Because most Nigerien and Beninese potters have a captive status, they are/were forced to follow strict marriage rules and, frequently, to settle in villages or districts inhabited by people with similar status. This has markedly oriented spatial connections and knowledge circulation in the study area, contributing to the mixing of people with distinct languages and origins. Within this spatial framework, social hierarchies have either led to multiscalar processes of alignment or alternatively acted as powerful filters, blocking the circulation of knowledge (Crown, this volume). We saw, for example, that, despite potters having direct or indirect relations in certain practice settings and attributing aesthetic and/or economic value to NRPT elements, they nevertheless rejected them because of stereotypical associations with low social status. This work of imagination played out differently around market places, when both potters and customers positively connoted technical or aesthetic variants.

A last factor pertains to the hegemonic nature of aesthetic practice. On one hand, choices in pottery forms and decoration are structured by existing grammars and repertoires, which are reinforced not only by shared representations within potting communities but also by the taste of clients on market places. On the other hand, aesthetic practices developed in other realms of the material world lead to innovations and the consecutive development of regional stylistic variants. This latter factor probably accounts for the puzzle with which I opened this chapter—the discrepancy between Urvoy's observations and mine. We saw indeed that NRPT producers drew inspiration from an array of locally produced and foreign objects throughout the 20th century in a context of increasing competition between artisans and gradual transformation of water jars from functional to decorative items. Potters thus continuously stretched their ornamental grammars and repertoires, developing a style whose homogeneity and current geographical scope should not mislead us into believing that it is rooted in a long and coherent history.

Acknowledgments

I thank all the Nigerien and Beninese potters with whom I've worked since 2002 and my research assistant, Doulla Sindy, whose intelligence, resourcefulness, and commitment never cease to impress me. None of my ethnographical work would have been possible without him. My thanks also go to the MA and PhD students with whom I worked in the field. Research in Niger and Benin received financial and logistical support from the Ministère du Tourisme et de l'Artisanat du Niger, the CReA-Patrimoine (Université libre de Bruxelles), the Communauté Wallonie-Bruxelles, and the European Research Council.

A huge thank-you to Ann Stahl and Andy Roddick for organizing such an inspiring seminar; to the staff at the Amerind Foundation for receiving us so well; and to all the seminar participants for their friendliness, intelligent comments and discussion. Good company, good talk, good food, good wine, good music . . . how much better can it be?

Notes

1. Y. Urvoy's 1955 publication was posthumous since the French Resistance shot him in 1944 for crimes of collaboration. In charge of several geographical and topographical missions in Niger, he had developed an interest for the culture history of southwest and central Nigerien populations (D. Urvoy 1978).

2. The Crossroads of Empires project (2011–2015), directed by Anne Haour (University of Norwich), received funding from the European Research Council under the European Union's Seventh Framework Programme (FP/2007-2013) / ERC Grant Agreement 263747.

3. "Dallol" is equivalent to the Arab word *wadi*, designating a streambed that remains dry for most of the year.

4. Literally, "people from the enclosure." The term *horso* is also used in the area.

5. According to vessel parts. Coarse grog is used for the body and medium-sized grog for the neck.

6. Fieldwork in the Zarmaganda was unfortunately superficial. Data were collected in 2003 during the exploration phase of the project, which ended in 2006. Regional security problems precluded additional visits.

7. The reputation of Boubon potters grew, especially after the installation of a Swiss studio potter in 1993 and the development of pottery-oriented touristic activities (see also Roddick, this volume).

8. The Songhay-speaking Wogo population is one of many Songhay subgroups. Living on islands in the Tillaberi area, they have intermixed with Fulbe and are well-known for their art—especially wall painting and woven blankets.

References

Alpha Gado, Boureima. 1993. Une histoire de famines au Sahel: Étude des grandes crises alimentaires (XIXe–XXe siècles). Paris: L'Harmattan.

Anquetil, Jacques. 1977. L'artisanat créateur au Niger. Paris: Dessain et Tolra.

Bako-Arifari, Nassirou. 2000. Peuplement et populations Dendi du Bénin: Approches anthropo-historiques. *In* Peuplement et migration. Elisée Soumonni, Diouldé Laya, Boubé Gado, and Jean-Pierre Olivier de Sardan, eds. Pp. 113–146. Niamey: CELTHO.

Barth, Heinrich. 1859. Travels and Discoveries in North and Central Africa, vol. 3. New York: Harper and Brothers.

Bastin, Stéphane. 2008. Diffusion du maraîchage féminin et grands espaces de mobilité dans la vallée du Niger. Techniques & Culture 51:124–143.

Beauvilain, Alain. 1977. Les Peuls du dallol Bosso. Études Nigérienne 42. Niamey: Institut de Recherches en Science Humaines.

Bernus, Edmond. 1981. Touaregs nigériens: Unité culturelle et diversité régionale d'un peuple pasteur. Paris: L'Harmattan.

Byfield, Judith. 2002. The Bluest Hands: A Social and Economic History of Women Dyers in Abeokuta (Nigeria), 1890–1940. Oxford: James Currey.

Cooper, Barbara. 1995. Women's Worth and Wedding Gift Exchange in Maradi, Niger, 1907–1989. The Journal of African History 36(1):121–140.

Corniquet, Claire. 2011. Cadres de pratiques et circulation des connaissances chez les potières de l'Arewa (Niger). Cahiers d'Études Africaines 51(201):87–114.

———. 2014. Ancrage social, Ancrage spatial: Circulation des savoirs céramiques chez les potières de l'Arewa et du Kurfey (Niger). PhD dissertation, Université libre de Bruxelles.

Cunningham, Jerimy J. 2009. Pots and Political Economy: Enamel-Wealth, Gender, and Patriarchy. Journal of the Royal Anthropological Institute 15(2): 276–294.

Dreier, Ole. 1996. Researching Psychotherapeutic Practice. *In* Understanding Practice: Perspectives on Activity and Context. Seth Chaiklin and Jean Lave, eds. Pp. 104–124. Cambridge: Cambridge University Press.

Etienne-Nugue, Jocelyne, and Mahamane Saley. 1987. Artisanats traditionnels en Afrique Noire: Niger. Paris: Institut Culturel Africain.

Fuglestad, Finn. 1983. A History of Niger, 1850–1960. Cambridge: Cambridge University Press.

Gado, Boubé. 1980. Le Zarmatarey: Contribution à l'histoire des populations d'entre Niger et dallol Mawri. Études Nigériennes 45. Niamey: Institut de Recherches en Sciences Humaines.

Gosselain, Olivier P. 2008a. Mother Bella Was Not a Bella: Inherited and Transformed Traditions in Southwest Niger. *In* Cultural Transmission and Material Culture: Breaking Down Boundaries. Miriam T. Stark, Brenda J. Bowser, and Lee Horne, eds. Pp. 150–177. Tucson: University of Arizona Press.

———. 2008b. Thoughts and Adjustments in the Potter's Backyard. *In* Breaking the Mould: Challenging the Past Through Pottery. Ina Berg, ed. Pp. 67–79. BAR International Series 1861. Oxford: Archaeopress.

———. 2010. Ethnographie comparée des trousses à outils de potiers au sud du Niger. Bulletin de la Société Préhistorique Française 107(4):667–689.

———. 2015. Roads, Markets, Migrants: The Historical Trajectory of a Male Hausa Pottery Tradition in Niger. *In* The Distribution of Technological Knowledge in the Production of Ancient Mediterranean Pottery. Walter Gauß, Gudrun Klebinder-Gauß, and Constance von Rüden, eds. Vienna: Sonderschriften ÖAI.

Gosselain, Olivier P., Renaud Zeebroek, and Jean-Michel Decroly. 2008. Les tribulations d'une casserole chinoise au Niger. Techniques & Culture 51:18–49.

Haour, Anne, Oumarou Banni Guené, Oliver P. Gosselain, and Alexandre Livingstone Smith. 2011. Survey Along the Niger River at the Bénin-Niger Border, Winter 2011. Nyame Akuma 76:23–32.

Ingold, Tim. 2000. The Perception of the Environment: Essays in Livelihood, Dwelling and Skill. London: Routledge.

Kaplan, Stephen. 1973. Cognitive Maps in Perception and Thought. *In* Image and Environment. Roger M. Downs and David Stea, eds. Pp. 63–78. Chicago: Aldine Publishing.

Knappett, Carl. 2011. An Archaeology of Interaction: Network Perspectives on Material Culture and Society. Oxford: Oxford University Press.

Lave, Jean. 1993. The Practice of Learning. *In* Understanding Practice: Perspectives on Activity and Context. Seth Chaiklin and Jean Lave, eds. Pp. 3–32. Cambridge: Cambridge University Press.

———. 2011. Apprenticeship in Critical Ethnographic Practice. Chicago: University of Chicago Press.

Lave, Jean, and Etienne Wenger. 1991. Situated Learning: Legitimate Peripheral Participation. Cambridge: Cambridge University Press.

Lovejoy, Paul E. 1986. Salt of the Desert Sun: A History of Salt Production and Trade in Central Sudan. Cambridge: Cambridge University Press.

Michelaki, Kostalena, Gregory V. Braun, and Ronald G. V. Hancock. 2014. Local Clay Sources as Histories of Human-Landscape Interactions: A Ceramic Taskscape Perspective. Journal of Archaeological Method and Theory. doi 10.1007/s10816–014–9204–0.

Olivier de Sardan, Jean-Pierre. 1969. Système des relations économiques et sociales chez les Wogo du Niger. Paris: Institut d'Ethnologie.

———. 1973. Esclavage d'échange et captivité familiale chez les Songhay-Zerma. Journal de la Société des Africanistes 53:151–167.

———. 1984. Les sociétés Songhaï-Zarma (Niger-Mali): Chefs, guerriers, escalves, paysans. Paris: Karthala.

Sauvy, Jean. 1948. Un marché africain urbain: Niamey. Notes Africaines 38:1–4.

Schildkrout, Enid, Jill Hellman, and Curtis A. Keim. 1989. Mangbetu Pottery: Tradition and Innovation in Northeast Zaïre. African Arts 22(2):38–47.

Séré de Rivière, Edmond. 1965. Histoire du Niger. Paris: Editions Berger-Levrault.

Smolderen, Lucie. 2013. La filière artisanale du coton dans le Dendi et le Borgou (nord Bénin): Un fait ethnographique et historique. MA thesis, Université libre de Bruxelles.

Stahl, Ann B. 2013. Archaeological Insights into Aesthetic Communities of Practice in the Western Volta Basin. African Arts 46(3):54–67.

Stark, Miriam T. 2006. Glaze Ware Technology, the Social Lives of Pots, and Communities of Practice in the Late Prehistoric Southwest. *In* The Social Life of Pots: Glaze Wares and Cultural Dynamics in the Southwest, AD 1250–1680. Judith A. Habicht-Mauche, Suzanne L. Eckert, and Deborah L. Huntley, eds. Pp. 17–33. Tucson: University of Arizona Press.

Urvoy, Dominique. 1978. Yves Urvoy (1900–1944). Revue Française d'Histoire d'Outre-Mer 65(238):64–98.

Urvoy, Yves. 1955. L'art dans le territoire du Niger. Dakar: Institut Français d'Afrique Noire.

Wenger, Etienne. 1998. Communities of Practice: Learning, Meaning, and Identity. Cambridge: Cambridge University Press.

Wright, Marcia. 2002. Life and Technology in Everyday Life: Reflections on the Career of Mzee Stefano, Master Smelter in Ufipa, Tanzania. Journal of African Cultural Studies 15(1):17–34.