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Making Gains from Industrial Scrap: Small-Scale Production in Ouagadougou, Burkina Faso

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ABSTRACT

Making Gains from Industrial Scrap: Small-Scale Production in Ouagadougou, Burkina Faso

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This dissertation examines how producers in the capital city of Burkina Faso manage to generate gains in producing utilitarian goods from scrap materials. Aluminum-smelting, tinsmithing, and tire-workings are three modern trades that have developed with the rising import of scrap supplies and consumer goods from Europe, the Middle East, and Asia. Operating outside the circuits of development aid, NGOs, and microfinance programs, these producers have maintained their activities for over three decades despite the structural limitations of their economy, seizing every new commercial opportunity that the booming capital city offers.

This research combines several methodological tools to better capture how producers understand and generate gains. After mapping, surveying, and making an inventory of sixty workshops across the city, I selected four of them to carry out an intensive observation of their production, marketing, and accounting practices. I completed my observations with the collection of work histories and qualitative interviews about issues of wealth, success, and poverty. Finally, I realized a survey on the consumer population of aluminum ware.

After decades of studies of the informal sector that mostly presented a negative portrait of these activities, I suggested examining producers' practices and organizations in terms of gains. This concept enabled me to identify a whole range of positive outcomes that producers make from their activities beyond mere economic profit. If these activities are economically gainful and gain-oriented, they also produce other types of gains that operate with different scales of value (see Guyer 2004:20). Producers' economic motivations interweave with social ones, influencing the way they manage their time, space, relationships, and money.

Yet, despite the fact that they do much better than making ends meet, producers often assess their situations negatively. They complain about their lack of money and means in general. They play down their ability to improve and place their hope in Westerners and going abroad. As decades of development programs have not proven very fruitful, I suggest that the challenge resides not in the means put in place but in people's conceptions about themselves and their situations.

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DEDICATION

I dedicate this work to my heavenly Father, Who seized me during my field research in Burkina Faso. I did not know Him, but He knew me. This work, and my whole life, belong to Him.

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Chapter I. Introduction

How are producers of utilitarian goods made from scrap materials, located in a rapidly growing capital city in West Africa, able to generate gains to sustain themselves in a strongly dependent economy? From the viewpoint of international organizations, Burkina Faso is among the least advanced countries (LDCs), with an average gross domestic product per capita of less than one dollar per day (Lanser et al. 2006:1). The country is heavily dependent on foreign aid, which represents about half of total public expense (Lanser et al. 2006:1). This dependency makes the country eligible for the United Nations' Millenium Development Goals project to reduce "by half the proportion of people living on less than a dollar a day" (UN 2007:4). Yet, these objectives are deemed "unattainable from a technical and financial standpoint" (Lanser et al. 2006:1). UN sources acknowledged that "at the midway point between their adoption in 2000 and the 2015 target date for achieving the Millenium Development Goals, sub-Saharan Africa is not on track to achieve any of the goals" (UN 2007:1). After more than a decade of structural adjustment programs, the 1994 devaluation of the CFA franc, the ongoing privatization of state enterprises, the promotion of the private sector and micro-credit, and numerous conferences on poverty reduction, what is the situation of such producers today?

With the current debate on development issues, informal sector, and small-scale enterprise in the background, I attempted to find out how producers in the capital city of Burkina Faso manage to make a living by transforming scrap materials into utilitarian goods. Looking at their work organization and their technical, marketing, and accounting practices, I came across more

¹ Foreign public aid represented about 12.7 percent of its gross domestic revenues in 2004 (OCDE 2006:1).

fundamental issues of identity and self-perception, as well as conceptions about success, wealth, and poverty. As someone pulling a thread, I began to unravel the linkages between these local craftsmen and the broader economic system in which they operate, their work organization and the changing socio-cultural values and belief systems that shape it, their economic strategies and their conceptions of self and life. Beginning with a very concrete, practical research question, this dissertation came to inscribe itself into the ongoing endeavor within social sciences to reconsider the conceptual apparatus with which scholars have made sense of social practices and beliefs in various socio-cultural settings.

The relationships between ideas, economy, and society

Almost unintentionally, I found myself compelled to broaden my understanding of the relationships between individuals and society, values and practices, in order to make sense of what I was observing in Burkina Faso. As Bourdieu wrote, the scholar is not looking for exotic particularities considered "in themselves and for themselves," but aims at comparing differences between historically situated institutions and practices in order to capture what is invariable (*invariant*) in these variations (1994:16-20). I turned to the theoretical writings of social scientists to find what they had to say about how "social relations affect the behaviors of individuals and institutions" (Granovetter 2000:75). Despite their various theoretical positions, these scholars concurred on a few points that are critical to my own argument. They all agreed on the postulates that first, humankind is fundamentally a "social being" (Polanyi 1983[1944]:74) and second, that "all actions involves beliefs" and "rest on reasons" that make sense to the individuals (Boudon 2007:26, 90-1). In other words, "no intentional action [...] can

be accomplished without bringing into play, from its very inception as intention, 'ideal' realities (*réalités 'idéelles'*), representations, judgments, [and] principles of thoughts" (Godelier 1984:21). Such movements as neoliberalism, "Marxism, positivism, or social Darwinism" have revealed how much "ideas lead the world" (Boudon 2007:31; Latour and Lépinay 2008:3).

These approaches are essential to make sense of the relationships between Burkinabè producers' beliefs and values and their actions as well as between the economic and social realms and the challenges, changes, and frustrations they bring. Tarde for instance, refuted the idea that the economy was embedded into the social "for the simple reason that the social is not a distinctive domain but a principle of association and contamination" (Latour and Lépinay 2008:39). If there is a "social totality" (*un tout social*), it is "in the making," through "inventions" and "artifices." This reality is "a possibility among others" and "has nothing inevitable" (2008:47). Society is the production of "virtualities contained in individuals, which could not be realized by any of them in an isolate manner. [...] These virtualities are individual ideas and wills [which Tarde places] in brains instead of nowhere" (Tarde 1902, Vol 2:220-1 *In* Latour and Lépinay 2008:47).

I believe that several recent theories, such as network theory, make similar arguments. Tarde's notions of 'associations' between people, which bring 'innovations,' 'virtualities,' and 'artifices' are echoed in Godelier's 'possibilities' and 'ideal systems' (1984), Bourdieu's 'distance' or 'difference' (1994), Verran (2001) and Guyer's idea of 'knots' (2004), and Granovetter's 'network' (2000). These scholars try to pin down a moving social reality that is birthed from interactions between real persons, producing something that is larger than themselves, yet cannot exist without them. Societies are "unstable," as any "real" and "realized"

social relation "coexists in thought [...] with other possible social relations" (Godelier 1984:225, 228). Therefore, there is never one single system of production or kinship, but several, which coexist with others, real or ideal, even though one may dominate the others (1984:226-7). This is why change is possible and to some extent, unpredictable (see Herzfeld 2004:207-8).

As a result, economic systems are always the product of interactions among social individuals. Tarde argued that "there is no domain" but that, for instance, "the economic and the political bear twice on the same object, ... [and] grope along the same networks" (Latour and Lépinay 2008:39). Almost a century later, Granovetter stated that economic institutions are in fact "social constructions" and economic actions are "embedded within networks of personal relations which places individuals in contact one with another" (Laville et al. 2000:12-3). Indeed, for any economic system to work, one needs trust, which can only exist through social relations (Granovetter 2000:90).

Modern economy itself is plural and cannot be reduced to a sole market system (Laville et al. 2000:16). Indeed, "the economic universe is made of several economic worlds, endowed with specific 'rationalities'" (Bourdieu 1994:176). Among these systems persists that of the gift, which is a "social system of relations from person to person" vital to all societies (Godbout 2000:25-6, 32). In their analyses, scholars should not forget that "the drive to give is as important than that of receiving to understand humanity [...]. Giving, transmitting, giving back, [...] compassion, and generosity are as essential as taking, appropriating, keeping, envy, or egoism" (2000:31).

² To confirm Tarde's argument, Elyachar observed in Egypt that "[w]hen a master sends a customer to a colleague with instructions to treat him well, networks of relations in the master's "personal life' are meshed with his networks of relations in his 'professional life." She adds that the same is true with state relations (2005:140).

How do these fundamental assertions bear on this study? I suggest two postulates to understand these producers' behaviors and conceptions about their work in their changing environment. Firstly, all actions and behaviors take their root in the individual's ideas and beliefs, consciously or unconsciously. "The actor adheres to a belief, makes a given decision, accomplishes a given action, when he has the impression that the aforementioned belief, action, or decision rest on a system of strong reasons, on a system of reasons that the generalized Other would endorse" (Boudon 1999:130). Secondly, that there is no specific 'economic,' 'social,' 'religious,' or any other domains as clearly bounded, separate entities. Bounded entities are only conceptual abstractions created to help scholars decipher a complex human reality. However, they tend to become a hindrance and I contend that the real challenge remains to get back to real people's experiences and start from there (Guyer 2004:14).

Influenced by this new theoretical outlook, I present two arguments about the situation of these Burkinabè producers. Firstly, they make various economic, religious, social, and personal gains from their activities precisely because there is no separate economic or social domains *stricto sensu*. Therefore, we need more than purely economic concepts to examine these activities in any meaningful way. Secondly, their capacity to develop, progress, and fulfill their aspirations is hindered, not only by a lack of voluntary policy-making at the national and regional levels, but also by their conceptions about themselves and their situations. Indeed, Herzfeld reminds scholars that "while we may reject [stereotypes] as tools for anthropological analysis, we should not ignore their forceful presence as locally valued models for everyday life" (2004:23). I suggest that both scholars and development experts need to incorporate this "ideal" (*idéel*) and idealized dimensions of human lives in their analyses and programs to better help

producers and other economic agents gain self-confidence in their capacity to achieve their goals. That is to say, we need to work inside out.

Blurry worlds, rigid concepts

As its West African neighbors, Burkina Faso is "remotely global" (Piot 1999) and its economy might be qualified as "open" (Guyer 2004:4). "Neither autonomous nor subjugated," it is "subject to extraction of primary resources, "unequal exchange" (Amin 1976), and rapid changes in conditions over which their population have had very little control" (2004:4). This economic system is the product of government and international policy-making, regional and international economic exchanges and regulations, in addition to local actors' responses, choices, and actions.

The production activities that are the topic of this dissertation perfectly illustrate these changing geopolitical, economic, and socio-cultural conditions. Often first-generation urban dwellers, these producers transform imported scrap materials into utilitarian goods for the domestic consumption market. These new, urban trades are dependent on international and regional economies to access raw materials, provide an important outlet for school-leavers and villagers seeking a better life in the capital city, and feed the domestic market with affordable household equipment. Their earnings are essential not only to reproduce their labor and household in a context of rising costs of living, but also to feed broader personal, social, and religious projects and long-term ambitions.

This work finds its roots in one of the most fundamental thrusts of economic anthropology, that economic practices and ideologies are as much social phenomena as any other human

activity. People's prime motivation is not "to safeguard [their] individual interest in the possession of material goods; ... [but] to safeguard [their] social standing, [their] social claims, [their] social assets." In other words, whatever the type of society, "the economic system will be run on non-economic motives" (Polanyi 1968:7 *In* Roseberry 1997:253).³ It would be a serious mistake to believe that market economies do not follow this rule. The "Market ideology" is also a cultural construct and "market transactions are socially, culturally and politically embedded" (1997:259).

Recent scholarship has questioned the status of scientific, so-called objective concepts and theories. Much of this conceptual apparatus has been established as dichotomous concepts that have shaped Western thinking for many centuries, sometimes tracing back to Antiquity. They tend to separate what is often deeply intertwined: mind/body, intellectual/manual, knowledge/practice, economic/social or moral, work/non-work, traditional/modern, rural/urban, quantitative/qualitative, and more recently, formal/informal and local/global (see Roseberry 1997:251). These binaries have too often restricted our abilities to 'see' and examine realities in their fullness, as dynamic, complex, and multifaceted phenomena (see Guyer 2004; Schwint 2002).

In addition, social scientists have come to realize that what they have long thought to be scientific concepts could actually be "folk" ones (Elyachar 2005:15) and what was thought to belong to other (i.e. non-Western) societies could very well be prevalent in the West, or viceversa. This "cultural idealism" is rooted in "a failure to keep in mind that ideas have practical

³ Herzfeld explains that "[t]he Greek term for 'value' (*aksia*, the root of the English word 'axiology') has spawned a veritable shoal of etymological cognates, all of which are immediately recognizable as having to do with evaluation at once social, cultural, and moral" (2004:9). In Greece, "to 'be worthy' (*aksizo*) is a reputation that all seek in the face of each other's persistent challenges" (2004:9).

social origins, manifestations and consequences" (Carrier 1997a:xii). Indeed, Polanyi had already pointed out "that the Market is a conception of the world rather than the world itself" (Carrier 1997b:27). Likewise, Hart wrote that "The idea of economy is an invention of western civilization" (Hart 1990:138 *In* Carrier 1997a:vii). Dilley also argued that "there is no such thing as 'the market' outside specific historical circumstances in specific countries and cultures" (Elyachar 2005:24, referring to Dilley 1992).

These assertions do not imply that it is impossible to make sense of socio-cultural practices and belief systems in a geographically, politically, socially, and historically located community. Rather, they mean that scholars ought to be more critical toward the theoretical apparatus they draw on as well as the people they study. In that endeavor, Carrier attempted to render "this central concept [of the market] ... strange" and "less self-evident" (1997b:1). Likewise, Elyachar's work on the interactions among craftsmen, NGOs (non-governmental organizations), and international organizations in Cairo, Egypt, sought "to challenge prevailing notions" like the market (2005:4). She too reminds scholars that "ideas [...] do not reside in the realm of pure theory [but] are practical as well" (2005:5). Observing the shortcomings of our conceptual apparatus to understand economic practices in sub-Saharan Africa, Guyer made theoretical propositions to "incorporate the experience of multiplicity into the theory" as well as the notion of uncertainty (2004:18, 25).

In considering the way Burkinabè craftsmen organize their work to generate economic profit as well as other types of gain, my research led me to follow the steps of these scholars in reconsidering such notions as profit, work, money, wealth, success, and poverty. Do these notions, as they are used in scholarly work, overlap the ideas of producers themselves? Are they

adequate to analyze and make sense of producers' practices and conceptions? As Elyachar, I believe that my investigation of the economic practices and conceptions of these Burkinabè producers "can contribute to the broader project of rethinking the market [and other economic conceptions and practices] ... in the era of neoliberalism" (2005:23). It is indeed "urgent to develop new theories of capitalism which would not pose the diversity of "production forms [...] as anomalies, throwbacks, or merely transitional stages" (Bernal 1994:807).

Scholars are increasingly aware of the importance to move awat from rigid theoretical frameworks in order to make sense of a rapidly changing and interconnected world. They acknowledge the importance "to recognize the plurality of productive relations and rationalities that exist within capitalism" and "hybrid" types of economic systems (Bernal 1994:792; Elyachar 2005:23). The challenge resides in including both market and non-market relations and examining, rather than overlooking, the "diversity, ambiguity, and the open-endedness of social processes" (Bernal 1994:806-7). This dissertation places itself in this academic effort.

Market and market practices

Studies of the market and market practices in economic anthropology have followed the same endeavor to go beyond conceptual divides and encompass their diversity. Mintz's ground-breaking study of Haitian market women {1961}, and other related work in the Philippines (Davis 1973) and Nigeria (Trager 1981) have clearly shown "that economic and social objectives are often intermingled [in market practices and] that middlemen commonly employ strategies of a social content to achieve their economic intent" (Finan 1988:694). Referring to Braudel's work (1979), Labazée reminds us that "all forms of exchange are simultaneously economic and social"

(1994:212). He goes even further, arguing that attributes usually ascribed to entrepreneurs in capitalist economies are "neither wholly met [in] nor entirely absent" from any economic system. In fact, he finds them "particularly useful for the study of promoters' behavior and the working of markets in Africa" (1994:212). Reaching beyond the theoretical divide between economics and social studies, quantitative and qualitative approaches, economic anthropologists have been able to combine them to provide rich analyses of market practices.

Rising above the ideological debate between advocates for and opponents to neoliberalism, recent studies have also revealed how 'the market' and the market economy are neither rigid nor destructive entities. In her study of rural weekly markets in Senegal, Perry argues with conviction that "the market" is not "an anomic agent of change or an abstract force of social dissolution, but [...] a recurrent social process put in motion by farmers themselves in ways amenable to their preferred lifestyles" (2000:463). She continues, refuting Bloch and Parry's assertion "that the market is 'a kind of acid which inexorably dissolves cherished cultural discriminations, eats away at qualitative differences and reduces personal relations to impersonality" (Bloch & Parry 1989 *In* 2000:464). On the contrary, she explains that the institution of weekly markets in rural areas have actually "enhance[d] community life, ... [or even created] community, in ways that standard narratives of capitalism are unable to elucidate" (2000:464).

Looking particularly at buyer and seller relationships in the market, anthropologists have noted that such economic relationships cannot be completely drained of their social substance. What Sahlins called 'balanced reciprocity' (1972) and Plattner 'equilibrating relationships' (1983, 1985) illustrate the fact "that long-term steady and exclusive market relationships are

preferable to short-term price maximization" (Finan 1988:694; see also Elyachar 2005:147-8). Plattner's equilibrating relationships act "as a kind of social stabilizer that counteracts the dangers of an uncertain market environment" (1988:649). They are based on a minimum "mutual trust" but are often associated with tighter social bonds such as "personal friendship [or] kinship" that can potentially work as a social sanction. Market relationships are thus "personalized" in order to reduce risks and unpredictability and "impersonal, competitive relationships [are interpreted] in terms of familiar social and cultural texts" (1988:695; see Elyachar 2005:201).

In his study of a large regional fruits and vegetable market in northeast Brazil, Finan also found that middlemen developed "equilibrating" relationships with wholesalers in order to buffer the risks inherent to their activity. These relationships proved to be beneficial both on individual and collective levels as they contribute to ease the flow of goods in the region. While the objectives and benefits of these relationships are "clearly economic," their "substance [...] is drawn from the social context and sanctioned in a social realm" (1988:704). Switching destinations to take advantage of price differences or shortages would be foolish as "entering a new market without a confirmed buyer" would be too hazardous. In addition, middlemen spend too much time and effort "to cultivate new reciprocal relationships" to change partners for short-term benefits (1988:706).

Clawson found similar strategies with a self-employed construction contractor in Alabama who is utterly dependent on his personal network to make a living. These relationships mix "enjoyment of socializing" and "social obligations" (Clawson 2005:247, quoting Busse 2001:15). However Clawson underlines that the social and economic dimensions of these relationships cannot and will not be dissociated by this outworker. She notes that although "he is

keenly aware of the professional benefits that may accrue from socializing, [...] he resists framing his social interactions as mainly strategic" (2005:247). As in other contexts such as in African popular economies, this contractor avoids direct conflict as much as possible, in order to preserve his network in the community (2005:249).

Work as an economic and social activity

The concept of work is also a cultural and theoretical construct. Because it is related to "all human activities," work is a difficult notion to define (Applebaum 1992:x). It is a "necessity of life," including "both making things and performing services" in order to "satisfy human needs and wants [...] and yet, it is performed in the most diverse ways to achieve the universally necessary goal of providing the sustenance of life" (1992:x). Yet there are other incentives to work than mere "survival" (Applebaum 1984:14). As an economic activity, work is not separated from the rest of social life. Quite the opposite, it is very much "embedded in a variety of structures from which it takes its organization and meaning" (Joyce 1987:2; see also Applebaum 1992:ix). Across socio-cultural settings, incentives for work include "the force of tradition, the desire for appreciation and the securing of community approval for work well done" (Applebaum 1984:14). Indeed, "[t]he prestige that accrues to the hard worker, the fast worker, the careful worker, the competent worker is [...] a significant factor in motivating labor in most societies" (Herskovits 1965:123 *In* Applebaum 1984:14).

Therefore, work can be conceived as a "total social phenomenon" as it relates both to society and the individual (Mauss 1950). It is experienced as much as an economically gainful activity as a "political and religious act" (Godelier 1972:266, *In* Wallman 1979:4). It is also

about fulfilling moral expectations, gaining respect, and acquiring a status and an identity (Simpson 1997:46; Applebaum 1992:586). According to Applebaum, "[w]ork is like the spine which structures the way people live, how they make contact with material and social reality, and how they achieve status and self-esteem" (1992:ix, 587). It may be essential for "their psychological well-being," and even if they do not find satisfaction in the activity itself, they may enjoy the social relations they have at work, which can grow into friendships (1992:589). Even in twenty-first century Western societies, where people tend to spend less time in work itself, the latter "still plays a central role in determining one's station in life, as well as the possibilities for the quality of one's own life and that of one's family and offspring" (1992:587).

The concept of gains

As anthropologists have shown that work and market activities are more than purely economic endeavors, it is clear that individuals expect and gain more than mere financial profits from their enterprises. As individual and social beings, they generate through their activities both economic and social, material and immaterial, quantitative and qualitative increments, either directly or indirectly (see Latour and Lépinay 2008:6-7). Even if they cannot be easily quantified or evaluated, such increments constitute real assets which are re-invested in many ways: in securing a clientele and support from colleagues, drawing candidates to learn the trade, marrying, having children and relatives who may later help in the trade, investing in house-building or other economic projects to generate additional earnings, and securing one's old age and family's future, among other things. A thorough study of the way small-scale producers organize their activity and manage their gains must therefore broaden the analysis beyond

neoliberal economic concepts. The challenge for scholars is not to reduce these practices into distinct and unconnected categories but to consider their variety and the way they relate to one another.

Many ethnographic studies have shown how such economic terms as "profit" are in fact rooted in a particular cultural framework and may greatly vary in their meanings and applications. In their study of Andean peasants growing potatoes in the Peruvian highlands, Mayer and Glave showed that the notion of profits is "a constructed cultural category arrived at by socially established (accounting) procedures. For that reason, [it] may not have a single definition" (1999:344; see also Gudeman and Rivera 1990). When evaluating the profits and losses of cash crops, Peruvian peasants did not take into account "household inputs and family labor" and ignored "the cash expenses necessary to produce [subsistence crops]" (1999:345). The notion of profit, therefore, was "not a relevant category" to understand their accounting practices. Rather, household members were "more concerned with monitoring flows within each stream [expenses, money, and service] than with evaluating outcomes of past ventures." However, this scheme had the disadvantage of masking "underlying resource flows that often impoverish peasants" (1999:345).

To give sense to the economic organization of small-scale enterprises, scholars need to pay particular attention to the values that shape and guide producers' actions. According to Berry, these values are much more than the outcome of an "interplay between preference and scarcity," as defined by neoliberal economists (1985:59). Rather, they "must be understood as part of the social process" (1985:60). They are "culturally determined," even if partly, and they effect in

⁴ But quoting de Janvry, they add that "we should not 'confuse the inability of peasants to capture profits with their presumed nondesire for profits' (1981:104)" (345).

Elyachar, "workshops [...] produce value that is not inherently economic and which in itself has nothing to do with the production of surplus value or other definitions of economic value" (2005:143). In addition, workshop owners constantly "transmute value from one sphere to another [...] and transfer the forms of wealth and power that they produce in one domain to another" (2005:144). In such conditions, analyzing production activities only from an economic angle cannot provide a thorough understanding of their organization. Scholars need to consider how macroeconomic and other structural conditions both shape and are shaped by values and practices (see Berry 1985:6).

The plural notion of gains allows us to incorporate all these dimensions to better understand producers' entrepreneurial choices. Guyer (2004) suggested the notion of "marginal gains" to make sense of economic practices in African popular economies that could not be fully comprehended by the current theoretical apparatus (see chap. V). Beyond "the tired and misleading binary [conceptual] oppositions" that have impeded scholarly understanding of African economic practices, Guyer calls for a finer analysis that takes "multiple analytical vantage points that remain open to one another" (2007:199). People play with various "repertoires," the "asymmetry in the cultural framing of transactions," the "open multiplicity of the value scales," and the "performativity of economic events" to extract even the smallest increments (2007:186-7; 2004:20).

These gains are not only monetary, but also in kind, time, relations, prestige, power, and rank, among others. As Tarde indicated, "the human heart calculates and compares constantly, but on a different type of scale" (Latour and Lépinay 2008:12). To him, economics should be

"the science of passionate interests" and should quantify all the modes of assessments that people engage in (subjective, moral, esthetic, and monetary, among others). Like the different scales identified by Guyer, Tarde was convinced that "there is no man, there is no people, who pursued, at the cost of unrelenting efforts, a certain increase of wealth, glory, truth, power, or artistic perfection and who does not fight against the danger of decrease of all these goods" (1902, Vol I.:67 *In* Latour and Lépinay 2008:6-7). Therefore, the real challenge is not to remove 'irrationality' from people's behaviors but rather, to understand people's different types of rationalities (Boudon 2007:26, 97). In a bold statement, Tarde argued that "everything in economics is irrational, everything in economics is [...] extra-economic" (2008:14, emphasis in original).

A "hybrid" economic system

As Elyachar, I believe that the challenge resides in unraveling the different threads of these "hybrid economic systems," in order to examine the way that they interrelate and the power relations that shape them (2005:23; see also Berry 1985:6). "'Market society' as such [does] not exist" in either post-socialist countries, in post-colonial, or even post-modern ones. Rather, "hybrids [have] emerged in which property [is] a 'recombinet' that [draws] together elements of various property regimes and forms of markets from the remnants of the old system." As in the Middle East, I would argue that both elements from gift and commodity economies "are relevant and intertwined" in African economies (2005:23; see Godbout 2000:29). Burkinabè producers "pursue their economic interests openly and with full social legitimacy" at the same time as they are also very much involved in "giving" and producing values that are "not inherently economic"

(2005:25, 140, 143). In addition, producers' workshops should not be thought of in isolation but rather, as "one node of a complex system of social relationships" or "network" (2005:149-50; see also Silver 1981:48). Masters are constantly involved in material as well as social, "relational," and symbolic exchanges. Their mastery is expressed in their ability to modulate between their capacity to produce and sell goods and services and to intensify "the depth of the social world in which they live" (2005:152). In these exchanges, what might be considered at first as loss (of work, money, or a worker) is sometimes a "gain" for the master in terms of "relational value" (2005:152-3). In such conditions, "neither 'the gift' nor 'the market' is an adequate concept with which to think about what is at stake" (2005:140).

These theoretical approaches cast light on the way producers hire and train apprentices. Researchers have moved from a quite simple, culturally remote, and sometimes exotic understanding of apprenticeship to a finer approach to the way knowledge and know-how are transmitted and acquired. Their focus has shifted from traditional apprenticeship in rural settings involving the transmission of technical, symbolic, and religious knowledge to the study of an "educational process," which involves clear economic principles and concerns (Lave 1982:182; see Peil 1970; Lloyd 1953). This conceptual change accompanied a dramatic alteration of the economic situation worldwide and the emergence of new trades and new ways to transmit them.

Hiring apprentices serves several purposes. Producers acquire a readily available and affordable labor force to carry out the production processes (see Berry 1985:142-3; Herzfeld 2004:62). Apprentices are necessary to meet the demand and maintain a viable economic activity. Taking on apprentices also positions the master and his workshop in a network of social relations, as apprentices often come from kin, neighbor, friend, or customer relations. It helps

build the master's reputation, not only as a skilled or economically successful (or at least viable) producer, but also as someone one can or want to work with (i.e. honest, sociable). The choice of the trade and the master with whom a young person will be trained are also as much economic as social. It will influence in the type, scope, and quality of skills the trainee will acquire, as well as the network of customers, suppliers, and colleagues s/he will have access to. Even though a number of these apprentices will later become competitors, their integration in a "community of practice" guarantees some level of respect and solidarity among producers in the same trade.

The choices of hiring apprentices and the way in which to train them are shaped by a combination of economic interests and social meanings. Far from being "informal," Lave asserts that apprenticeship, such as in tailors' shops in Liberia, is "highly structured, although not by teachers" (1982: 182; see also Dasen 2004). The progression of the tasks learned by young apprentices is structured by an "exogenous organization of social categories" of clothes, the internal logic of the production processes, and economic concerns, since "it is more costly to make an error when cutting out a garment than when sewing it" (1982:182-3). Besides learning technical skills, trainees also learn to "conduct business" (1982:182). "They learn 'who is concerned, what they do, how daily life unfolds, how masters talk, walk, work, and, in general, carry out their lives [...] and what apprentices must learn to become accomplished practitioners" (Greenfield and Lave 1979:95 *In* Dasen 2004: 32).

Learning is a social experience involving social relationships and an active "participation in a community of practice" (Smith 1999). The participants acquire not only "knowledgeable skills," but also become "full participant[s] in a sociocultural practice" and acquire a new identity (1999; see also Simpson 1997:46). The type of "mastery" that is acquired is both

"organizational" and "relational" and involves both linguistic and "non-linguistic" knowledge (Lave and Wenger 1991:64 *In* Simpson 1997:46-7; Bloch 1991; see also Pálsson 1994; Zarca 1988). In fact, one could argue that "[a]pprenticeship is less concerned with the transmission of craft techniques than with modeling the social values and attitudes within which the craft is practiced" (Herzfeld 2004:51).

Burkina Faso in the "Global Hierarchy of Value." Challenges for development experts

Herzfeld's notion of "global hierarchy of value" refers to the spread of values bearing "a European and colonial origin" that has invaded the most geographically and culturally remote places (2004:2-3). It is "the hidden presence of a logic that has seeped in everywhere but is everywhere disguised as difference, heritage, local tradition" (2004:2). Weak social groups such as artisans have internalized, even "embodied" these values, although they may try to counter them (2004:21). The local has become global, as particularities are appraised with the same yardstick of values (2004:2, 19). "People make disparaging comments about their own local cultures because they are already judging them by an intrusive set of standards" (2004:21). They become ashamed of some aspects of their culture that are perceived as repulsive through the lens of these global standards (2004:26). Paradoxically, marginalized people "absorb and reproduce [the] unflattering portrait" that is given of them and train "the next generation in the same systemic self-marginalization," thereby restricting "their access to the means of upward mobility" (2004:32, 194). As a result, they are "trapped in the judgmental vise of the global hierarchy of value" (2004:194). Despite this rather gloomy analysis, Herzfeld refuses to be overdeterministic. There is still "space for creative manipulation," as small as it may be.

Education, for instance, is one means for upward mobility (2004:195). Change remains possible because "the global political environment is itself changing" in unpredictable ways (2004:207-8).

Herzfeld's analysis confirms how important values are in shaping people's lives.

Burkinabè producers do not escape this "global hierarchy of value" as I show in this work. Local systems of production and conceptions coexist with global ones, engendering 'hybrids' with lots of tensions and frustrations (see Godelier 1984:223-4). Like Cretan artisans, they take pride in their skills and independence, thereby reproducing their marginalized status (Herzfeld 2004:32). They have left their villages with the hope of climbing the "ladder of upward mobility, but for many it will represent the most ambitious horizon of possible advancement" (2004:71). While this coexistence of different value systems, real and potential ones, pertains to all societies, they do not bear the same weight in the "hierarchy." Furthermore, weaker groups rarely "control the criteria of taste for the 'tradition' that they supposedly embody, produce, and represent" (2004:207).

The key for these Burkinabè producers is to regain the means of their own self-definition and achievement. This is what many development programs attempt to achieve. In the last decade, they endeavored "to empower the poor through debt and microenterprise" (Elyachar 2005:27). Development experts believed that microcredit could help the poor "develop their entrepreneurial potential." By giving them the means to invest in the creation of small enterprises, they would increase their "earnings and standard of living" (Guérin et al. 2006:1). Yet, the impact of microfinance has not been convincing. "The entrepreneurial potential of the poor is much more limited than microcredit advocates claim it to be." Local markets quickly

saturate as the same activities flourish by imitation while the demand remains the same. In addition, microcredit is often diverted to meet pressing needs (sickness, school fees, debts), leading to situations of excessive debt (2006:3). Lastly, microfinance and other pilot development programs cannot solve the "tremendous needs to improve infrastructures in terms of health, education, drinking water, and communication" (2006:4). These needs can only be met by deliberate policy-making at the national level.

Building on all these theoretical insights, I argue that identity and self-esteem are the crux of the matter. As long as Burkinabè producers and their fellow-citizens will assess themselves and their situations on the scale of the "global hierarchy of value," without controlling even a few of its criteria, they will remain subjected to it. As the Beninese economist Albert Tévoédjré argued, "the primary asset [...] is certainly not the financial capital at one's disposal, but the human capacity to work, to conceive, [and] to innovate" (1978:95). People's capacity to believe in themselves and their ability to change their situations for the better is central for any development project to work. Tévoédjré acknowledged that "reinventing the economy [...] will not suffice. One has to be *willing*, to be willing to 'change'" (1978:106).

Outline of chapters

The first part of my dissertation (chap. II-VI) aims at setting the context in which these production activities have emerged and the conceptual framework I am drawing from to examine them. In chapter II, I focus on the historical and economic factors that have led to the rise of the "informal economy" in the urban environment of the capital city. In chapter III, I present the methodological approaches that I chose to capture the dynamic work organization of these

workshops and address complicated issues such as bookkeeping and conceptions of success and achievement. In chapter IV, I trace the history and evolution of these trades in Burkina Faso, and especially in the capital city. I consider the characteristics of the population of producers, the way they launch these activities, and the type of demand they meet. In chapters V and VI, I lay the theoretical foundations on which I will examine the values that underlie these producers' work organization: their conceptions of work and the notion of gains.

In the second part of the dissertation (chap. VII-XIV), I examine producers' work organization and strategies. I begin by analyzing the ways they organize their work in space, time, and among workers (chap. VII). Then I explore the relationship between masters and apprentices and how knowledge and skills are transmitted (chap. VIII). The subsequent three chapters (chap. IX-XI) concentrate on the various technical processes, adaptations, and innovations producers resort to to meet consumers' demand. The succeeding three chapters (chap. XII-XIV) shed light on their marketing and accounting strategies.

Finally, the last two chapters prior to the conclusion return to the values that inspire and drive producers. In chapter XV, I demonstrate how producers' social, moral, religious, and personal values, motivations, and beliefs seep in every dimension of their work: in their relationships with coworkers, fellow producers, and clients and in the way they manage their time and their earnings. In chapter XVI, I turn to producers' conceptions of wealth, money, and success. I examine their dreams of a better life, which are often influenced by Western concepts of a 'good life.' Feeding their imagination on an idealized Western world, they build dreams and strategies to improve their lifestyle, some of them making plans to go abroad to tap into this

wealth with the hope of including themselves in this global appeal to prosperity (see Ferguson 2002:555).

This dissertation aims at considering how these 21st-century Burkinabè producers position themselves in this local, yet global, economy to meet economic and cultural needs, sustain their lives and that of other generations (older and younger), and feed their dreams and expectations. As a detailed ethnographic study, it engages in a conversation with issues that are at the core of the discipline of anthropology. What are the values that motivate and explain people's actions? What is the effect of this "global hierarchy of value" on the way they perceive themselves, assess their situation, and take decisions? What is the space that remains, in this increasingly interconnected world, for individual and local adaptations, changes, and innovations? My hope is that this dissertation will begin to answer these questions, through "the magnifying lens of ethnography" (Herzfeld 2004:27).

Chapter II. The rise of recycling activities in Burkina Faso:

Economic and historical factors.

Burkina Faso, formerly known as Upper Volta, is a relatively small, landlocked country, approximately in the middle of the big West African bulge. Situated between Mali and Niger and between the Sahara Desert and the coastal rain forests, it has the same Sahelian climate as its neighbors with warm, dry winters, a hot intermediary season, and wet summers with scanty rainfall and recurrent droughts (CIA 2004; Bureau of African Affairs 2007; Encarta 2005). By contrast, its southern edge, running alongside the border from Côte d'Ivoire to Benin, enjoys more humid, tropical weather. With few natural resources, a fragile and poorly irrigated soil, and an economy mostly based on subsistence farming, it ranks as one of the poorest countries in the world, with an average national income barely reaching U.S. \$300 per year (IZFa; UNICEF 2004).

In a number of ways the economic situation of Burkina Faso closely resembles that of other countries in West Africa: economic crisis, population growth, rapid urbanization rate, unemployment, dependency on international financial aid and imported products, and export of primary resources such as cotton and labor. The country remains largely dependent on agriculture and livestock activities, revenue from migrant workers, and foreign aid – the latter representing more than 80 percent of the gross domestic product (GDP) in public investments (IZFb). However, even if its economy has not been as perturbed as its West African neighbors'

¹ In 2001, Burkina Faso ranked 159th out of 162 countries, on the Human Development Index elaborated by the United Nations Development Program. http://www.undp.org/hdr2001/indicator/cty_f_BFA.html

² It is much less than in neighboring countries such as Côte d'Ivoire, where the GDP per capita reaches \$1,400 or \$2,200 in Ghana. In industrial countries, it reaches \$37,800 in the U.S.A. and \$27,600 in France (CIA 2004 – 2003 estimates).



Map 1. Map of Burkina Faso.

in the last two decades (see Calvès and Schoumaker 2004:1342), it remains highly vulnerable to the volatility of the international market for two reasons. Firstly, its major export, cotton, is heavily dependent on weather conditions and the world cotton price. Secondly, import tariffs constitute a major source of revenue for the state (about twenty percent).³ Since independence in 1960, this acute vulnerability of the Burkinabè economy has affected not only the state but also the population and its purchasing power (EIU 2001b; Zagré 1994). A substantial number of workers continue to migrate to Côte d'Ivoire and Ghana every year since productive employment has not expanded with the population.

³ Ministère des Finances et du Budget, Burkina Faso (2004). State revenues from various import taxes (aggregated): 87,620,522 (F. CFA) out of a total revenue of 434,301,969 F. CFA for 2003.

Agriculture plays a vital role in the domestic economy with approximately 90 percent of the population making a living from subsistence farming and livestock rearing. This sector "is still largely dominated by small family farms comprising three to six hectares of land. These farms are engaged primarily in subsistence agriculture, with grain crops occupying 88 percent of the area cultivated each year, while cash crops (such as cotton, peanuts and sesame seeds) occupy only 12 percent" (Canadian International Development Agency 2002). This rain-fed agriculture remains weak because of irregular rainy seasons and poor soils. In addition, demographic growth, desertification due to recurrent droughts, and soil degradation partly resulting from overgrazing have seriously affected agricultural activities and thus, the country's economy. Despite these adverse conditions, this sector accounts for approximately 40 percent of the country's GDP and 80 percent of all its exports - cotton being the main export crop (International Trade Center 2004a).

Notwithstanding long-lasting efforts to promote the manufacturing industry and the private sector, foreign and national direct investment has remained limited since independence. This sector is still dominated by a small number of companies, which generate almost 80 percent of the revenues (IZFa). Most of these industries, the processing of food and beverage, textiles, and vegetable-oil products such as soap, are concentrated in the capital city (80 percent). Others are located in Bobo-Dioulasso, the second largest city of the country, and the remainder of the companies, as in the mining sector, are scattered in other towns. Some natural resources (manganese, limestone, small deposits of gold, copper, and bauxite among others) have attracted a small number of mining companies. But "[t]he mining sector remains largely undeveloped, and

⁴ Ministère des Finances et du Budget, Burkina Faso (2003).

gold deposits in particular are still mined by traditional techniques" (Canadian International Development Agency. 2002). As in many developing economies, the industry is the least developed sector of the domestic economy, providing less than twenty percent of the GDP. In contrast, the agricultural sector and the service sector generate respectively 39.8 percent and 40.5 percent of the GDP (CIA 2004).⁵ This profile of a "service economy" is only apparent, as it reflects in fact the under-development of the primary and secondary sectors (Ouali 1999:1268, my translation).⁶

Numerous factors explain this underdevelopment of the industrial sector: the country's landlocked position, the high costs of production due to lack of infrastructure, the need to import all of the country's fuel, a poorly developed transportation system, the small size of the domestic market and its limited purchasing power, and the scarcity of qualified labor. In addition, the implementation of structural adjustment programs sponsored by the International Monetary Fund (IMF)⁷ in the 1990s has brought new difficulties. The restructuring and liquidating of numerous state enterprises resulted in thousands of job losses. Inspired by neo-liberal principles, these policies encourage the Burkinabè government to maintain low inflation, reduce its trade deficit, and encourage private investment (CIA 2004). In the last few years, foreign companies have indeed begun to invest in such sectors as cement and mines; however, after years of protection of national production, the liberalization of the economy has led to stiffer competition from Burkina Faso's neighbors (IZFa, EIU 2001b; Zagré 1994).

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⁵ In comparison, Côte d'Ivoire: Agr. 36.6 percent, Ind. 19.9 percent, Serv. 43.5 percent; Ghana: Agr. 35.4 percent, Ind. 25.4 percent, Serv. 39.2 percent; and in industrial countries – U.S.A Agr. 1.4 percent, Ind. 26.2 percent, Serv. 72.5 percent (CIA 2004 – 2003 estimates).

⁶ All translations from French sources are mine.

⁷ Now called Poverty reduction and growth facility programs (PRGF).

In 1994, the devaluation of the CFA Franc was orchestrated to improve the economic situation of the African countries that were members of the "franc zone." In Burkina Faso, the devaluation did bring some improvements. The change of exchange rates boosted exports and the current trend is "for exports to grow faster than imports, as a result of structural adjustment measures." However, most of the country's balance of trade "still shows a structural deficit, with exports covering scarcely 48 percent of imports" (Canadian International Development Agency 2002). Another study shows that even though the purpose of the devaluation was, among other things, to improve the competitiveness of the economy and boost local production, most enterprises have been "suffering since 1994" (Camilleri 1999:1641). Approximately a year after the devaluation, the volume of activity had decreased by 22 percent while the costs of production had increased up to 58 percent compared with the turnover (1999:1652). To keep their clientele, producers barely raised their prices, thus decreasing their profit margins (1999:1655). All in all, local enterprises emerged from the devaluation weaker than before because of a "depression of the urban markets and a general decline of household revenues" (1999:1656). This strengthened the position of several economists, who argued that improving the viability of African economies and industries necessitates more than a quick devaluation (1999:1656-57; also see Coquet & Daniel 1994; M'Bok 1994).

Overall, the economic landscape has not changed drastically since independence. Despite a succession of well-advertised development programs to reduce poverty and help the private and the informal sectors, there has been little tangible effect on people's welfare. Loada writes that

⁸ There are fourteen African countries that still belong to the "Zone franc" and which are grouped in two monetary unions: UEMOA (Union économique et monétaire oust-africaine): Benin, Burkina, Côte d'Ivoire, Guinée-Bissau, Mali, Niger, Sénégal, and Togo and Cemac (Communauté économique et monétaire de l'Afrique centrale): Cameroun, République centrafricaine, Congo (Brazzaville), Gabon, Guinée équatoriale, and Chad (Quid 2000:1822b).

despite the "good macro-economic performances these last ten years," which brought the "praises of the international financial institutions," the population's daily conditions are worsening (2006:20-1). On the one hand, real economic growth rates have evolved from five percent (1994-99) to 6.7 percent (2003-5). On the other hand, commodity prices are swelling, 9 the conditions of life have deteriorated, and poverty keeps increasing (2006:21). Indeed, statistics show that the proportion of people living below the absolute poverty line has slightly risen, reaching 46.4 percent in 2003 (versus 44.5 percent in 1994) (2006:21; see also Camilleri 1999:1656-57; Calvès and Schoumaker 2004:1342).

Nevertheless, the population does not seem to relate the difficulties of their daily life to the action of the President of Burkina Faso, Blaise Compaoré (Loada 2006:22). Despite their growing dissatisfaction regarding the "governmental action in terms of [public] health, education, infrastructures, battle against poverty, etc.," there is a widespread belief in a sort of "political irresponsibility." People consider that "the chief is good, [but] it is his entourage which is bad" (2006:22). In this semi-democratic régime, the president was reelected for the third time in November 2005 with just above 80 percent of the votes, even though the participation rate was low, reaching 57.66 percent. ¹⁰ In addition, there was a relatively high number of invalid votes (9.51 percent), representing almost twice the number of votes for the candidate who arrived in second position (4.88 percent; Loada 2006:31, 33). This result is quite "paradoxical" since there had been a strong popular movement against the régime at the end of the 1990s,

⁹ Despite the fact that statistics show that inflation is under control (around 4 percent during the 1992-96 period) - which was one of the objectives of the structural adjustment program (see Ouali 1999:1280. 82).

¹⁰ After maintaining a rather authoritarian regime, Compaoré adopted a new constitution in 1991, which was approved by referendum (4th Republic). In the wake of this democratic opening, multiparty elections were organized, beginning in 2005 (Bureau of African Affairs 2007; see Loada 2006).

along with a rising discontentment of the population (2006:21).¹¹ Loada explains that Blaise Compaoré benefited from the strong clientelist system of his party, a renewed popularity from the way he handled the crisis in Ivory Coast (ongoing since 2002), and a financially and politically weak and divided opposition. Yet, the feeble participation reveals both the "disaffection" of the electorate and probably, their "political incompetence" (2006:31).

Before examining further the contemporary economic situation of Burkina Faso and its capital city in particular, I suggest that we consider the past to identify key factors that have shaped – and might continue to influence – the country and its working population to explain the rise of recycling activities.

From Local Kingdoms to Burkina Faso: A Brief Economic History

Contemporary Burkina Faso is the result of many waves of migration, both long-term and temporary in purpose, through conquests and trade. With a population of 13.9 million inhabitants (in 2005), 12 the Burkinabè people "belong to two major West African cultural groups – the Voltaic and the Mande (whose common language is Dioula)" (Bureau of African Affairs 2007). While the population is constituted of sixty-three ethnic groups, the Voltaic-Mossi constitute more than half of the population (about 60 percent). The other groups are comprised of the Gurunsi, Senufo, Lobi, Bobo, Mande, and Fulani (see map 2). In addition, a majority of Burkinabè are Muslim (55 percent), even though many also "adhere to traditional African religions" (about 20 percent). Christians, both Roman Catholic and Protestant, make up about 25

¹¹ This movement sparked with the obscure death of the "leading independent journalist Norbert Zongo," head of the local newspaper "*L'Indépendant*" (Bureau of African Affairs 2007).

¹² The total population was estimated to reach 14,326,203 inhabitants in July 2007 (CIA 2007).

percent of the population, mostly in urban areas. Despite this ethnic and religious diversity, the country is described as "an ethnically integrated, secular state" (Bureau of African Affairs 2007; see also CIA 2004). I will concentrate on two main economic aspects that contributed to the shaping of contemporary Burkina Faso and that are relevant for this study. Firstly, while many older crafts were the prerogative of particular ethnic groups or groups of specialists (called castes), newer ones are not. Secondly, the economic development of the country has been, since the colonial period, heavily dependent on migration to Ghana and Côte d'Ivoire.

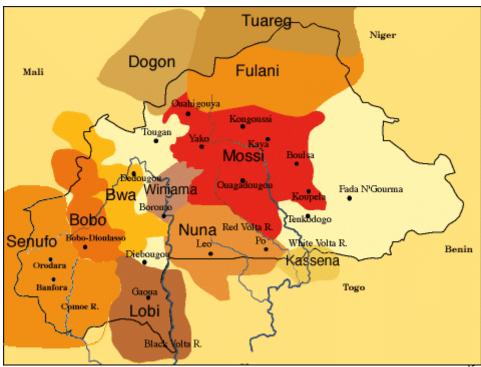
Fleeing wars, epidemics, or looking for new territories, various groups of migrants (cultivators and cattle-farmers) arrived from "all directions" and began to settle in what is now Burkina Faso (Khiétéga and Madiéga 2004). This diverse population presented two main types of political organization. They were either societies with centralized power (Mossi, Gourmantché, and Gan kingdoms or Fulani emirates and chefferies) having a strong hierarchy and subjected to permanent rivalry to conquer political power. Or, almost all the societies from the western, southwestern, and northwestern areas did not have any centralized power but were organized in villages¹³ or lineages¹⁴ and their political hierarchy was very weak. But everywhere, these societies were divided between "nobles," "free men," and "slaves." The system of caste only existed in the northern region of Yatenga (Khiétéga and Madiéga 2004).

In the second half of the nineteenth century, on the eve of colonization, the societies with centralized power reached a certain stability, which was favorable to the development of commerce and the spread of Islam (Khiétéga and Madiéga 2004). Among them, the Mossi country was known to be a sort of "peace zone" crossed by two main commercial routes (north-

^{13 &}quot;organisation 'villageoise'" (Khiétéga and Madiéga 2004).

¹⁴ "organisation 'lignagère" (Khiétéga and Madiéga 2004).

south and east-west). There was no direct control from the chiefs over industrial and commercial activity, just a system of allowances, which guaranteed peace and political stability and favored commercial exchange (Izard 1975:244).



Map 2. Burkina Faso. Ethnic groups. 15

These populations were essentially farmers, living off the produce of the land. The Mossi had the reputation of being "good traders" as well, benefiting "from their country's strategic location between the Sahara and the forest regions." About six caravan routes crossed the country, "linking the Niger river area to the Gold Coast and Togoland" (Skinner 1989:112-13). The Mossi markets were famous for their donkeys, as well as their cotton bands, indigo cloth, iron tools, and weapons (1989:112-3; see also Martinelli 1996:37-38). These goods were exchanged for salt, kola nuts, and other luxury goods.

¹⁵ Credit: Roy, Christopher D. 1987, Art of the Upper Volta Rivers. Chaffin: Meudon. http://www.uiowa.edu/~africart/toc/countries/Burkina Faso.html. Used with permission.

In Mossi society, the economic activities also included some crafts, often carried out by specialized social groups. The two main industries were metal-working and weaving.

Blacksmiths produced mainly agricultural tools, as well as some weapons, which they sold in local markets (Izard 1975:243-4). They belonged (and still do) to specific lineages, distinct from the rest of Mossi society. Even if it is only in the Mossi kingdom of Yatenga that they are organized into an endogamous, caste-like group, smiths are always regarded with a degree of spiritual fear. They were sought after as mediators to solve disputes and to carry out fertility rites for barren women, and were commonly thought to have magical powers, which they used to heal various diseases or strike an offender with lightning (Izard 1975:222; see also Martinelli 1996:15, 38).

Other social groups were specialized in specific crafts. These groups often constituted communities coming from neighboring ethnic groups and were specialized in a particular craft that existed neither in the local, pre-Mossi societies nor in Mossi society. The most important group was the Yarse, a Sarakollé Muslim community specialized in trading and weaving. They played a key role in introducing Islam to Mossi communities. The Songhay or Marãsé were specialized in dyeing cotton cloth with indigo. Finally, the Bambara or Kāmbse were few in number and specialized as blacksmiths appointed to the royal court to produce guns (Izard 1975:223). Leather-working was mostly developed in eastern Mossi territory.

The French conquest and colonial rule (1896-1960)

At the end of the nineteenth century, the "quest for the Niger river" led to a strong competition over the territories of Burkina Faso between the British, settled in the Gold Coast,

the Germans, established in Togoland, and the French, located in the French Sudan (now Mali), Dahomey, and Côte d'Ivoire (Khiétéga and Madiéga 2004). As the French took over, they took advantage of the divisions among the centralized societies to better control them, even though they faced some resistance from the populations without centralized power (Khiétega and Madiéga 2004).

During the sixty years of French colonial rule, the populations of present-day Burkina Faso were exploited as a source of labor for the benefit of French plantations in Côte d'Ivoire. The local economy was seriously disrupted as the young male population had to leave their household farms to work in the plantations of Côte d'Ivoire, on the railroad construction between Abidjan and Niger, and in the cotton and rice fields of French Sudan (Khiétega and Madiéga 2004, Massa 1995:17, Schwartz 1995:264). Those who remained in the country were forced to work a number of days per year on collective fields growing crops (cotton, rubber, peanuts) that were meant for exports (Duperray 1992:271-72). The pressure was such that many workers fled the poorly paid forced labor, preferring the cocoa plantations in the Gold Coast (now Ghana) (Coquery-Vidrovitch 1985:231, Gregory et al. 1989:78, 81).

Since then, this movement of migration has never ceased. Seasonally or for longer periods, thousands of Burkinabè peasants have left their villages to earn money in the plantations of the Gold Coast and Côte d'Ivoire or to find poorly paid jobs in cities such as Abidjan (Coquery-Vidrovitch 1985:159, Wilkins 1989:376). Even today, the country continues to supply labor to its neighbors, with about 20 percent (if not more) of the population of Burkina Faso residing outside the country. Until the recent civil unrest in Côte d'Ivoire, Burkinabè were the largest

group of foreigners in that country, about two million (Khietega and Madiega 2004; Gregory et al. 1989:103-4).

The colonial period left a permanent impact on these societies in the future Burkina Faso. The landscape was radically changed by the construction of roads, railroads, bridges, and dams, which allowed people, information, and goods to circulate freely and promoted regional trade (Duperray 1992:271). The introduction of motorcycles, automobiles, and trucks in the 1910s gradually replaced human porters. Cotton, peanuts, and shea nuts were grown more intensely, which led to the development of the first industries as the crops were processed before being exported. On a social level, improved hygiene and health care led to a significant population growth from three million people in 1919 to 4 million at the end of the 1950s (Khietega and Madiéga 2004). The urbanization process slowly began to draw people out of the rural areas and Ouagadougou grew from 19,000 inhabitants in 1919 to almost 50,000 in 1960. The construction of infrastructure such as hospitals, schools, or refrigerated slaughter-houses led to the development of wage labor. A newly educated elite and the growing importance of labor unions, rivaled the traditional chiefs for power and became increasingly influential in the political arena. New forms of organization and expression began to develop through non-profit associations and newspapers (Duperray 1992:286-88). However, these economic and social changes remained limited compared to the other French colonies in West Africa.

Even though the various attempts at development initiated during this period did not lead to much change, the introduction of a monetary economy and wage labor gave an unprecedented importance to the cash economy. The imposition of an ever-growing tax per capita, in goods and then increasingly in colonial currency, compelled people to seek paid work abroad (Massa

1995:27). Upon their return, migrant workers were not only bringing money in cash, but they were also introducing new values and lifestyles through manufactured objects such as clothes, bicycles, and radios (Khietega and Madiega 2004). However, although migration brought money to the country, it was in fact slowing down its development by depriving it of its labor force and benefiting economic investments abroad (Duperray 1992:284).

From independence to contemporary Burkina Faso

The first two decades after independence (in 1960) did not see any tremendous changes in the country's economy or in people's daily lives. A succession of coups d'état brought different military men to power, all of whom misused the state budget and international aid money (Speirs 1991:93-5). It was Sankara's brief episode as head of state that left the most impressive mark both on the modern history of the country and people's memories. After a bloody coup in 1983, the young captain caused the country to take a radical turn: he changed its name from Upper Volta to Burkina Faso, ¹⁶ rejected Western financial aid and political interference, fought corruption by reducing government wages and privileges, built hundreds of schools, trained school teachers and doctors, and started building a railway linking Ouagadougou to the Niger border (Speirs 1991:101; Skinner 1988:443-44). His goal for the country was to achieve "food self-sufficiency" and respond to the population's "basic needs through improvements in the health and education services as well as increasing agricultural production" (1991:101; see also Ouali 1999:1275-76, 1278-79; Wilkins 1989:383). Burkinabè people still remember him as

 $^{^{16}}$ From two different local languages: *burkina* (Moore) meaning upright, incorruptible and *faso* (dioula) meaning land, country, nation.

promoting local craft production when soldiers, women, or pupils were parading in the capital city, wearing locally woven cotton cloth and sandals made from tires. 17

Yet this radical turn was short-lived as it did not please many conservative parties (political opponents, traditional chiefs, and foreign interests), who resented Sankara's cutback on their privileges. Among the general population, Sankara's political measures were met with a mixture of approval, skepticism, and bitterness. Civil servants resented their wage cuts (Speirs 1991:102; Skinner 1988:451), migrants in Côte d'Ivoire feared a break in the economic relationship between the two countries (Skinner 1988:446), and fractions of the population were irritated at Sankara's promotion of women, demotion of the Mogho Naba, ¹⁸ and the removal of all political power from the traditional chiefs (Skinner 1988:450; Wilkins 1989:384).

On October 15th 1987, Sankara was ousted and assassinated by his close collaborator, Captain Blaise Compaore. Immediately upon taking up office, President Compaore restored ministerial salaries to their previous level, interrupted social programs such as food subsidies, and re-established political relations with Western countries. Since then, his political agenda has been focused on attracting foreign investment and aid by complying with their demands such as holding multiparty elections (in 1992), tolerating freedom of the press, liberalizing the market, and strengthening public finances (see Wilkins 1989:387-88). Compaore has managed to maintain relative political stability despite some ambiguous connections with the civil wars in Liberia and Côte d'Ivoire, the diamond traffic in West Africa, and numerous violations of human rights such as the murder of journalist Norbert Zongo in December 1998.

 $^{^{17}}$ Interviews. Ouagadougou 2003-04. Also see Skinner 1988: 445. See note 18.

Decades of development efforts by the successive governments and a continuous influx of foreign aid money have not borne much fruit. The domestic economy continues to depend heavily on agriculture, on the export of the same primary goods (cotton and labor), and on foreign aid. The country could benefit from its strategic position at a regional crossroads and its key role in promoting African cultural expression. For years now, the country has been organizing important international events such as the African film festival (FESPACO)¹⁹ and the African arts and crafts fair (SIAO).²⁰ However environmental and institutional constraints (deficit in good governance, pressure from international financial institutions, corruption, to mention only a few) represent a very serious hindrance to the country's development (Khietega and Madiega 2004).

Ouagadougou: A capital at the crossroads.

Until the colonial period, Ouagadougou was composed of dwellings in small scattered hamlets, separated from one another by millet fields and covering an area of ten kilometers around the palace of the Mogho Naba (Bicaba 2004). It only began to expand with the establishment of a French administrative post and a mission station in 1904. With a population of approximately 8,000 inhabitants in 1904, it expanded to 59,126 in 1960, as the colonial administration undertook many building projects and organized the growing city into zones. In 1947, the decision to reinstate the city as the capital of the reconstituted colony²¹ brought many traders, manufacturers, administrative agents, and workers to settle in the city, triggering a

¹⁹ FESPACO: Festival Panafricain du Cinéma et de la Télévision de Ouagadougou

²⁰ SIAO: Salon International de l'Artisanat de Ouagadougou.

²¹ The colony of Upper Volta had been dismantled from 1933 to 1947 and divided between the colonies of Côte d'Ivoire, Niger, and the French Sudan. The goal was to have a better access to the voltaic labor force (Duperray 1992: 252, 276-77).

demographic growth that has not stopped since then (Bicaba 2004). In 1985, it had reached 441,514 inhabitants with approximately 60 percent living in "spontaneous housing" (Ouattara 2004; Kieffer 2006:64). Ouagadougou is today the leading administrative, cultural, economic, and demographic pole of the country (see map 3).

With an annual growth rate of 4.3 percent per year, Ouagadougou is among the cities that are growing the fastest on the African continent (Ouaga Focus 2001). In 2001, the population of the capital city was estimated to have reached 856,000 inhabitants (Leenhardt 2005:7) and is expected to exceed 2.5 millions in 2015 (Ouaga Focus 2002b). The proportion of the population living in the capital city is also expected to grow from 10.2 percent (2000) to 13.8 percent in 2015, in comparison to the total population (Ouaga Focus 2002b). Scholars have suggested that the reasons for this rapid urbanization are "persistent droughts over the last 25 years [which] led to famines in the countryside and hence massive rural to urban migration," younger men and women fleeing the countryside to "escape [...] from the rigid social structure of traditional rural life as they [are] attracted by the bright lights of [...] large cities," and "high to very high birth rates in urban areas" (de Jong and van Teeffelen 1999).

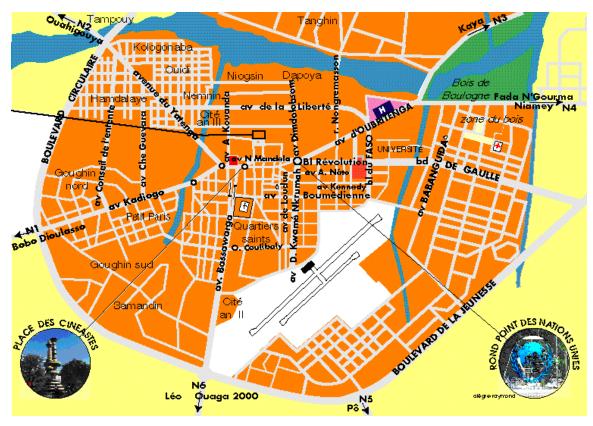
This rapid demographic explosion is not without consequences. The unemployment rate is "consistently high" in the capital city, reaching 25 percent in 1992 (Calvès and Schoumaker 2004:1342). Urban poverty remains important, even if it seems to have slightly decreased in recent years, falling from 19.9 percent in 2003 to 16.3 percent in 2006 (estimates; IMF 2008:30).

The difficulty in finding employment constitutes a serious hindrance to enter "adulthood. A

²² Even though the country itself is much less urbanized than its neighbors (the urbanization rate reached 15.5 percent in 1996). In 1993, the country was the least urbanized of West Africa, "far behind Niger and Mali, whose urbanization rates were respectively 18 percent and 25 percent" (Ouattara 2004).

²³ In 1996, Ouagadougou hosted 44.1 percent of all urban dwellers in Burkina Faso. Bobo-Dioulasso came next, with 19.5 percent (Ouattara 2004).

shortage of employment opportunities postpones marriage and access to housing, and lengthens the period during which young people remain economically dependent on elders" (Calvès and Schoumaker 2004:1341). In addition, even if a proportion of these urban migrants settle in "planned settlement structures [...] a significant part of the new population [settles] in an unstructured way, often into illegal, spontaneous settlements [...] without [having access to such facilities] as drinking water, sewage disposal, electricity and roads" (de Jong and van Teeffelen



Map 3. Central neighborhoods of Ouagadougou.

1999). This is of great concern to scholars, as well as urban planners and government officials, as these uncontrolled settlements can have dramatic consequences on the population's health and living conditions (Ouaga Focus 2001).²⁴

A young urban population.

The population of the capital city is young and composed of recent generations of city-dwellers. Almost 75 percent of the population is under 30 years old (INSD 1998:70)²⁵ and most of them are first- or second-generation residents in the capital city.²⁶ The average age is 19 and 43 percent are migrants (Leenhardt 2005:7). It has been predicted that in 2015, the majority of this urban population (58.6 percent) will be under twenty years of age (Ouaga Focus 2002b). In many respects, the situation of these young migrants is similar to that of the majority of first- and second-generation urban dwellers in African cities and other developing countries.²⁷ But contrary to the prediction of modernization theory, migrants are not "discarding their rural and traditional values" to become "true urbanites" (Erman 1998:541). Quite the opposite, scholars have observed a persisting "rural-urban continuum" despite the diversity of migration patterns across developing countries.

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²⁴ Scholars of the Ouaga Focus group argue that even if the rural population in Burkina Faso is "*on average*" more disadvantaged than those living in Ouagadougou, there are still great disparities of access and use of basic social services (especially medical care and education) in the capital city (op. cit. Ouaga Focus 2001. N° 1).

²⁵ More recent statistics show similar results – i.e. this study of two neighborhoods of Ouagadougou (Taabtenga and

²⁵ More recent statistics show similar results – i.e. this study of two neighborhoods of Ouagadougou (Taabtenga and Wemtenga), which shows that 73.3 percent of the population is under 30 years of age, for the period between 2000 and 2004. Source: Observation de Population de Ouagadougou. UERD (Unité d'Enseignement et de Recherche en Démographie). Université de Ouagadougou. http://www.uerd.bf/OPO/principale.html

²⁶ See Gugler (2002:28-29): "The majority of adults in African cities continue to be first-generation migrants from rural areas because much of the rapid urban growth that has characterized Africa over the last half-century has been due to rural-urban migration."

²⁷ See Ferguson 1992, Gugler 2002, Erman 1998, Englund 2002, Trager 1998, Dike 1982, MacGaffey 1983, and Potts & Mutambirwa 1990, among many other scholars who have examined the question of migration and rural-urban linkages in Africa south of the Sahara and other developing countries.

Migrants, who have come to the city mostly for economic reasons, rarely intend to settle there definitively and certainly not to be buried there. In addition, their ambitions are often geared towards improving the conditions of life in their home village or rural area (Englund 2002:137; also see Trager 1998; Dike 1982; Gugler 2002). "[T]he distinction between rural and urban" has even become "blurry" as communication between rural and urban areas has greatly increased, mostly because of improved transportation and the influence of the media (Erman 1998:541). While most migrants continue to identify with their home village, they do integrate urban values and lifestyle. At the same time, "[a]dopting urban patterns of behavior does not mean forgetting how things were done at home. Working-life migrants will continue to behave in urban or rural ways at the situation demands" (Gilbert & Gugler 1992:158, 159 quoted in Erman 1998:546). These generations of young urban dwellers settling in Ouagadougou perfectly reflect this worldwide phenomenon.

These young, urban dwellers have left the fields to work mostly in low-income jobs. They are poorly educated and as a result cannot have access to most forms of employment.

Approximately half of them have never been to school, a minority has gone through grade school (16 percent), and only six percent obtained a diploma on completing Junior High School (INSD 1998:73). As in other African countries, the unemployment rate among the youth has increased in the last two decades and is "disproportionately high," reaching "43.3 percent among 15-29 year olds" in 1992 – versus 6.7 percent "among those 40 and older" (Calvès and Schoumaker 2004:1343). This is especially true for the "urban educated youth," who experience "higher rates

²⁸ Gilbert, Alan and Josef Gugler, eds. 1992. Cities, Poverty and Development: Urbanization in the Third World. 2nd ed. Oxford; New York: Oxford University Press.

of unemployment [...] than among less-educated youth, especially at the secondary level" (2004:1343).

Since access to a first paid job in the formal sector has considerably been delayed in recent years, young urban people are increasingly turning to the "informal" economy to find a job (Calvès and Schoumaker 2004:1347). A national survey²⁹ reveals that "the vast majority of young men (approximately 90 percent) and almost all of young women with no formal education were first employed in the informal sector" (2004:1350).³⁰ In addition, a substantial number of school dropouts "are actually performing unpaid work (9.5 percent of young men, 11.4 percent of young women)," working as "family workers" or "unpaid apprentices" (2004:1346-7). These figures confirm "the rupture between formal education and access to modern sector and the informalization of youth employment that has been documented in other African cities" (2004:1351).

Ouagadougou in the making: the changing landscape and urban heterogeneity

In such conditions, the informal sector provides most of employment opportunities in the capital city. Recent surveys have shown that "as many as 80 percent of the paid jobs in Ouagadougou were outside the modern sector in the early 1990s" (Calvès and Schoumaker 2004:1342). Another study shows that a significant number of the active population in the capital city consists of independent workers (45 percent - versus 39 percent in the total population) or

²⁹ "A unique nationally-representative retrospective survey entitled "Migration Dynamics, Urban Integration and Environment Survey of Burkina Faso" (MDUIE survey) conducted in 2000 in Burkina Faso of 8644 individuals" (Calvès and Schoumaker 2004:1344).

³⁰ Other figures show that "while 56 percent of men and 74 percent of women from the oldest generation [1965-74 cohort] had their first job in the informal sector, this percentage jumped to 91 percent of men and 94 percent of women for the youngest cohort [1975-84]" (Calvès and Schoumaker 2004: 1350).

apprentices, while the rest have managed to find wage labor (32 percent) (INSD 1998:14).³¹ On the whole, the majority of the urban active population work in trading activities (35 percent), a sector largely dominated by women (74 men for 100 women). The handicraft sector features in second position in the employment structure of Ouagadougou (23 percent). This sector, in contrast, is predominantly male (408 men for 100 women) (1998:19).

Having access to these cash-earning activities, the purchasing power of the urban population seems to be significantly higher than in the rural areas. A 2001 survey reveals that the average monthly income in Ouagadougou amounts to 37,300 F CFA (about \$57). The range of income varies from 100,000 F CFA in state enterprises, 94, 700 F CFA in administration, 73,500 F CFA in the formal private sector, down to 20,400 F CFA in the informal sector³² (Leenhardt 2005:9). In comparison, the monthly average spending³³ reached 18,949 F CFA per person (about \$29) or 97,155 F CFA per household (about U.S. \$150) in 1996.³⁴ According to the INSD survey, most of these expenses go towards food (30 percent), transportation (14 percent), and housing (10 percent). Entertainment, money transfer and gifts in kind each represent less than

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³¹ It is estimated that in Burkina Faso, the labor force amounts to about five million people and represents around 40 percent of the whole population (CIA 2004). Sanou (1993) gives complementary figures concerning the population of household heads in the capital city: more than half of household heads are wage-workers but a significant number are independent workers (38 percent). This rate reaches 63.3 percent among poor households. Among richer households, 79.5 percent are salaried workers in public and para-public sectors (Sanou 1993).

³² Respectively, \$154, \$146, \$113, and \$31. To better assess this income declared by the interviewees, statisticians have "reconstituted" their income over a full year, taking into account seasonal variations. They found an average monthly income of 41,200 F CFA (\$63) for informal workers in Ouagadougou. Unfortunately, this author does not provide any information on how the "informal" sector, workers, and units of production were defined in the survey (Leenhardt 2004:26).

³³ In its survey of household consumption in Ouagadougou, the INSD assessed the household expenses for one year, recording yearly expenses for categories such as food, clothes, housing, equipment, health, transportation, leisure, education, hotels/restaurants (consumption expenses) and money transfers, gifts, and other miscellaneous expenses (for non-consumption expenses). In relation to the number of households interviewed, they estimated an average household consumption level per year of 1,282,119 F CFA (consumption and non-consumption expenses) and 1,165,854 F CFA (consumption expenses only) (INSD 1998:47).

³⁴ The annual household spending was estimated to be 1,165,854 F CFA in 1996 (or 97,155 F CFA per month) (INSD 1998: 47-8).

five percent of the average individual's monthly expenses (1998:48).³⁵ More research is needed to relate these results to people's actual consumption and gift practices and examine whether they indicate a change to a more self-centered lifestyle.

Due to these rural-urban migration and the development of a market economy, the city of Ouagadougou is rapidly changing, both by "controlled" urban planning initiatives and by "uncontrolled," spontaneous settlements. The city has been divided into administrative "sectors" (secteurs), which comprise several neighborhoods (quartiers) (Ouaga Focus 2002c). Most of these neighborhoods are made up of heterogeneous types of housing. In "loti" areas, one can find a traditional compound containing several mud-brick houses, without running water or electricity, next to a modern, cement villa with a satellite dish on its roof. The living conditions of residents in the "loti" neighborhoods are generally better than in the "non-lotis" ones and are gradually improving (Ouaga Focus 2002d). In contrast, residents in "non-loti" areas (one household out of four) live in small, precarious constructions, housing mostly a single household. They comprise mostly young couples and recent immigrants cautiously investing in these houses while waiting for the area to be allotted by urban planners (Ouaga Focus 2002d).

Despite these disparities between and within these areas, the majority of the urban population still live in simple houses, without electricity and running water (INSD 1998:38, 41).³⁶ Most urban residents still cook outdoors and continue to use wood for fuel (more than 70 percent). Despite continuous efforts to encourage the population to save wood and turn to gas,

³⁵ Average expenses per month and per capita: 18,949 F CFA [\$29] with 7,353 F CFA (30 percent) going on foods (food, drinks, tobacco, or food vendors), transportation 2,693 F (14.2 percent), then housing 1,885 F (9.9 percent). Entertainment 696 F (3.7 percent), money transfers 641 F (3.4 percent), and gifts in kind 197F (1.0 percent).

³⁶ Less than one household out of four has running water; only 22.9 percent have a faucet inside the house; the majority goes to the nearby fountain to get water (42.7 percent) or get water delivered by water boys (28.5 percent). Only 30.6 percent of the households have electricity and 68 percent use petrol lamps (INSD 1998: pp. 38, 41).

only a minority actually does so (only 13 percent; INSD 1998:40). In addition, less than twelve percent use an "improved stove" (foyer amélioré) designed to limit wood consumption (Ouaga Focus 2002f). Charcoal is used even less than gas: by only six percent of households (INSD 1998:40). Finally, only seven percent of households own a telephone (1998:43).³⁷

Although urban planners are largely overwhelmed by this rapid demographic growth, they have initiated several projects to modernize the city and improve living conditions. At the end of the 1990s, the city authorities decided to build better quality houses with facilities on the outskirts of the city. This project, called "Ouaga 2000," which gave its name to this new neighborhood, was soon followed by the ZACA project, 38 which aimed at developing new commercial and administrative facilities at the heart of the city. Residents of the old, downtown neighborhoods have reluctantly been relocated to the new periphery of the city and their old and insalubrious compounds were destroyed (Sommet Francophonie 2004). Finally, urban planners are currently in the process of officially allotting plots to all residents in the "non-lotis" neighborhoods. This is a decisive step before putting in electricity and running water.

Even though urban dwellers still live in modest conditions, their lifestyle is changing slowly but surely. Living in the "hub" of economic and cultural exchanges with foreigners, the Ouagalais³⁹ have easier access to new, foreign goods, trends, and values through the education system (schools, university), media (TV, internet), imported goods, and contact with foreigners (tourists, diplomats, development agents).

³⁷ This does not include the growing number of cell phone owners.

³⁸ Still ongoing. ZACA stands for "Zone d'Activités Commerciales et Administratives" (Zone for commercial and administrative activities) but also for "zaka," a mooré term which designates the "compound" and by extension the "household" (the people living in the compound). Originally, this term means the "yard" inside a compound and by extension, all the huts having an opening to this yard (Alexandre 1953:485). ³⁹ Name of the inhabitants of Ouagadougou.

The Shape of the Domestic Economy: leaving a "niche" for informal activities

From this overview of the rapid expansion of the capital city, we can see more clearly how the weakness of the domestic economy and of the secondary sector in particular have created a perfect "niche" for the development of informal production activities (Zagré 1994; EIU 2001a; 2001b). As the Burkinabè state has not been able to keep apace with the waves of poorly educated migrants and provide them with proper housing and income-generating activities, these populations have provided for themselves. Building their own houses and developing their own means of livelihood, these recent urban dwellers have established new economic activities to provide an income and cater to the needs of a growing but low-income urban population. This has been commonly designated as the "informal economy."

In Burkina Faso, if more than 80 percent of the active population still work in agriculture, the informal sector "accounts for 70 percent of all non-agricultural employment" (Gaufryau and Maldonado 1997; see also ILO 1991; Canadian International Development Agency 2002). It is believed to be growing faster than any other economic sector and in 2000, it represented about 25 percent of the GDP (Leenhardt 2005:25). Between 1975 and 1990, the active urban population experienced a 6.3 percent annual increase, on average. To meet the needs of this growing population, the local economy should have generated 46,000 jobs per year and more than half of them in the urban environment (Gaufryau and Maldonado 1997:8). The majority of these workers were absorbed into the informal economy. It is estimated that about 75 percent of

⁴⁰ Except in the areas of food processing and construction, where informal employment represents respectively 49 and 54 percent. This definition excludes all service activities.

⁴¹ In comparison, almost 76 percent of the employment in the capital cities of the West African Economic and Monetary Union (UEMOA) belongs to the "informal sector," which represents only 22 to 28 percent of the GDP in terms of revenues and wealth (Leenhardt 2005:4).

the urban labor force is employed in the informal economy, versus 15 percent in administration and about 10 percent in the private, formal sector (Camilleri 1999:1645).⁴² In the early 1990s, it was contributing to more than half of the secondary and tertiary sectors of the country – 62.6 percent and 55.2 percent, respectively (Camilleri 1999:1645; see also Gaufryau and Maldonado 1997:10).⁴³

This sector is in fact the biggest employer in most developing countries around the world, catering to the needs of a growing and impoverished urban population. In Africa, "urban informal employment is estimated to absorb 61 percent of the urban labour force. This sector was expected to generate more than 93 percent of all additional jobs in the region in the 1990s," versus an average of forty to fifty percent in Asia, depending on the level of development (ILO 2002). In Latin America, approximately sixty percent of new jobs are generated within the urban informal sector. Within the West African Economic and Monetary Union (UEMOA), the informal sector represents 78 percent of household consumption (Leenhardt 2005:17). This sector meets the needs of the majority of the population, across all socio-economic groups, because of its spatial and social proximity and its low prices. People only turn to the "formal" sector to purchase goods and services of higher "quality" or because there are no other "alternatives" (2005:17).

Social scientists and international experts have still not reached a consensus on the definition of this concept (Maloney 2004:1159). World Bank experts admit that they are "dealing

urban labor force, while it goes up to 65 percent in such countries as Bangladesh (ILO 2002). See also Lautier

(2006).

⁴² A more recent survey (2001-2003) shows that 73.4 percent of the employment in Ouagadougou is in the "informal sector" (Leenhardt 2005:10).

A more recent study estimated that out of 151,000 "informal units of production" surveyed in Ouagadougou, 34.2 percent were in industry, 48.7 percent were in trade, and 17.1 percent were in services (Leenhardt 2005:11).
 In the newly industrialized countries in Asia, the urban informal sector represents less than ten percent of the

with several distinct phenomena" and that is why they need "to employ multiple measures" as they are not sure of what they "should be studying" (Perry et al. 2007:1). The standard International Labour Office's (ILO) definition of the informal sector draws together a disparate ensemble of activities and types of organization. It includes businesses run by self-employed individuals as well as workshops of varying sizes, hiring apprentices and sometimes paid employees. Activities range from "legitimate" such as retail trade, production, and service activities in various domains of the economy – to "illegitimate" such as smuggling, drugtrafficking, and prostitution (ILO 1985:11; Hart 1973:68; Latueri 2006:215). A more recent definition specifies that "[informal] production units [...] typically operate at a *low* level of organization, with *little or no* division between labour and capital [...] and on a *small* scale [...]. Labour relations - where they exist - are based mostly on *casual* employment, kinship or personal and social relations *rather than contractual* arrangements with *formal* guarantees." Most of them consist of "*subsistence-level* activities, motivated by the need for *survival*" (ILO 2002, emphasis mine).

From its conception, the notion of informal sector has been tightly connected to the need of Western policy-making, whose focus was to increase "economic growth in developing countries" (Hansen 2001:7450). As a result, its various definitions have been restricted to "negations" as informal activities were "defined by the state" and "analysed as reactions to state or formal market 'failures'" (Roitman 1990:673, 679, emphasis in original). ⁴⁵ The informal sector is thus more a "residual notion than a concept, defined in relationship to [...] what it is

⁴⁵ As Hart wrote several years before, the "informality [is mostly] in the eye of the beholder," that is, the government or power that cannot control or comprehend these activities (1985:55; see also Klein 1999:555-6; Elyachar 2005:79; Lautier 2006:210).

not" (Hansen 2001:7450). These definitions generally imply that these activities are not registered at the chamber of commerce, do not pay taxes, and thus cannot claim benefits such as social security, unemployment or retirement payments. In addition, they do not conform to the international labor law: they do not guarantee a minimum wage, provide poor working conditions, and often exploit children's labor. As a result, they represent an unfair competition to the formal sector, which has to comply with all these regulations (Gaufryau and Maldonado 1997).⁴⁶

Scholars have used the notion of informal sector to corroborate their "ideological positions." While some viewed it "as a reservoir of the entrepreneurial spirit (the neo-liberal view)," others saw a "desperate response of marginalised workers to systematic exploitation (the revised Marxist perspective)" (Klein 1999:556; see also Mollona 2005:528). Maloney views the "informal sector" in developing countries as the equivalent of "the voluntary entrepreneurial small firm sector found in advanced countries" (2004:1159). Workers may deliberately choose to enter the informal realm of the economy as it "may actually offer a measure of dignity and autonomy" that formal jobs do not, even if it may not lead them out of poverty (Leenhardt 2005:11; Maloney 2004:1173).⁴⁷ However, Hansen cautions us, arguing that "the resourcefulness of the urban poor must be tempered by a recognition of the heterogeneity and change of informal sector activities as well as the exploitative conditions under which much of this sector's work is carried out, particularly by women and children" (2001:7452).

⁴⁶ Interestingly, the authors do not provide a clear definition of the informal sector in their research document, as if implicitly using that of the ILO, for which their document was written.

47 Many have even never 'entered' the formal economic realm.

Informal sector, microentrepreneurs, and microfinance

In the last fifteen years, national and international institutions have attributed a "social function" to the informal economy: "to create employment [and] fight against poverty" (Lautier 2006:210-11). In an era of economic liberalism and ongoing deregulation, policy-makers have shifted their strategies in an attempt to counter the effect of structural adjustments programs and poverty (see Elyachar 2005:81, 83). By narrowing the definition of the informal economy to the criterion of size, they could qualify these activities as "microenterprises" and remove the aspect of "extralegality" to reintegrate them within the state (Elyachar 2005:82, 84). In doing so, they put the emphasis on the "individuals and their entrepreneurial qualities over the community and its genius for survival" (2005:82).

Development experts believed that by injecting microcredit and providing technical and managerial training to promising microenterprises, they could "formalize the informal" (Lautier 2006:212). Microcredit was considered as "the main tool, not to create small capitalist enterprises, but to make microenterprises or viable individual activities durable, precisely because they are not driven by the will to accumulate" (2006:213). It is one of the strategies that have been included in the Millenium Development Goals set by the United Nations to reduce poverty worldwide (Servet 2006:451).⁴⁸ But if microcredit can help "stabilize small entrepreneurial activities," it cannot solve poverty or even claim to (Guérin et al. 2006:3). Firstly, "[t]he entrepreneurial potential of poor people is much more limited" than we imagine, as entrepreneurship involves a degree of risk which the poorest are unable to take (Guérin et al. 2006:3; Fouillet et al. 2007:248). Seconly, "credit from microfinance programs helps fund self-

⁴⁸ See the Millenium Project website: http://www.unmilleniumproject.org/goals/gti.htm

employment activities that most often supplement income for borrowers rather than drive fundamental shifts in employment patterns" (Morduch 1999:1610). One needs much more than microcredit "to develop microentrepreneurship" and it would be a "dangerous illusion" to promote it as the key to development (Servet 2006:456-7).

In fact, many studies have shown that microcredit rarely leads to productive investments (Fouillet et al. 2007:246, 250). The precarious situation of most microcredit borrowers leads them to use their loans mostly to cover emergency expenses (health, food, ceremonies, or reimbursing former debts), which may create situations of excessive debt (Fouillet et al. 2007:248). Several factors actually limit microentrepreneurship: these activities are often barely profitable and their earnings highly variable; local markets saturate quickly because of the development of new enterprises, which often imitate each other and lack purchasing power (for lack of clients) and competitiveness against manufactured goods (Fouillet et al. 2007:247). Lastly, microcredit organizations tend to loan to populations living above the poverty line and mostly in wealthier urban areas, which may increase socio-economic inequalities even more (2007:250, 253). Some suggested to subsidize micro-financial services in order to reach these financially and geographically isolated populations (2007:254; see also Morduch 1999:1571).

Most scholars agree that the solution to the recurrent problems of poverty and economic growth lies in planned policy-making at the macro-level. "Microfinance may be a safety net for the most destitute, but microcredit can only exceptionally be a factor of growth" (Fouillet et al. 2007:259; see also Morduch 1999:1610). It is only a tool amidst a larger scheme of policy-making, which should focus on improving the infrastructures in terms of health, education, water supply, and communication (Guérin et al. 2006:4). Institutionalizing a social protection system

would greatly release the "social pressure" on microentrepreneurs (Servet 2006:456). Lastly, practices of "saving, insurance, [and] migrants' remittances" are much more efficient than microcredit to fight against financial exclusion (2006:457-8; see also Fouillet et al. 2007:255; Morduch 1999:1606). Even if microfinance and other development strategies are useful at the micro-level, they remain limited in their impact and need to be included in a broader, all-encompassing policy at the national and international levels.

This chapter aimed to provide background information, both economic and historical, that helps explain the development of an informal economy and particularly that of the recycling activities which are the subject of this study. In many ways, this examination of particular production activities helps highlight the key aspects of the informal economy as well as the challenges that this society is currently facing. In the subsequent chapters, I will analyze how these artisans generate and reinvest different kinds of gain, thus contributing to the production and reproduction of Burkinabè society. But I will also examine the limits and contradictions of these economic systems, which arise at the junction of different worlds (capitalist vs. traditional, urban vs. rural, Western vs. African, global vs. local). In doing so, I intend to provide critical insights into a sector that is at one and the same time so fragile and so essential to the domestic economy.

In my research focusing on the economic organization and practices of small-scale production activities, I made methodological choices that would best fit the goals of this investigation. One of anthropologists' greatest and distinctive tools is that of participant observation, often during a "prolonged fieldwork" (Bloch 1991:194; Gupta and Ferguson 1997:1-3). Sharing the daily life of the population studied, at least partially, the researcher begins to familiarize herself with and understand their practices, social codes, and beliefs, which would not be possible with other methods. At the same time, people become acquainted with her presence and will eventually carry out their activities with less "reactivity" (Bernard 1995:137, 141; Gupta and Ferguson 1997:36-7). Many scholars acknowledge that anthropologists obtain "the basis of their knowledge about the people they study from informal and implicit cooperation with them" (1991:194). Fieldwork is fundamentally a "teamwork" and "a co-operative enterprise" that develops through social interactions not only with the targeted population, but also with other people, such as "spouses, friends, [...] and colleagues" (Pálsson 1994:915-16). That is to say, "the fieldworker is an apprentice in the collective enterprise of making an ethnography" (1994:916).

Yet, there has been much debate on the degree of involvement and apprenticeship of the ethnographer during his field research, particularly in the subfield of the anthropology of techniques. Some argue that "[o]bservation and interview are inadequate methods" to understand the production of technical knowledge (Keller and Keller 1996:136). As a result, the observer must participate in an active manner in order to acquire and understand various types of

knowledge through his own "bodily experience" (Bloch 1991:193-4; Keller and Keller 1996:136). Others have warned against the danger of performing "the same technological actions that [the technographer] is describing" (Lemonnier 1992:27). In doing so, one can actually be "cumbersome" and disruptive. In addition, the process of acquisition might take much longer than the time of field research itself and it might give the wrong impression "that the ethnologist can actually become the craftsperson" (1992:27). Yet, being a "participant observer" rather than an "observing participant" is possible (Bernard 1995:138). Since most technical actions and behaviors are often "repetitive," the recording process is facilitated and can be systematic, particularly with the use of photographic and video recordings (Lemonnier 1992:27).

In this research, I deliberately chose not to undertake an apprenticeship in any of the three trades studied for several reasons. Firstly, this study is not about technological processes of production *per se*, but about economic practices and conceptions at work. If I had been absorbed in acquiring basic techniques of production, I would have only covered part of the subject without being available to examine other aspects of the work. Secondly, the time necessary for the apprenticeship would not have allowed me to carry out a comparative work across the three types of trade (aluminum-smelting, tinsmithing, and rubber-working). Also, I would not have been able to perform extended observations in other workshops within the same trade and build deeper relationships with other craftsmen in order to carry out critical interviews on accounting practices and other sensitive, money-related subjects. Thirdly, even if rubber-working is quite accessible for a woman, tinsmithing and aluminum-smelting are strenuous activities and I would

¹ Keller and Keller speak in particular about visual, sensorimotor, aural, kinesthetic imageries (1996:136).

certainly not have had the strength and dexterity to execute all the tasks. And finally, I am convinced that only a combination of various methodological tools can effectively help the scholar access and understand the multifaceted knowledge that motivate and shape people's actions.

As Bloch rightly pointed out, "we should treat all explicit knowledge as problematic," be it that of the informants or our own (1991:194). Verbal or written – explicit – expressions are constructions that are "probably remote from that employed in practical activities under normal circumstances" (1991:194). It is therefore essential to diversify the types of data collected as well as the ways in which they are gathered (see Schwint 2002:43-4). Bloch suggests that the anthropologist should include her bodily experience to keep in mind that "most of our material is taken from the world of non-explicit expert practice and does not only come from linear, linguistic thought" (1991:193; see also Keller and Keller 1996:136). In doing so, the anthropologist does not achieve a "neutral and fully objective operation," but "a construction and translation activity in which the researcher produces more than he reproduces" (Laplantine 1996:37 *In* Schwint 2002:47). The text produced is therefore "neither an indigenous description nor [...] an exogenous description [...] but [...] a combination of several viewpoints of the same value" (2002:48).

(1991:193).

2002:43).

² In studying wood-carvers in eastern France, Schwint opted to diversify his methodology but also the levels (*échelles*) of observation. These levels went from the micro-scale (work operation; technical process); to the level of the "artisan and his work, his practices, norms, and values;" to the level of the enterprise, "including all the persons working there;" and lastly, the level of the "professional group found in the local geographic sector" (Schwint

³ Likewise, Bloch explains that in "attempting to give an account of chunked and non-sentential knowledge in a linguistic medium (writing) ... [the anthropologist] must be aware that in doing so she is not reproducing the organisation of the knowledge of the people she studies but is transmuting it into an entirely different logical form"

Consequently, this piece of research combines several methodological tools to examine how producers understand and generate gain by studying their knowledge in practice. It was carried out in several stages with methodologies built on one another: mapping, survey, and inventory; intensive observation of production and marketing practices; collection of work histories and qualitative interviews; and finally, a consumer survey. This combination allowed me to better capture the dynamic nature of work activities, cross-checking practices against discourses and vice-versa, using the results and observations obtained through one method to enrich the others. This multi-dimensional approach was necessary and extremely fruitful to examine such an evasive concept as gain.

Unit of analysis.

This study focuses on the workshop as the principal unit of analysis (ILO 2002; Verdon 1979; Bernard 1995:35-7). The production unit or enterprise is comprised of the *patron*⁴ (the boss) and his work team (apprentices or paid labor). The notion of workshop in an African context is very flexible as individual workers (apprentices or paid workers) can use the workshop facility and their personal networks of suppliers and clients to run their own business as an extra activity. To capture the flexible nature of these production practices (both collective and individual), I also investigated particular individuals' knowledge and work practices within the workshop setting.

An inventory of recycling workshops

⁴ Patron: masculine form as the entire population of producers of recycled goods is male.

In the beginning of my field research, I attempted to identify the factors that affected the location and work organization of the workshops in the capital city (Bourdieu 2000). I began with a survey of various neighborhoods in order to identify as many workshops as possible.

Often, one producer would take me to several others, in other parts of the city, allowing me to find more workplaces scattered all around the capital. The purpose of the mapping process was not to cover the entire population of producers or to give a full representation of it, but rather to help me identify the major patterns of workshop locations within and between the three recycling activities.⁵

I was able to obtain a detailed map of Ouagadougou, produced by the city council.⁶ This document includes precise maps of each administrative "secteur" of the city, with an index of every street (including their names or identification numbers), and a color-code identifying residential, administrative, industrial, commercial, and natural areas ("îlots"). It also indicates religious edifices, marketplaces, sport grounds and other public places, dams, railroads, and streams. As I was carrying out this initial stage, I marked the exact location of the workshops on the map with a color-code for each trade. I also highlighted all the marketplaces indicated on the map as potential work or retail places for these artisans.⁷

Based on this initial mapping process, I selected a total of sixty workshops across the three types of recycling activities according to the distribution pattern that I had identified. The inventory covered the three recycling activities as follows: seventeen rubber-working – including

⁵ Aluminum smelting, tinsmithing, and rubber-working.

⁶ Mairie de Ouagadougou. 1997. Plan de la ville de Ouagadougou. Ministère de l'Économie et des Finances, Ministère de l'Administration Territoriale, Direction du 2è Projet de Développement Urbain, Mairie de Ouagadougou. I thank Mrs. Vuillermet, who used to work at the Danish Embassy of Ouagadougou, for loaning this book to me, as it was out of print.

⁷ They are 37 marketplaces reported on this map, for 30 administrative "secteurs."

two inner-tube workshops, one of which hosted about fifteen independent workers, 8 sixteen aluminum-smelting, and twenty-seven tinsmithing workshops. This unequal distribution mirrored that of the workshops which I had identified during the mapping process. These workplaces were distributed throughout fourteen "secteurs" of the city, which basically are part of the old and new peripheries. In the center of the city there were few recycling activities – mostly inner-tube workers settled in Rood Woko market, which were not part of this study. 9 The non-loti areas are mostly residential areas with few production activities.

I conducted a short survey to collect systematic information about the structural composition of the workshops and identify relevant factors of production for each activity. The variable factors covered by the inventory ranged from the number of workers and apprentices, to the number of years of activity, the description of the facilities (i.e. storage room, electricity, telephone), the kinds of raw materials, and the range of goods produced and available for purchase, among other things. 10

This survey also intended to establish what terminology producers used regarding work, profit, and other types of gain as well as how they assessed their situation, from being difficult to being relatively successful (Bernard 1995:310; see also Pelto and Pelto 1978). In addition, I made an extensive photographic inventory of the workshops to obtain some indications of the work organization, the level of productivity, and the types and range of goods produced in each enterprise. I also photographed the surroundings of the workplace, to visualize better the

⁸ It consisted of several stalls inside Sankare Yaare, where about 15-20 Dafing inner-tube workers are settled, working either independently or in teams.

⁹ They have scattered to other marketplaces, especially Sankare Yaare and Cité An II markets in the old periphery of the city, since a fire broke out in May 2003.

10 See Appendix B for a partial rendering of the data obtained in this inventory.

environment in which recycling activities operated and identify where and how each type of recycling activity was situated (Collier and Collier 1986:29, 36).

Out of this sample of sixty workshops, I selected four to carry out the next stage of my research. I chose these workshops according to the following criteria: one workshop per activity; different locations throughout the city, in different neighborhoods, and different types of environment (marketplaces, streets, residential neighborhoods); and workshops having been in operation for different lengths of time, with different work organizations (individual worker vs. team work) and different numbers of workers. Last but not least, the availability and the readiness of the *patrons* to welcome me into their workshop and cooperate with me were essential. I disregarded some workshops that could have been potentially included in my study because of the lack of interest shown by the bosses in contributing to my research.¹¹

I selected the following four workshops: 1) One workshop of aluminum-smelting, located in the 'new' periphery on a commercial, side street, surrounded by retail shops of used spare parts. This workshop included the boss and three apprentices at different levels of training; 2) a second aluminum-smelting workshop, located in a residential neighborhood of the 'old' periphery. This was a much larger workshop, comprising the boss and approximately fifty workers divided in several work teams. The organization and intensity of production and the facilities were on a much bigger scale; 3) a tinsmithing shop, located on a paved main road in the 'new' periphery and surrounded by a few other, scattered traders. This independent worker had no apprentices and worked in precarious conditions, under a small canopy, with few tools and limited raw materials, which were stored in a neighboring garage out in the open; lastly, 4) a

¹¹ Talking about the choice of field sites, Bernard writes that "there is no reason to select a site that is difficult to enter when equally good sites are available that are easy to enter" (1995:143).

workshop belonging to two tire-workers, located in a specialized marketplace on the fringe of downtown Ouagadougou; these two artisans worked independently of each other and had no apprentices. The first three workshops were created respectively ten years ago (in 1995), thirty-one years ago (in 1974), and fifteen years ago (in 1990). The two tire-workers began respectively twenty-five years ago (in 1980) and fifteen years ago (since 1990).

Language training

It has been reported that "anthropologists who speak the local language" are able to investigate and speak about more sensitive issues. It is also an important key to improve one's rapport with the local population (Bernard 1995:145). In my previous field research in Burkina Faso (in 1997 and 2000), I had little understanding of *Mooré*, the language used predominantly in this region of Burkina Faso (especially in the central and northern parts of the country). I had been working with an interpreter, who was also teaching me the rudiments of this language.

Between 2000 and 2002, I took further steps to be able to speak this language more fluently.

Since no formal *Mooré* language training was available in the U.S., I studied *Mooré* grammar and vocabulary from a handbook 12 and took conversation lessons with a native *Mooré* speaker living in Chicago. Upon my arrival in Ouagadougou in September 2002, I hired a young woman to develop my proficiency in the language through conversation and vocabulary learning. At the end of the first two months, I had reached a good intermediary level of fluency and was able to carry out the initial inventory and survey on my own.

 $^{^{\}rm 12}$ Moré Basic Course. Edited by the U.S. Foreign Service Institute.

The capacity to work without an interpreter greatly facilitated my communication with the artisans. First of all, they appreciated my efforts to learn their language and that certainly helped my introduction into their workshops. Secondly, I was able to participate fully in the various interactions and activities going on in the workplace as well as in their homes, from business-related conversations to jokes. Lastly, these artisans were great teachers, as they corrected me and taught me important technical vocabulary and idiomatic expressions. This was essential to further my understanding of their work and their conception of it.

Participant observation in four workshops

This stage of intensive observation of work practices was the core of my research design. Participant observation may "include observation, natural conversations, various kinds of interviews (structured, semistructured, and unstructured), checklists, questionnaires, and unobtrusive methods" (Bernard 1995:137). It is the main research tool for anthropologists as it allows them to build good rapports and trust with the community and therefore, makes it "possible to collect different kinds of data" (1995:140). In addition, it gives the anthropologist "an intuitive understanding of what's going on in a culture," allowing her to "formulate sensible questions" and "to speak with confidence about the meaning of data" (1995:141).

Like most researchers, I was more of a "participant observer" than an "observing participant" (Bernard 1995:138). The fact that I was a young, white, European, and female researcher certainly had an impact on my relationship and collaboration with this all-male population of producers. Indeed, "gender [is] a variable in data collection," as it can limit the researcher's "access to certain information" and influence "how [she] perceive[s] others"

(1995:154). I would argue that my presence was tolerated and even made legitimate by two main factors. Firstly, being European gave me a different status than local women. Europeans are 'different' and their behaviors and lifestyles are expected to be 'strange,' sometimes. Seeing a lone, white woman spending her days with male workers was therefore tolerated, even funny. In addition, as a 'White,' I could be a source of recognition and financial aid. Secondly, my married status may have helped legitimate my moral standing. I was not categorized as a 'wild' woman but remained 'respectable,' as the presence of my husband during the entire period of field research provided a sort of moral cover.

My relationship with each of these bosses and their apprentices greatly varied, depending on their personality and their perception of my presence. There was a mixture of interest and distrust, of pride and indifference. I believe that many initially thought that I would be a harmless white woman who would not understand much of their work. But my persistence in coming to their workshops day after day and in asking sometimes prying questions may surely have led them to wonder what I was really up to. But even though they knew my name – which they transformed into a local name, Zalissa, easier to pronounce – I remained their "nasaara," the white woman. While bosses probably saw my presence as an opportunity to get some kind of help, there was more to it than that. Most took pride in my interest in their work and were happy to show me their expertise and explain their difficulties as well as their achievements. As I will show in subsequent chapters, even if some bosses questioned me to know how well others

¹³ I came to understand that being called "nasaara" was equivalent to the way they address a person from another ethnic group by his or her ethnic name: such as "Bisa," "Gurunga," or "Moore." Even if these terms of address may sometimes be used in a pejorative way, this is not the most common case. In that sense, craftsmen called me by my "ethnic name" and it probably involved a mixture of recognition, fun, and more rarely, some belittling.

were faring, direct comparison was consciously avoided on both sides in order to preserve the confidentiality of the information and their trust.

In sum, this situation of field research provided an opportunity to build relationships. While some remained quite formal, others grew into friendship, to this day. ¹⁴ I learned to practice gift-giving as an expected part of social relationships there. Bosses regularly offered me drinks or snack food when I visited them and I often returned the favor in token money or in kind. As much as they were a source of information for my research purposes, I was also a great source of information for them about European lifestyle and beliefs and we had many discussions comparing our worlds, learning from one another. This research is the fruit of these reciprocal and personal interactions.

My research combined various methods to better understand the dialectic between knowledge and action, particularly those developed by activity theorists and analysts of "work in practice" (Keller and Keller 1996; Engeström and Middleton 1996; Garfinkel 1967; Goodwin 1994, 1995, 1996; Lave 1993; Sacks 1963; Sharrock and Anderson 1986; Sharrock and Watson 1988). These scholars have shown that knowledge is not abstract and individual but socially embodied. It is a product of the reflexive relationship between talk, body language, and artifacts and thus, it is visible, observable, and learnable. From this perspective, work is fundamentally collaborative. Its actors operate in a social and historical context and have different types of knowledge, perspectives, and interests. Workers manage unpredictability by referring to past actions to re-orient present and future ones, generating routine practices as well as innovations.

¹⁴ I am in regular contact with three of them, by email or phone.

Participant observation is essential to understand the logics and practices of work as they unite both "the hand and the mind" (Harper 1987:118 *In* Keller and Keller 1996:127). There is a "unity of work," with a dialectic between "internal representations and external actions" and with a "productive activity [that] is essentially nonlinear" and nonverbal (Keller and Keller 1996:127, 129). There is a perpetual movement between a "nonverbal," "active reasoning," which draws from various types of knowledge, "imagery," and representations and the "unfolding experience" (1996:129-30). As a result, the method of participant observation is essential to understand people's actions and thought processes, since "thoughts may actually occur to people most often in nonlinguistic form, especially when they are involved in making something," (1996:130)

Based on this approach, I analyzed the producers' conceptions of their activities and their gainful outcomes by examining their practices and meanings in context. It was essential to transcend verbal explanations about gain and success offered by the producers during the survey (Bernard 1995:310). For that reason, I centered my study on the producers' production and marketing practices. These observations provided a critical insight into the producers' perception of the economic practices they used to generate gainful outcomes, and additionally into their understanding of the production, distribution, and consumption processes.

Work activities were analyzed along two main lines: in the temporal and spatial sequencing of actions and in the workers' different positions, levels of knowledge, and perspectives. These observations were recorded in written notes, tape recordings of conversations, photographs, and videotaping of the successive stages of the production processes, the social interactions in the workplace, and market transactions. This combination of recordings helped me analyze more

thoroughly how talk, bodily gestures, and the material environment interacted in the generation of verbal and nonverbal knowledge and practice. This was critical to getting a sound understanding of gain as embodied, as well as verbalized, knowledge. This multi-dimensional analysis would not have been possible through instantaneous observation and note-taking (see Goodwin 1993, 1994; Collier and Collier 1986).

This phase of participative observation focused on four main aspects of the work practices consecutively. Firstly, I focused on the organization of production and the division of labor within the workshop to find out what was the nature of the production unit and what were the distinct sequences of work activities. This was followed by an examination of the periodicity of work to reveal how producers perceived and managed unpredictability, social constraints, and aspirations, daily and seasonally. I also considered what types of decision-making processes were used in addition to the technical processes and knowledge involved in the production of each type of goods. I spent five to seven days 15 noting every technical action of each worker in their sequential order. I drew up charts with a column for each worker in which I noted each new technical action and the time at which it occurred. This allowed me to obtain detailed records of the technical processes involved, the temporal organization of their work, the division of labor and distribution of tasks within the team, and the role, responsibility, and level of training of each worker.

I then spent approximately the same number of days examining the social interactions in the workplace. Constantly keeping track of the time at which each action occurred, I described the relations between the boss and his apprentices and paid labor, between workers of equal and

¹⁵ Depending on the complexity of the workshop and the variety of goods produced.

different age groups, status, and technical competence, and between workers and clients, friends, relatives, and visitors. These social interactions ranged from giving orders, correcting, and instructing, to having casual conversations, making jokes, or being silent. I took a close look at the intricacy of other social activities within the work time and space and paid special attention to individual temporal and spatial trajectories in order to analyze to what extent work activities are embedded within the family, religious, and social spheres.

Next, I took several days to focus my observations and descriptions on market transactions between producers and suppliers and between producers and customers. I analyzed the practices of evaluation of quality, design, and trademarks and of price-setting and negotiating. During that period, I also recorded the various techniques of accounting, calculating, and book-keeping used by the producers. Subsequently, I asked sixteen volunteers among the workmen (four bosses, three apprentices, and nine paid workers) to record their daily incomes and expenses for a certain period of time (a month and a half, on average). At the end of this phase, I also paid attention to moves through space, across the city or even abroad, in order to trace networks of supply and retail in which each workshop and individual producer were embedded.

Photographic, video, and audio recordings were essential to complement the observations made during this phase. At the end of each stage of my participative observation, I spent two days recording by video and/or audio the specific interactions I was observing: technical processes and work organization, social interactions, and market transactions. The purpose was to better capture the dynamic nature of work practices, in order to be able to go back to the recordings and analyze them in depth. One of my objectives was particularly to obtain clear recordings of the conversations and body language happening in these various interactions that

could be examined for further semantic analysis. The photo/audio/video recordings were occasionally presented to the participants of the research project in order to collect their feedback and reactions. These video-recordings were strictly meant as a recording tool, with no intention of editing them for public broadcasting.

Work histories and thematic interviews

The observations from the work activity analysis provided information for qualitative and thematic interviews conducted throughout the research period. In turn, the latter helped focus my observations. I collected the work histories of individual producers with various levels of knowledge and experience. The aim was to identify patterns and variations in the constraints and opportunities that had shaped their career, as perceived by producers. I also elicited accounts of how technical and marketing innovations came about at both collective and individual levels and on the producers' work values and their perception of the evolution of their activity, the market, and its competitive aspect through time. At the end of the research period, I conducted interviews focusing on distribution and marketing strategies, price-setting, the calculation of profit margins, savings, accountability, and evaluation and management of gains and losses. Finally, I recorded the producers' perceptions of their life and their future, their desires and their wishes, their ideals and frustrations, their future projects and hopes, and their viewpoint on the widespread desire to go to Western countries. The purpose of these thematic interviews was to obtain a better understanding of their value system and their priorities, and how these values fed and interacted with their work and money-management practices.

During this last period, I extended my network of informants to establish work histories of older and sometimes retired producers. With the help of the artisans with whom I had worked during the participant observation period in addition to other key people, ¹⁶ I was able to identify and interview some of the oldest artisans in each trade. These interviews, which were sometimes carried out in several occasions, gave me tremendous insights, notably about the inception and evolution of these trades since the colonial period. In addition, these interviews covered some of the themes previously mentioned concerning their careers, apprenticeship, and technical knowledge and innovations, their work values, their perception of the evolution and future of the trade, in addition to money issues, and wealth and poverty.

A consumer survey on aluminum ware.

Finally, I conducted a quantitative survey focusing solely on the consumption of recycled aluminum ware. The goal was to sketch a socio-economic portrait of the consumer population and identify some tendencies in the ways in which consumers buy, use, and perceive these goods. I hired four graduate students from the Sociology Department of the University of Ouagadougou as research assistants.¹⁷ Each assistant interviewed fifty household heads and ten businesses using such products, which amounted to 240 questionnaires. The sample was randomly chosen. The interviewers conducted the survey in four different neighborhoods of the city, chosen according to geographic and socio-economic criteria. To cover the neighborhood in a systematic way, the interviewers selected one block out of two and one household per block,

¹⁶ I am especially thankful to "Lagui," a young trader of iron and tin goods located in Cissin, who introduced me to a number of old tinsmiths.

¹⁷ I thank Prof. Laura Faxas, visiting professor at the Sociology Department of the University of Ouagadougou at that time, for giving me the opportunity to hire some of her graduate students to carry out this survey.

following a government map for each neighborhood.¹⁸ The interviewer had to choose the third house on the left in the first block, then the sixth house on the right in the second block, then the ninth house on the left in the third block, *et cetera*. This method avoided interview bias in selecting the household according to its spatial location or its appearance. In addition, this method was also applicable to one "non-loti" neighborhood which had not yet been mapped by the city planners.

The fifty businesses were not selected in such a random way. Because of the difficulty of localizing them, we identified the main activities which required the use of recycled aluminum products and chose two businesses of each activity and of each type of construction: permanent (metal or cement) and more rudimentary (a mere stand). The survey was conducted over ten days, during weekdays, one weekend and a national holiday. This allowed us to interview some people who would normally not have been at home on weekdays. ¹⁹

With the help of the late Mr. Gnégné, a library employee at the University of Ouagadougou, ²⁰ I entered the data into a database software named Epi-info 6.04b (1999 version). This software was created by the Center for Disease Control and Prevention (CDC), U.S.A. and the World Health Organization to provide basic variable analysis and statistics for public health agents. It enabled me to analyze the collected data, crossing variables and computing statistics for a finer examination of the consumption tendencies in the capital city. These results will be published in further publications.

¹⁸ See reference in note 4.

¹⁹ See appendix [?].

²⁰ I thank Prof. Laura Faxas for introducing me to Mr. Gnégné. Mr. Gnégné passed away a few weeks after helping me entering the data.

Limits of the research

When designing this research project, I deliberately narrowed my focus to the production side of these recycling activities. My initial question was 'how do these producers make a living out of these trades?' which was quickly followed by 'what do they do with what they earn?' I thus did not consider the consumption aspect – except with the exploratory consumer survey of aluminum ware – and the regional and international ramifications of these trades, through the study of commodity chains, for instance. The reasons for this choice are both theoretical and methodological. Firstly, my research question did not require an immediate analysis of these aspects. Secondly, such a broad-scale project would have required a multi-site research (in Europe and several West African countries), which was not conceivable considering the amount of time (thirteen months) and means available. Yet I believe that this dissertation is an essential step for undertaking further research projects to address these understudied issues. Indeed, scholars need to pay closer attention to the consumption practices in West Africa, which are rapidly changing in both urban and rural areas. The "social life" of scrap materials has scarcely been investigated, as they move from Europe to Burkina Faso through numerous transactions and crossing various macro-economic and cultural environments.²²

²¹ Appadurai (1986).

²² One outstanding exception being the export of used clothes between the West and developing countries, notably towards Latin America and Africa. See Hansen, Karen Tranberg. 2000. Salaula: The World of Secondhand Clothing and Zambia. Chicago: The University of Chicago Press.

Chapter IV. A Growing Market for Recycled Goods:

Its History and Characteristics.

In the bustling capital city, producers of recycled goods represent only a small fraction of the urban economy. According to a survey carried out in 1996 by the National Institute of Statistics and Demography (INSD), blacksmiths represented only 0.5 percent of the active male population; 0.9 percent were tinsmiths, and one percent were involved in other craft activities. Needless to say carrying out these trades is not as popular or widespread as being a mechanic (6.2 percent), a mason (5.2 percent), a taxi-driver (5.1 percent), a farmer (4.4 percent), or even a night-guard (3.2 percent) (INSD 1998:75). All together, craftsmen and other producers do not represent more than three percent of the entire working population of the capital city (INSD 1998:75). Yet, as ninety percent of all the production activities in Burkina Faso are informal (Gaufryau and Maldonado 1997:8; ILO 1991), these producers play a key role in the domestic economy, despite their small number.

I will demonstrate in this chapter the importance of the market of recycled goods for the country's domestic economy, in providing everyday, utilitarian utensils with no imported, industrially-made equivalents. From the imports of raw materials coming from various international sources, to a nation-wide consumer market, this market is far from negligible, as it also offers an opportunity for earnings to school dropouts and new urban dwellers. At the same

¹ According to Gaufryau and Maldonado (1997:10), the first five activities that employ the most people within the informal economy are the following: mechanics and repairmen of two-wheelers, masons, metal scrap-dealers ("tôliers ferrailleurs"), woodworkers, and electricians.

² I already noted (see Chapter II, pp. 23-4), that 45 percent of the labor force in Ouagadougou works as independent workers, 32 percent work in wage labor, and 9 percent as apprentices. The remaining categories are employers (2.6 percent) and housemaids and male domestic employees (11 percent) (INSD 1998:14).

³ See chapter II.

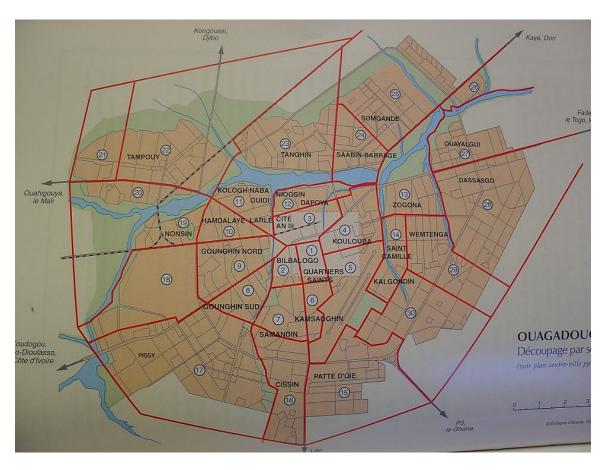
time, these relatively recent, urban producers maintain a fragile balance between a notable flexibility and a certain vulnerability to the market. Drawing largely on local resources, they constantly adapt to changing economic conditions that are beyond their control.

Producers of recycled goods: Demographic and spatial evolution in the capital city.

Up to the beginning of the 1980s, recycling activities seemed to have been mostly confined to particular neighborhoods of the city (see map 4). Niõghsin was the traditional quarter for smiths and especially bronze-workers and jewelers. This sector adjoined Dapoya (with the market of Sankare Yaare) and Larlé neighborhoods, where a large number of artisans were located. Many aluminum-smelters had their workshops there, in addition to tinsmiths and rubberworkers. Some rubber-workers had also settled downtown, in the central marketplace – before it was even built⁴ – while others gathered in another downtown neighborhood called Zangotin. The neighborhoods of Tanghin and Saaba have also hosted old blacksmith families and continue to retain some of the oldest aluminum-smelting workshops. Larle, on the east side of Ouagadougou, used to be the main hub for scrap metal traders and many tinsmiths had settled there. Finally, several tinsmiths had developed their activity in the marketplace of Bwesyaare, on the opposite side of the city and along the airport wall, along with many scrap dealers.

⁴ The central marketplace, called Rood Woko, was built in the 1980s and inaugurated in 1989. Before, it was only an open space where traders used to sell their goods from wooden stands. This market was closed down when a fire broke out in May 2003.

⁵ Bwesyaare means the donkeys' market (boanga, pl. boaense = donkey; yaare = market). This former donkeys' market is now an important informal market for all kinds of scrap items (scrap wood, metal, glass bottles, plastic containers, and second-hand clothing) as well as traditional medicines.



Map 4. Central and peripheral neighborhoods of Ouagadougou.

Nowadays, producers of recycled goods are scattered throughout several other neighborhoods, even though some have remained in these original places. Producers often move several times in their lifetime, collectively or individually. Indeed, artisans and other street peddlers have regularly been displaced by city authorities in preparation for the visit of high-ranking officials, upcoming international summits, or new urban planning projects. Others move for economic reasons, trying to find a better location, where they can have space to work while being easily seen by potential customers.

Spatial tribulations: the example of the rubber-workers

The successive relocations of the population of rubber-workers are a telling example of the "spatial tribulations" that can occur in the capital city for these "informal" artisans. After many years of working in the open-air central marketplace (approximately from the 1950s to the early 1980s), the population of tire and inner-tube workers was asked to move away, along with hundreds of other traders. The state had received money from the French Agency for Development (AFD)⁶ to build a covered market, which would be named "*Rood Woko*" and was beginning the construction phase. The group of rubber-workers was relocated into another downtown market, Zabre Raaga.

When Rood Woko was inaugurated in 1989, the tire-workers were not allowed to return. The city authorities, to whom the market management had been delegated, alleged that tire-working was taking too much space and producing too much waste – it was "dirty," according to the producers. Only a few inner-tube workers (making puisettes and rubber bands)⁷ were allowed to rent a stand. The tire-workers remained in Zabre Raaga, until "Khadafi" (the President of Libya himself or at least Libyan interests) came to build a bank in that location. Once again, the city authorities intervened and moved them to the market of Cité An II, on the fringes of downtown, near the airport wall. At that time, this marketplace was empty as previous traders had deserted that place because clients were not coming. But the group of tire-workers accepted to move in as it was already an identified market: it had a "name" and thus, people already knew the place. In May 1990, the tire-workers moved into Cité An II. They have not moved since then

⁶ Source: Ouédraogo, Hamidou. 2004. *Le Discours ambivalent de Djibril Bassolé*. In L'Observateur Paalga. N°6120. April 13th, 2004. http://www.lobservateur.bf/Oarticlearchive.php3?id_article=531

⁷ A "less dirty" production trade. *Puisettes* (coming from a French work "puiser," to draw water) are soft buckets made of inner-tube which are used to draw water from a well.

but they know that if the city authorities decide to relocate them again, they will have no other choice but to comply.

Travelers and traveling ideas

Recycling activities have not only evolved spatially but also through time. If some, like rubber-working, may derive their techniques from older trades such as leather-working, the others (tinsmithing and aluminum-smelting) are quite new. They are the outcome of regional and even international interactions, being shaped by European and West African travelers as well as imported objects and materials. I will now provide a sketch of the historical evolution of each of these trades, reconstituted from various producers' testimonies.

Rubber-workers

Judging from several verbal accounts, it seems that the population of rubber-workers has increased considerably through time. In the 1940s, this activity did not exist. Nobody was making tire-sandals and one could barely find a single tire in the whole city. At that time, people were wearing sandals made of bark and cloth or leather. The first tire-workers appeared in the 1950s, when some Burkinabè migrant workers came back from Ghana and "imported" the idea of making tire-sandals. An old man explained that around that time, all the people making tire-sandals were Ghanaians. "All the tires were coming from Ghana. Even the [tire-] sandals were coming from Ghana. They were many who cut [tires] but they were all Yoruba. They were

⁸ At that time, the few car owners were mostly Europeans and trucks were not as numerous as there are now.

⁹ In comparison, tire recycling is believed to have begun around 1928 in Ethiopia, at the time when cars began to emerge in this country. The technique was brought by an Italian individual during the Italian invasion and later on, two Ethiopians introduced it in "the capital city in 1962" (ENDA 1999).

[settled] in Zangotin... They were all coming from Ghana ... [and] were only making sandals." 10

In the 1950s and 1960s, the population of tire-workers in Ouagadougou reached approximately twenty to thirty people, located in the central marketplace. When they moved to Zabre Raaga in the 1980s, there were approximately fifty workers. Some contend that their number has not noticeably increased since the 1990s. During my fieldwork in 2002-2003, I personally estimated that between sixty and eighty persons worked in Cité An II market. This figure did not include the tire-workers working across the road in Samandin neighborhood and the inner-tube workers settled in the Dapoya market. ¹¹ In total, the population of rubber-workers in the capital city may total between a hundred and a hundred and fifty people.

Tinsmiths

Although I was not able to collect as much information about the history of tinsmithing and aluminum-smelting in Burkina Faso, it seems that these trades were also "imported" – by Burkinabè or by foreigners. People from Burkina Faso who had spent time in neighboring countries (especially Ghana) were a great source of change, importing new ideas as well as goods. Foreign artisans working in the capital city were also introducing new trades, new production styles, and new ways of working.

¹⁰ Interview with an old, blind man who used to be a tire-worker and then a tinsmith. Paghalayiri, Ouagadougou. August, 19th, 2003. I believe that these first tire-workers were indeed Yoruba, but they came most certainly from Nigeria rather than Ghana.

During his activity, the central market of Rood Woko also hosted a significant population of inner-tube workers. Since the fire broke out, they have probably been dispersed among the various marketplaces of the city: Sankare Yaare, Cité An II market, and other marketplaces.

For instance, I met an old Burkinabè tinsmith who grew up in Ghana in the 1940s-1950s and learned the trade there before traveling extensively in West Africa and up to Mecca, teaching others along the way. When he came to Burkina Faso in the 1980s, he found that the local tinsmiths already knew how to make buckets, stoves, and "foyers améliorés." The latter model had been invented by development agents in an attempt to help the Sahelian population to reduce their consumption of wood. About twenty years ago, tinsmiths were based in Sankare Yaare and primarily made buckets. They can now be found in most neighborhods and are so many that one of them complained that there are two tinsmiths every "six mètres."

It is difficult to provide even a rough estimate of the tinsmith population in Ouagadougou. From my own data, I have identified approximately ninety tinsmiths across thirteen different neighborhoods of the city. There seem to be between a hundred and a hundred and fifty workers in the three main tinsmith areas (Sankare Yaare/Paspanga, Bwesyaare, and Baskouy dam). However these figures are not comprehensive and they may well be twice this figure.

Aluminum-smelters

From the artisans' viewpoint, the origin of aluminum-smelting is quite obscure. In the capital city, most of the oldest aluminum-smelters have died and taken their memories with them. When asked about the origin of the trade, one older producer declared that he did not know it but he recalled a story, which, interestingly, conveyed a negative version of the

¹² Literally: "Improved stove."

¹³ These "White people," had taught the same model in Niger, Mali, and probably Senegal. This model provided a smaller opening that allowed for only three wood sticks and reduced the income of air so that the fuel would not be consumed too fast. Also see Chapter II.

¹⁴ "Six mètres" (six meters) is the width of an unpaved street, as established by urban planners. By extension, it can also indicate the block contained between two "six mètres" – the equivalent of the American "block," on a lesser scale. In that case, the producer meant that one can find two tinsmiths in the same street (block).

beginning of aluminum-smelting. He recounted that a white man came to Abidjan, Côte d'Ivoire and suggested <u>not</u> to teach African artisans that they could make aluminum pots from imported cast-iron ones. He actually never taught them. The story ends there but it seems that Africans nevertheless learned the technique, maybe by imitation, using imported cast-iron pots as patterns and scrap aluminum as a cheaper and more malleable alloy. The brief genealogy of "patrons" that I collected actually reveals these regional interactions. One artisan came from Guinea to Ouagadougou, after staying for a while in Bobo-Dioulasso. Another had learned the trade from a Wolof artisan who had migrated from Senegal. Still another had come from Mali and taught one of the oldest artisans here before going back to Mali when the war broke out between the two countries in the 1980s.

The suggestion that some of the first aluminum-smelters in Ouagadougou were former bronze-smiths does not seem to hold. I personally met only one former bronze-maker who dropped the trade arguing that it was not profitable anymore – "now, it's gold-plated [jewelry] that works." It is actually a rather intriguing argument, since bronze-working has picked up very well in Ouagadougou, because of the development of tourism and of such international fairs as the Salon International de l'Artisanat de Ouagadougou (SIAO). An old producer argued that these two crafts do not use the same smelting process, which explains why the transition from bronze-working to aluminum-smelting is rather uncommon. ¹⁵

In 1962, there were approximately ten aluminum-smelters in the capital city. Three had settled in Paghalazonde, near the Saaba neighborhood; three others had opened their workshops in Dapoya, Larle, and Zogona and later moved to Bwesyaare. Two others were in Bilbambili

¹⁵ Interview with "Patron Zorgho," aluminum-smelter in Dassasgo, Ouagadougou. Sept. 26th, 2003.

(near the Tampouy neighborhood, on the road leading to Ouahigouya) and one was in Niõghsin. As a consequence of the growth and the diversification of the trade, aluminum-smelters have spread to other parts of the city, opening workshops in Tampouy, Hamdalaye, Nonsin, Patte d'oie, Dassasgo, and Somgande, among other places.

In conclusion, it seems that these three trades evolved during the 1980s, as an outcome of a combination of factors. One can highlight at least two of them: the development of cheaper and faster means of transportation (bus and train, especially) allowing people, goods, raw materials, and ideas to circulate more easily; and an increased urbanization in which cities attract more foreigners but also villagers seeking to enter a more profitable activity than farming. Facing growing competition from new producers and imported products, artisans are pressed to diversify or specialize their production and to move to other locations where there are fewer artisans, or none at all.

The ethnic factor

While the ethnic factor does not seem to play a major role in shaping these activities, it cannot be completely ignored. As we have seen earlier, handicraft activities in the Mossi kingdoms were appropriated by specific castes or ethnic groups from within or without the Mossi communities. ¹⁶ This is not the case of these modern, urban production activities.

Mirroring the composition of the population in the capital city, most of the producers involved in these trades are Mossi. ¹⁷ Only a minority represents the diverse ethnic groups of the country (for

¹⁶ See chapter II.

¹⁷ And assimilated, as the Yarse (muslim traders from Mande origin) and the Yaadse (Mossi from the kingdom of Yatenga, Ouahigouya).

example Gourmantche, Gurunse, Samo, Bobo) or foreigners (especially Malians and Yoruba from Nigeria). Among these minorities, the Dafing (or Marka) community stands out as probably the second largest ethnic group involved in recycling activities, after the Mossi. From western Burkina Faso (Sourou region), they come to the capital city to work principally in tinsmithing or inner-tube production before returning to work in their village fields in the rainy season. They tend to cluster in a few places and specialize in a limited range of production (buckets, water-cans, *puisettes*, and rubber straps). However, other producers do not seem to complain about them being a potential threat or holding a monopoly on these markets.

This brief overview of the demographics and the historical evolution of these trades demonstrates that they are a product of West Africa's modern history. Situated at the crossroads of the economic exchange between Europe and West Africa, local artisans have acquired and developed a body of knowledge by imitation (copying imported goods) and by invention (using scrap materials and being attentive to local needs), benefiting from the increased mobility of people in the region. In a context of rising economic exchange and competition, where no specific social group has a hold on these recycling activities, let us now consider what allows these trades to continue over time.

¹

¹⁸ These observations are based on my personal fieldnotes, no statistical data being available (to my knowledge) on the presence of the Dafing population in Ouagadougou in these recycling activities.

¹⁹ The Sourou region, comprising the towns of Tougan and Nouna on the western side of the country, is known for its agricultural activities: cotton, rice, and green beans.

²⁰ I have not encountered any Dafing in aluminum-smelting and only two in tire-working.

²¹ For the purpose of this study and because of the language issue, I did not select any of the Dafing workshops for participant observation. Indeed, few Dafing speak Moore and most of them use Dioula as a *lingua franca* to communicate in the capital city.

Despite an ever-growing presence of imported goods in the domestic economy of Burkina Faso, the market of recycled goods has not only continued to exist over time but has also greatly diversified its products. This continuance may be explained in part by the flexibility and adaptability of its organization in relation to the wider economy. Indeed, the nature of this market is very competitive and the evolution of its goods, their prices, and the producers themselves, are driven by the law of supply and demand. This market is fully embedded into the national, regional, and international market economy and none of the producers is in a position to dominate the trade, by controlling the flux of supplies or goods for instance. Lastly, the state does not exercise any direct control over this particular market, whether on the prices, supplies, or goods sold. Its influence would be most felt through tax-collecting and market fees, which weigh more on individual producers than on the market organization itself.

The absence of a monopolistic organization or any dominant production group could be another key to the adaptability of this market to changing conditions. Unlike traditional trades,²³ these more recent, urban activities are not controlled by a distinct social body, such as a particular ethnic group or caste that would lead the trade and maintain its coherence by a set of

²² I am drawing a parallel with the notion of "open economy" defined by Guyer: "Neither autonomous nor subjugated, African economies have been "extroverted" or "open economies" ... subject to extraction of primary resources, "unequal exchange" (Amin 1976), and rapid changes in conditions over which their population have had very little control" (Guyer 2004:4). On a smaller scale, the market of recycling goods is very much dependent upon external, macro-economic factors upon which producers have little control – i.e. the import of supplies and of competing, manufactured goods, the purchasing power of the consumer population, and so on.

²³ See Tamari, Tal. 1997. Les Castes de l'Afrique Occidentale: Artisans et Musiciens Endogames. Nanterre: Société d'Ethnologie. Even if the notion of caste is more dynamic than researchers initially thought, it is still understood to be an "endogamous artisan and musician [group]," the access to which is socially regulated (Tamari 1997:61). Being an apprentice in one of these caste professions can be a quite long rite of passage where the apprentice is expected to acquire not only a technical but also a spiritual body of knowledge. The literature on West African caste people has demonstrated at length their ambiguous social status and how they often play important economic and religious roles within the community, being both respected and feared (1997:1).

rules, practices, or belief system. Even if many tinsmiths and scrap-dealers belong to the Mossi blacksmith caste, for instance, that does not make them a majority and the market remains open to non-blacksmiths.²⁴ Producers within a particular craft are not gathered together in a specific space or neighborhood of the city, traditionally or historically appointed to artisans. Rather, they are geographically scattered and work in both commercial and residential areas, old and newly allotted neighborhoods in the capital city.

In fact, the relationship between producers is not without tension, at times. They claim that they are not worried by the number of fellow craftsmen in the vicinity, since they are all 'in the same boat.' Yet, most producers wish to see a monopolistic organization neutralize 'unfair' competition as supplies and goods would be sold at a set price. Whenever they can, they try to counter this competition with the limited means they have. Moussa²⁵ for instance, stopped producing molds for other aluminium-smelters as the latter used them to sell pots cheaper than his. He only does it for those located outside the capital city. Martin also stopped making frying pans because there were "too many people doing it, there was no more market." Producers are keenly aware that the increasing number of competitors weakens their position on the market. Nevertheless, their strategy to diversify their production to find themselves another 'niche' may help keep their trades alive.

In the midst of a competitive and rapidly changing market, these producers have not managed to organize themselves in order to exercise some control over the sources and flux of

²⁴ See Camilleri (1999:1649).

²⁵ Pseudonym. All of the informants' names have been replaced by pseudonyms to respect the confidentiality of their records.

²⁶ "Il y avait trop de gens qui faisaient ça, y avait plus de marché." Indeed, Martin explained that many Dafing tinsmiths from the region of Bobo-Dioulasso have come to the capital city to produce mainly buckets, water-cans, and frying pans. Interview, August 18, 2003.

supplies or over price-setting and regulation. Few producers belong to trade associations (*groupements*) and the latter do not seem to function very well or have much power over the workings of the market.²⁷ In addition, the resources of any individual worker (i.e. finances, personal networks) may be too limited for any of them to rise to a position of power. The example of Moussa is a case in point: even though he owns the biggest workshop of aluminum-smelting (more than fifty workers) in the capital city and is the only one to produce large pots in big quantities, he has no control over the supply's circuits and prices, the price variations of the aluminum pots, the distribution outlets, or the consumer population. Consequently, these markets are close to the model of a perfect market economy where people enter the trade with roughly the same assets and compete against each other.

The flexibility of the market pertains also to the nature of the supplies. Scrap materials are not, by definition, standardized items. Producers have to adapt to their diverse shapes and quality in addition to the unpredictable quantity imported. A particular type of waste may run out, while new kinds of scrap may come onto the market. Producers such as rubber-workers are well aware of their fragile dependency on these imports. Without being over-concerned, they wonder about the invention of new technologies such as tubeless tires, which may be a threat to their business. However, they believe that this change will not come about "tomorrow."²⁸

Lastly, another important aspect that explains the persistence of the market of recycled goods over time is that it fits into a particular "niche" of the domestic economy. Despite growing

²⁷ See chap, XIV.

²⁸ The spread of tubeless tires would mean the end of used inner-tubes. However producers are not too distressed about that, knowing that it will not happen overnight. On the other hand, tubeless tires have liners inside, which rubber-workers call *bante* and use to make decorated tire-sandals (see chap. XI).

imports of industrial goods from both Western and Eastern countries,²⁹ recycled goods have more than resisted. They are created for a specific, local demand for utilitarian products, which have, for the most part, no imported, industrial counterparts. While imported goods appeal to consumers because of their 'foreign-ness,' their 'new-ness,' their esthetics, and sometimes their cheaper price,³⁰ recycled goods are perfectly suited to local practices and flexible enough to adapt to changing needs. Still as important, their low prices are maintained to match the relatively low purchasing power of the population.

A fragile balance

The negative aspect of the situation is the fragility of this market. These producers are part of a larger scheme, that of the market economy, but they have little influence in it. They are on the receiving end of the long journey of scrap supplies but they control neither the frequency of their delivery, nor their quantity or quality, and even less their price (see Hansen 2000). Producers are at the mercy of changing technologies and designs coming from Western countries but also of a market of supplies that is rapidly evolving. Tinsmiths, for instance, find it harder to purchase metal oil drums as they are gradually being replaced by plastic containers. They can buy less car wrecks than they used to, as car owners and mechanics increasingly choose to sell their car wrecks to scrap dealers, who have more purchasing power. They are then exported to

²⁹ During the 1999-2003 period, There was a 14 percent-increase in import trade (including all goods), and in particular: plastic goods: +45%; computer parts and accessories: +14%; and electric appliances for land-line telephone systems: +28%. Source: International Trade Center. UNCTAD/WTO. 2004. www.intracen.org/menus/countries.htm

³⁰ Flip-flops imported from Asian countries are cheaper than some of the decorated tire-sandals, for instance. However this is more an exception that confirms the rule. Consumers' assessment of quality is also worth considering, as industrial goods are not necessarily deemed to be of "better quality" than recycled ones. They seem to make a distinction between Asian goods and Western ones, the latter being the real "*original*" ones. They are thought to be of better quality and more prestigious to possess – which justifies their higher prices – than cheaper, "*adaktable*" (imitated) versions (from Asian and African origins). See chap. XII on marketing practices.

Ghana where they will be recycled. Aluminum-smelters and scrap dealers are also facing competition in the purchase of aluminum from Ghana. The latter is available in larger quantities than in Burkina Faso and used to be cheaper. However as the aluminum market improved, more traders and aluminum brokers began to come from other West African countries to get their supplies there, causing the prices to rise.³¹

At the other end of the marketing chain are the consumers, with their varying purchasing power and changing preferences. There also, producers have little control on consumer tendencies but they are compelled to remain sensitive to them in order to stay in production. The ceaseless influx of new consumer goods and values onto the domestic market shape the local demand, desires, and priorities. Imported goods sometimes compete directly with recycled ones, threatening to supplant them. Tire-workers often complain that 'the Whites' shoes' are "too many" on the market and are responsible for the declining interest of Burkinabè consumers in tire-sandals. Aluminum ware called "Fougan," made by local industries, also compete with recycled aluminum goods.³² In reaction, producers stress the higher quality of their products compared to these "cheap" and "fragile" industrial goods, their durability, and adaptability to specific needs. Even if changing lifestyles can threaten the future of these recycled goods, the "niche" for these products may continue to exist over time by providing a wide range of low-cost imitations of imported goods, spare parts for economical repairs, and specific creations for local needs.

³¹ Interview with Moussa, aluminum-smelter in Zogona, Ouagadougou. Feb. 5th, 2003.

³² See Camilleri (1999:1651) who explains that about 30 percent of producers of utilitarian goods in the capital city complain of the competition from imported products (kitchen ware from China, furniture from France, spare parts from Ghana, cosmetics from Nigeria...).

Lastly, the ambiguous status of these informal activities with regard to the law can also be a weakness. Standing in a kind of gray zone, these activities are not legal *stricto sensu*, but are tolerated by the state. The government understands their economic importance and gives them some leeway, allowing – up to a certain point – peddlers and shops to mushroom on road sides and in *ad hoc* marketplaces. Their illegality has been partially remedied by the creation of a specific tax, ³³ collected by mobile agents who assess a shop's value and calculate the amount of tax to be paid according to a set grid. Yet, the ambiguity of their status persists and at a cost: these artisans and traders have little to no political or economic influence and can arbitrarily be moved around or see their shops destroyed, as new urban policies are implemented or a foreign official comes to the capital city. Despite well-advertised forums on "how to help the informal sector," these producers receive no financial or organizational support from the government and have to face the challenges of a market economy by their own means.

Entering the market: Gaining access to supplies and customers

In his study of "apprentice workshop" in Accra, Ghana in the 1970s, Verdon explained how these artisanal workshops could be very differently organized depending on several factors: their use of raw materials (for repair or manufacture); their differential relationships to the market (manufacturers looking for customers vs. customers looking for repairmen); and their technology – whether each worker had his own complete set of tools or if there was only one set of tools divided among the team, according to the tasks performed. These structural differences often entailed different power structures and "patterns of authority" (Verdon 1979:534). Without falling into the "functionalist" trap, I will now examine the three types of recycling trades by

³³ Contribution du Secteur Informel (CSI).

looking at some of these factors to identify the prerequisites needed to enter these trades and also some possible constraints on their organization.

Trajectories and access to the trade

Producers enter the market with a similar background, having gone through an apprenticeship and creating their own business with limited means. The population is entirely male. Approximately half of these men have left their villages, where farming was their main activity, to come to the capital city hoping for a better living. Those who were born in Ouagadougou (about 22 percent of my sample) often represent the second generation of their family living in the capital city.³⁴ These craftsmen are thus mostly recent city-dwellers, keeping strong links to their home village and in some cases, to farming activities.

Even though most of them have received some schooling, they have a low level of literacy as their education was frequently discontinued for economic reasons. While more than half spent a few years in elementary school or *madrasa*, ³⁵ a Coranic school, seventeen percent had no schooling at all. Several of them (nine percent) have tried to compensate by going to night school later in life. However out of eighty-eight interviewed artisans, only two continued to Junior High and one to High School. Starting an apprenticeship was thus vital to not remaining "idle" and becoming a "bandit" or "vagabond," as they say.³⁶

In contrast with traditional crafts in West Africa where the artisans often belong to a particular caste, the apprenticeship system of these more recent activities is free, open to all

³⁴ These data have been retrieved from a sample of 60 subjects, interviewed between 2002 and 2003. See Appendix B.

³⁵ I spelled it according to the local pronunciation. One usually finds it spelled *medersa* in the literature.

³⁶ Bandit: gangster, thug; vagabond: vagrant, hobo.

candidates, and void of any ritual or symbolic practices. The main condition for their acceptance is to know "where they come from." Thus, a large majority of workers entered the trade through the mediation of a relative or social acquaintance.³⁷ The young candidate needs to be introduced by a relative or someone known to the boss, so that he can be socially identified.³⁸ The relative endorses the young man as honest and reliable but he will be responsible for him in case of problems. The only major obstacle to accepting an apprentice would be a lack of financial means of the artisan to pay for additional labor.³⁹ The number of apprentices is thus not strictly controlled by some social rules or by a particular body of masters. One of the consequences of this absence of regulation is that the artisans train those who will become their own competitors (see chap. VIII).⁴⁰

Financial access: drawing on social resources and self-help.

To enter the market, a relatively large initial investment is required, by local standards, in terms of finances and equipment. Compared to the average national income per capita, producers

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³⁷ A study instigated by the Direction de l'Artisanat in Burkina Faso revealed that two-third of the artisans began their apprenticeship in a workshop owned by a member of kin or by someone known to the family (Gaufryau and Maldonado 1997:13).

³⁸ See chap. XI.

³⁹ In turn, the limited prosperity of individual producers has an impact on the appeal of the trade to young men, who will try to enter another, financially more rewarding activity. This is probably the case for tire-working and maybe tinsmithing, where most young men have come to this trade more because they knew someone doing it – a relative, friend, or neighbor – rather than for the money. This is not as true for aluminum-smelting, which is more lucrative and thus, more appealing to 'strangers.' See chapter XI.

⁴⁰ Verdon (1979) also noted that this type of "apprentice workshops" produces their own competitors, but he has a different reading of this phenomenon. According to him, by producing their own competitors, "[n]one [of these workshops] will grow, at the expense of others, to a possible state of monopoly" (1979:538). He then concludes that these workshops are "non-competitive." Unlike Western firms, they are not driven by the ambition to grow, expand, or become more productive and profitable (1979:538). The producers' own desire for a monopolistic structure that would "solve" the problem of what they see as an "unfair competition" seems to say something different and deserves a more thorough analysis. I will address this issue in subsequent chapters.

spend overall between five and twenty-seven percent (from \$12 to \$61.31)⁴¹ of that amount to start their business. ⁴² However as we can see from these figures, there are some variations from one trade to the other. Opening a workshop in aluminum-smelting requires more financial investment than for tinsmithing or tire-working. In 1974, Moussa spent about 21,250 F CFA (\$32.69) to build his shop for aluminum-smelting and to buy the necessary tools to start working. Twenty years later, Paul spent almost twice as much: 39,850 F CFA (\$61.31). Indeed, not only did they need to build or buy a place to work, but they had to acquire rather expensive equipment: a fan to blow the air into the hearth furnace (9,500 F CFA), a scale to weigh the aluminum bought (8,000 F CFA or more), big wooden frames (1,000 F CFA each) and smaller ones (500-1,000 F CFA each) to make different casts, and a variety of other tools (pestles, sieves, metal belts, tongs, skimmers, and crucibles) costing between 100 F CFA and 1,000 F CFA per month (see chap. XIV), we can see that the sum invested ten years earlier amounts to at least half of his monthly income. ⁴⁴

Tinsmithing and tire-working do not require advancing as much money. The equipment needed is not as heavy as for running a furnace and the raw materials are all together less expensive than scrap aluminum. Martin, a tinsmith, and Rasmane and Boureima, tire-workers,

⁴¹ As of January 1st, 2000, the exchange rate was 651 F CFA for \$1.

⁴² The average national income per capita has been estimated in 2002 to be \$227. Source: Banque de France. 2002. Rapport Annuel de la Zone Franc. Burkina Faso. http://www.banque-france.fr/fr/telechar/zfranc/2002/p4_burki.pdf. See also Commission UEMOA 2004, which shows that the GDP per capita reached €240 (\$290) in 2004, equivalent to 154,800 F CFA. Source: http://www.izf.net/izf/Guide/Burkina%20Faso/Default.htm

⁴³ The molds used for casting pots and other items are most often acquired for free: smelters cast their own molds from carefully chosen pots and it only costs them the price of the aluminum used to produce them.

⁴⁴ This is only for comparative purposes. Of course, Paul did not invest all this amount at one time. Yet, considering that Paul had opened his workshop almost ten years prior to the time of the study (he began in 1994), the level of investment was quite significant in comparison with what he currently earns as an established artisan. For comparion, see Dilley (1986:138).

started with approximately nine dollars worth of tools and three or four dollars of raw supplies to start producing. Martin worked for a long time without a shed, changing places a number of times and is now working under a rudimentary structure that cost him about 4,050 F CFA (\$ 6.23) to build. Rasmane and Boureima did not have to build their workplace. They are renting a space in a marketplace built by the city but have actually not paid their rent in a long time...

Despite these disparities among the trades, all artisans rely mostly on themselves to start their own business. According to Sanou (1993), the majority of independent workers in Ouagadougou (i.e. those who belong to the informal sector) obtained their initial capital from personal savings (55 percent for independent workers with capital and 42.3 percent for "marginal" independent workers). Another study shows that only 3.2 percent of "Informal Units of Production" in Ouagadougou have borrowed money or obtained a loan to invest in their enterprise (Leenhardt 2005:12). Artisans have in fact little alternative. They do not have access to formal banking institutions or government-run development programs, both because they lack information about them and do not provide enough guarantee to benefit from these services (see chap. XVI). Their personal network of relatives and friends can rarely offer any substantial help either, as they often have a similar socio-economic profile. Most commonly, a relative or friend may give or buy a tool or two for them but will more rarely help them financially.

Because of such a limited support network from outside organizations, the apprenticeship period is a decisive moment to prepare oneself for business. It is a crucial stage when producers

⁴⁵ Sanou, Ourobé Mathias. 1993. Pauvreté et marché du travail à Ouagadougou (Burkina-Faso). Chap. 6. OIT: Institut International d'Etudes Sociales. DP/57/1993.

http://www.ilo.org/public/french/bureau/inst/papers/1993/dp57/chap6.htm#1. The second source of capital comes from finding resources in family and household circles: 54.1 percent for marginal independent workers but only 23.5 percent for independent workers with capital. According to the classification of work forms that Sanou is using, the term "marginal" activities refers to poorly productive street activities or semi-legal or illegal activities (Sanou 1993, chap 3).

acquire key competences in all the domains pertaining to their business: finances (saving and managing money), knowledge (technical, managerial, and marketing), and network-building (with suppliers, clients, and colleagues). All these independent producers began preparing themselves during that time, buying tools here and there and putting aside as much money as they could from the small earnings they received from their boss. ⁴⁶ They started producing for themselves, 'after hours,' to earn some more money and develop their networks of suppliers and clients. Their persistence over time is even more remarkable as they developed and grew largely by drawing from local resources.

Sources of supply: places of origin, markets, and prices.

The second key aspect of running a business is having access to supply. Producers must know what they need, where to get it, how much they should buy and at what price, and how to bring it to their workplace. Again, the apprenticeship period is a crucial moment for learning all this information. Most – but not all – scrap supplies for these recycling activities are imported, from Europe first and then from coastal countries, mostly from Ghana and Côte d'Ivoire. Because the country is landlocked and the national purchasing power is relatively low, scarcity is always a threat. Also, because of their own limited financial means, producers can rarely build

⁴⁶ In his study of "apprentice workshops" in Accra, Ghana in the 1970s, Verdon already argued that the initial capital is never so important "as to be prohibitive to the average producer. All the capital requirements of an Accra apprentice workshop can be met by the average individual producer after a few years of hard work and saving … [It is thus] accessible to everybody" (Verdon 1979:536).

⁴⁷ Ghana has taken over Côte d'Ivoire as the main source of imports – at least for waste and scrap materials, since the civil war that broke out in September 2002.

up a significant stock of supply. They are constantly looking for raw materials and as a result, having access to information about sources of supply and suppliers is vital for their business.⁴⁸

The situation may worsen as the imports of raw materials have declined in the last few years. From 1999 to 2002, the import of aluminum has gone down from 3,049 thousands U.S. dollars to 2,400 (-21%); the import of iron and other metal has been reduced from 11,294 to 9,441 thousand dollars (-16%); and that of rubber waste from 108 to 43 thousand dollars (-60%). In contrast, the import of new tires and rubber grew by twelve percent in about the same period (1999-2003) and iron and non-alloy steel bars and rods by thirteen percent. As I have shown, this dependency on imported raw materials may have a serious impact on the sustainability and the organization of these production activities.

Scrap aluminum

The supply of scrap aluminum seems to be more clearly organized and to involve a larger and more diverse network than scrap iron or rubber. First of all, there is a set price for scrap aluminum. It is sold by the kilogram at a predetermined rate that varies seasonally. The price of aluminum collected in Burkina Faso fluctuates between 500 and 600 F CFA per kilogram during the rainy season (being at its lowest during July and August) and goes up to 750-800 F CFA near the end of the dry season (May-June).

⁴⁸ See Guyer, Jane I. 2004, p. 107.

⁴⁹ Source: International Trade Center UNCTAD/WTO. 2004. Burkina Faso. Imports 1999-2003. http://www.intracen.org/menus/countries.htm

⁵⁰ Source: International Trade Center. UNCTAD/WTO. 2004. Mirror Imports of Burkina Faso (1999-2003). http://www.intracen.org/menus/countries.htm These sources, as well as the official Burkinabè government website, did not provide the equivalent figures in weight, to assess the evolution of these imports more accurately.

Given their limited production level, most producers buy aluminum collected in Burkina Faso. However bigger workshops with a higher production level have to turn to aluminum imported from Ghana, which is available in much larger quantities than that which can be collected in Ouagadougou. This is more expensive, costing all year round between 750 and 850 F CFA per kilogram, not including transportation costs and custom fees. The former can go up to 500,000 F CFA for a truck load coming from Tema, the main industrial port in Ghana, to Ouagadougou. In Burkina Faso, the tariffs on the import of raw supplies and equipment goods are set at 6.5% of the merchandise's value (ONAC 2000). Here is what an average import of aluminum for Moussa's workshop would amount to: if they imported approximately five tons, worth four millions CFA francs, they would be taxed for approximately 260,000 F CFA. With such added costs, one might expect the price of aluminum to go up drastically, rendering the operation barely profitable. However, my calculations reveal that the increase of the price of aluminum remains within reasonable margins, around 952 F CFA per kilogram.

In choosing aluminum parts, artisans make a distinction between "hard" and "soft" aluminum, referring to alloys with a different percentage of aluminum. They need both types to produce quality items. Hard aluminum is understood to be mostly engine parts (from trucks, cars, mopeds and even boats), which are not as pure and malleable as soft aluminum such as printing plates, cans, roofing sheets, bicycle mudguards, and old aluminum pots. Most suppliers

⁵¹ This 6.5% tax is a compound for Category 1 of goods: import tax = 5% + Statistical fee = 1% + community withholding tax for solidarity: 0.5%. Source: Office National du Commerce Extérieur (ONAC). 2000. Le Code et le Tarif des Douanes. January 1st, 2000. Loi N° 03-92/ADP du 3 Décembre 1992. Code des Douanes. http://www.tradepoint.bf/guideoperateur/reglement.htm#Le%20code%20et%20le%20tarif%20des%20douanes.

⁵² These figures come from an exampled provided by a young aluminum dealer working for Moussa. In fact, a "good" trip would be to bring back at least ten tons of aluminum from Ghana. When they come back with only two tons, it is not profitable for them since it will only last about four days.

 $^{^{53}}$ 4,000,000 [5,000 kg x 800 F CFA] + 500,000 + 260,000 = 4,760,000 F CFA/5,000 kg = 952 F CFA/kg.

provide both types of aluminum except, as we will see below, factories and Ghana sources, which deal only with soft aluminum.

There are four main categories of suppliers in the city and the prices may vary from one to another, the price differing between fifty and two hundred CFA francs per kilogram. First, there are two main suppliers, or middlemen rather, who are located in two different places in the city. They buy aluminum from a large network of suppliers and resell it to producers who come to them, making a profit on each transaction. One of them is located downtown, close to the former central marketplace Rood Woko. The other is placed near the central bus station of Patte d'Oie. They act as a kind of brokers, without a shop building but with a strong network of suppliers, some of them importing aluminum from Ghana.

Secondly, there are several factories in the capital city that work with soft aluminum. Some make aluminum cooking utensils, others make construction materials in aluminum (such as window frames), and several print shops use aluminum plates to print newspapers, bulletins, and other printed materials. Artisans, but more often, middlemen, deal directly with an employee of the company, to buy (often illegally) the defective products that have been discarded during the production process. Since these employees are not necessarily aware of the rate of exchange, the middlemen can negotiate the price down to 500 F CFA per kilogram and sell it for 650 F CFA per kilogram to the artisans.

While these sources can provide supplies in bigger quantities, most artisans consider these places too expensive and prefer dealing with individual suppliers who are not 'professional' and thus have less bargaining power. With the previous two categories, artisans get the aluminum for 650 to 750 F CFA per kilogram, but they can buy it for 500-550 F CFA per kilogram from the

last two categories: mechanics and individual suppliers. Mechanics are the main sources of hard aluminum. Some aluminum-smelters have developed their own personal networks of mechanics. They frequently go to their workshops to check if they have discarded some broken aluminum parts coming from the body or the engine of a car, truck, or machines. However the main source of scrap aluminum for most artisans comes from individuals collecting scrap aluminum, both soft and hard. This category of suppliers ranges from young children to old men, all males, who try to increase their revenue by selling aluminum from a few grams to approximately ten kilograms. Some are regular suppliers, coming several times a week to the artisans' workshops and others are more occasional. Lastly, clients – mostly women this time – sometimes provide their own aluminum, in order to reduce the price of the items they order.⁵⁴

Due to their limited purchasing power, most aluminum-smelters have to buy aluminum every one or two days, to keep production going. Buying small quantities at a time, ⁵⁵ they usually carry their supply of scrap aluminum by their own means of transport – bicycle or moped. But bigger workshops need bigger quantities and have to pay a taxi or push-carts to deliver the materials. In some cases, tons of aluminum are brought monthly from Ghana by truck, delivered at the main truck station of the city, and then brought to the workshop on push-carts.

Tin and scrap iron

Tinsmiths work mostly with discarded metal sheets used for roofing, used oil drums, and car bodies. According to their information, iron scrap has 'no price,' at least at the outset. In fact,

⁵⁴ See chapter XII.

⁵⁵ More than 10 kg, which amounts to 5,000 F CFA or more.

the price of each part is assessed according to such criteria as the quality of the metal (whether it is rusty, whether it has holes, whether it is 'clean' or 'dirty'), its thickness, and how many items the artisan can potentially produce from it. Usually, a metal sheet is bought by the meter, between 1,000 F CFA and 1,500 F CFA the meter. A used oil drum costs between 1,000 and 2,500 F CFA – sometimes reaching 3,000 F CFA. A "car" (meaning what remains of the car body) costs around 10,000 – 25,000 F CFA.

As in the case of the supply of scrap aluminum, we find the same categories of suppliers: main suppliers or middlemen who make a living from it and occasional suppliers of tin and scrap iron who have an empty barrel or who have changed the metal sheets of their roof and want to make some money by selling them. Like aluminum-smelters, most tinsmiths prefer dealing with the latter category, which is less aware of current prices and has less bargaining power. But when they have no choice, they may go to the main suppliers of scrap metal in Bwesyaare, Confiance Yaare, ⁵⁶ Larle, or more recently, to the new scrap yard on the outskirt of Ouaga 2000 neighborhood.

As most producers of recycled goods, many tinsmiths have little purchasing power and have to buy their raw supplies frequently and in small quantities. Martin for instance, spends between 2,000 and 10,000 F CFA every two or three days, paying the biggest amounts in two installments. Even when the prices reduce during the rainy season, tinsmiths do not have the means to buy greater quantities and are unable to build a stock before the prices rise and the supply gets scarce again.

⁵⁶ Confiance Yaare can be literally translated as the "market of trust."

Used tire parts and inner-tubes

The case of rubber-workers is yet different, as they are specialized in a variety of production. Some are working solely with used tires, making all kinds of joints for car parts, belts for machines such as mills, straps for armchairs, or cutting large strips of tires and selling them to shoemakers to be transformed into soles. Others are working solely with inner-tubes, making *puisettes* and rubber bands of different sizes, from very thin ones to be used by tailors to larger ones used to fasten objects on bicycles or moped carriers. Lastly, some are working with inner liners taken from tires and inner-tubes to make different kinds of sandals. Due to this variety of production, rubber-workers need diverse kinds of supply and resort to different networks of suppliers. In this work, I will address the last category only.

The majority of the supply of inner liners – or "bante" – and inner-tubes are imported directly from Europe and sold in Sankare Yaare, a market located in an old neighborhood of the city. Many inner-tube workers – the majority of them being from the Dafing ethnic group – have settled there, but most tire and "bante" workers do not work there. As we have seen earlier, the latter have been displaced several times by the city authorities and finally located in Cité An II market. Each time they need supplies, these workers have to cross the city to go to the Sankare Yaare market. For instance, Rasmane and Boureima go there approximately twice a week, spending between 5,000 and 7,000 F CFA.

The availability and the quality of the supplies depend heavily on the flux of imports.

When there is a delivery, prices go up but producers find better quality materials. When the stock

⁵⁷ What the tire-workers call "bante" [which sounds like the French word "bande" (strip)] is in fact the inner liner of the tire, a layer of special rubber inside a tubeless tire that is resistant to air and moisture. Source: Tire Talk. Truck Tire Terminology 101. February 2004. http://www.tomorrowstechnician.com/tt/tt20436.htm. The specificity of this layer is that it is very smooth (esthetically and in its structure) and it is preferred to make sandals. We will use their terminology from now on.

is almost depleted, prices go down but the quality is less desirable. Unfortunately, rubberworkers have few alternative sources of supply in town. They may buy used tires from mechanics or apprentice truck drivers. They use the metal wire inside the bead bundle to make staples, the cap plies to make a machine belt and cut the tread into small bands that will be sold as fuel.⁵⁸

Having examined the various aspects of this market of recycled goods, from the producers' profile to their financial assets and access to supplies, we begin to appreciate the economic importance of this market but also the challenges that it faces. By providing a source of income to young urban dwellers and school drop-outs and generating a body of knowledge and *savoir-faire*, these activities also bring about competition from within. Despite the lack of state support and access to formal banking institutions, these producers manage to draw some resources from their personal savings or from close social circles to produce their own source of revenue. Lastly, not having much control over the quality, quantity, and frequency of the imports of supplies, they have to multiply their sources and be strategic in managing their limited stocks. Let us conclude this chapter by turning to the consumer demand for these recycled goods and its characteristics.

Home products for a nationwide clientele

The market of recycled goods is a domestic market. Producers, located mostly in urban centers, have their goods distributed first in the markets of the capital city and the major towns of the country. By the intermediary of retailers, these products reach village markets all around the

⁵⁸ Women use this type of fuel to light their fire, especially during the rainy season, when wood is wet.

countryside. None of them are intended to be exported to neighboring countries or to Europe, unlike "tourist crafts" made from recycled materials such as bronze sculptures or toy cars and bicycles made by children and teenagers.

Overall, the consumer population of all these recycled goods spans all categories of age, socio-economic levels, ethnic and religious groups, and geographic locations. Indeed, the majority of the population in Burkina Faso is still cooking with wood and/or charcoal (versus gas in wealthier families). From the wealthiest to the poorest household, people continue to prepare local dishes, even if only for special occasions. There is thus a strong, mostly female, demand for aluminum and tin cooking utensils (stoves, pots, pans, spoons, and skimmers), which are best adapted to local cooking practices, large-sized families, and to such social events as weddings and name-giving ceremonies, when women prepare meals for a large number of people.⁵⁹

Women appreciate the fact that aluminum pots resist the heat of the fireplace made with stones better than any other kind of pots. Also, no industrially-made container is as big as the larger aluminum pots, ideal for preparing *saghbo*⁶⁰ and *dolo*⁶¹ in great quantities. All women, both in urban and rural areas, alternate between cooking with wood (using a fireplace with stones or a wood stove) and cooking with charcoal (using a charcoal stove), both types of stove being made exclusively by tinsmiths.⁶²

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⁵⁹ See O'Hear (1987:519), who makes a similar comment about the consumption of pottery goods in Nigeria: "Large storage vessels, for example, have been little affected by manufactured competitors. They continue to be used for crop storage, since, unlike plastics, they discourage mould. Large water pots are more efficient for cooling than plastic containers and are also relatively cheaper. They will be needed until every house has constant running water, refrigeration facilities and reliable electricity supplies."

⁶⁰ The national staple dish made with millet flour but also with sorghum, fonio, corn, or rice flour.

⁶¹ A local beer made from red millet.

⁶² See O'Hear (1987:519): "And, while many households now have alternative types of cooking facilities, many others cannot afford either to buy or run them. Even middle-class women frequently prefer to cook over a fire, as more modern appliances may be inadequate for the size of their families or their ceremonial needs."

The use of recycled products is very widespread, both in urban and rural areas. With ninety percent of the population making a living from farming activities⁶³ and eighty-two percent still living in rural areas,⁶⁴ recycled goods are perfectly suited to the lifestyle and purchasing power of the rural population. Tire-sandals, straps and *puisettes* made from inner-tubes, bicycle saddles and buckets made from scrap iron, aluminum pots, and other items find their real outlet in the village markets, even more than in the capital city. Farmers (mostly in villages but also in the city) appreciate the solid tire-sandals, which last longer and protect their soles from thorny bushes. Be they in cities or villages, owners of old bicycles, brand new motorcycles, or cars make great use of inner-tube straps to attach objects onto their carriers or turn to creative tinsmiths or aluminum-smelters to fix a spare part for their vehicle. It is always more useful, cheaper, and often more durable than the "*original*," imported one.

Producers of recycled goods are also compelled to follow the evolution of the local consumer market. The range of goods is constantly changing, some models falling out of fashion, while others are trendier and new items are created to meet new needs. The import of new kinds of consumer goods both challenges and inspires the artisans to create new items. Some inventive tinsmiths are now making seats for the latest brands of motorcycles imported from Asia while tire-workers are not only producing sandals but also a large variety of "spare parts" and joints for cars and other machines.

Even if producers feel safe in believing that these lifestyles will not change all at once and that their goods will continue to find a market for the years to come, they watch the import

⁶³ 2000 estimates. Source: CIA. 2004. The World Factbook, Burkina Faso. Last updated: January 10, 2005. http://www.cia.gov/cia/publications/factbook/geos/uv.html#People

⁶⁴ Figure derived from UNICEF data, which provide the rate of urban population in Burkina Faso (2003): 18%. UNICEF. 2004. En Bref: Burkina Faso. Statistiques. http://www.unicef.org/french/infobycountry/burkinafaso_statistics.html#6

of industrial goods with a wary eye. People's preferences keep evolving and this, unfortunately, is out of their control. Industrial cooking utensils tend to be considered more attractive, prettier, and shinier than the locally produced ones. Tire-sandals too are slowly but surely falling out of fashion, considered to be footwear for old people and farmers. It would be somewhat hazardous to predict how local culinary practices will evolve in the long turn, but the producers are right. Change will not happen suddenly and in the meantime, their market will probably continue to grow, in connection with the population growth, ⁶⁵ the urbanization rate, ⁶⁶ and the poverty level, ⁶⁷ which limits people's purchasing power.

Over the past thirty years, the market of recycled goods has shown a remarkable ability to adapt to both the vagaries of the economy and the evolution of the local consumer market. Even though they do not control much of the input factors of their activities (frequency, quality, and price of the scrap materials), producers find themselves a niche by providing goods that have no industrial counterparts. Flexibility is definitely a key for them to make the best of the supplies they have access to and meet the needs of an increasingly urban consumer population.

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⁶⁵ Population growth rate: 2.6% (2004 estimate). Source: CIA Factbook. Burkina Faso. http://www.cia.gov/cia/publications/factbook/geos/uv.html Last updated: February 10, 2005.

⁶⁶ Annual growth rate of urban population 1990-2003: 5.0%. Source: UNICEF. 2004. En Bref: Burkina Faso. Statistiques. http://www.unicef.org/french/infobycountry/burkinafaso_statistics.html#6

^{67 45%} of the population lives below the poverty line (2003 estimate). Source: CIA. 2004. The World Factbook. Burkina Faso. Last updated: January 10, 2005. http://www.cia.gov/cia/publications/factbook/geos/uv.html

Chapter V. Meanings of work and making gains.

Renewing our theoretical apparatus.

Work, market economy, and the "Other": the limits of ideological dichotomies

Words contain worlds of imagination, preconceived ideas, as well as elaborate concepts. When we think about 'work' in our Western industrial societies, we almost immediately picture a wage employee in a company building, working from 9 a.m. to 5 p.m. and receiving his paycheck at the end of the month. Imagination continues. Workers are believed to function in a worldwide market economy, where businesses are driven by what has been identified as "neo-liberal" economic principles: maximizing their profits and accumulating as much wealth as possible (in money, employees, real estate, machines, clients, and share-holders). A standard enterprise is conceived as having "a built-in mechanism for continual and indefinite expansion" (Verdon 1979:533). It 'naturally' "strives toward a situation of monopoly ... [Being] intrinsically 'competitive' [...], [it is] geared toward eliminating all other groups of production involved in the same type of economic activity, whether [it achieves] it or not" (1979:534). The limits to its growth are thought to be only external, such as "the size of the market and the availability of technology, of capital, [and] of labor," for instance (1979:533).

This neoclassical model of the economy has been in place for over a century and has had major influence on how scholars have looked at their world and that of other people. Social scientists have developed a set of analytical tools derived from this economic model to investigate "other" societies and economic practices. This has often led them to resort to conceptual oppositions that were illustrated, for instance, in the heated debate between

Formalists and Substantivists during the 1960s in the subdiscipline of economic anthropology. While the former aimed at applying neoclassical concepts to explain economic practices in non-industrial societies, the latter refused to frame non-capitalist societies in such terms. Without truly being resolved, the debate gradually faded away. Anthropologists moved away from these dichotomous explanations, yet retaining the "substantivist truth [...] that all economies are 'embedded.'" Indeed, it is now an accepted fact that "the economy is an *aspect* of social life rather than a segment of society" (Plattner 1989:14, emphasis in original).

For almost thirty years now, social scientists have clearly demonstrated that this neoclassical model is an abstract, even an "ideological construction" (Joyce 1987:24). In the preface of his book *Economics as Culture*, Gudeman showed that all economies and economic theories are "cultural constructions" and that the Western model for analyzing economic patterns is only one possible model (1986:vii-viii). Economic activities, and work in particular, are not separate spheres from the rest of social life. In fact, they have been theoretically detached from it only since the end of the eighteenth century (see Applebaum 1995:59).

According to Godelier, the notion of "work in general" has emerged in the West and isolated "work from its individual forms and from [its] structural locations, so that it is seen as a discrete activity in a distinct 'economic' realm" (Joyce 1987:2). The new division of labor, which emerged "alongside social hierarchies rather than being the prior cause of them" (Godelier 1980:903, emphasis in original), caused work activities to be more spatially and temporally defined – in contrast to the domestic sphere and "leisure" time (1980:905). But even

¹ See for instance this collective essay edited by Sandra Wallman in 1979: Social Anthropology of Work. A.S.A. Monograph. Vol. 19. London: Academic Press.

² Joyce refers to the following article: Godelier, Maurice. 1980. Work and Its Representation: A Research Proposal. History Workshop Journal. (10): 164-74.

if there are real structural and cultural differences in the definition of work across societies, Godelier warns us not to separate work conceptually from the rest of social life. Indeed, "it is hard to believe that social processes of differentiation, empowerment and stratification, which had operated until the emergence of industrial society, would have suddenly ceased to influence the organization of the economy" (Godelier 1980:906).

Joyce invites scholars to go further, as the "history [or study] of work has to be about more than work alone" (Joyce 1987:28). Work and "non-work" spheres of life should not be conceived as being totally distinct worlds as they are actually very much "reciprocal in their relationship" (Whipp 1987:221). In both industrial and more traditional societies, people are motivated by principles other than those which these elusive, neo-liberal ones would have us believe (1987:24). Rather than being opposed, market, work, and community lives are linked in many ways that all need to be taken into consideration. The problem resides in our current theoretical apparatus, which prevents us from examining these connections in a more dynamic way.

The social embeddedness of work

Any attempt to define the notion of work reveals its evasiveness. Gamst wrote that "work has one of the broadest ranges of meanings of any word in English," thereby revealing its "diffuse" nature not only in our language but also in "our social relations" (1995a:xi). Its various roots reveal its ambivalent meaning, ranging from a purposeful act to a painful labor (Gamst 1995b:2). Applebaum goes even as far as asserting that since work "relates to all human activity, no definition of work [can be] satisfactory" (Applebaum 1995:46).

It is also important to delineate the limit of this concept as clearly as possible in order to agree on what is *not* work. Indeed, scholars need to be watchful not to fall into an "all-purpose definition of work [that would come] out of the cross-cultural hat" (Wallman 1979:3). Activities that are sporadic and involve little planning; that are only slightly, if not at all, "related to an institutional product;" and that "relate to [everyday], mandatory, universal behaviors in society," are commonly not considered as work in the Anglo-Saxon thought system (Gamst 1995b:6).

Work is never a matter of only physical exertion but is fundamentally connected to mental and cognitive operations (see Moorhouse 1987:241). Countering the belief that craftwork is largely "manual" – in opposition to "the mental powers of professions," Gamst argued that such work as that of railroaders was "exceedingly mental." He explained that "[t]he railroader adjusts to new circumstances and problems at work by means of analytic cognitive abilities which allow for operations in situations not previously experienced and in which no supervisor is present" (n.d.: 4; quoted in Baba 2003:19).

People work for many different reasons: to prepare a dowry to get married, to satisfy an urgent need for cash, or to continue traditions even if they have become uneconomic (Wallman 1979:5-6). "[M]aintaining social status and personal esteem" is often a major preoccupation, concerning "authority within the family" or "credibility in the community" (1979:5; see Ortiz 1984:898; Applebaum 1995:47). "The task of meeting obligations, securing identity, status and structure, are *as fundamental to livelihood as bread and shelter* ... [And] by the same token, the loss of any work may cause *the loss of necessary non-economic resources*, notably of identity, status and the structure of time" (1979:7, my emphasis).

Work is also about fulfilling moral expectations and gaining respect. In most popular beliefs, work is a safeguard against idleness (Moorhouse 1987:241). "[W]orkers in [the most] 'menial' jobs may attach the utmost significance to their work, to getting it done well and earning the respect of others" (Joyce 1987:22). In fact, "virtually *all* jobs [even the most routinised] provide the raw material for workers to regard themselves as 'skilled', even if this is not institutionalized ... [and] pride can be obtained from doing *any* job" (1987:241-42, emphasis in original). This echoes Etzioni's statement that people "respond to two or more irreducible sources of valuation: their satisfaction and their moral values" (1995:251).

Scholars are encouraged to study further the perception of masculinity in low-skill jobs, where men "gain pride, respect, confirm identity, by pitting themselves against fear or furnace" (Moorhouse 1987:242; see Herzfeld 2004:62-64, 88-9). Workers value the "display of sheer strength, endurance and courage" in an environment that is sometimes "fraught with danger" (1987:242). Across the whole range of professional occupations, from low to high skills, work is thus a powerful instrument to "generate power and prestige, establish relationships and symbolize status" (Ortiz 1994:903; see also Goldschmidt 1995:86; Wallman 1979:5).

Encompassing so many aspects of human life (personal, social, psychological, moral, economic, and political), we could argue that the concept of work comes close to what Mauss would have called a 'total social phenomenon.' Consequently, scholars need to consider the "quality of the relationships involved in the allocation, production or distribution of resources" as well as "the values ascribed to each of [these transactions]" (Wallman 1979:2, emphasis in

³ See Mauss (1950 [1923-24]). Mauss defined the concept of 'total social phenomenon' (*fait social total*) out of a desire to define the 'social' as a reality, integrating its different aspects: economic, juridical, moral, religious, technical, mythological, and esthetic; linked with individual histories and physical and psychological expressions (Lévi-Strauss 1989).

original). Work is "not only 'about' the production of material goods, money transactions and the need to grow food and to cook the family dinner. It must equally be 'about' the ownership and circulation of information, the playing of roles, the symbolic affirmation of personal significance and group identity – and the relation of each of these to the other" (Wallman 1979:7).⁴

In short, these observations invite scholars to broaden their scope of analysis beyond a mere economic standpoint. Like most other activities, work arises within a social and cultural context and in turn, actively shapes this context. Work is also imbued with meanings, which are learned by workers through socialization, then generalized and "often reified as a code of work ethics and of job characterizations" (Ortiz 1994:896). In addition, the way tasks are distributed is also "[reflecting] both the prevailing social organization and the politico-economic context within which the labour process unfolds" (1994:902). Work activities thus are part of the social life in which they arise. They "can help both to strengthen existing social relationships and generate new ones" (1994:893).

Working for various types of gain

Inspired by these scholars, I demonstrate in this study that any economic activity generates not only financial profit but also social and cultural gains such as identity, social status, self-esteem, prestige, and recognition. As both an economic *and* social activity, work leads not only to material but also to "immaterial benefits" (Firth 1979:200). We thus need both economic and sociological concepts to analyze this reality of work and the gains generated.

⁴ Simpson also argued that "work itself [is] a very complex form of social activity involving issues of identity, ownership and exchange" (1997:46).

I believe that the notion of gain begins to answer some of these theoretical and analytical challenges.⁵ A gain is defined as "an increase," an "addition," or "advantage" that is obtained. To gain something implies "to get by labor, to earn," "to gain livelihood," especially by "effort or merit" (Webster 1999:579). The concept of work encompasses all the economic and social, material and immaterial, quantitative and qualitative increments that can be obtained, directly and indirectly, through work activity. The evaluation of what has been gained can be assessed objectively (by an outsider) and subjectively (by the participants), and depends on historically defined cultural and social values. These values, or standards of expectation, determine whether a type of behavior or course of action is rational, reasonable, or not. They can be contradictory at times, which can explain some tension, frustration, and contradictions between workers' statements and their practices (see Latour and Lépinay 2008:5).

From one society to another, the nature of these variables can change, as can the importance given to each of them and the order in which they are considered. As I will demonstrate in the next chapter, one of the primary values for a man in Burkina Faso is to be able to earn a living that is adequate for marrying and caring for a family. People take pride in being a hard worker and in honestly earning a living that make them able to participate to family and community ceremonies and social events and to help or support needy relatives. Not being able to do that is perceived as a shame, as a mark of being a "vagabond," and sometimes as being "lazy" (see Moorhouse 1987:241). It is difficult for people who do not work to be

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⁵ I am indebted to Professor Jane I. Guyer, who initially suggested this term to me as she was pondering similar issues as well. However, my conceptual definition and use of the notion of gain may have taken a different turn than she first intended (see her book *Marginal Gains. Monetary Transactions in Atlantic Africa*. Chicago: The University of Chicago Press. 2004).

considered responsible or mature and they may barely be consulted in decision-making, concerning family or community issues.

These are the kind of values that shape the way people organize their work and invest the economic gains they make from their professional activity. Beyond the money earned from their work, they desire to gain a reputation and a social status in their community – yet making profits is an essential way of obtaining these social gains. The latter can be evaluated as quantitative, financial gains, constituting real assets that can be re-invested in many ways: securing a clientele and support from colleagues, attracting candidates to learn the trade, marrying, having children and relatives who will later help in the trade.

In Western societies, some of these values are also present although they do not have the same importance as in Burkina Faso while others are more prevalent. People are more self-centered and tend to seek financial autonomy in order to not depend on anybody and live a lifestyle that they desire (see Godbout 1992:18). In the West, professional careers are often geared to reaching a culturally determined level of income that they will invest into acquiring material wealth (cars, houses, jewelry, prestige objects, for example) as well as immaterial assets (living in the 'right place', with the 'right lifestyle,' and the 'right people,' for instance).⁶ To attain this chosen (or at least desired) lifestyle, people often invest in higher education (which costs time, money, and sometimes a lengthened dependency on parental support) to be able to choose a professional occupation, valued for being more rewarding (involving more responsibility for instance, or because people's "personality" or "gifts" can "thrive" in it) and for

⁶ About the place of work in North American societies, Gamst wrote that "Work provides a temporal order for behavior. It furnishes a necessary routine in daily life, that is, an expected, regular, largely prescribed course of activities, reassuring and soothing in face of all the challenges and anxieties of human existence" (1995b:14).

its higher pay. For some, the ultimate goal is to be wealthy enough to not work (living on one's income or from earning interests).

Here too, what is gained from a professional activity is not only the amount that appears on the pay-slip but the reputation, social status, and lifestyle to which this professional occupation gives access. Again, these gains can be measured according to various scales of value – by the social benefits that come with the contract, the various kinds of wealth they are able to acquire, the amount of free time (i.e. 'non-work' time) available, and the type of leisure activities they can engage in, for example.

Still, everything is not equal or a potential gain. What makes something a gain is something sought for, desired, valued – it is a positive outcome. What people say and what they do is thus geared toward producing or 'gaining' this increment by investing time, energy, money, and various kinds of other resources such as people, tools, facilities, information, and knowledge. In addition, as Gudeman pointed out, this 'surplus' can be "consumed, saved, or invested" in something else (2001:98). Despite all this effort, people are not always successful in the way they generate and utilize these gains. To sum up, the notion of gain helps us understand the rationale behind people's actions and their motivations for doing what they do and saying what they say. That is to say, it broadens our understanding of what people do with what they gain and why.

Guyer's concept of "marginal gains"

This conceptual definition of gain feeds on Guyer's stimulating discussion on "marginal gains" (2004:25). While I do not pretend to apply her theoretical propositions directly to my

analysis, I believe that they are significant for my observations. The ethnographic examples that she uses offer helpful parallels to the materials that I collected. Her analytical insights provide valuable directions to further my understanding of the economic practices I studied.

Like other scholars investigating the phenomenon of work, Guyer points to the inadequacy of current social theories and concepts for our examination of African popular economies.

Because of this shortcoming, she wonders how scholars can make sense of capitalist-type "commercial methods" that are not governed by neo-liberal principles (2004:6, 9). "What, then," she asks, "should be the terms for understanding the investments that African people have, in fact, made with the money earned in the market?" (2004:9). Her concept of "marginal gains" is a first step in attempting to respond to this challenging question. Since scholars have reached a "conceptual stalemate" concerning African economic realities (2004:9), she returns to the empirical records and works from there, focusing on a feature that is common to both Western and African economic practices, "namely the expectation of gains" (2004:17, my emphasis).

According to her, "[g]ain is at the center of microanalysis for monetary transactions" as well as a "persistent motive" that has structured European economic involvement in Africa all throughout history (2004:17).

Borrowing from economic theories, Guyer believes that the concept of "marginal gains" can help us better encompass the diverse and changing realities of African economies. "In microeconomic theory," she writes, "the margin refers to the "next transaction," to which the rational calculus is decisively applied" (2004:25). It is the borderline, for a transaction, between being profitable and nonprofitable. "Profit is [thus] maximized where marginal costs (the cost of producing the next unit) equal marginal returns (the income from the next sale)" (Guyer

2004:25). Guyer uses the term *marginal* to refer specifically to "reasoning, purposive behaviour, and strategic means-end thinking" (2004:25). With these theoretical propositions, she sets up a way to reach a better understanding of "rational behaviour in [...] uncertain times," where "the meaning of reasoning" is approached "as an activity and uncertainty as an experience" (2004:25). This concept opens the field of investigation to include the "persistent possibility," in people's expectations and courses of action, to generate "a gainful margin in exchange" (2004:26).

While most scholars have looked at African economic realities from the viewpoint of "exchange systems," centered on the concept of "equivalence," Guyer argues that in African monetary exchanges, it is the "asymmetry of value, as a permanent and culturally market feature," that prevails (2004:19, 27). Because "value is contingent, hermeneutic, negotiable, and nonnatural,"8 each monetary transaction can involve several social and cultural value systems which can meet or diverge at particular points – which Guyer names "commensuration and disjuncture" (2004: 13, 20). It is at these points of "disjuncture" (or thresholds) between scales of value that gains can be made: "between kinds of currency, between neighboring groups, between fictional units and real units, between currency and goods, and between one legal-jural regime of enforcement and another" (2004:20).

Because of this complexity, Guyer proceeds to look at the various scales of value that people use during their transactions (such as "numeration, ranking of people, and categorization of commodities by kind and by quality") (2004:49). Each of these scales has "its own logic," its "conventional" ways of being linked to another scale, connecting "quality to object

 ⁷ Quoting Latham (1971:604).
 ⁸ Quoting Mirowski (1991:706).

classification" or "quantity in numbers to money goods" and forming a sort of "repertoire" of possibilities (2004:19, 21). It is at the intersection of different scales of value ("trope" or "threshold") that gains can be extracted, "[w]hen one scale is not exactly reducible to the terms of another" (2004:49, 51). The potential for a gain dwells in the process of negotiating the meeting point (or absence thereof) between two repertoires. This gain "can be either conventionalised or singularised, recognized or concealed, foregrounded or backgrounded, depending on context" (2004:51). Looking at the way "marginal gains" are generated out of these transactions is therefore essential to unravel the various threads of economic transactions which unfold between different registers of value in an unpredictable environment.

The "varied commercial cultures" on the African continent have risen in an unstable context. African economies have rarely been ruled by "any of the principles" that have been instituted in Western capitalist systems as "systemic and invariant," such as "the value of money, the irreducible purity of number, and the stability of state legal frameworks for property, contract and credit" (Guyer 2004:16, emphasis in original). Prices and profits were, for the most part, not pegged or evaluated in relation to the gold standard. Likewise, "[n]umber and calculation were not anchored to formal mathematics and accounting" (2004:16). While intellectuals are accustomed to thinking of the Western market as a well organized entity, where "price [is placed] at the center in each transaction," the challenge for scholars of the African continent is of yet a different kind (2004:97). They need to go back to empirical records and investigate the various experiences of economic reality, "focus on instrumental calculation about advantage, [...] and incorporate the experience of multiplicity into the theory" (2004:18).

What we are dealing with are subtle routine practices that aim at extracting "marginal gains" at the "disjunctures between scales" (Guyer 2004:95). Performance lies in "successfully bringing them together" (2004:95), drawing on an "old series of gestures" which are organized in an innovative and "contingent" way at each transaction (2004:53). The key dwells in the "considerable leeway" that remains concerning "exactly where" the scales will meet in each transaction. This meeting point differs as the "context" in which the transaction occurs can vary. This "leeway" is the very "opportunity, and even the need, for charismatic resolutions – new ways of bringing the scales together in novel situations" (2004:97-8). We can see that there is much to study from these economic transactions, involving purposive reasoning and behaviors and questions about where people draw on various repertoires and combine known practices in new ways, in order to face unpredictable circumstances. "Gain is [thus] a challenge: to get, to conceptualize, to justify" (2004:53).

Guyer illustrates her point strategically through various ethnographic examples, one of them the owner of a gas station. The latter skilfully managed the distribution of petrol during a severe crisis of petrol shortage in Nigeria. To do this, she drew on different scales of value and carefully played on different registers to satisfy both economic and social expectations. "People appeared to be sorted into status categories and the time into episodes [...] The first episode set parameters in place: a constant nominal price, modified by variables of status, waiting time, dashes, and the presence of the authorities. The variables, and the timing of opening and closing the pumps, would be orchestrated by the owner" (2004:111). The latter successfully managed the

⁹ Guyer refers us to Verran's concept of "clots." See her book: *Science and an African Logic*. Chicago: University of Chicago Press, 2001, p.11.

distribution "in a way that allowed the play of the market, and of status differences, and at the same time had maintained the image of a stable and fair price, offered to everyone" (2004:113).

"African economic experience" is thus a "charismatic performance," where "people are entrepreneurs, in literal sense of 'bringing together' the valuation repertoire, much of the time" (Guyer 2004:98). Even though these practices are not always successful "in buffering the effects of volatility or in redistributing resources justly," they are essential to keep the market operating and counter potential violence that can emerge in such "conditions of radical indeterminacy" (2004:102). Guyer invites scholars to tackle an exciting yet complex field of study, working "toward the aggregative process by which scales and performances become institutions, institutions form into repertoires, and finally patterns of action are discernible" (2004:114). The theoretical challenge is to bring "together the analysis of uncertainty and the analysis of institutions" (2004:116).

Production of recycled goods in Burkina Faso: a gainful activity

How can the concept of gain, as defined above, help us to better understand these production activities in a West African city? *A priori*, these small businesses making recycled goods almost look like enterprises that could be found in Western societies. They work in a market economy, where they exchange products using currency money; they "price their goods, purchase their raw material, and use capital in the form of money, credit, equipment, and so on." Like Western enterprises, "[t]hey are not restrained from indefinite accumulation of capital although capital seems less relevant in their organization" (Verdon 1979:536). Why is it that they do not seem to function according to neo-liberal principles?

Verdon boldly states that scholars and development agents should not assume that these "apprentice workshops will naturally evolve into modern and large-scale enterprises, given the right market conditions and the right individuals at the right places" (Verdon 1979:532). According to him, a critical difference between the Western model of an enterprise ¹⁰ and the reality of African "apprentice workshops" lies in "the principles that structure the relationship between employer and employee on the one hand, and master and apprentice on the other" (1979:533). In the first case, the employer is ideally the owner of the capital and depends on the labor force (the employees) to carry out the process of production. The enterprise is greatly "sensitive to the supply and demand law of the market" and adapts its labor force, production strategies, and reinvestments accordingly (1979:533). It is conceived as "intrinsically 'competitive'" and as having "a built-in mechanism for continual and indefinite expansion" (1979:533-34).

By contrast, an "apprentice workshop" is not working towards "indefinite expansion" but is structured for the transmission of knowledge from master to apprentices. Verdon explains that apprentices are not wage employees but working to learn the trade, before moving on and opening their own workshop, "after a few years of hard work and saving" (1979:536). The reasons why a master accepts apprentices are "for both economic *and* status reasons … [Indeed, to] accept more apprentices is not necessarily synonymous with producing more. It is rather to be interpreted in terms of prestige and reputation" (1979:536, emphasis in original). In addition, the "decision to accept apprentices […] is entangled with matters of kinship and status" (1979:536). Because of that, the master has no direct control over the size of his labor force (i.e. he cannot

¹⁰ Verdon also points to the fact that scholars and development agents are using "the 'enterprise,' 'firm,' or 'business' [...] as a paradigmatic model in the economic study of apprentice workshops" (1979:533).

'hire' and 'fire' at will), which "makes reinvestment very unattractive" (1979:537). Verdon concludes that "[a]s a result of this inelasticity and the constraints of reinvestment, the apprentice workshop [...] has a very low potential for growth and expansion" (1979:537). For that reason, it "cannot be identified in any fashion with enterprises, firms, or business" (1979:538).

But is that really the end of the story? In a world that is becoming increasingly interconnected, it would be surprising if the organization of these production activities remained so radically insensitive to market economic principles. Indeed, Burkina Faso is going through a deep, societal transition and this cannot but affect these urban production activities. Between foreign supplies and local goods, rural background and urban lifestyles, local beliefs and Western values, and between social obligations and individual desires, these producers have to make choices, re-organize their priorities, and sometimes cope with oppositions and frustrations. Part of the wider regional and international market economy, these producers are confronted by similar conditions to those that Guyer described. The question is thus: how do they generate routine yet innovative behavior and knowledge, in a context of uncertainty and an unpredictable market, to make a living, satisfy social and individual expectations, and maintain their business?

I want to argue that since Burkinabè society is going through such a profound transition, the values that influence people's lives and decisions must change as well. In other words, how these producers of recycled goods view their activity, how they conceive the gains they make from it, how they organize themselves to generate them, and how they use and reinvest them is also changing. Their scales of value include both social and economic motivations and obligations, as well as collective and individual ones. These principles are not always in

¹¹ See chapter II.

opposition, as they can be complementary, but when they conflict, they bring about frustration and confusion.

I believe that the notion of gain is a very powerful tool for considering the multiple dimensions (we could almost say variables) involved in work as well as in explaining it – across time, space, and professional settings. If carefully used, gain can help us highlight people's motivations and strategies in all their complexity and subtlety without pre-determining one aspect over the other by a conceptual twist. By constructing its approach around the notion of gain, my work contributes to the field of economic anthropology and sociology that will inspire other researchers unravel the threads of this complex phenomenon.

Chapter VI. The value of work in Burkina Faso

Before moving further into the core of my thesis and investigating the multiple facets of these gain-generating activities, I would like to focus a little on the conceptions of Burkinabè producers about work. What motivates them to wake up every morning, work all day long, sometimes seven days a week, in a noisy and dusty environment, and to do a physically strenuous activity? What are the underlying objectives and values that eventually structure their work, give it direction and organize it, enable them to set their prices, negotiate, and invest their resources? Even though it begins with fulfilling such primary needs as feeding oneself and one's family, their motivations include other dimensions, which are no less important.

Working to "make money"

The main motive that recurrently comes back in what producers say is to "make money" or literally, "to look for money" ("baoda ligdi"). As Leimdorfer noted in the context of Côte d'Ivoire, money is "omnipresent" (as a necessity and in people's discourses) but "rare" (1997:132). Producers are thus "looking for money" to satisfy both the most primary needs of everyday life and their dreams of a better future. They justify their behavior (leaving their village, going abroad to work, declining the invitation of a peddler to buy his merchandise) by the fact that they are "looking for money:" "Nous aussi, on veut l'argent. Mam data ligd la,"

¹ "We too want money [French]. I want money" Abdul Wahab, tire-worker. Interview, August 27th, 2003.

"m kẽnga ligdi baod ka ye!" "tõnd baoda ligda" And as one young aluminum dealer stated it, "mon but, c'est d'avoir beaucoup d'argent."

Producers look for every opportunities to increase their financial gains. To accomplish this goal, they are ready to leave the village where they used to farm and go to the capital city or abroad, ready to "suffer" and "work hard." As we have seen earlier, ⁵ Burkinabè, and especially the Mossi people, have a reputation throughout Western and even Central Africa, of being hard workers. They are used to working hard in order to produce millet and other staple foods out of poor soil and French settlers quickly saw the potential of these Sahelian populations for their coastal plantations. Today, Burkinabè continue to migrate to the capital city and neighboring countries, striving to improve their earnings.

Many of the producers' trajectories follow this pattern. Boureima, for instance, left his village after spending twenty-five years cultivating green beans, peanuts, and other staple foods. Considering life in the village to be much harder than in the capital city ("ya toogo yid ka"), he settled in Ouagadougou about ten years ago and learned the trade of making tire-sandals with a set goal of "making/finding money." Another example is Martin, a tinsmith in his forties, who went to Côte d'Ivoire when he was younger. He used to make iron knives and other small objects out of the family forge, which was located in the blacksmith village of Sãaba, now a peripheral neighborhood of Ouagadougou. Since the trade was not very lucrative, he seized the

² "I went there for the money [to look for money]!" Ali, tire-worker. Fieldnotes, July 10th, 2003 – talking about his stay in Côte d'Ivoire when he was younger.

³ "We are looking for money" [i.e. "it's morning, we haven't earned any money yet], said Rasmane, a tire-worker, to two young girls who tried to sell him and his client some mangoes. Fieldnotes, June 19th, 2003.

⁴ "My goal is to have a lot of money." Ismaïla, aluminum dealer. Fieldnotes, August 7th, 2003.

⁵ See chapter II.

⁶ "Mam baoda ligdi." Interview with Boureima, tire-worker, Cité An II market. June 19th, 2003. Interestingly, Boureima was born in Abidjan, where his father used to work at the port before bringing all his family back to Burkina.

opportunity that was offered to him to work in a relative's shop in northern Côte d'Ivoire. After a few years, he tried his luck further south, in Abidjan. But as he was getting exploited by his *patrons*, he complained that he did not come to "suffer for nothing." He was ready to "suffer" to "make money," but if they retained part of the pay they had agreed on, he would rather work in Burkina Faso even if it meant earning less.⁷

"Good money" is earned from "hard work"

Producers make a clear distinction between 'good money' and 'bad money,' depending on how it was acquired. According to their moral standards, the former is earned through honest, "hard work" and the latter through immoral ways. As one aluminum-smelter stated it, "good money" ("ligdi songo") is money for which you "struggle" ("fo modgdame n pame"). An old, former tire-worker who became a wealthy landlord and truck owner stated that to prosper, one had to "work honestly and not do anything wrong (dishonest)." Working, and working "hard," is thus the key to having access to a "good life," to prosper, and to progress. When I asked an old tire-worker how artisans could improve their situation in Burkina, his answer was clear: "give up dishonest practices and theft and work until the sweat comes out," he said, stressing his point by mimicking someone wiping the sweat from his forehead.

In the same way, spending some years in the village is valued by many as a good way of

⁷ "Parce que, je suis venu pour chercher l'argent! Si c'est du travail, au Burkina y a du travail! Mais je suis venu ici pour chercher de l'argent. Je suis pas venu en Côte d'Ivoire pour souffrir pour rien! Je suis venu pour souffrir, avoir de l'argent." Interview with Martin, tinsmith. Interview, February 18th, 2003. He eventually returned to Burkina Faso as his parents called him back.

^{8 &}quot;Toma ne pu-peelem ... [la] ra man yel weng ye." In Moore, pu-peelem means to have a "white heart."

⁹ "Bas yil-bèda, la bas waghdma, ... n tvm [ti nyissã?] tulgha woto ne nyesghe! Fo hã yik [n] tvm ti fo tulgha wa yit ti fo n taka, n nyese, n vus n nyu ... nye kiti ti Burkina kieng taore." Interview with Zakaria, tire worker. August 28, 2003.

acquiring these positive values. Village life is often opposed to that of the city as a better way for children to learn the 'true' values of 'working hard.' It seems that it is mostly Muslim families who send their children to the village to combine Coranic studies (attending a *madrasa*) and farming. For instance, Hamidou, who was born and raised in Ouagadougou, spent three and a half years in his family's village when he was about eleven years old. To him, every young person should stay in the village to learn how to 'work hard.' Otherwise, if he stays in the capital city, he will become lazy ("fo togo n keng village... sinon, fo sen pa Ouaga, fo pa rat tom ye"). Another aluminum-smelter was also sent to his hometown, Kaya, when he was sixteen years old to study the Coran and cultivate the fields for four years. He thought that it was a good way to "gain wisdom" ("fo pama yam," lit. "you gain intelligence"): "if you suffer, you become wise ... when you come back to Ouaga, you know how to work." The city is thus perceived as being a place where a young man does not learn the true values of life: working hard, making an effort, and being honest.

Muslims view money earned dishonestly as "haram" – an Arabic term meaning 'sinful.' This notion was explained to me by Moussa, the owner of the largest aluminum-smelting workshop in Ouagadougou, who is also a devout Muslim. If someone does not earn money honestly, he "will die quickly" (fo na ki tao tao). Money earned from conning people is "ligdi"

¹⁰ Piot observed similar practices in Togo (2006:176).

[&]quot;You have to go to the village ... Otherwise, if you stay in Ouaga, you will become lazy (lit. you will not want to work)." Hamidou, aluminum-worker. Fieldnotes, January 24th, 2003.

¹² "Fo sã namsde, fo pama yam... fo sã lebgha Ouaga, fo tõe n tome." Malik, aluminum-smelter. Fieldnotes, January 25th, 2003.

haram" or "sinful money." He adds, "[if you go] abroad and con [people to get] money, [...] it's not good." 13

There is thus a semantic pair where 'good' money is opposed to 'bad' money. 'Bad' money is money which is earned dishonestly, by conning or taking advantage of people or by using witchcraft. It is expected that ill-gotten money will not benefit the person for long. In addition, the idea of 'easy money' is also disapproved of, since it does not require any personal and physical effort and is often acquired by immoral means as well (by prostitution, stealing, and lying, for instance).

Work is therefore conceived as being the best antidote to laziness and its disapproved outcome: becoming a thug ("wagdre"). Many producers recount how they entered the trade because they were failing in school and running the risk of turning into "gangsters" (see Herzfeld 2004:72). A young aluminum-smelter explained that although he was doing well at school, he was becoming a "bandit." To avoid this, he personally decided to quit school and look for an apprenticeship. Another young worker in the same aluminum-smelting shop criticized the kind of young men who drink tea all day long, without working. From morning to night they sit outside, spending 125 F CFA on drinking tea (a significant amount to him). To him, it is important to work so that one does not have to ask relatives for money all the time. Being idle and depending on relatives is thus perceived as shameful and contemptible as it goes against social expectations and moral values.

 $^{^{13}}$ "[Fo sã kienga] tenga to n wẽnga ligdi [...] ka soma ye." Moussa, aluminum-smelter. Fieldnotes, January 15, 2003.

¹⁴ "*C'est moi-même qui ai laissé. Mam da lebga bandit bala.*" Léon, aluminum-smelter, Zogona. February 4th, 2003. ¹⁵ Kieffer wrote an article about these young men who gather to drink tea in the capital city. He reported similar comments from older people who qualify these youths as being "lazy" and who "had better look for a job rather than sit and do nothing" (2006:70; my translation).

In producers' discourses, "not working" unavoidably leads to becoming a "vagabond."

During a period of low activity in Moussa's large aluminum-smelting shop, entire teams of pot-makers were sitting idle outside. The young men kept telling me that they had become "vagabonds." Even if there was no order for them to work on, they made a point at coming to the workplace every day. Staying at home was "not good." It was probably perceived as shameful for a man and head of the family to stay idle, not mentioning that no one wants to reflect too long on the dreadful prospect of not being able to meet his responsibilities. A young spring-maker commented that someone who has time (i.e. remains idle) will begin to think about the future and worry. That is why he likes to keep busy working: it means that there is money coming in and it prevents him from thinking too much. To him, someone who has "time" is "worth nothing." It is "not having time," in other words, being busy working, that is good for a "man." 19

A "lazy" apprentice (i.e., one that does not work "hard" or honestly) will thus be loudly condemned as being a "vagabond." For instance, Paul regularly scolded Idrissa, one of his apprentices, for being lazy ("ya kviima"). He complained that Idrissa wanted money but did not want to work for it. In his logic, his apprentice was doomed to become a "vagabond" or worse, a

¹⁶ "Tõnd lebga vagabond."

¹⁷ "Hã pa yiri, ka soma ye." Malik, leader of a production team. Fieldnotes, January 25th, 2003.

¹⁸ "Moi-même, j'aime le travail … parce que si je n'ai pas de temps je ne pense pas. Je travaille seulement. C'est ça que je veux. Si tu as le temps … – si tu as le temps tu penses, des fois même, tu as peur de l'avenir. Tu as peur. [Parce que] tu sais que, [pendant] ce temps que tu as la force là, tu n'arrives pas à résorber tous tes problèmes. Et quand tu seras un peu affaibli par l'âge, qu'est-ce que tu vas faire?" Alassane, spring-maker. Interview, August 26th, 2003.

¹⁹ "Si tu as le temps, c'est que tu ne vaux rien.. si tu n'as pas le temps là, c'est ça même qui est bon avec l'homme." Idem.

"thief." A few months later, Paul eventually dismissed Idrissa, telling him that he could "stay home." He commented to me that he was too "disrespectful" ("impoli") and "stupid" ("yalma").

Martin also had to dismiss his former apprentice as he was not respecting their informal contract. After learning the basics of the trade, the apprentice had begun to be negligent, not carrying out the orders that Martin was giving him. Even worse, he started to lie both to Martin – by pretending to go to a wedding to justify his absence, while he was actually playing soccer – and to his clients – by collecting cash advances from them to do an order that they had never asked Martin to do and not delivering the merchandise to them. Martin's clients eventually warned him that if he did not dismiss his apprentice, the latter would "spoil" his name.²¹ The tinsmith acknowledged the problem and asked his apprentice to "stay home."²²

Throughout all these discourses and experiences, we can clearly identify a semantic opposition between the way producers understand and contrast 'working,' 'not working,' and 'not working well.' The positive group (working/ hard/ effort/ sweat/ honestly) is explicitly opposed to its negative counterpart (not working/ lazy/ dishonest/ *vagabond*/ thug/ thief). ²³

These dichotomous values pervade Burkinabè society at large. Indeed, in a local newspaper, a recent article reported that people longed for social justice in their country. They were sickened by "people displaying their ill-acquired wealth, incompetent people being promoted, thieves

²⁰ "A pa rat tvm ye. A na yi wagdre... A data ligdi la a pa rat tvm ye." (He doesn't want to work. He will become a thief... He wants the money but he doesn't want to work." Paul, aluminum-smelter. Fieldnotes, December 24th, 2002.

²¹ "Si tu lèves pas ton apprenti, il faut savoir que ton nom ce sera gâté ... dans tout le secteur." Martin, tinsmith. Interview, February 20th, 2003.

²² "Aujourd'hui, je peux te dire, si tu pars [au] mariage, ... bon il faut rester à la maison. Le moment [où] je peux t'appeler, je vais t'appeler, tu vas venir [re]commencer le travail." Point. Ça c'est réglé comme ça." ("Today, I can tell you that if you go to that wedding ... well, you can stay home. When I can call you, I will call you [back] so that you can resume working [with me]. Period. [The problem] was solved that way" – Martin never called his apprentice back, it was a way of parting from him without tension. Idem.

²³ For the Baining of Papua New Guinea, "[w]hat distinguishes humans from animals is the fact that humans work; work, or "sweat," is considered the quintessential human activity" (Graeber 2001:69-70).

being honored, and people with suspicious morals being glorified."²⁴ Dishonesty is thus not socially condoned. These values undoubtedly influence what producers are ready to do to accomplish their goals and where they set the moral limits to what they can do.

Producing recycled goods and the notion of 'hard work.'

Producers of recycled goods evaluate their work in relation to the values that we have previously examined but also with regard to other professional occupations. This may result in some contradictory perceptions, but in general, producers are proud of what they do. In some ways, they are pleased to see themselves "working hard" and to know that not everybody is able to do what they do. A young tire-worker, commented that "if you are not courageous, you cannot cut tires" ("Fo sẽn ka tar courage, fo ka tõe tɒm pneu wãda"). He was implying that jobs were available but one had to be willing to 'work hard,' 'to sweat,' and to get one's hands dirty.

The physical aspect of their work is just too hard for other producers. As a young tinsmith acknowledged, they work with their "strength" ("tõnd tumda ne pãnga") and that can be "tiring" ("ya yamse"). A group of Dafing tinsmiths also admitted that their work was just too "hard" ("toogo") and "dirty" ("rēgdo"). They would readily abandon their activity to do something else if I could find them another job.²⁶

Producers often compare their situation to that of "commerçants" (traders) who, in comparison, do not work with their strength. One aluminum-smelter commented that artisans "work hard for nothing" because it is just a question of "luck" ("ya zu-noogo"). In comparison,

²⁴ Journal du Jeudi. 2005. "Politique blablabla. Le peuple ventriloque mettra sa voix aux enchères." Nº 726, August 18-24. http://www.journaldujeudi.com/fixe/fs_semaine.htm. My translation.

²⁵ Madi, tire-worker. Fieldnotes, September 2, 2003.

²⁶ "Fo sã pam toma to n song tõndo, tõnd na yik n pamame." Dafing tinsmiths. Fieldnotes, December 9th, 2002.

retailers ("commerçants") have an easier job²⁷ as they earn more than craftsmen do, selling goods for which they have not made any effort. In fact, they can even make more money from selling goods that they bought from artisans than the latter can from producing them (or so they believe)!²⁸

Yet, being an artisan has some advantages that they are also quick to discern. According to one, an artisan can never go bankrupt – unlike a trader. Even in times of difficulty, if one has a little money remaining, like a hundred or five hundred CFA francs, he can still buy a few supplies, make something out of them that can be sold for profit (*yõodo*), and be back on track. An artisan is like someone who has a "gold mine:" he can always get something from it and move on from there. But if a trader "falls," it is the end for him – unless God helps him – because he cannot make anything from scratch. ²⁹ He would have to reconstitute his financial capital before being able to buy a new stock of merchandise. ³⁰

Producers also compare their position to that of "fonctionnaires" (civil servants). Even if many envy the regularity with which they are paid – at the end of each month – and the fact that they have easier access to banking services such as loans, they often prefer their independence and the frequent cash earnings. Indeed, each time they sell a product, they receive cash, which they can spend to meet a need (buying another bag of rice, medicine, or paying the rent). A "fonctionnaire" would have to wait until the end of the month to get his paycheck and this is not

²⁷ "Nug toma ka pam ligd ye" ("artisanship does not bring any money"). Paul, aluminum-smelter. Fieldnotes, December 19th, 2002.

²⁸ "*J'ai vu que les commerçants qui achètent chez nous, ils gagnent plus que nous.*" ("I saw that traders who buy from us earn more than we do"). Martin, tinsmith. Fieldnotes, February 18th, 2003.

²⁹ "La hãn wa commerçant budu fo hãn lvi c'est fini [he rubs his hands]. Hã ka Wênd sõngre, fo ka le [yik] yase. Ah, bala fo ka nug-từm wey. Nug-từm soaba, ya wa ... ya wa ned h tara sãn-boko bala ... un trou d'or. Tu prends – chaque fois tu pars [tu repars] Nug-từmda ya woto. La hãn ya commerçant ka tõe yi woto ye." Abdul Wahab, tire-worker. Interview, August 27, 2003.

³⁰ This is, of course, not necessarily so, as a trader can begin by selling goods which he will pay once he had sold them.

advantageous. In addition, they know that they could earn at least the equivalent of the salary of a lowest-ranking civil servant, or more... if they did not have so many charges and unexpected expenses.³¹

In fact, producers know that they are better off than many other workers and they are not ready to give up on their assets. Comparing his position to that of a night guard, Rasmane, a tireworker, exclaimed that these two activities have "nothing in common." He could not live on a watchman's wage, which is way under his needs. ³² Indeed, tire-workers generally earn at least three times as much. I presume that they would also consider their work as being socially more rewarding.

Even though entering the trade was rarely a "vocation," producers of recycled goods still perceive their activity as a positive "opportunity," among other possible ones, "to survive, to make money, to start a trade, and to do business" (Leimdorfer 1997:130, my translation). In these tough, highly masculine environments, they find value in what they do, in displaying "sheer strength, endurance and courage" (Moorhouse 1987:242). Even though other professions have enviable advantages, they also acknowledge their assets and know that they are better off than others. As I will show, producers also value their activities for their capacity to fulfill the social expectations attached to their work.

aluminum-smelter/supplier. Interview, August 7th, 2003. My emphasis.

^{31 &}quot;A: Je ne pourrais pas vivre de la fonction publique... parce que j'ai de grands projets à réaliser avant de mourir... V: ça veut dire que le salaire d'un fonctionnaire n'est pas suffisant pour toi? A: pour moi, non. V: donc tu penses que ton travail actuel peut te donner plus d'argent qu'un fonctionnaire? A: ça ne me donne pas plus d'argent parce que je n'ai pas un fond de roulement. Si j'avais un fond de roulement ça allait nettement mieux donner.. plus qu'un fonctionnaire. Mais.. je ne baisse jamais les bras. Je me dis que un jour ça va aller." Ismaïla,

^{32 &}quot;Nug-tomde la gardien [toma] ka a yembr ye... depenses yida tusa tã kiug teka ... Ka nafr [mam]... ka ta mam daabo" (Being an artisan and a night guard is not the same thing... [My] needs (expenses) go beyond 15,000 F CFA per month (the average wage of a watchman) ... It's not profitable... I'm not interested). Rasmane, tire-worker. Fieldnotes, July 21st, 2003.

Earning enough to "eat" and meet social needs.

One of the major criteria that enable Burkinabè producers to assess their professional occupation is its capacity to feed themselves and their families. How much and how well they eat is thus a way of evaluating how much they earn and how well their business is faring. The relation between working and eating is developed at length through a wealth of idiomatic expressions, jokes, and sayings. For instance, an aluminum-smelter jokingly teased one of his chubby colleagues when, looking at his belly, he exclaimed: "He is a patron. He eats well!" 33 He even attributed him the nickname "Paul Pure," which comes from the fact that "he has a belly" ("a puga ya bedre"). By characterizing his colleague as a "patron," this producer was implying that he was wealthier than him, judging from his physical appearance.³⁵ But the reality was not that straightforward, as Paul *pure* seemed to be in a similar situation to Paul, sometimes having fewer orders and even buying aluminum refuse from Paul in order to extract more metal from it.

Alternatively, earnings are often referred to as "food money" ("dib ligdi") or "beans money" ("benga ligdi"), ³⁶ as Paul likes to call it. The latter was remarkably creative in his ways of talking about his earnings. To him, any profit was simply equivalent to food. In a particular instance, he hurried his apprentice to bring him water so that he could clean his hands and collect the money that a client was handing him. He exclaimed: "Hurry! There's food coming! Hurry

³³ This comment was pretty ironic as Paul himself has a belly. ³⁴ From p ve: rumen, paunch (for an animal) (Alexandre 1953).

^{35 &}quot;A va patron. A dita soma... A tara kamba wvsgo sẽ tvmda me a zinga." (He is a boss. He eats well ... He has a lot of kids working at his place). Paul, aluminum-smelter. Fieldnotes, December 19th, 2002. Paul often refers to food and eating as a sign of success. Not only for him but also in local standards, eating well and being pot-bellied are signs of wealth.

⁶Benga: a local dish made of red beans mixed with rice.

up!"³⁷ At another time, he asked an apprentice mechanic who was bringing a spare part to be repaired if there was "*food*" for him at the outcome. The apprentice clearly understood what was implied and replied that there were "*green bills*" awaiting him.³⁸

Earning well is thus equivalent to satisfying primary needs and meeting all the expenses necessary to daily life: eating, feeding one's family, paying for medical bills, and saving a little to face unexpected expenses. A recent newspaper article accurately summarized these priorities. Commenting on the upcoming presidential elections in Burkina Faso, the editor of the newspaper *Journal du Jeudi* reminded the candidates of people's priorities: having enough to eat, having a job and access to medical care, and seeing fewer socio-economic disparities between the wealthiest and the poorest. People expected politicians to tackle the issue of famine and enable them to "eat and drink everywhere and at any time."

In fact, these minimum expectations are not so low. They imply that one should earn enough not only to meet the primary needs of everyday life (in other words, to survive) but also enough to invest in social life and reach a desired social status. A decent lifestyle is one that allows workers to earn enough money to feed others: wife, children, and dependents, in addition to facing additional expenses pertaining to social life. If not, one is just getting by, surviving, but certainly not living.

This was the case of Hamidou, who confided in me that he was not earning a lot: it was

³⁷ "Wa ne, ya ribo. Man tao tao!"

³⁸ Referring to American dollars. (Paul: "Ah, si y a à manger là -bas... Y a à manger?" and the mechanic replied: "y a des billets verts." Paul: "Y a des billets qu'on peut mettre dans sa poche?").

³⁹ "The ideal program for some Burkinabè can be summed up in four points: food self-sufficiency, full employment, good health, and social justice. Development, growth rate, and leadership are all "blablabla" politics. People of a real country want something concrete" (my translation). Journal du Jeudi. 2005. "Politique blablabla. Le peuple ventriloque mettra sa voix aux enchères." Nº 726, August 18-24. http://www.journaldujeudi.com/fixe/fs semaine.htm

"just food money" ("Mam pa tar wvsgo ye. Ya dibo ligdi bala"). His income was not sufficient for him to get married (he had been seeing a girl for three years with no prospect of marrying her soon) or to go to bars and have a drink with other people. He was even reluctant to participate in conversation with people who were better-off than himself, as they would be talking about things that he was not able to purchase – thereby increasing his frustration. To remedy this situation, he was looking for every opportunity to diversify his income, developing his network of business relations to sell other types of metal.

When these minimum expectations cannot be met, there is a real concern and sometimes despair. One tire-worker deplored the fact that he did not earn enough money to feed his family adequately ("[Ligdi] ka sek ye, ka sek ye... Riba meng ka tõe pam n dit seka. Ayey!"). He was not asking to be wealthy but at least to be able to eat and take care of unexpected events such as a child falling sick. ⁴⁰ But if the market is slow and he is not able to sell his products, while he still has to take care of his wife and children, "what will you do?" ("comment tu vas faire?"). ⁴¹ This man, maybe in his late fifties, had reached a critical point: he found it harder to sell his tiresandals than before, especially since the central market (Rood Woko) had been closed after a fire had broken out. He was too old to learn another activity and he did not see what else he could do to keep supporting his family and facing his responsibilities as husband and head of a household.

Hence, work is important for providing individuals with the means to fulfill their social obligations and ambitions. Beyond personal resources in people (extended family and networks of friends and acquaintances), work is the major, if not the sole, source of income that these

⁴⁰ "Tõnd zi runda wa, tõnd ka baod ti arzeka ya wʊsgo ti ya... Ya fo .. pam n di, sã mik ti wala bãnga wa kiẽ, ah, bi fo toghỗ tipa." Abdul Wahab, tire-worker. Interview, August 27th, 2003.

⁴¹ "Karim (a young tire worker who was listening to our conversation): Fo hã tara neõd n kieng ragõ wa, ti kos ti hã ka ra... Abdul Wahab: ... hã ka ra! K: ... ti fo tara pagha ne kamba... AR: ... comment tu vas faire?" Idem.

heads of household have for meeting everyday needs and facing emergency situations. It is what establishes an individual as a socially reliable person, providing him with an identity and the means to invest in people and other types of wealth.

"When you have money, you are respected"

Working is thus an activity that is imbued with social meanings and expectations, which include and go beyond the basic reproduction of the labor force. The fact that a working man⁴² has the means to meet these primary needs, gives him a recognized status and identity within the community. He is identified as someone responsible and reliable, who can meet socially defined responsibilities and expectations such as founding a family and taking care of it, participating in community events such as festivals and ceremonies, getting involved in decision-making processes, acquiring a certain amount of material wealth (i.e. clothes, houses, cars), or sending his children to school or finding them apprenticeships. Through work, the social value of the whole person is assessed.⁴³

Questioned about what he meant by "being well" ("être bien"), a spring-maker explained: "To be well is to have money. When you have money, you're well! Yeah. You're respected. If you don't have money, you're not respected." Then he wittily added, "what, it's not the same thing

⁴² I focus on men as this is the population targeted in this research project. However, this argument is also true for women, cross-culturally. Women are active participants in gain-generating activities and increasingly involved in wage work and other economic activities (see Leimdorfer 1997: 166-67).

⁴³ See Guyer, who gives the example of the Igbo ranking of people according to their wealth. "[M]oney was converted into position at regular quantified intervals" but it was also converted in different kinds of wealth: "in followers, alliances, the breadth and prominence of one's social networks" (2004:69-70).

⁴⁴ « Être bien c'est avoir l'argent! Quand tu as l'argent tu es bien! Ouais. Tu es considéré. Si tu n'as pas l'argent tu n'es pas considéré. » Alassane, spring-maker. Interview, August 26, 2003.

in your country?"⁴⁵ Even if he acknowledged that he could be "happy" (heureux) without money, social pressure – particularly from his wife – made it imperative for him to seek money. "She will see people who can do [something] and she will tell you that 'ha, you'd better find a way to do that [too]!"⁴⁶ Working to "make money" is thus about "being well."⁴⁷ "The reverse is true as well. Without money, one loses people's respect, beginning with oneself. The pressure to satisfy social expectations is all too real for these producers and family heads.

Lacking money brings shame and anxiety, sometimes resulting in sickness. Malik for instance, had been suffering from a stomach ulcer for a while because of financial and marital worries. His divorce brought shame and despair for him as he had not been able to marry another, 'decent' wife yet. All of this pressure, sometimes self-imposed, greatly contributed to developing an ulcer. His illness added to his worries, as the treatment cost him a lot of money and as it has hindered his work. Due to the pain, he was not able to produce larger pots anymore. Another example was when several of Moussa's workers were unable to buy a sheep for the Tabaski festival because of a period of slow activity. It was a real concern to them and they were discussing ways to participate honorably to the festivities. As a way of saving face, the boss loaned his workers some money on the day prior to the feast so that they could make a decent

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⁴⁵ « Ou bien, ce n'est pas la même chose chez vous? » Alassane, spring-maker.

⁴⁶ « ... il faut avoir une femme compréhensive, sinon, quand tu n'as pas l'argent là [...] on va te traiter d'un bon à rien, or que ça fait mal au cœur, quand tu vois que tu te débrouilles, que tu n'es pas en mesure de faire ceci cela et puis, elle, elle va voir des gens qui peuvent faire ça et elle te dit que "ah, que toi aussi tu n'as qu'à te débrouiller pour faire ça! »

⁴⁷ "Les gens veulent l'argent pour être bien" (People want money to be well). Alassane, spring-maker. Interview, August 26th, 2003. I believe this to be true all over the African continent. Guyer notes similar values in Nigeria: "Children, health, and money are grouped as a threesome of necessities for the *good life*, but their prioritisation and the interaction of investments in each one are contingent" (2004:119; my emphasis). And Leimdorfer writes that in Abidjan, Côte d'Ivoire, "faut l'argent," ["[one] needs money"] is a recurring phrase [...] during the years of the crisis" (1997:155; my translation).

⁴⁸ Tabaski or Aïd festival which represents the sacrifice of Abraham's son, Ismaïla for the Muslims. Each year, they celebrate this festival by sacrificing a sheep.

contribution. They would reimburse him later, when the market would improve (see chap XV).

From these examples, we can see that work, as an economic and social activity, is fundamentally embedded in the larger scheme of life (Godelier 1980:903). Money is a medium to satisfy a whole variety of social relations and to generate different kinds of wealth. Generating economic gains is therefore critical for these producers of recycled goods. However it is not an end in itself. Work is also about generating social gains.

Values at work: shaping and giving meaning to work practices

As much as Western, neo-liberal values have influenced the way scholars and development agents have approached economic activities, the way Burkinabè perceive their work greatly influences the way they organize it. Graeber argues that value is "the way people represent the importance of their own actions to themselves [...] reflected in one or another socially recognized form" (2001:47). It does not originate in the forms in which it is expressed but in "the *meaning* of the various acts of creation, consecration, use and appropriation, and so on, that make up its history" (2001:114, my emphasis). In other words, value emerges in action. By observing what people do and how they talk about what they do, one can identify not only what they value but how these values are developed and change over time. In addition, what people value influences and brings light to what they do and why they are doing it. As Joyce stated, there is an "interrelation" between discourse and practice, discourse being "simultaneously material and cultural, a way of doing things and saying things" (Joyce 1987:12).

This overview of the producers' expectations from their professional activities begins to reveal some of their motivations, priorities, and values – both socially and individually defined –

which I will examine throughout this study. What is at stake in these economic activities is not only to generate economic gains but also to obtain social gains. These producers are concerned about making money, but also about acquiring greater assets than money itself such as marrying and having children, being a responsible and reliable husband and household head, meeting dependents' needs, "being well," acquiring material symbols of 'being well' (i.e. a motorcycle, a house, a television set), or fulfilling future projects and dreams (opening a shop, going to "nasaar tenga," literally, "the land of the Whites").

Understanding these values is essential to making better sense of the producers' production strategies, management and accounting modes, in addition to discerning the challenges, contradictions, and sometimes frustrations that they may encounter. Indeed, what you value is what you are ready to work for, to spend time, money, energy, and social resources – even if it can sometimes be painful. If an artisan values social prestige more than the economic expansion of his activity, or if social obligations have more weight than his personal success, it will show – in his behavior and priorities, in the way he manages his time, organizes his work, and reinvests his money.

One revealing example, to which I will return later, is that of Paul, an aluminum-smelter, who complained several times to me that he was not making enough money to save. A few weeks earlier, he had complained that he had no means to produce enough pots to hold a stock and readily provide a pot to a client. Yet, even though he wished he had more money to buy more aluminum supply and be able to secure a convenient stock of goods, he did not consider it realistic to put money aside regularly (in a savings account, for instance). It would just take too

⁴⁹ He commented that "ya talga" (we're poor), explaining away his inability to build up a stock of products.

much time for him to accumulate the necessary amount of money ("If I save money, it won't go fast. It will take too much time – even two years. I have not [even] tried"). ⁵⁰ In addition, if the market were not good, he would have to draw from his savings to feed his family and end up by "eating" all of his savings. ⁵¹

Yet, I later discovered that Paul had, in fact, a saving account in a credit union, but this was not for business purposes. These savings were entirely to be used for social means: paying for younger siblings' and his own daughter's school fees or contributing to some events in his village community, for instance. The very month of this particular interview, Paul had actually spent 40,000 F CFA of his savings to go back to his village and attend a funeral.⁵² This money was used to pay for his bus fare and the remainder was given to his relatives back home. Saving some of his income was thus planned in order to meet social obligations and gain recognition but not to improve his business. Paul actually confessed that he had never *thought* of putting money aside to acquire a larger amount of aluminum. It was far out of reach for him.

This example reveals how socially recognized values frame what producers can and cannot do. They set social expectations that these men 'ought to' fulfill if they do not want to breach an invisible, yet very tangible, rule. While producers take pride in being able to meet these social standards, the latter can also curtail their personal aspirations. Marie saw in these contradictions the rise of an African version of individualism, "combining processes of individualization and re-composition of community solidarities" (1997:8). Away from their village communities and

[&]quot;Sã bĩngda ligdi, ka na pam tao tao ye. Na kaosame [tõe ta yuma a yiibu]. Na ka mams ye." (Lit. If I put some money aside, it will not grow [accumulate] fast. It will last – it can take up to two years. I have never tried [or I have not tried yet]). Paul, aluminum-smelter, Patte d'Oie. January 28th, 2003.

⁵¹ "Fo tõe bĩngame, ti raag ka be, ti fo rik n di" (you can save but if the market is not good, you will take [your savings] and 'eat' them). Paul, aluminum-smelter, Patte d'Oie. January 28th, 2003.

⁵² About U.S \$62, more than the salary of a low-rank civil servant (35,000 F CFA) but about 12 percent of his monthly income (based on his earnings in January 2003).

fending for themselves in cities offering new opportunities but little protection, people recreate new types of community solidarity, while transforming old ones and re-defining their position as individuals.

The aim of this chapter was to examine the underlying values that sustain people's motivations to work. I also alluded briefly to some key issues that will be considered in greater depth in the latter part of the thesis, such as the producers' self-perceptions in relation to money, success, and poverty. In doing so, I established some provisional findings that will shed light on subsequent parts of this thesis. Bearing these considerations in mind, I will now examine the way in which these producers organize their work, looking at the technical, managerial, and economic aspects of their activity.

Chapter VII. Work Organization: Key aspects of the Production of Utilitarian Objects from Scrap Material

Production consists of "the act or instance of the manufacture of things (broadly conceived) from a set of raw materials (again, broadly conceived): that is, the act of bringing things into existence" (Dilley 2004:799). According to Godelier, the relations of production consist in "relationships [...] among individuals, which take on one or the three following functions altogether: to determine the social form of the access to resources and control of the conditions of production; to organize the work processes and allocate members of the society among these processes; [and] to determine the social form of circulation and distribution of the products of individual or collective work" (1984:31; also 1975:94-95, 98-99, 120). These aspects are pertinent to my analysis of these workshops that transform scrap materials into utilitarian goods. In this and the following chapters, I will examine how these factors interact in order to show how the work of these producers is organized around economic, technical, and social concerns and constraints.

The 'artisan logic:' comprehensive knowledge and hidden competence¹

According to Schwint (2002), the type of knowledge that frames and sustains these workshops' organization is all-inclusive. This is what explains the persistence of artisan production in relation to the industrial sector and the social and symbolic satisfaction that craftsmen draw from it. The artisan's production knowledge forms a "totality" that should not be

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¹ From Schwint (2002). All translations are mine.

artificially divided between knowledge and know-how. Schwint defines the "technical knowledge of production" (*savoir technique de fabrication*) as "the ensemble of knowledge necessary for the production of objects, from the conception of technical operations to their execution" (2002:16). It is theoretical and practical at the same time and includes both thoughts and actions, acquired knowledge and knowledge in action. For that reason, the "processes of production," "conception and execution" stages, and "theory and practice" should not be separated (2002:191-92). Craftwork is thus all-encompassing (*entier*), carrying out all the phases from beginning to end, varied and complex, "associating the eye, the mind, and the hand into skills slowly acquired through experience, and which can only be passed on through it" (2002:16).

Schwint explained that there is "efficacy" (efficacité) in the artisan's knowledge and this efficacy is three-fold: technical, economic, and social. "The technical efficacy resides in [the artisans'] ability to find solutions that are best adapted to their situation, to find 'tricks' (combines)," that is, ingenious ways to solve a technical problem or bypass their limited resources. The concept of 'trick' in the artisans' discourses is very much "the indigenous category for competence." A good craft worker is qualified as being "'crafty,' 'artful'" (2002:53, emphasis in original). This technical knowledge contains "economic" as well as "social efficacy", as artisans find in all the aspects of their work ("physical, social, ethical, and symbolic") key elements to fulfill their interests in it (2002:17). They take pride in being independent, in being "their own boss," fending for themselves (se débrouiller par soi-même),

² "[Un bon artisan est] "astucieux,' 'combinard'." Herzfeld wrote that "in many cultures of European origin, people associate the idea of manual artistry with cunning and subterfuge." "Artisans" rhyme with "artifices" and "craft" with "craftiness" (2004:1). Interestingly, the English term "trick" encompasses all these meanings.

mastering their craft, and owning their knowledge (2002:193-94). Thus, there is a symbolic dimension to their work, as the artisans enjoy giving life to matter and providing services to society – in other words, being useful (2002:194-95). Schwint believes that it is this comprehensive nature of the artisans' work that provides artisans with satisfaction, social status, and power and explains why only a limited number of craft shops grow into industrial enterprises (2002:196).

To sum up, craft knowledge is of a distinctive type. It resembles that of the *mètis*, this practical and crafty intelligence described by Détienne and Vernant in ancient Greek society.³ It is an "attitude, [a state of] mind, which allows the individual to adapt to a difficult and unstable context" (Schwint 2002:141). It is an all-encompassing, *in situ* type of knowledge, "inductive and experimental, an art of combining [which mixes] creation, association, anticipation, getting by (*la débrouille*), cunning, and 'magic'" (2002:139). According to Détienne and Vernant, the *mètis* implies an "opportunistic sense" and a "long-acquired experience," which apply to "fleeting, moving, disconcerting, and ambiguous" realities, "which do not lend themselves to precise measure, exact calculations, or rigorous analysis" (Détienne and Vernant 1992 [1974]:10 *In* Schwint 2002:140). Indeed, in many ways, the artisans are able to adapt to changes "in materials, in goods produced, in clientele, but above all, in techniques" (Schwint 2002:29).⁴

In using the notion of *mètis*, Schwint rejects the Western way of thinking that arose in the seventeenth and eighteenth centuries, separating the mind from the body, the intellect from the manual, knowledge from know-how, and the artist from the artisan (2002:153, 156). In the same

³ See Détienne, M. and J.-P. Vernant. 1974. Les ruses de l'intelligence. La mètis des Grecs. Paris: Flammarion. Also see Herzfeld (2004:1) and de Certeau's notion of "*tactique*" (1990:XLVI-XLVII, 60-63).

⁴ See Lévi-Strauss's notion of bricolage (1962:30-1).

line of logic, scholars and philosophers have made a distinction between "exogenous" knowledge, "exterior to the daily and tangible experience of work" and "endogenous" knowledge, "internal to the experience and situation." The concept of know-how (savoir-faire) took an informal spin, believed to be "intuitive, off norms [...], less rational and less formal" (2002:168). Following Détienne and Vernant, Schwint questions "the radical dichotomy between being (l'être) and becoming (le devenir), the intelligible (l'intelligible) and the sensitive (le sensible)" which is the foundation of Greek philosophy since Platon (Détienne and Vernant 1992:11 In Schwint 2002:184; see Applebaum 1995:48-9). Since then, "change, chance, and bias have been excluded from legitimate knowledge" (2002:184). This primacy of "discursive intelligence" has become a hindrance, preventing us from 'seeing'" (Cornu 1991:85 In Schwint 2002:184). The notion of the *mètis* allows us to "reintroduce all of the aspects which our mode of knowledge had rejected ... [and] reintegrate in our perception of the world the body, the objects, [and] nature. [It helps] think differently on a mode close to the *mètis*: [encompassing] diversity, plurality, [and] wholeness (mixité, pluralité, globalité)" (Schwint 2002:190; see Herzfeld 2004:124-5).

Schwint's proposition of a comprehensive type of knowledge does not apply to artisans' knowledge in particular but to knowledge in general. Along the same line, Keller and Keller confirm the "crucial role of visual, kinesthetic, and aural imagery in reasoning" (1996:130). They emphasize that "non-verbal reasoning" is essential to both conception and execution processes and that "thoughts may actually occur to people most often in nonlinguistic form,

especially when they are involved in making something" (1996:130). Using the case of ironworking, they show that "knowledge is both constructed and applied, while practice is simultaneously governed by that knowledge and creative" (1996:14). In other words, there is a dialectic between the two and conceptually separating them would be a real impediment to our understanding.

I believe that an approach to knowledge as both theoretical and practical is fundamental to understanding the organization, meanings, and goals of these production activities in Burkina Faso. Yet, I also wish to argue that the dialectical relationship between the mind and the body is not specific to craft production or to non-Europeans, or even Africans. Knowledge is everywhere the result of an ongoing, dialectical process and my analysis of these producers' work organization is an attempt to include these two dimensions (theoretical and practical) as inseparable entities.

The organization of production: a conceptual as well as practical process

What I attempt to show in the remainder of this chapter is that the work of these producers of recycled goods is fundamentally organized and conceptualized and it takes into account such economic factors as productivity. As Schwint states so well, when receiving an order, the artisan "will envision the entire system of production, taking into consideration his stock of machines and tools. He envisages the different operations to carry out, that is the precise organization of the production process: the machines and tools to be used, the entire manual approach, and the

⁵ Along the same line, Bloch argues that "much of knowledge is fundamentally non-linguistic" and that "concepts involve implicit networks of meanings which are formed through the experience of, and practice in, the external world." He explains that "under certain circumstances, this non-linguistic knowledge can be rendered into language and thus take the form of explicit discourse, but changing its character in the process" (1991:186). See also Herzfeld (2004:25-6).

different materials to be used" (Schwint 2002:52). Since the artisan needs to produce a certain quality of work in a minimum amount of time, his goal is "to find the best production processes, trying to eliminate some steps and go faster without affecting the quality of the product." In addition, since he does not have ample financial means, his techniques must be cheap. There is thus a "double tension" that the producer has to deal with: "that of time and that of costs. [He] has to produce as fast as possible and at the cheapest costs in materials, in tools, [and] in machines" (2002:52).

Schwint identifies two main procedures of conception of the production process. If the product to be made has already been produced, the artisan will just "copy" it and reproduce the same process. But if it has never been manufactured, he will have to create a new system of production, drawing from his specific means of production and from his prior knowledge (2002:53). In fact, these two conception methods are frequently combined, as "reproduction and creation always coexist" – one often predominating the other, depending on the object to be produced (2002:53). Duplicating a previous plan of production enables the artisan to use his "accumulated knowledge" (savoir accumule) and in doing so, to reduce the initial work of conception. The artisan only has to adapt to fit changing circumstances. If a client asks for a new object, the artisan will often request to see a sample in order to understand how it has been conceived and be able to "reconstitute the different stages of its production" (2002:55). He is thus performing a "technical reading" of the object, appropriating the system of production for himself (2002:56).

Experience is central in these processes. Schwint summarizes by saying that "creation is the result of a confrontation between the theoretical and practical capacities of the system of

production. Experience [...] is transformed into a knowledge [that is] structured and formalized enough to be drawn upon during the conception [phase of] the production [process]. It is knowledge in store (savoir stocké)" (2002:57). It is also important to remember that the conception of the production process continues during the making of the product, through "experimentation" (2002:58). Keller and Keller made a similar observation regarding the work of the ironsmith, saying that "[m]aking something [...] is a process of gradually specifying the product both mentally and materially in the very act of producing it" (1996:118).

In addition to technical and economic factors that are taken into account in the conception and carrying out of the production process, there are also aesthetic and stylistic aspects — especially for a first creation. Keller and Keller remind us that "[m]ental images of line, proportion, contrast, elegance, and simplicity [may] also [be] brought to bear" (1996:113). According to them, these various criteria (technical, functional, commercial, aesthetic, and stylistic) all constitute some "influences on design rather than determinants of outcome [...] [which] had to be assessed and reassessed as it [takes] material form" (1996:117, 123). Producers thus work with a series of images, "visualizing a goal, seeing the procedures for its creation in an imaged form, and acting on that plan with a mind open to alterations of the image and innovations in form. [...] Handling these multiple images is difficult for a beginning [artisan] but becomes easier as experience is gained and, perhaps, images become ingrained" (1996:157-158).

Keller and Keller assert that a shop is "an expression of [an artisan's] knowledge of his craft" (1996:60). Following their lead, I show in this section that the organization of these Burkinabè producers, "far from being arbitrary, embodies the potential for productive activity and as such is a material realization of [their] expectations and anticipations regarding future work" (1996:61). In looking at "the physical arrangement of the work space," we can identify the "basic principles of a worker's stock of knowledge and ... [the] specific techniques and recipes for production" (1996:86). In the way he organizes his tools and workbench, the producer verily "builds the environment in which he works" (1996:60).

How have these producers of recycled goods organized their workspace? First of all, it is worth noting that they all have a workspace, spatially and functionally distinct from any other space. Almost none of them work in their home or compound: only three out of sixty-six workshops that I identified in the city worked inside their compound and they were all aluminum-smelters. All of the others (aluminum-smelters, tinsmiths, tire- and inner-tube workers) had built or were renting their workspace in marketplaces, along business streets, or even in residential areas. Yet, even those working inside their compound had built a space separate from the living quarters. Work is thus clearly conceived as a distinct activity, which needs its proper space – especially as the activities are quite noisy and dirty (see photo. 1-7).

Secondly, their workspace is a place of order. Arriving early in the morning, before the workers arrive, one will always find the place cleaned up and in order. Raw materials and tools have been put in a storage room, a wooden trunk, along the walls, or in slots under or over the



Photo 1. Dafing tinsmiths, near Baskouy Dam

Photo 2. Tire-workers, Cité An II market





Photo 3. Tinsmith, along the airport wall, Patte d'Oie



Photo 4. Aluminum-smelter, business street, Patte d'Oie



Photo 5. Tinsmiths out in the field, Tanghin

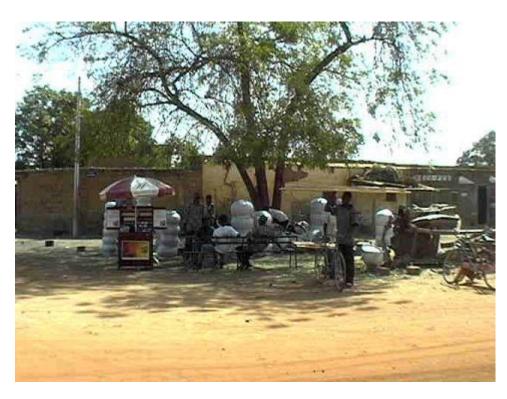


Photo 6-7. Aluminum-smelter, outside and inside the workshop, Zogona.



thatch-roof of the workspaces. Items of refuse have been collected and put aside for another possible use or thrown away in the street where they will be burned the next day or picked up by some passers-by who can find a use for them. For instance, when he comes to work in the morning, Paul always has his youngest apprentice sweep the place, inside and outside the workshop, to remove any useless wastes and the litter and dust that have been blown by the wind. He then makes a little heap out of it, on the edge of the street, and burns it.⁶

Likewise, all the aluminum-smelters end their working day having their youngest apprentices clean the wooden frames they used during the day to make pots of various sizes, removing the sand that stuck onto them and putting them back in place. Then, they put the metal molds in order, put the sand back into a heap and wet it so that it remains moist enough until the next working day. Tinsmiths and rubber-workers also maintain their place as tidy as possible when working in an open space. Of course, the purpose is not that these spaces be spotless. However a minimum of order is required to maintain an efficient production process and a certain quality of work. Indeed, aluminum-smelters need to keep the ground where casting is made swept clean so that no impurities will spoil the castings by making holes.

Lastly, these workplaces are functional spaces. Whatever the size of their shops, producers have distinct places for carrying out the production process itself (or even different places for different tasks to be performed throughout the production phase), for the storage of tools and supplies, for the storage and display of finished products, and for clients or visitors (see fig. 1, 2,

⁶ Since the city garbage-collection system is quite inefficient and overwhelmed by rapid urbanization, people burn their wastes themselves, almost on a daily basis.

and 3). The majority of the surveyed producers keep their equipment inside the workshop itself, but a significant number (43 percent) do have a separate storage room.⁸ In both cases, the building is often secured with metal doors and shutters which lock. Only two tinsmiths keep their materials in a neighboring truck garage, out in the open, but the latter is guarded at night by a watchman. Of course, this proportion varies across the four activities. The majority of aluminum-smelters and tinsmiths (56 percent each) have a storage room separate from their workshops where they can keep their sizeable and heavy metal supplies and finished goods. In contrast, rubber-workers do not need so much space. None of the seventeen rubber-workers⁹ represented in my sample had a room to store tools, supplies, and finished goods, except two inner-tube workers who rented a shop in a marketplace. All of the others, settled in Cité An II market, rent open stalls which do not have any locked room. Since their materials are not bulky, they simply store them in a wooden trunk or in some metal boxes hidden under their pile of inner-tubes or tires. At the end of the working day, they cover their supplies and goods with cardboard, plastic or jute sacks, tied with elastic straps or secured under a wooden bench put upside down. They do not worry about their equipment being so easily accessible to thieves since the market is guarded at night.

In addition to the working space where the production process takes place, producers often have an extra space in front of their workshops to display their goods or put their additional supply and tools. It can be a simple shade, consisting of wooden poles and a thatch roof extending their shops or it can be directly out in the open. Since few of them have signs to

⁷ These figures are not to scale. They only aim at sketching their functional organization through space.

⁸ These data come from an inventory that I carried out from a sample of sixty workshops (27 tinsmiths, 16 aluminum-smelters, and 17 rubber-workers). For the detailed results of this inventory, see Appendix B.

⁹ I use the term rubber-workers to designate workers who work with tire, inner tube, and/or inner liner materials.

identify their shop, the display of finished products is a strategic way to advertise their activity. This outer space is the place of most interaction with potential clients, visitors, or passers-by.

Often, it is also the area where goods are completed and perfected, especially in aluminum-smelting.

It is noteworthy that producers are ready to invest in their workplace, in the buildings and facilities, in addition to making sure that they are located in a strategic place to be visible to their clientele. The vast majority of the producers are located in business areas: in specialized marketplaces (especially the rubber-workers: eighty-two percent and tinsmiths: twenty-six percent), near a marketplace (aluminum-smelters: forty-four percent and tinsmiths: twenty-two percent), or along a business street (about one-third of aluminum-smelters and tinsmiths). Only a minority of them have settled in residential areas or even in a field in one of the peripheral neighborhoods of the city. Except one trunk-maker, these are mostly tinsmiths or aluminum-smelters located in old smith neighborhoods (*Tanghin* and *Saaba*). More than half of the producers rent a workshop in the city (fifty-two percent), as they want to establish themselves in business areas. Most tinsmiths own their shops (sixty-seven percent) while most aluminum-smelters (sixty-nine percent) and rubber-workers (ninety-four percent) rent them. For that reason, most of them (eighty-eight percent) do not live in the same neighborhood as their workplace and have to ride their bicycles or mopeds to get to work.

Due to these economic priorities and constraints, producers who rent their workshops (the majority) spend more money, in the long term, than those who build their own. Indeed, in my

¹⁰ One aluminum-smelter is located in a more recent neighborhood near the University of Ouagadougou. But he is not too far from a business-area and sells mostly to retailers who know his location.

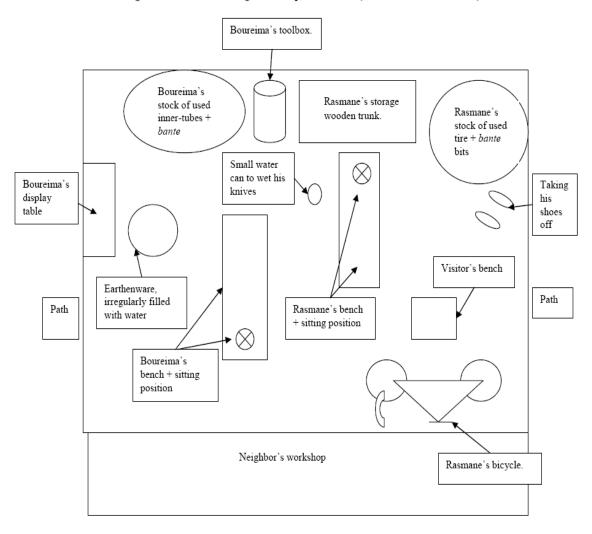
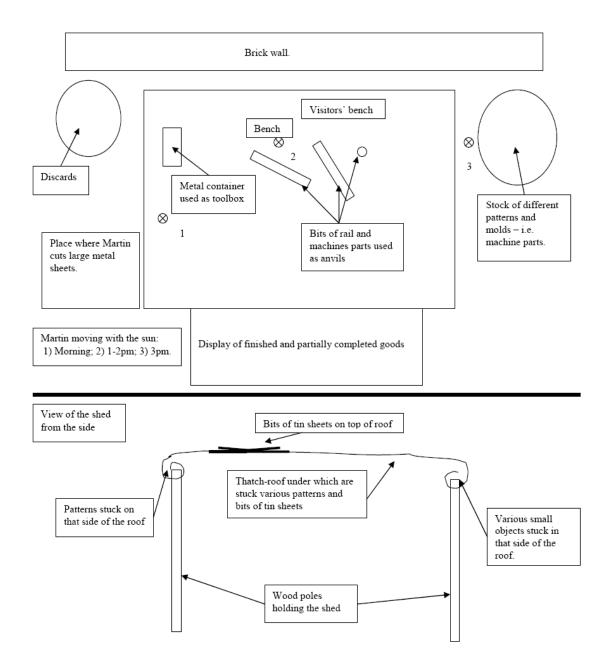


Figure 1. Rubber-working workshop, Cité An II (Rasmane and Boureima).

Figure 2. Tinsmith's workshop, Patte d'Oie (Martin) – views from above and from the side. (see photo. 6)



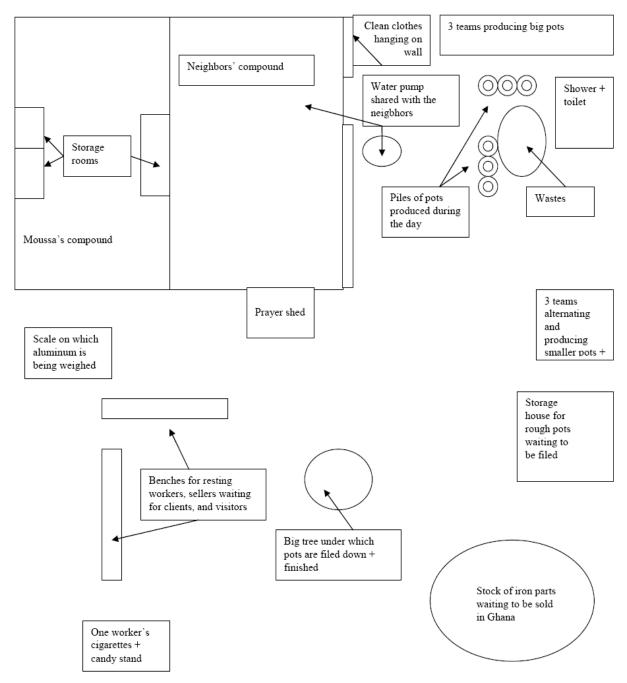


Figure 3. Overall view of Moussa's aluminum-smelting workshop, Zogona (see photo 9, 10, and 11).

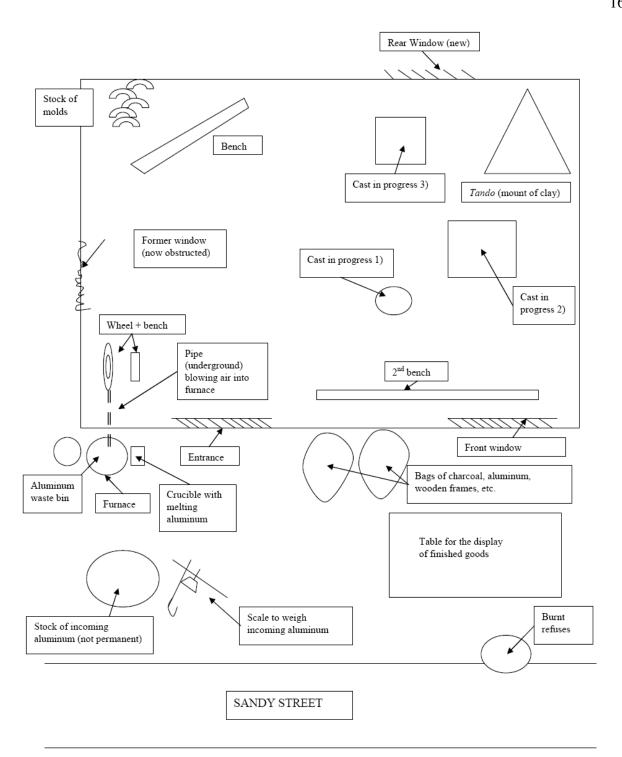


Figure 4. Aluminum-smelting workshop, Patte d'Oie (Paul) (see photo 7).

sample, rental costs range from 500-600 F CFA for a stall in a public marketplace to 3,000-5,000 F CFA a month for a private shop, depending on its location and the type of construction. At the extreme end of the scale, Moussa, the owner of the biggest workshop of aluminum-smelting in Ouagadougou rents a compound – where he built up to six furnaces – for 15,000 F CFA a month. In contrast, those who built their own workshops are the ones who invested the least money in them. The majority (fifty-seven percent) spent approximately 5,000-6,000 CFA francs to build a simple shed from wooden poles with thatch roof, which they have to replace regularly. The others, mostly tinsmiths (thirty-one percent), have built their shops with used galvanized sheets and pieces of wood and the rest have either acquired them already built (thirteen percent) or made them with mud-bricks (four percent) or cement (four percent).

In many ways, these producers have established a separate space for their professional activities. It is a place they have invested in, designed to be functional for production activities, and strategically located for marketing purposes. Some would like to improve it 'for the clients' but do not for lack of money or for fear that thieves might help themselves or that the police may ask them to move at any time. Others are not concerned about their space provided that it is functional enough to carry out their activity.

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¹¹ A total of 23 workshops out of 60.

¹² I do not have an estimate of the costs of these types of construction. The ones made of used tin sheets and wood must probably be around the same costs as those made of wood and thatch-roof. Those made of mud-bricks or cement amount certainly to much more than that, as they are also covered with a tin roof. As an informant told me, a 20-tin sheet house costs around 500,000 F CFA, one can estimate that a small workshop of about 4 tin-sheets would cost around 100,000 F CFA or less, depending on the materials.

Work time and time at work: producers' temporal organization of work

Schwint notes that "the artisan has drawn a number of work values from peasant culture: a spirit of independence, the value of [their] heritage (*patrimoine*), family work, the culture of effort, a certain freedom in organizing their time, [and] the place of work in daily life (no holidays, long days)" (2002:33). This also applies to these Burkinabè producers, many of whom were farmers or come from peasant families. Most of them work at least six days a week and often seven days, especially among Muslim workers. The latter rest on Friday afternoon, after the one o'clock-prayer, but often work on Sundays, carrying out pressing orders or merely opening their shop for potential clients. Christian producers (catholic and protestant), in contrast, close their shops on Sundays to go to church and rest.

Producers work long days, from ten to twelve hours a day. They usually come to their shop around seven o'clock in the morning and only leave by five or six o'clock in the afternoon, at sundown. Yet, they do not necessarily begin production work at seven. They often take the time to greet their colleagues and neighbors, drink coffee, tea, or even eat breakfast from a street vendor, before getting down to work. Often, they do not begin working until half past seven – eight o'clock. Their next break will be at lunch time, between noon and one o'clock. Being away from their dwellings, nobody goes home to have lunch. Rather, they all buy a dish from a nearby street vendor and resume working five to fifteen minutes later. Practicing Muslims also interrupt their work to fulfill the afternoon prayers (1:30pm, 3:30pm, and 6pm) on a mostly regular basis. Yet these breaks rarely last more than fifteen to twenty minutes, more rarely half an hour.

Work rarely stops because of sickness. For many reasons, and not only financial ones, producers hardly ever stay at home because of an illness or an injury. For instance, Martin had a

whitlow on his left thumb for approximately a month. It impeded his work as he could feel the pain while hammering the iron sheets. He was not able to perform certain tasks or produce some goods that required working on heavy metal sheets and he could not work as fast as he wanted to. Yet, he did not interrupt his work to see a doctor or rest at home until it healed. He bought some pain relievers from a street vendor, protected his finger with a band aid, and carried on with his work, thankful that it was his left hand that was injured and not the right one. Likewise, unless it is a "very serious disease that makes you stay in bed," all producers will keep coming to work, whether they have malaria, fever, headaches, or backaches. Martin believes that it is a question of "courage" and not of money.¹³

Yet, many do come to work to preserve their business as well as their honor. When he had malaria, Paul came to work and slept most of the time, lying on a bench in front of his neighbor's shop. He relied on his apprentices to run the workshop and complete the orders. While the crisis lasted four days, he was not ready to stay at home during this time: he took some pills and a "small Guinness" beer and "it was over." Staying home "would have worsened it." In addition, he added, "if you stay home, who will feed you?" Malik too, a team leader in Moussa's workshop, continued to work despite a painful stomach ulcer. Due to the pain, he was not able to make large-size pots anymore and his team was now making slightly smaller pots. Staying at home was not an option for him either, as he had many responsibilities and it would just have aggravated his health and worries.

All in all, only a few workers had to stop working or even change activities because of health problems. They were mostly apprentices or workers in aluminum-smelting workshops

¹³ Interview, August 18, 2003.

^{14 &}quot;Fo sẽn pa yiri, anda na kõ fo dibo?" Paul, aluminum-smelter. Fieldnotes, August 12, 2003.

who injured their back because of lifting too heavy weight. Jacques, Paul's fourteen-year-old apprentice, had to stop working at his workshop after a little more than a year because of eye problems. It was apparently not linked to the aluminum-smelting activity, though the fumes coming from the furnace certainly did not help. If producers may take some days off for other reasons, sickness and injuries are rarely an impediment to maintaining the workshops running.¹⁵

Yet, these long workdays and few days off do not make these producers 'workaholic.' As Dilley (1986) observed in weavers' time management in Senegal, there is a great deal of irregularity at work. ¹⁶ During an eleven-day period, he recorded the number of hours worked per day and noted that work was frequently interrupted for various reasons, from technical to social: the loom was broken and had to be fixed, weavers had to go to the market to buy supplies or to the village for some reason, they were sick, or the "wife ran off, went in search" (1986:143). But when they were able to work an entire day, they could work up to twelve hours.

Similarly, the work of these Burkinabè producers is frequently interrupted. Independent workers not only carry out the production process, but they also deal with clients coming to order, visitors stopping by, individuals coming to sell supplies, or street vendors passing by from whom producers may buy some snack food or drinks. When supplies are running out, producers also interrupt their work to go to their suppliers, riding their bicycle or moped, in order to buy additional raw materials. When they are out of change, they go to ask their neighboring craftsmen and traders for change in order to return it to their clients. All of these tasks surrounding production fundamentally pertain to their work. But if an artisan has apprentices, the latter will perform most of them while he continues the production process.

¹⁵ See chap. XV.

¹⁶ See the Appendix 1of his article: A survey of weavers' incomes (1986: 143-44).

In Moussa's aluminum-smelting shop, work is specialized even further and the labor force is much more important. The production teams work ceaselessly from about seven in the morning to two o'clock in the afternoon, until they have produced the required number of pots for the day. After that, they shower, rest, or produce on their own account, if they can.

Meanwhile, the boss and his 'assistants' are sitting outside, handling the delivery of orders, the reception of supplies, and the bookkeeping. Next to them, several young men wait for clients to collect their orders, carry out their own activities, and leave the workplace from time to time to meet with suppliers and clients. Finally, another team with flexible working hours files and finishes the rough castings that come out of the production area. All of these people stay on the site from about seven or eight o'clock in the morning to five or six o'clock in the afternoon.

To sum up, even if they stay long hours on their work sites and if their time is primarily focused on production activities, these producers do not strictly separate their work time from other non-production and social times. Work is being done and the orders are being processed and most of the time, delivered on time. Often, they continue to work while eating a snack, chatting with a visitor, or taking the order of a client. Yet, they may also interrupt their work to focus on their interaction with a client, supplier, or visitor; to run an errand for themselves or a relative, to eat or take a nap. However these activities will rarely, if ever, take over their work time. As Rasmane, a tire-worker, explained, he cannot eat a snack and work at the same time. "It slows me down." This is particularly obvious in aluminum-smelting, where production work is built around and works in rhythm with the melting process but also from the preparation of the cast. While the rest of the team finishes preparing the cast or when the aluminum is melting,

¹⁷ "Mam kaosdame." Fieldnotes, July 21, 2003.

some workers, or the boss himself, take a short break to chat with a visitor or a colleague, eat a snack, smoke a cigarette, or rest. However this lasts only a few minutes. When the aluminum is melted, they quickly come back to pour it into the cast and continue their work.

Clearly, work is a distinct activity in producers' conception and organization. In space and in time, work is geared towards the fulfillment of production goals and the sale of products. I will now show how their work is organized through the division of labor.

Division of labor: efficiency, hierarchy, and skills

According to Schwint, the comprehensive nature of artisan knowledge means that the artisan handles the whole process of production and proceeds one piece at a time, in order to remember all the details of the production (measurements, steps, and 'tricks,' among others) and be more efficient (2002:192-93). Controlling the whole process, he can better anticipate, adjust, miss stages, and win time. "The absence of division of the production process (*la non-division de la fabrication*) is a precious source of economy and elaboration of [new] ways to produce" (2002:193). In addition, it allows the artisan to have control over his stock of knowledge. It is both a way to "resist dependence" and to build a "space of power," which is a space of creation and decision. The artisan thereby acquires the social status of a producer (*fabricant*) providing services to society and of one possessing craft knowledge and being a "craft-master" ("*maître-artisan*") (2002:194).

Schwint's observation from artisans in the Jura mountains of France is not fully applicable to the situations I encountered in Burkina Faso. While some independent producers work alone and thus carry out the entire production process, they do not necessarily work one piece at a

time. To gain time and efficiency, artisans – especially tinsmiths and rubber-workers – produce a batch of the same type of goods for which they proceed by stages. Yet, Schwint's comment about the efficacy of producing one item at a time is also pertinent in the case of batch production. Producing a dozen of rubber soles or straps at the same time is a very efficient way "to keep the information in mind, as well as to find the best solutions [for the production process] and to save a maximum of time, materials, and stages (*procédés*)" (2002:193). Even if one finds tinsmithing or rubber-working shops composed of several workers, each worker works independently and produces his own set of orders in batches.

There is thus a division of work on two levels: in the production process and within the team. In workshops where the boss has hired apprentices or workers, there is a division of labor among the workers. If the master handles the major part of the production process or the most critical phases, he progressively delegates these tasks to the most skillful apprentices. Some finish by totally withdrawing from the production stage to concentrate on the management of their activity (buying supplies, marketing, and bookkeeping). As Ortiz wrote, "[t]o some extent, one can account for specialization and the division of labour as responses to technical requirements and time constraints" (1994:899).

Aluminum-smelting, in particular, requires a clear division of labor among the team primarily for technical reasons. This activity necessitates at least three workers to carry out the whole process and thus the tasks are divided among them: one is at the furnace, spinning the wheel to blow air into the furnace, adding aluminum into the crucible, ¹⁸ and watching the melting process. One or two people, depending on the size of the team and that of the item to be

¹⁸ A crucible is a vessel used for melting the aluminum.

made, make the cast. And one person pours the aluminum while the other is pressing on the cast to avoid any leak. Each one has his role and that allows work to move on swiftly.

Depending on the size of the work team, the organization may vary and the craftsman can carry out different tasks or be more specialized. In Paul's workshop for instance, composed of Paul and his three apprentices, the 'job description' involves not only the production part but also handling clients and suppliers, buying supplies for the shop, and running errands for the boss or for acquaintances. In contrast, in Moussa's workshop, workers are much more specialized in their tasks. This is a large workshop, composed of about fifty workers divided into specialized teams. On the production side, five main teams solely produce pots of different sizes (team 1: pots #30-60, team 2: pots #15-30, team 3: pots # 12-20, team 4a: pots and lids #10-20, and team 4b: pots and lids #2-10) and one team exclusively produces lids of all sizes (team 4c). 19 Outside the compound, another team is dedicated to finishing the production process by filing off the rough castings (pots and lids) and fixing any repairable holes or imperfections. On the marketing side, several young men sit outside, waiting for clients, while others are buying and selling aluminum to the boss. Finally, on the management side, the boss himself, assisted by one of his sons and another close collaborator, supervises the orders and the production process, the imports of aluminum from Ghana, and the delivery of orders; deals with important clients; and handles bookkeeping.

In some situations, the producer has to carry out the entire production process of one item.

It is especially the case in tinsmithing, when the tinsmith has to produce a single, but more

¹⁹ I have attributed numbers to the different teams to identify them better. The numbers correspond to their workshop location and that is why there are three teams #4, as they share and alternate in the same workspace. This workspace can have only two teams operating in it at the same time.

complex product. For instance, Martin regularly receives orders to make ovens, shelves to be placed in freezers, peanut roasters, or *maslaaga*, a special dish to make local doughnuts. Most often, clients only order one of these items instead of a batch. In addition, these objects are quite complex to make, as they are made from different parts that have to be carefully measured. Martin thus proceeds one item at a time, even if he sometimes interrupts its production to carry out other orders to maintain a cash flow.

Within this division of labor, there is also a hierarchy, first between the boss and his apprentices, but also among apprentices and workers. Unlike more traditional crafts, these 'owners' of the knowledge of their craft are not called "masters" but "bosses" (*patrons*). As in Greece, there has been a linguistic shift from "*masters*" to "terms of formal authority or simply by personal names" (2004:28-9). The former term "has come to signal an obdurate traditionalism that has no place in the modern world" (2004:29). Bosses are the heads of their workshops, directing the work process, teaching apprentices, giving orders, correcting them, and paying them. Having launched their own production unit, they own the shop and all the tools and supplies, and they have the power to decide whether or not to recruit apprentices. Moussa described his position the following way: "I am the owner. I'm the boss. I'm the one in command." Once hired, apprentices learn mostly by imitation, beginning with easy tasks and staying in a position where they can observe how the more advanced apprentices and the boss are working. Gradually, they are given more important and technically more difficult tasks to do, until they are able to carry out the whole process on their own.

 $^{^{20}}$ "Ya mam n so. Mam ya patron. C'est moi qui commande." Moussa, aluminum-smelter. Fieldnotes, February 15, 2003.

There is also a hierarchy and a division of labor among apprentices, according to seniority and level of skills. Generally, senior apprentices have accumulated knowledge and competence over time and are able to carry out most of the production process. They are in a position of authority over the newer apprentices, giving them orders and correcting them. The boss may even entrust them with important transactions, dealing with clients, purchasing supplies, or keeping books. As new apprentices are often younger in age, it is socially acceptable for them to submit to older workers, do simpler tasks, and run errands for them such as buying water or food.²¹

The hierarchy among apprentices and workers is not limited to seniority and age. It also depends on skills. A skilled apprentice can quickly improve his status and be given more responsibilities and more complex tasks to do. For instance, after working in Moussa's aluminum-smelting workshop outside school time, Léon began working there full-time in 1997. Two months later, he recounted, he became a "patron" himself, directing a team of three workers. He then was sent to the boss' second workshop in Accra, Ghana where he stayed eight months. When he came back to Ouagadougou, he had gained experience, was able to make larger pots, and was better paid as a result. After a second trip to Ghana, which lasted over a year, he is now the leader of a team of six workers, making bigger pots, and also earning more money. Léon was very proud to show how fast he had learned the trade, pointing out how he had been able to make his first pot the very first week of his training. In contrast, Salif, nicknamed "the old-timer" (le vieux), is doing the job of a young apprentice in his team. He mixes the sand and pours it into the cast for the two main workers of the team to ram, who are younger than he

²¹ Schwint notes that artisans often rank themselves according to the number of years practicing their craft. "Time is thus a key element of competence. It is synonymous with knowledge" (2002: 201).

is. His situation is unusual enough that the other workers have given him this nickname, which is often the subject of jokes. As I will show in the following chapter, the willingness and the 'intelligence' to learn are key factors, in producers' discourses, in determining the speed at which an apprentice improves his level of competence.

The spatial and temporal organization of these producers confirms Schwint's and Keller and Keller's argument that craftsmen's work is both conceptual and practical. Burkinabè craftsmen are economically "efficient" as they organize their work to waste the least time, energy, and materials in order to meet the demand and generate profit. In the next chapter, I will show how these considerations are also at work in the way producers select and train their apprentices.

Chapter VIII. Management of people, management of knowledge

To be viable, craft activities cannot rely solely on technical *savoir-faire*. Craftsmen also need to know how to manage their labor force, to which they transfer various types of knowledge. In this chapter, I will address these two elements that are vital for the existence and continuation of a gainful trade: people and knowledge. There needs to be people to transfer knowledge to, to carry out the work, and to maintain the trade over time, as craftsmen continue to transmit their knowledge to others. The questions that I want to examine in this chapter are the following: what kinds of people is trade knowledge transmitted to and how are they recruited? What are the various kinds of knowledge that are transmitted and how? Which choices are made about whether or not to transmit different types of knowledge? Finally, how does the master handle his relationship with the apprentice(s) and bring it to a conclusion?

Apprenticeship in urban Burkina Faso: changing conditions, concepts, and challenges

Building on the theoretical understanding that scholars have elaborated over the years (see chapter I), I now focus on the reality and relevance of the transfer of knowledge within the three production activities that are at the center of this work. I suggest that the comprehension of the social dimensions of this learning process is fundamental to understanding the way these trades function to best fit a changing socio-economic environment (see Wallaert-Pêtre 2001). Zarca writes that for any particular culture to live (i.e. work culture), "there must [...] be a transmission at the level of generations, not only of knowledge and know-how capitalized into works and tools, but also of values, ways of being, [and] ... symbols" (Zarca 1988:248-249). Hiring

apprentices and training them is thus a comprehensive life experience, in which novices not only learn a craft and a trade but also take on a new identity and status (Herzfeld 2004:37, 50-1).

One of the primary functions of apprenticeship is to reproduce the body of producers in a particular trade while providing a cheap labor force (Dureau and Dubert 1985:334). According to one particular tinsmith, a craftsman must transmit his knowledge and *savoir-faire* to others: "if you know [something], teach somebody else!" (Fo sen bang ya, zams neb ya, hein!). His age was another incentive for sharing his experience with young men: "I'm just an old man. I will teach kids [...] that they too rise up." This particular tinsmith definitely had a vocation for training novices. He had traveled to many West African countries, transmitting his knowledge to numerous apprentices and taking great pride in it. If his business was doing as well as it used to when he was in Ghana or Nigeria, he claimed, he would have at least ten apprentices in his shop.³

Having a certain number of apprentices is thus a sign of prestige and "vitality," which indicates how well the enterprise is doing (Martinelli 1996:26). Alternatively, not being able to hire apprentices indicates that the producer earns just enough to support himself and his family. If the business does not "work," there is no need to hire an apprentice whom he would not be able to pay. In addition, the apprentice himself would not stay if he did not receive some financial compensation. "If you don't give something to these kids, [they] won't even be able to

¹ Interestingly, while this argument is often applied to "informal sector" activities, it also pertains to "formal" activities. In France for instance, trainees often complain of being taken advantage of as cheap labor force by the companies where they perform their internship. The difference may be that these interns are already qualified and only need some practice.

² "Mam ya nin-kẽema bala. Mam na wuluga kamba [...]Ti bãm me yik wey." Lagui Moumouni, idem.

³ "I know that [if] there are supplies, [if] there is work, I can take ten kids." (La d mi ti ted be me, tuum be me, mam twe dika kamb piiga...). Lagui Moumouni, ibidem.

stay with you. Because kids now consider money more than work." Hiring apprentices is thus only possible if a certain economic stability is met.

The conditions of apprenticeship have changed considerably through time and may vary throughout West Africa and across trades. According to Peil, "[t]he 'traditional' or 'customary' apprenticeship [in West Africa] would be marked with payment in kind, apprentices living with the master, learning by copying the master rather than by formal teaching and a choice of trade by the parents rather than by the prospecting apprentice. Apprentices would be mostly illiterate and from rural areas" (1970:139). In contrast, "'modern' apprenticeship […] would be more formal – payment in cash, specific skills taught in a set order, and choice of trade by the apprentice himself. Apprentices would be literate, of urban background, and live separately from the master" (1970: 139).

In Burkina Faso, apprentices rarely pay any fee to be trained in any male- or female-dominated craft activity. The only major exception lies in trades which utilize modern equipment, such as large car repair shops. Since these shops are economically more attractive to young men, there are many candidates for apprenticeship. Imposing a fee is thus a way to filter some of them out. In contrast, such trades as tinsmithing, aluminum-smelting, and tire-working are not as economically attractive and having the apprentices pay would most probably discourage young aspirants and provoke a shortage of workers.

Most apprentices receive some kind of "daily subsistence allowance in cash" (Livingstone and Kemigisha 1995:340). This amount of money, called 'food money' in Burkina Faso,⁵ varies

^{4 «} Si tu ne donnes pas quelque chose avec les enfants, il pourra pas même rester avec toi. Parce que les enfants même voient maintenant l'argent plus que le travail. » Martin, tinsmith. Fieldnotes, August 18, 2003.
5 "Rib ligdi."

"from workshop to workshop and [depends] on the business climate" (1995:340). In some instances, the producer might not give anything to his apprentice but would allow the latter to sell his own production to earn some money. But this practice was more frequent in the past.

Most apprentices learn the trade in one to two years, on average (see Livingstone and Kemigisha 1995:341). Yet, while they reach a certain level of expertise in two years, most apprentices stay with their boss much longer (often four to six years, sometimes up to ten or twenty years), attempting to build up financial and marketing assets before starting their own business. Among the seventy apprentices in my initial inventory of workshops, fifty-five percent had begun their training in the past three years prior to the survey. Less than a quarter had been apprentices for four to five years and only nine percent for more than five years. Following the same trend, fifty-six percent of the interviewed producers had been trained between one and five years before opening their own workshops. 8 Only twenty-two percent (less than a quarter) had been apprentices for six to eight years.

Across the three trades, most producers agree that a motivated apprentice can learn in a year or even less. It depends on his motivation and "intelligence" (yam). According to Lagui Issa, an old and almost blind tinsmith and former tire-worker, it all depends on "the head" or "brain" (zugu). To him, these trades are not difficult to learn. "But if you don't have any brain, you can learn for a year and not know it."9

⁶ In contrast, training in older trades, such as pottery-making, can last up to seven years. In this particular context, "apprenticeship can be associated with social maturation" (Wallaert-Pêtre 2001:475).

At the time of the survey (October-November 2002).

⁸ This figure is only indicative as I was able to collect information on the apprenticeship period for only twentyseven producers out of the 60 workshops inventoried (N = 27).

⁹ "La zuga hã ka ye, fo twê zamsa ta yumde n ka bang ye." Lagui Issa, tinsmith. Interview, August 19, 2003.

Hiring process: a matter of trust and economic prerequisites

Since these production activities are by nature economic and organized around (but not only) economic interests, the choice of apprentices has to be regulated by some means. Without a legal framework protecting both 'employers' and 'employees,' producers resort to a system of social recognition to validate an apprentice's candidacy. As Charmes notes, "[t]oday, the artisan hires in priority children that are presented to him by acquaintances and that parents entrust him with" (1985:318). Yet, this varies again depending on countries and trades. In Côte d'Ivoire, Dureau notes that "[a]bout two-tiers of the apprentices have no family connections with the boss" or other workers in the enterprise and half of them are hired as a result of a "spontaneous request" (1985:331).

In the urban environment of Ouagadougou, producers do not hire apprentices "like that." ¹⁰ If the candidate is not a direct kin to the producer, he will have to be presented by a relative who will act as a guarantor for him. At Paul's workshop, all three apprentices were introduced by their mothers who already were his clients. Hamidou explains that no one can be hired at Moussa's large workshop of aluminum-smelting without being introduced by an elder in his family (i.e. older brother, father, grand-father). He himself was presented by his grand-father, who is the imam of the neighborhood mosque and knows the boss very well.

In fact, while producers claim not formally to restrict the trade to their kin, the great majority of their apprentices are related to them in some way (see Wright 2002:22). The majority of the producers interviewed during my survey had some kind of kin relations with their

 $^{^{10}}$ "Je prends pas un apprenti comme ça" (I don't take apprentices like that). Martin, tinsmith. Fieldnotes, August 18, 2003.

apprentices (fifty-one percent). When they were not directly related, many came from the same hometown or region (thirty percent). On a less frequent basis, some hired friends or acquaintances (seven percent), young men living in the same neighborhood (four percent), or belonging to the blacksmith caste (four percent). Ousmane, a tire-worker, declares that his trade is a "tradition" (rogh-m-mik) in the family. It is the work of his "elders." Madi too, a young aluminum-smelter, says that he was "born with this job."

Even if the need for guarantee when hiring apprentices tends to restrict the trade to relatives and acquaintances who easily can be socially identified, the hiring process does allow for some flexibility. One aluminum-smelter argued that he was the only one in his family in this trade. Moussa, the boss of the biggest aluminum-smelting workshop in the capital city, learned the trade from a totally unrelated pot-maker. His mother served as a guarantor, pleading with him to take her son, which he refused at first. As she kept insisting, he finally accepted and trained him for approximately a year. Likewise, Paul, a Gurunga from the region of Reo, came to the capital city and began his apprenticeship with a non-related aluminum pot-maker from a different ethnic group. ¹⁴ In short, the system of social identification of an applicant allows the trade to be reproduced both within and outside a producer's social circle. In this way the

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¹¹ 11% were older and younger brothers (*kiẽma/yao*); 11% were uncles and nephews; 7% were fathers and sons; and 22% did not specify their relationship.

¹² "[Ya] tõnd rogh-m-mik tuuma, tõnd kiẽm damba tuuma." Ousmane, tire-worker. Fieldnotes, August 27, 2003. The term "*rogom-mik*," translated as traditions or customs, literally means "to be born" (*roghé*) and "find" (*mik*) what the elders do.

¹³ "Mam rogha ne tuum kanga ». Madi, aluminum-smelter. Fieldnotes, February 17, 2003. Martinelli reported that blacksmiths distinguished their various lineages between those who were "born of the forge hereditarily" (*rogh-ne-sâado*) or had "entered" the trade later in history (*sâ-kyêdba*) (1996:14). Even if he did not belong to blacksmiths or aluminum-smelters' lineages, Madi distinguished himself from other apprentices and workers at the shop who 'entered' the trade at a later age.

¹⁴ Paul belongs to the Gurunsi ethnic group located in south and south-east Burkina Faso. He did not speak Moore when he arrived in the capital city and had to learn it. He was certainly introduced by his uncle (a *gendarme*) who had welcomed him initially.

producers minimize the risks of hiring someone who might not respect their authority, might 'waste' their time by being undisciplined, unmotivated, or even dishonest.

Hiring or firing apprentices does not necessarily follow "market whims" (Silver 1981:48). Indeed, accepting apprentices is "not necessarily synonymous with producing more. It is rather to be interpreted in terms of prestige and reputation" (Verdon 1979:536). As a result, workshops "cannot expand or contract at the will of the master" and thus, are "only indirectly sensitive (or largely insensitive) to the law of supply and demand of the market" (1979:537, emphasis in original; also see Labazée 1988:196). Yet Silver contends that these workshops "operate in the context of a Western market economy" and are confronted by the factors of supply and demand daily. Even if they do not respond to these factors on an individual basis, they do so on a collective level, achieving "a functional elasticity as a group" (1981:49).

My own observations reveal that the number of apprentices fluctuates with market conditions, to some extent. At the level of an individual workshop, producers do not hire apprentices if they do not have the means to give them some kind of compensation. During slack periods, Moussa reduces the number of teams working and has them rotate, depending on the type of orders. Idle workers are not 'fired' as such but "rest" (vvvse) without being remunerated. There is also a kind of self-regulation at the trade level, as young 'apprenticeship-seekers' do not apply in a workshop or trade that does not seem prosperous.

Age can also be an issue for accepting or not accepting apprentices. One aluminum-smelter had difficulty entering the trade because of his age. After spending twenty years in Côte d'Ivoire, Issaka came back to Burkina Faso with his family and asked an aluminum-smelter to teach him

the trade. The latter initially refused, claiming that he was too old to learn. ¹⁵ Issaka, who was thirty-five years old at the time, had to insist before his boss hired him. But then, he was able to learn the trade in a year. Likewise, some apprentices argue that they cannot change apprenticeship because "we are old... we cannot work [in] another job... they [only] take kids like this," showing me a twelve-year-old boy. ¹⁶

Comprehensive apprenticeship: acquisition of various types of knowledge

At the level of micro-enterprises within the "informal" sector, the apprenticeship is very practical and includes different aspects of the trade: "technical but also commercial from the sale of the production to clients to the purchase of materials" (Dureau 1985:334). Masters make their young apprentices carry out some apparently "unproductive activities" such as running errands or going to their suppliers to buy some materials. In doing so, they begin to learn "the environment (suppliers, subcontractors, and clientele) of the trade in which they start," which will be a "considerable advantage" when they will open their own workshop (Charmes 1985:325). Herzfeld argues that apprentices are chiefly "learning to learn" and the knowledge that they acquire "is not exclusively, or even primarily, of a technical variety" (2004:139). Due to this variety of knowledge, time is an essential element of apprenticeship (Schwint 2002:200). In the three trades studied here, there are three main types of knowledge that are transmitted, no matter the duration of the apprenticeship: technical, economic, and social.

¹⁵ "[A] pa twe bang ye" – implying that when one is 'too old,' it is too difficult to learn a craft.

¹⁶ "Tõnd ya bedre... tõnd pa twē man tuuma to ye... ob rika biiga la woto." Ousmane, Paul's oldest apprentice, aluminum-smelting workshop. Fieldnotes, December 19, 2002.

Technical knowledge

The primary objective of an apprenticeship is to acquire the technical skills of a trade in order to become skilled at producing particular items. ¹⁷ Apprentices familiarize themselves with the raw materials, the tools, and the production process beginning with simple tasks and progressing towards making more complex articles. Experienced apprentices and workers distinguish themselves by their level of technical competence that enables them to discern details and aspects of their work that are hidden to untrained eyes.

The best expression of the implicit, embodied dimension of technical mastery is expressed in the word "zemse," "to render equal, to adjust, to make fit" (Alexandre 1953). Without being able to explain 'how they know what they know or do,' they explain their actions by their goal: to fit, to be equal, to reach a middle ground. Yacouba, one of the team leaders at Moussa's aluminum-smelting workshop, hits the sides of the bottom frame to adjust the width of the gap between the inner and the outer sections of the sand cast after having removed the metal mold. He does so by *looking* at the gap and gently tapping on the sides, "until it fits" (ti zemse). This vague expression translates imperfectly the accumulated knowledge that Yacouba has embodied. It implies that he knows what is the 'right' distance between the two parts to make a perfect pot that is neither too thick nor too thin (see Bloch 1991).

Economic knowledge

During their apprenticeship, young workers also acquire knowledge in marketing, management, and accounting, which is indispensable to open and run a business. Apprentices

¹⁷ Wallaert-Pêtre defines these abilities or skills as reflecting "the acquired potential of an individual to execute tasks by the use of appropriate knowledge" (2001:479).

watch their boss deal with clients and suppliers, build up their own networks, and acquire precious business values and practices. The apprentice learns from what his boss "was talking about, how he debated the price, how he behaved with [his clients], and what policy he was following with these people with whom he worked trustfully" (Charmes 1985:325).

Paul's apprenticeship and handling of his own apprentices are a good illustration of the acquisition process of economic knowledge. He learned many of his current suppliers' locations when he was still an apprentice. Now, he sends his most experienced apprentice to buy charcoal, aluminum, and items that he does not produce in his workshop. He also trains all of his three apprentices to deal with clients, thereby implicating them in learning the prices and in bargaining.

Social knowledge

According to Martinelli, "[t]he transmission of technical knowledge is a process of social construction" (1996:9). As technical knowledge "leans against a social identity," apprentices acquire a new identity and new ways to relate to others during their learning process (1996:12). This social knowledge consists of new ways to behave, to deal with clients, suppliers, and other colleagues and to speak, with the acquisition of a vocabulary specific to the trade. Zarca explains that an occupational identity is expressed "in gestures [...] 'taken' in the technical action" and that "each trade has its tools and its own technical terms" (1988:253, 255).

Every apprenticeship "assigns to the future expert (*homme de métier*) a way of being, an ideal" (Zarca 1988:250). For that reason, Burkinabè male producers do not want to be identified with trades that do not enhance manly values. Hamidou, for instance, chose not to work in

pastry, even if the salary was much higher. Baking cakes was a "job for women." Instead, he went for the second alternative that his grand-father offered him: aluminum pot-making. Even if producers and apprentices often go into these trades as a second choice, they identify with the positive values that pertain to them. These values enhance male qualities such as physical strength and artisan characteristics such as being creative and resourceful (débrouillard). As Zarca points out, "the apprentice comes from a social milieu that cultivates values of work and effort," often being sons of artisans or workers in the craft production sector (1988:250; also see Herzfeld 2004:88).

This period of apprenticeship is also a time when apprentices build up their social networks of colleagues and other social ties that will play an important role in their future career. It is a time when apprentices integrate their new occupational identity through the social interactions they engage in. They meet those who began in the trade before them as their seniors, "older brothers" (kiẽm dãmba), or "bosses" (patrons). They also develop friendships with other apprentices of the same generation who may become precious assets when they establish themselves as independent producers. They may exchange services with their former colleagues, help one another, and send clients to one another (see Allen 1983:161).

The process of transmission: progression and motivation

The apprenticeship is a gradual process that follows several stages of progression within a certain period of time. "The first months of apprenticeship are, in general, a phase of observation and familiarization, during which the apprentice must strive to show his boss his good will (i.e.

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^{18 &}quot;Ya paga toma."

he must accept to carry out the most thankless tasks) and his interest in the job (providing a proof of his ability to observe)" (Charmes 1985:322). The beginning is thus a time of testing, when the boss observes whether his new apprentice is motivated and trustworthy. The first tasks that will be given to him are "secondary" and do not play a direct part in the production process (1985:323). This is the stage of "legitimate peripheral participation" that Lave and Wenger have described (1991; Herzfeld 2004:50-1).

By carrying out unrewarding tasks for the boss and the older apprentices, new apprentices become acquainted with the work atmosphere and organization. They learn the tools (their names, uses, and where they are put in order) and the spatial organization of the shop as they clean the shop before and after the workday. They also learn to work with others and to understand the hierarchy in the shop when they are scolded for making a mistake or for not being fast enough and when they are sent to buy food, drinks, or snacks for others.

Observation is a key element of apprenticeship and it has to be learned.¹⁹ "To see, one has to develop a peculiar intelligence of visual images [...]. The technique can only be *seen* if it is *shown*" (Martinelli 1996:18, my emphasis). The apprenticeship involves "showing" and "explaining, demonstrating," which relate to two different types of knowledge: "practical intelligence and discursive intelligence" (Martinelli 1996:18; see Cornu 1991:83; Wallaert-Pêtre 2001:482). Mossi craft producers use the term *n'wilgi*, "to acquire knowledge, or to show, to let somebody observe, to make known." This specific word contrasts with a word that describes the acquisition of intellectual knowledge at school, *n'zamse* (1996:10). In short, teaching and

¹⁹ "Regarder s'apprend" (Martinelli 1996: 18).

learning in the context of craft production are inseparable from the action of showing and observing.

In aluminum-smelting, the new comer is always positioned in a place of observation. Paul explains that "every new [apprentice] begins at the wheel." Being at the wheel is a very good position to observe everything that is happening both inside the workshop (production) and outside (dealing with clients and suppliers). In Moussa's larger workshop, every new apprentice follows the same stages of progression. They begin by supplying charcoal for the furnace (ning saala); next, they sit at the wheel to blow air (zugle); they move on to pounding and mixing the sand (pābda tāndo), then pouring sand into the mold and ramming it (n yak tānda n ning ruka puga n to ti tānda concentrer); and finally, when the apprentice masters all of these four stages, he can now replace the team leader when the latter is absent.

The early stages of apprenticeship consist of performing simple production tasks to help the familiarization process. The master shows how to do something (*n'wilgi*) and then lets the apprentice observe and reproduce by trial and error. Explaining how he dealt with a former apprentice, a tinsmith recounts how he first showed him how to cut the sheet metal, fold it, and the rest. "I showed him. He didn't even do [...] one month, he began to make small buckets [...] Often I told him: "Watch carefully. Look for bits of sheet metal that I throw away, make something and I will see." By learning the basic production gestures and handling of the material, his apprentice began to make "small things" such as small buckets, small stoves,

²⁰ "Nouveau fãa yilmame." (Every new [apprentice] wheels). Paul, aluminum-smelter. Fieldnotes, December 26, 2002.

²¹ This is very similar to the spatial organization of a traditional blacksmith shop, where the new apprentice is positioned at the bellows where he can observe the master and his assistant (Martinelli 1996:31).

²² My emphasis. "Je lui ai montré. Il n'a même pas fait.. un mois, il a commencé à faire les petits seaux ... Et souvent, je lui dis: "faut bien regarder, il faut chercher dans les morceaux de tôle que je jette, et tu fais quelque chose je vais voir." Martin, tinsmith. Fieldnotes, February 20, 2003.

dustpans, lids, and the like, before moving on to the production of more complex items – i.e. big stoves, peanut roasters, or doughnut pans.

Tire-working follows the same pattern. Every novice begins by working with inner-tubes, which is much easier to work with than tire. The first task that was given to Ousseni, an apprentice in the early 1950s, was to learn how to cut straight (*wã tidga*). Nowadays, novices learn how to cut straight by cutting elastics for underpants (*caleçon sũuda*) from inner-tubes. After that, they learn how to make soft buckets (*puisettes*). It is not until they master the use of knives and the handling of inner-tubes that they begin working with tires to make simple models of tire-sandals and then more complex ones.

One way to evaluate an apprentice's level of competence is to consider what he cannot do. If apprentices can produce small and simpler items, only experienced workers and bosses handle delicate pieces of work and operations.²³ Paul's apprentices always stop the production process after ramming the sand into the molds. Then, they let him check the work and assist him putting the mold back together and pouring the molten aluminum. Paul is also the only one repairing faulty items coming out of his shop or brought by clients. When the apprentices withdraw to let their boss continue, it is a good opportunity for them to watch and learn 'how the boss does.'

Another way to assess the competence gained by an apprentice is his ability to 'see,' to discern subtle elements of the production process that a novice cannot perceive. Jacques, Paul's youngest apprentice working at the wheel, was learning to recognize when the molten aluminum was ready to be poured (and therefore, when he could stop wheeling air underneath the furnace). In one instance, he thought the aluminum was ready so he called the boss. The latter prompted

²³ "An apprentice cannot be compared with the boss." ("*Un apprenti ... ça peut pas se comparer avec le patron*"). Martin, tinsmith. Fieldnotes, February 18, 2003.

him as if to make sure: "Kooma mõghame?"²⁴ Not sure whether he was right or not, Jacques continued wheeling until his boss told him to stop (Bi f baase).²⁵

The key to a successful apprenticeship is to prove that one "wants to learn" (n date n zamse). When the boss sees that an apprentice is motivated to learn and is able to observe, he entrusts him with increasing responsibility. Léon proudly related how fast he had learned aluminum-smelting and climbed the ladder as a result of his motivation and hard work. While in Junior High School, he came to the shop whenever he was out of class and watched the aluminum-smelters work. "The work seemed easy to me. I just needed practice." In 1997, he entered the workshop and began making lids in the boss' team. Two months later, he became a "patron" himself, replacing the boss who had stopped working in the production unit. His responsibilities continued to grow as he kept gaining experience. One of his younger teammates commented that he had never made a pot #2 on his own. Léon exclaimed: "But this is the problem! If you don't ask..." Producers find that some people spend five years in the shop without learning anything. But "if their head is alive," and if they take initiatives, they can learn after a month or two.

²⁴ Literally: "Is the water red (or ripe)?" From *mõghe*, to become red, to ripen (Alexandre 1953). Aluminum-smelters designate the molten aluminum *koom*, 'water.' ²⁵ "Then stop."

²⁶ "[Tuuma] yi facile ne mam. Da kɛlla pratique." Léon, aluminum-smelter. Fieldnotes, February 4, 2003.

²⁷ "Mais c'est ça le problème! Fo hã pa sok ye..." This contrasts with Herzfeld's description of Greek apprenticeship, where artisans conceal knowledge from their apprentices behind boring routines, compelling the latter to 'steal' it from them (2004:117-22).

²⁸"Ob zugu sã vwiime."

Choosing what to learn and what not to learn during apprenticeship

In choosing a boss with whom to begin an apprenticeship, the trainee also chooses the range of skills and specialization that he will acquire. Like many other aluminum-smelters, Paul is not able to make aluminum teapots because he had not learned this with his former boss. In his view, if 'one has not seen it done, one cannot learn it.' Tire-workers too, specialize in what they have been trained. Issouf, for instance, takes out the beads and cut the treads of tires into strips that others will transform into soles, different types of straps, and other final products. He has never been trained to produce these items and therefore, does not make them.

Apprentices who want to diversify their skills may therefore change bosses. That is what a young tinsmith from the region of Bobo-Dioulasso did. Since his father was repairing tin ware, he went to work with another boss to learn how to make stoves (*fourneaux*) and "hearths" (*foyers*).²⁹ At Moussa's workshop, a man came from Mali to learn how to make lighter aluminum pots. As he worked for a few months in his team, Léon explains: "He came to improve his skills [...] Because in their shop, they produce heavy pots. This is why he came to get some experience to be able to make light [pots] and earn profit."³⁰

Trained producers can also learn by simply looking at and observing what other colleagues do. At the time when Martin was only making frying pans, he decided to add charcoal stoves to his range of production. "Well, I simply looked, [and] I said: 'but that's easy to do!' [As] a blacksmith... I just [have to] look, I can do it. Indeed, I looked, and I cut the dimensions that I

²⁹ *Fourneaux* and *foyers* are two different kinds of cooking stoves – the first one designates charcoal stoves while the second characterizes wood stoves, which replace the traditional hearth made with three stones.

³⁰ « A wa me na wa *améliorer bãngra*[lit. knowledge]. [...] Puisque bãm zingu wa, a yisda rugda zisgo, ti yẽ wa na *bao expérience* bilfu n togõ yis faaga *n pam yõodo* ». Léon, Moussa's workshop, team leader (team #4a). Fieldnotes, September 26, 2003 (my emphasis).

wanted, then, I made a stove."³¹ He learned how to make cake tins in the same manner. His first attempts were more difficult, until he found the right way to make them.

Producers can also choose not to learn how to produce certain items or to acquire particular skills. Most of the time, they provide sound economic reasons to justify their decision: these objects require too much work and effort for too little profit while they can produce other, more profitable items. This is why Zakaria chose not to learn how to cut tires to extract the tread. To produce tire-sandals, he merely adds straps on tire strips that he bought from other tire-workers. "There's too much sweat!" he said chuckling. "If I can get shoes [for] 1,000 [CFA francs] [...] there's profit. That's why I dropped hard work... Cutting tire, it's a pain!" "33

Training practices: explicit vs. implicit ways to transmit knowledge

Commenting on Lave and Wenger's work (1991), Bloch writes that "the fact that the transmission of knowledge in West African weaving or tailoring is largely non-linguistic may have less to do with the culture of education in these places than with a general feature of the kind of knowledge that underlies the performance of complex practical tasks, which *requires* that it be non-linguistic" (Bloch 1991:187, emphasis in original). In other words, the knowledge to be transmitted is too complex to be conveyed by words only. Indeed, "the process of enskilment is not just a cognitive one; rather, it involves the whole person interacting with the social and

³¹ « Bon, j'ai regardé comme ça, mais j'ai dit "mais ça c'est facile à faire!" [En tant] que forgeron: ... je regarde seulement, je peux le faire. Effectivement c'est ce que j'ai regardé, et j'ai découpé les dimensions seulement que je veux, alors, j'ai confectionné le fourneau. » Martin, tinsmith. Fieldnotes, August 18, 2003. Martin belongs to a blacksmith caste and even if he went into tinsmithing, he relates a lot of his knowledge and skills to his blacksmith identity.

³² They may also argue that "there are not many people buying" these items ("Neb ka be wusgo n dare").

³³ "Mam tulga ya wusgo! ... m sãn pam nueda kobsi [...] Yõod be ne. Re kit ti mam bas tum wusg quoi. ẽh. La, pneu wa saob me hãn wãnda, a ya namsgo!" Zakaria was quite optimistic as his models of tire sandals are worth 750 F CFA at the most.

natural environment [...] Most of the time, words are beside the point simply because actions speak *faster* than words" (Pálsson 1994:919-20, emphasis in original). Quoting Bourdieu, Pálsson explains that "[t]he novice imitates the *actions* of others, not simply their models and discourses; practical schemes 'pass directly from practice to practice without moving through discourse and consciousness" (Bourdieu 1990:74, *In* Pálsson 1994:920, emphasis in original).

During this socialization process, apprentices incorporate non-verbal, kinesthetic knowledge, codes, and gestures. Many commands are given without words, as the apprentice learns to decipher silences, looks, and signs that the master or co-workers give him (Herzfeld 2004:100-1). These short signals are sufficient to convey simple information efficiently and with a minimum number of words. In aluminum-smelting which, unlike tinsmithing and rubberworking, is fundamentally team work, many instructions are given this way. When Paul gets ready to place the top frame back onto the mold, he only needs to mumble " $\tilde{a}h\tilde{a}$ " to indicate to his apprentices that he needs assistance.

Nevertheless, verbal instructions, explanations, and corrections are employed, under certain circumstances and depending on the bosses' personality. Paul is a boss who communicates a lot with his apprentices, from giving instructions to joking with them.³⁴ He constantly monitors their work, making comments and correcting them when necessary. Sometimes, he even uses didactic ways very close to those applied in formal education, asking feedback from his apprentices to make sure that they understand.³⁵ Here is an excerpt from my fieldnotes that illustrates this:

Paul calls Jacques to show him how he should have melted the aluminum in a smaller crucible (*zug-laaga*) to melt faster. Once it has melted, he can then transfer it into a bigger container. To check if he understood,

³⁴ Herzfeld wrote that "Words are not entirely absent from all artisan-apprentice exchanges. Much depends on the attitude of an individual master..." (2004:102).

³⁵ See Wallaert-Pêtre who observed that the characteristics of apprenticeship (verbal – nonverbal directions; allowing for questioning or not, etc.) may vary with the socio-cultural context (2001:482-4).

Paul asks Jacques: "ya laaga a wana? A yembre bi a yiibu?" [how many dishes [crucibles] are there? One or two?] Jacques replies: "a yembre" [One]. But then he realizes that he said something wrong so he corrects himself: "a yibu" [Two]. Paul comments: "Zo, fo ya geenga. Hein?" [Zo, you're crazy, huh?]. Then Paul adds another piece of supply to melt and goes inside, making fun of Jacques by repeating to Ousmane and Idrissa how he answered his question. (Fieldnotes, December 21, 2002).

Paul may also give explicit instructions to his apprentices on how to produce a better item, by not removing too much sand from the mold or by better positioning the metal mold to have a prettier cast, for example.

Orders, given more or less severely, are sometimes necessary to prevent serious errors which may have economic costs. Pálsson writes that while "[s]ilence is a sign of smooth cooperation [...], direct commands signify the opposite – low morale" (1994:920). Many orders are brief and authoritative, meant as quick instructions about what the apprentice should do. "*Ning sala!*," "*yilm soma!*" are examples of what an aluminum-smelter can say to his apprentices to "add charcoal" or "wheel vigorously" (Herzfeld 2004:80-4). These quick orders are necessary when there is an urgent need, such as a leaking crucible which loses the molten aluminum. At other times, orders are given to reprimand an apprentice who is not doing what he is supposed to. 37

Scolding and correcting apprentices are an entire part of the learning/teaching process. It gives a clear sign that the apprentice has breached a limit in terms of technical expectation but also in terms of his relationship with the boss in his authority over him. When Moussa sees a problem in the quality of the items produced, he goes inside the workshop to admonish the team or team leader. In one particular instance, he called one of the workers in Léon's team and said:

³⁶ In such an instance, Paul shouted to Idrissa: "*Idrissa! Fuite be me. Fo nem la?*" [Idrissa, there is a leak. Do you see it?]. Idrissa got up quickly and fixed the hole in the crucible to stop the leak.

³⁷ While Jacques was untying the wooden frames from a pot that had just been cast, Paul corrected him: "Hey! Hey! Hey! Hey! Lebg ka!" [Hey! Hey! Hey! Come back!]. Indeed, Jacques needed to add a new batch of aluminum to melt for the next production process. The other apprentices would take care of the cast.

"Seydou, didn't I tell you? [...] Yesterday, [your team] made twenty-one pots, [but] thirteen were not good... They have holes." The boss then broke a faulty pot that was in front of him with a hammer and said: "See, now there are just twenty left." Without saying a word, Seydou took the broken pot inside the boss' compound where aluminum supply was stocked to be melted again. A moment later, Léon came out of the workshop. When the boss reproached him for his poor production, Léon replied that "it's the aluminum" (ya waghda). But Moussa answered back: "I know aluminum. I work with aluminum. I never make holes like this." Léon mumbled something back but he eventually kept silent, as did the rest of the workers around.

Scolding also indicates that masters have expectations concerning their apprentices' progress and learning abilities. As Lave noted (1982), masters have a pre-established conception of how a standard apprenticeship should unfold with its stages and their length. If an apprentice does not fit into this schema, s/he is therefore categorized as 'stupid' or sometimes 'lazy.' The way Paul rebuked Jacques for not melting a good mixture of aluminum is a good illustration of this. Paul complained that "The kid didn't make a good mixture... He has no brain." Because of his mistake, the pot was "not good" (ka soma ye) for the aluminum was too "hard" (kveyenga). As I tried to defend the young boy, Paul exclaimed: "he can know in one week, but he has no brain! If [you're] intelligent, [you] can learn in one week."

Giving corrections and advice also happens among apprentices and experienced workers, especially between workers with different degrees of seniority. More experienced and older

³⁸ "Seydou, mam pa toghs fo ye? ... [Yãmb] mana rughdo pisi la yembre zame, bãm pi la tãbu ka soma ye... vwẽya be me."

³⁹ "Ade, mosã kieta bãm pisi."

^{40 &}quot;Mam mi waghda. Mam tumda ne waghdo. Mam pa man vweya woto ye."

⁴¹ "Biiga ka man mélange soma ye... A zugu ka be."

⁴² "Une semaine twe bangame la a zugu ka be. Hã ya intelligent, une semaine twe bangame."

apprentices or workers reproduce the master-apprentice relationship, even if their authority is not as absolute as that of the master himself. Senior apprentices observe what novices do to make sure that they are doing the right thing, correct them, sometimes pretty harshly, and show them what to do, when needed. This is a precious help to the boss and to the apprentice himself, since the former does not always take the time to show him. As Pálsson observed among Icelandic skippers, the whole work team "educate[s] each other" (1994:917).

Shared knowledge, hidden knowledge, stolen knowledge, and God-given knowledge

Because these crafts are practiced in open spaces, the public display of their work and know-how is a fundamental part of the artisans' work and identity. As in blacksmithing, the production aspect of these three trades is very much "socialized. The workshop is a public space. It implies an art of exposing oneself to others' appreciation, lending oneself to the aesthetics of the gaze (*l'esthétique du regard*)" (Martinelli 1996:19). However, there is always a risk that the transmitted knowledge may be usurped, falsified, or used to compete unfairly (1996: 22; see Herzfeld 2004:132-3). That may be why certain "techniques of production" or of management are not deliberately taught or explicitly transmitted to apprentices. These "secrets of the trade" will have to be obtained by gaining the boss' trust, "but more often by 'stealing'" them (1985:324-5; Herzfeld 2004:101).

Many craftsmen actually take great pride in displaying their skills, letting others see (*gese*) and even encouraging them to reproduce their work. As Lagui Moumouni explained, "*I want to show* (wilg) *them all my knowledge* ... *I will make* [a special stove] *to show* (wilg) *them* ... *I did*

⁴³ The verb *gese* means to look at, to examine, to realize (sth), to see. Alexandre (1953); Nikiema and Kinda 1997:255).

[it] so that they see (gese) ... So now they tell me to teach them (zamse) this [model]."⁴⁴ The process of learning by watching, sometimes without the producer being aware of it, continues throughout the producers' professional life. Martin considered it important to transmit his knowledge in order to pass it on to future generations and guarantee the continuity of his production for the clients' sake. "If I don't show it to somebody else and if I travel, [and] the women come [...] to my shop, and I'm not here. How will they do? [...] And if I die? I kept the idea with me. Nobody [else] knows. It's not right! It's better [...] to share the idea with somebody else, it's the most important thing."⁴⁵

Yet, this educational endeavor has limits. Producers have to find a balance between transmitting their knowledge as that the trade will continue and withholding some know-how in order to preserve their livelihood in a competitive market (Herzfeld 2004:62-3, 155). While he willingly shared his knowledge of new models of stoves wherever he traveled in West Africa, there was one that Lagui Moumouni never taught: the double-stove. He explains that "if the guy hasn't learned here," he will not know how to do it. 46 If producers cannot withhold all knowledge – otherwise apprenticeship would lose its interest and meaning, they still conceal strategic aspects of their work that make their economic success or specialization.

On the other hand, when this subtle game of showing and hiding knowledge to the apprentice is not well balanced, the whole purpose of apprenticeship is threatened. If the apprentice is not taught according to his expectations and if the boss deliberately hides key

⁴⁴ "Mam datẽ wilgu bãnga fãa ... Mam na mane na wilg ba ... ti b man ti b gese [...] Ti bãm yel mohãn ya, ti mam zamsa bãm n yãoã." Lagui Moumouni, tinsmith. Fieldnotes, September 11, 2003.

⁴⁵ « Mais si je ne montre pas ça à quelqu'un d'autre, et si je voyage... [et] les femmes viennent [...] dans mon hangar, et pis, je suis pas là. Comment elles vont faire? ... [Et] si je meurs?.. L'idée, c'est resté avec moi. Personne ne connaît. C'est pas bien! Vaux mieux [...] partager l'idée avec quelqu'un d'autre, c'est l'essentiel. » ⁴⁶ "Sã ka soaba zamsa ka."

production knowledge, the apprentice can put an end to his training and change bosses (Herzfeld 2004:117). Martin's former apprentice, for instance, had begun his training in tinsmithing with another boss, who did not "*show him many things*." The lad decided to leave him and his mother introduced him to Martin, who had a different approach to apprenticeship.

The process of acquiring knowledge indirectly or independently from the boss is not always clearly identified by apprentices and producers. This is why inventions and discoveries are often interpreted as God-given or intuitive knowledge rather than knowledge gained from accumulated experience and observation. Lagui Moumouni therefore prides himself that "nobody showed" him the models of stoves that he is making. 48 "This [model comes from] my head [intelligence, brain] [and I] made [it]." God also showed him how to make the "four-square" stove. 50 Plans, blueprints "came into" his head 51 while he was sleeping and he just had to carry them out. Likewise, Moussa received the idea of making a hole in the ground while sleeping. When he began, all his pots were failing because he did not know this technique for the pressured air to come out of the hot cast. 52 He has been successful ever since.

Dib ligdi: the apprentices' money

The amount of apprentices' daily allowance varies "from workshop to workshop, depending on "the business climate," but also across trades (Livingstone 1995:340). Charmes noted that in Tunisia this remuneration was only meant to cover daily meal and transportation

⁴⁷ "Il montre pas beaucoup de choses." Martin, tinsmith, reporting what his former apprentice's mother told him.

^{48 &}quot;Ned pa wulug mam wey."

⁴⁹ "Nyawa ya mam zugu [...] n mane."

⁵⁰ "Ya mam bala Wend nam wilg mam."

⁵¹ "Tvma wa mam zugu. Plan wata mam zugu."

⁵² Bãngra da ka be (Lit. "Knowledge was not there").

expenses and perhaps give the apprentice some pocket money (1985:316). Burkinabè producers know that not providing cash allowances to an apprentice would be perceived as being abusive. The trainee would not accept to stay in a workshop where he would work for nothing (Herzfeld 2004:74).

Burkinabè producers and apprentices make a clear difference between "money for work" (tom ligdi) and "money for food" (dib ligdi). 53 While the former is dedicated to renew their stock of supplies and labor force, the latter is meant to cover meal expenses for the workers. Paul the aluminum smelter explains: "we don't pay! [Rather], you will give them food! ... We call it all 'food money' [rib ligdi]."54 Everyday, he gives 50 F CFA to each of his apprentices for breakfast, 100 F CFA for lunch, and between 300 F CFA and 500 F CFA, when he can, before they go home in the evening. On other days, he may not be able to give them anything at the end of the workday. Apprentices are also paid differently according to their level of seniority, expertise, and dedication. In one instance, Paul gave 700 F CFA to Ousmane, his oldest apprentice, 500 F CFA to Idrissa and 300 F CFA to Jacques, explaining that Ousmane was working harder than the others.

The amount of "food money" varies across trades, making them more or less attractive to youngsters. While Paul's oldest apprentice can earn up to 700 F CFA on a good business day, the amounts are significantly less in tinsmithing or rubber-working. When Martin had an apprentice, he would give him 200-300 F CFA on good days. But "the day it doesn't work, 100

Lagfo, pl. ligdi: cowry, and currently by extension, money of any kind *Ribo* or *dibo*: food (Alexandre 1953).
 "Tõnd ka yod ye! Fo na kõ d ba rib wey!... Tõnd bola y fã ti 'rib ligdi." Fieldnotes, February 2003.

francs [...] [And] if I have nothing, I give him nothing."⁵⁵ In Cité An II market, rubber-workers generally give around 300-400 F CFA for "food money" to their apprentices, daily.⁵⁶

In Moussa's large workshop of aluminum-smelting, the organization is quite different due to the greater size of the enterprise and level of production. The allowances look more like wages and are calculated on the basis of a ton of aluminum processed (see chap. XIV). When the team has finished an order, the boss gives the total amount to the team leader, who then distributes different shares to each team member, according to their position and level of seniority. On average, team members receive 2,000-2,500 F CFA per day while the team leader (taoor soaba) gets 3,000-3,500 F CFA. At that level, one can definitely not speak of rib ligdi anymore but of real wages. The workers know that the boss "yaoda apprentis soma" (pays the apprentices well) and in their opinion, this is one of the reasons why it is the largest workshop in town.

Working for oneself for additional money

Most apprentices take every opportunity to supplement *rib ligdi* with additional earnings. These are occasions to practice their skills and improve them as well as to build their personal networks of clients, suppliers, and colleagues. This practice is an integral, socially accepted, and even expected part of the apprenticeship. It always occurs during slack time, when the apprentice is free to use the workspace, tools, and younger apprentices to assist him. Indeed, this personal work should never take priority over the boss' work and always requires the boss' permission. At

⁵⁵ « Le jour que ça marche pas, 100 francs. [...] [Et] si je n'ai rien, je lui donne rien. » Martin. Fieldnotes, August 18, 2003

⁵⁶ "Ob kõta dib ligdi," Boureima explains. April 18, 2003.

Paul's workshop, the oldest apprentice is diligent at saving some of his *rib ligdi* to buy small quantities of aluminum. Whenever he can, he produces a small item or two (a small pot, an ashtray) for family members or neighborhood acquaintances who have ordered them.

These extra activities are even more prevalent at Moussa's large aluminum-smelting workshop. There, all enterprising workers and apprentices save part of their wages to buy aluminum and pay a team to produce pots for them whenever the boss lacks orders. Apprentices with less means use the workspace after the workday to produce one or two items at a time. They will then split the profit from the sale with those who helped them during the production process. Many also sell their production to the boss, who is glad to increase his stock without tapping into his store of supply, especially in times of shortage.

The fact that Moussa lets his apprentices produce on their own account may create ambiguous situations. According to Bassirou, one of Moussa's oldest workers who regularly sells his own pots to three of the boss' clients, "the boss doesn't get angry" at this situation. Indeed, workers do not produce enough pots to be a threat to the boss' business and their production can even be an advantage to him: they maintain a regular supply to his clients whenever he may lack aluminum to produce and make his teams work when himself does not have enough aluminum to keep all of them active. Moussa even buys aluminum from his workers who have their own networks of suppliers in the city. Again, both sides benefit from the deals even if workers can only provide rather small quantities of aluminum compared to the needs of the workshop. The workers earn a small profit margin on the sales and the boss

⁵⁷ "*Patron ka zabr ye.*" Of course, he could immediately stop these parallel activities if it were a threat to him. Bassirou, team 1's wheeler. Fieldnotes, February 4, 2003.

maintains his stock of aluminum at a rate that is still cheaper than the aluminum bought in Ghana in much larger quantities.

Moussa justifies the liberty that he gives to his workers as a way to keep them satisfied. "I give them freedom. [If they have aluminum, they] can set up [pots]. It's fine like this [...] In doing so, apprentices are happy." Leaving them this freedom is therefore a way to maintain a certain control on the level of competition. The longer he can keep them happy, the longer they will stay in his workshop. Like Greek artisans, he may try to restrain competition "by co-opting [his] best apprentices as partners" (Herzfeld 2004:142, 145). Indeed, Moussa thinks that producers who do not allow their apprentices to produce for themselves from time to time make a mistake. Apprentices get frustrated and end up leaving the boss to open their own workshop — thereby becoming direct competitors (Herzfeld 2004:62-3). In his situation, his apprentices are not a real threat to his activity because they do not have sufficient means to work on their own account for more than a few days at a time.

Yet, Moussa's system is not without risks. His nephew Ismaïla, who works on the retail side of the business, denounces the dissensions, jealousy, and competition that are present among the apprentices. Overlooking basic economic rules of the market, the boss compelled them to sell at a cheaper price, thereby making their pots more attractive than his. As a consequence, Moussa has gradually lost clients to his apprentices, only keeping clients from the provinces. Secondly, apprentices and young aluminum dealers vie for access to the teams to transform their aluminum. Among those who regularly buy aluminum to produce their own pots, the shrewdest

⁵⁸ "Mam kõ ob liberté. [Ob sẽn tara wagdo, ob] tõe montamer. Woto ya soma [...] Woto, apprentis suri nõmame" (lit. the apprentices' heart is happy). Moussa, aluminum-smelter. Fieldnotes, February 15, 2003.

⁵⁹ "He made a mistake. Now, the only clients left [are those] in the province." (C'est [...] une erreur de sa part. Il n'a que des clients de province maintenant). Ismaïla, Moussa's nephew and aluminum-pot retailer. Interview, August 21, 2003.

have developed personal friendship ties with team leaders in order to facilitate their access to the labor force. Ismaïla foresees that when the boss has gone, the workshop will collapse because of these internal divisions and rivalries.

The young men working on the retail side of the workshop also take advantage of the boss' leeway. "With the boss, you have to know how to negotiate," Ismaïla explains. 60 Whenever they can (when the boss is absent or out of ear-shot), the young dealers increase the retail price of an item when dealing with individual customers. The boss, not knowing that they have already withdrawn a certain amount, gives them another percentage on the retail sum.

Ambiguous relationship between the boss and his apprentices: economic versus paternalistic.

In the West African entrepreneurial context, economic power and moral or spiritual leadership are often intertwined (Labazée 1988:177, 181). In the context of these small workshops, apprentices respect their boss much like an elder. They address him with the respectful term of "patron" (boss), which is a French word for the head of any industrial or commercial enterprise. This relationship is therefore fundamentally stamped as an economic relation between a boss and his 'employees' and not as a tie between a master and apprentices or initiates (see Herzfeld 2004:157). Apprentices also show their respect by using the polite form "yāmb" (formal you) to address their boss, the way Mossi address elders and people in higher position of authority.

But the term "patron" also includes a mixture of traditional and contemporary perceptions. It contains the notion of "taor-soaba," 'the one who is before, in front of, and leading because

^{60 &}quot;Avec le patron, il faut savoir traiter."

he 'knows more' (see Martinelli 1996:24). Once one reaches a certain level of technical dexterity and competence, one does not belong to the category of apprentices anymore but to that of bosses. ⁶¹ For that reason, there is a hierarchy of smaller bosses within the workshop who have been there long enough to acquire a certain authority over newer and younger apprentices. Their authority comes from the fact that they are senior workers or apprentices, they are often older (but not always), and of course, have acquired a higher level of knowledge, competences, and familiarity with the surroundings. This is why Bassirou, the wheeler of team #1 in Moussa's aluminum-smelting workshop can say that "after the boss, I am the boss... [because] I've lasted here." ⁶² He had gained a certain authority and respect over the others because of his seniority in the workshop. Interestingly, the leader of Bassirou's team, Philippe, does not claim to be a "patron" but qualifies other workers and team leaders as being "bosses" because they were already working in the shop when he began. "Their knowledge is superior to mine." ⁶³ Still, Philippe is the leader of the team producing the largest pots (which requires great technical competence) and gets the highest wage.

Even though the relationship between the boss and his apprentices is defined in economic terms, its nature is fundamentally rooted in the social and moral code of West African societies, based on the respect of elders. A good indicator of this is the case of 'firing' an apprentice. The decision of sending an apprentice back home is rare and never happens for economic reasons. It is always motivated by a serious or repetitive breach of the moral code (Herzfeld 2004:184).

⁶¹ In contrast, Wallaert-Pêtre describes how female potters of particular ethnic groups in Cameroon "maintain a low level of practice […] to respect the 'normal' duration of apprenticeship," even if they are able to do better (2001:484).

⁶² "Après patron, ya mam patron… mam kaosa ka." Fieldnotes, February 4, 2003. Being paraplegic, Bassirou cannot evolve in the team's hierarchy but remains a wheeler.
⁶³ "*Ob bangre yiida mam.*"

Labazée noted the same thing within medium and large enterprises in Burkina Faso. "Laying-off is an extremely rare sanction [...] If it may happen in case of repeated thefts, it does not seem to be a means to part with an unproductive worker" or someone who does not meet the enterprise's standards (1988:197). Dureau writes that the apprentices must show respect to his boss and his family. If not, he "may be sent back to his parents" (1985:332-33). But even in this extreme case, conflict is avoided to preserve good relationships between the two parties and their families (see Clawson 2005:249).

This is perfectly illustrated by a situation that occurred in Paul's aluminum-smelting workshop. Paul believes that parents "cannot accept" that he might dismiss their son for one reason or another. All of his former apprentices who left their training before the end seem to have done it at their own initiative. Paul qualifies them as being "lazy" (kviima) or "impolite" (impoli, French). During my time at his workshop, his relation gradually deteriorated with his second apprentice, Idrissa. Paul considered him to be "impolite," "lazy," and interested only in women and eating. Idrissa was definitely not obeying the moral code as he was often replying to Paul's rebukes without changing his behavior to meet his boss' expectations. Paul knew that it was for the same reasons that Idrissa had left his former boss, a carpenter, before coming to his shop. "Idrissa... is impolite. He doesn't fear [respect] people. So the carpenter told him to leave." A few months later, Idrissa was not there anymore as Paul had asked him to 'go home.'

Apprentices call their boss "patron" and bosses call apprentices "children" (kamba) or "work children" (tom kamba). In other words, if the boss is perceived as an economic agent,

^{64 &}quot;Ob pa na sak ve."

⁶⁵ "Idrissa... ya impoli. A ka zvet ned ye. Donc menuisier yella la me ti a loge." Van der Geest also notes that « respect (*obuo*) is ... a central concept in Akan moral thought." A child who behaves badly will be said to be "disrespectful" (1997: 535).

apprentices are categorized according to more traditional views. They are not yet adults and are placed in a position of social and moral inferiority. They are those who learn, who are dependent on the boss to know what to do; they need discipline and maturing, and they are not remunerated as real employees since their money is not 'real' money but "food money" (rib ligdi). Since apprentices are always younger than their boss, even if sometimes by just a few years, they remain "children" in the eyes of their boss. In the Tunisian context, Charmes explains that "paternalism" arose from an initial transmission of the trades between fathers and sons or uncles and nephews. If the producer now recruits children that are not directly related to him, he continues to expect the child to respect him "as a father" (no reply, looking down) (1985:318).

The relationship between bosses and apprentices is not only authoritative but can also be quite friendly. Bosses exchange jokes with their apprentices and often give them nicknames. They treat them from time to time and may help them in difficult situations. For instance, Paul regularly offers some snack food such as tamarind juices to his apprentices. Bosses and apprentices also exchange services, such as borrowing money from one another or personal equipment such as motorcycles. Bosses even entrust their apprentices with money, sending them to purchase supplies or exchange a bill against small change. The respect due to the authority figure and the elder continues to be a strong check on apprentices' behavior and trust.

The end of the apprenticeship: time to leave and growing competition

As noted above, the apprenticeship finishes whenever the apprentice has no more opportunity to learn, to acquire additional experience, or to increase his earnings. In most workshops, there is no possibility to find a compromise such as at Moussa's. The activity is not

important enough for both the boss and his apprentice(s) to make sufficient earnings that would enable them to support their respective families. Knowing the trade but not earning as he should, the apprentice's only solution is to move on and open his own workshop. Charmes noted a similar phenomenon in Tunisia and explained that "the resolution of the contradiction between the necessity to render the apprentices profitable (because of the competition on the labor market and the market of goods) and their maintenance in a state of subjection and exploitation [...] leads to an aggravation of competition itself" (1985:327-28). This situation leads to the "spontaneous [...] creation of a very high number of small shops with little capital and employing numerous apprentices" (1985:328).

Ideally, an apprentice should leave once he has reached a certain level of technical dexterity and after gathering enough means to open his own workshop. However it may take time to meet these conditions, depending on the apprentices' capacity to set money aside from his limited allowances and market opportunities. He may also leave before his technical training is over, either because of necessity or because his boss did not share all of his savoir-faire. Moussa left before mastering all of the production techniques and learned the rest on his own. This situation may not help producing strongly competent producers but rather, can deteriorate the general level of skills within a particular trade.

Most often, the boss and his apprentice come to an agreement that it is time for the latter to leave. When the boss sees that his apprentice has reached the desired level of competence, he "gives him the way," the permission to leave. 66 It is what happened to Abdul Wahab at the end

⁶⁶ The expression "n $k\tilde{o}$ sore," to give (somebody) the way, the road is frequently used to 'give permission' to leave and go home to somebody who had asked permission beforehand (n $b\tilde{o}sa$ sore). In that case, it is used figuratively to give permission to the apprentice to leave the workshop at the end of his training.

of his training in tire-working. The boss "didn't argue" or get angry. He simply told him that he "knew the work now" so he "gave [him] the road for [him] to settle down." In doing so, bosses keep the same strategy of avoiding conflict in order to maintain friendly relations and allow for future collaborations. In a fairly unstable economic situation, it is always safer to preserve good relationships between former bosses and apprentices in order to help one another in times of need (Herzfeld 2004:145).

The apprenticeship system in these three trades is well adapted to the organization of production and to guarantee their reproduction over time. The production process could not function properly without apprentices carrying out small tasks, running errands, and handling the production of small items that accomplished producers have no time for. At the same time, this training period is essential to acquire the fundamental and practical knowledge and skills necessary to run a business (technical, economic, and social). It is also a time when the trainees acquire a new way of being, new networks of social and occupational ties, and a new selfperception. Through this "enskilment" process (Pálsson 1994), they truly become tinsmiths, aluminum-smelters, or rubber-workers. At the same time, the trade's culture is transmitted, being embodied and interiorized in each apprentice who will then be able to reproduce it and in turn, pass it on to others.

⁶⁷ "Pa zab taaba," "bang tumda masa," "n kõ [ye] sore ti [ye] me baodam renda." The expression "baoda mam renda" literally means "to look for oneself," which producers translate into French as "se chercher." It means to find a way to make a living on one's own now, to struggle to make ends meet.

Chapter IX. Techniques at work in aluminum-smelting:

Chains of production, efficient routines, 'tricks,' and innovations

Agreeing with Schwint and Keller and Keller about the link between knowledge and practice, Schlanger also reminds us that "technique [...] is a matter of practical *reason*, of social *knowledge*" and is "fundamentally social" (1991, my emphasis). He adds that "the technical fact (*fait technique*) is a social fact like the others, and must be situated in its context, at the confluence between the interactions that give it its meaning" (1991). Referring to Mauss, Schlanger explains that a technical fact is an "efficient traditional act" (*acte traditionnel efficace*) [...] an *arbitrary, collective, reasoned act with multiple efficacy*" (Mauss 1936:370, 371 *In* 1991; emphasis in original). Any technician or craftsman "*knows*" even if it is in a way that is "not necessarily 'logical.'" Yet their knowledge is "adequate and apt to be shared. They know 'the practical solution of the problem' and their actions come from a conscious 'practice' and not from a theoretical logic" (Mauss 1947:41 *In* Schlanger 1991, my emphasis). Lemonnier adds that since technology and technological systems are "social productions," there are also "nontechnologically based choices" that are made (1992:19). What is specific to techniques is that it is "a matter of concrete efficacy."

In this and the following two chapters, I show how the techniques the producers across the three activities use are technical knowledge that is indeed goal-oriented and the product of a collective, social as well as individual elaboration through time. It is a practical knowledge in which the body and the mind are called on, a knowledge in action which draws on elaborated

routines for efficiency but remains flexible enough to adapt to the specificities of the object to be produced and to innovate.

Schwint explains that even though the artisan prepares the process of production in advance, it is only as a general blueprint. "An important part of the technique is produced at the very moment of production (*fabrication*)" (2002:203). There is thus a dialectic between several temporalities, as "the artisan must constantly think about the characteristics of the future object, refer to similar past situations, while still adapting to the evolution of the present circumstances of the [production] process that is taking place" (2002:203).

The following technical analysis aims at highlighting the economic logic and efficiency underlying the production process and the technical choices that are made by these producers. It demonstrates that 1) work is structured by efficient routines but also by economic concerns, 2) every actor has a specific role, 3) the workspace and tools are used and disposed in an effective way, and 4) some technical steps are unavoidable and constitute a constraint on the technical process. I will consider the three activities (aluminum-smelting, tinsmithing, and rubberworking) in separate chapters as they are shaped by different types of technical and economic constraints and opportunities. Due to these variations, producers do not use the same strategies and may not share the same concerns in terms of techniques, quality, and aesthetic.

Operational sequences (chaînes opératoires) and chains of production

One of the most valuable tools that anthropologists use to describe technical processes is what they have termed *operational sequences* (English for '*chaînes opératoires*;' see Grace 1996; Leroi-Gourhan 1964; Cresswell 1976, 1996; Balfet 1991; Desrosiers 1991; Martinelli

1991). Balfet explains that the concept of operational sequence is "a tool for the observation, description, and analysis of technical processes" and it is a "polyvalent tool" (1991:11). While the concept was initially expressed by Leroi-Gourhan in 1964, other anthropologists studying techniques have used it from different angles. Cresswell for instance, puts the emphasis on the "transformation of a raw material into a product" (Cresswell 1976 In Balfet 1991:12). Martinelli stresses that the focus of an operational sequence is "the goal that unifies the operations – the notion of project" (Martinelli 1985 In Balfet 1991:12). However, in general, it is understood that an operational sequence describes "any technical activity as a transformation of a material from state A to state A + x, which is the product" (Balfet 1991:13). 'A' is not necessarily a raw material in the strict sense and 'A + x' are not necessarily a finished product, ready to be consumed, but can be an intermediary artifact (1991:13).

The basic unit of a sequence is the "technical gesture (*geste technique*) or basic gesture (*geste élémentaire*)" as "atom of a technical action" (Balfet 1991:17). The chain of production is thus sequenced according to criteria such as names, places, actors, tools, and time. A series of operations constitute a sequence, several sequences then cluster into phases, which then make up a technical process or path (*cheminement*) (1991:17). Such processes can be synthesized into graphic representations (technical film, tables, and schemes) in order to emphasize different aspects of the operational sequence (1991:18). To sum up, single operations have meaning only within a *chaîne opératoire*, as "indispensable and dependent" links (Desrosiers 1991:22, quoting Balfet 1975:52). It is also essential to remember that what forms the core of the "technical atom" or basic gesture is not the tool, but the gesture (1991:23, quoting Balfet 1975:52). Lastly,

Cresswell warns us against any idealization, as an operational sequence is only a tool and as there is more than one way to realize a technical project (1996:82).

Aluminum-smelting: technology and operational sequences

The technology of aluminum-smelting has been used at both artisanal and industrial levels around the globe. According to a specialized source, "[a]luminum is one of the few metals that can be cast by all of the processes used in casting metals," mainly: die casting, permanent mold casting, and sand casting. Metal experts comment that the choice of the technique depends on two main factors: "feasibility and cost factors" and "quality factors" (Key to Metals Database 2005a). Among these three main techniques, "[s]and casting is the most versatile method and the most economical for producing small quantities. Almost any shape mold can be produced" (Metals Processing Advisor 2002). In contrast, die casting is used in the industry for the "production of large quantities of relatively small parts" and "produce good surface finish." Lastly, permanent mold casting "is suited to high-volume production" as it is "stronger than sand castings and less expensive for large production quantities" (Key to Metals Database 2005a; Metals Processing Advisor 2002).

In Burkina Faso, sand casting is the technique used to produce aluminum castings. It is one of the first forms of casting practiced, as it "was well established in the Bronze Age (beginning c. 3000 BC)." (New Encyclopedia Britannica 2002b:412a-412b). The technical process of sand casting is simple and cheap and follows the same pattern everywhere: "the mold is formed around a pattern by ramming sand, mixed with the proper bonding agent, onto the pattern. Then

.

¹ Permission from author.

the pattern is removed, leaving a cavity in the shape of the casting to be made [...] Molten metal is poured into the mold, and after it has solidified the mold is broken to remove the casting" (Key to Metals Database 2005a). This technique produces "rough surfaces" which need to be further refined by different means: "hammer peening [...], polishing, forging, plating, rough grinding, [or] machine grinding" (New Encyclopaedia Britannica 2002a:425b). Each casting is thus unique since the sand mold has to be broken and remade for each production cycle.

As its name indicates, sand is the primary element in sand casting. American craftsmen call green sand (which is not green) the aggregate of sand and "a binder such as water and bentonite clay," which is used to make the molds (New Encyclopaedia Britannica 2002a:412c). The proportion of each component may vary but the largest constituent is always sand. The goal is to find an appropriate balance between moldability, surface finish, and ability of the hot molten to degas.² The mixture should be moist enough so that the sand holds together when squeezed in the hand and breaks in half nicely. As a craftsman explains, "it should feel damp but not wet" (Himmelheber 1995a). He adds that "[a]fter a lot of use the mix may have to be recharged with bentonite due to the parting dust used and since the heat of the melt tends to burn out the clay."³ When the sand "will not form or break cleanly," he recommends making "a brand new batch of mix [green sand]" after bentonite has been added about three times (1995a).⁴ In Burkina Faso,

² The American Foundry Society explains that "[g]reen sand consists of high-quality silica sand, about 10 percent bentonite clay (as the binder), 2 to 5 percent water and about 5 percent sea coal (a carbonaceous mold additive to improve casting finish)." The last component is often not used (Turner-Fairbank Highway Research Center nd.).

³ See below.

⁴ Interestingly, it seems to be the opposite phenomenon in Burkina Faso. A young smelter working in the biggest aluminum-smelting shop in Ouagadougou explains that 'green sand' (*tãndo*) is made of sand (*bīisri*) and clay (*boalga*). But during the production process, it is the sand and not the clay that diminishes. The sand ends up sticking too much (because of the higher proportion of clay left) and the workers need to add more sand to make it usable again (Interview with Léon, Sept. 26, 2003). Indeed, I observed it as another aluminum-smelter (Paul) added sand (*bīisri*) to the green sand as it was sticking too much: "A pa soma ye. A colldame (Fr. coller)" (It's not good. It sticks) – Fieldnotes, Dec. 26, 2003.

green sand $(t\tilde{a}ndo - literally, mud)$ is made out of sand $(b\tilde{u}isri)$ and clay (boalga) or kaolin (goore), depending on the craftsmen. In addition, they use sand $(b\tilde{u}isri)$ as parting dust and kaolin powder to whiten the aluminum castings (see below).

From the United States to Burkina Faso, tools have also similar functions, shapes, and uses, even if their materials can vary. Craftsmen create "a mold that has the shape of the part to be made." Patterns are "made of some material such as wood, metal, wax, [or] polystyrene" (New Encyclopaedia Britannica 2002a:412c).⁵ As the metal to be cast will shrink somewhat between the time it first solidifies and the time it is cool, the master must be made slightly larger than the finished product (2002a:425a). Then, they place the mold into a molding box called flask. This is a multi-part box, which is often constituted of two parts stacked and attached together: the top (cope) and the bottom (drag). Sand is poured into the drag and packed in through a vibratory process called ramming. Wooden rammers (or wedges) of different sizes and shapes are used: square or round, short or tall, depending on the need and the stage in the production process. When the sand in the drag is rammed, craftsmen add some parting dust on the surface "to isolate the sand in the [drag] from that in the [cope] so that the two may be separated without the sand clinging to each other" (Himmelheber 1995b). Various tools can be used to shape the sand or remove some. For instance, before pouring sand into the flask, craftsmen place a metal cylinder to make the sprue to create a passage through which the molten metal is poured into the mold.⁸ Finally, both in American or Burkinabè workshops, old spoons bent to the desired shape and sharpened work well to smooth the sand mold, as well as spatulas.

⁵ In Burkina Faso, molds are made in metal (see below).

⁶ This is not the case for Burkinabè producers, quite the opposite (see below).

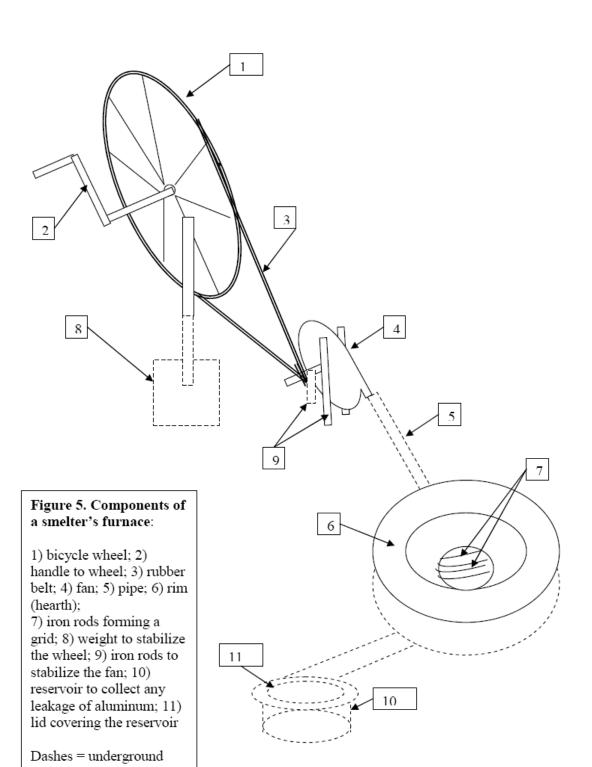
⁷ But it can have more parts if the object to be produced is more complex.

⁸ This passage is also called a "gate" (New Encyclopaedia Britannica 2002b:412c)

The structure that is used to melt aluminum is called "a furnace or cupola" (Himmelheber 1995c). American craftsmen can use a forge, a propane burner, "gas- or oil-fired reverberatory or hearth furnaces," or a homebuilt electric melting furnace (DPPEA 2006). In Burkina Faso, the furnace is composed of 1) a bicycle wheel with 2) a handle that spins 3) a rubber belt that sets in motion 4) a fan, which blows air through 5) a metal pipe that arrives underneath the hearth, which is made of 6) a truck rim. The wheel and the fan are stabilized by 8) a weight and 9) iron rods, respectively. Except for the wheel, the rest of the structure is half buried in the ground. Only the top of the rim/hearth is visible as the inside and outside have been coated with wet mud. The craftsmen leave a hole at the bottom of the hearth, where they place 7) small, bent iron rods to make a grid where the charcoal will be placed. A tunnel is also dug underneath the hearth, leading to 10) a reservoir meant to collect any leakage of aluminum. The smelter can have access to it by removing 11) a lid that has been buried on top of it (see figure 5).

The containers (crucibles) in which aluminum is melted are often of iron, since aluminum has a lower melting point than iron (1220°F versus 2800°F) (Himmelheber 1995d). In Burkina Faso, aluminum-smelters use gas tanks from domestic refrigerators, ⁹ gas bottles cut into halves, or even old cast-iron pots. Yet these containers do not last more than one to three days, depending on their strength and the intensity of work. They end up leaking because the heat of the furnace makes holes in the metal. To lengthen their lifetime, craftsmen coat the outside with a mixture of wet sand and green sand. Crucibles may be of various sizes, depending on the

⁹ Another aluminum-smelter believed that they were refrigerators' engine blocks cut in half, instead.



amount of molten aluminum needed. Producers calculate the volume needed for the mold and sprue and add approximately twenty-five percent "to be safe" and to take into account the slag that will be removed. The rule is never to "run short of melt when pouring" as the casting will shrink or worse, will not be completed (Himmelheber 1995d).

The operational sequence for the production of aluminum pots (see below) is efficient in many aspects, as it is highly routinized. Each step occurs in the same order for each cycle, and each worker knows his role in the production process. Yet, there are some variations across workshops in the organization of work and in some production strategies. To draw a better contrast, I will compare Moussa's workshop, the biggest workshop in town, with a smaller workshop whose organization is necessarily different.

Production rate: technical constraints and consumer demand

The production rate varies greatly between Moussa's workshop and smaller ones such as Paul's. While the slowest workshop can take up to an hour and fifteen minutes to make a pot, the fastest one (Moussa's) can produce a pot in twenty, even ten minutes. Of course, it depends on the size and complexity of the object but the organization of work plays an important part as well. At Paul's, the work atmosphere and the intensity of work are more casual in many ways. Producing only to order and with less means, the production rate can slow down from time to time, for lack of orders or lack of aluminum. Paul even admits that they are "slow" compared to other workshops. One day, I suggested that if they had two molds of the same item and a bigger crucible, they could work much faster. They could run two molds at the same time and melt

Operational Sequence 1. Producing an aluminum pot, size #8.



Photo 8. Mixing the sand (*tando*) before production.

Photo 9. Tying the two halves of the mold with a metal belt and a wooden wedge.



Photo 10. Cleaning the inside of the mold.



Photo 11. Filling and ramming the sand inside the mold.



Photo 12. Made a hole in the sand on top of the mold (left).

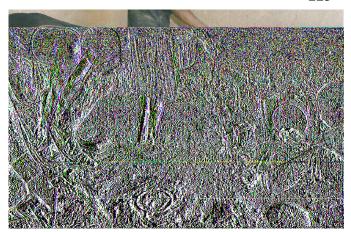


Photo 13. Waiting for the workspace to be cleared.



Photo 14. Turning the mold upside down and making sure it is tight.



Photo 15. Tying the two halves of the wooden bottom frame (ruk rogo) together and placing the two metal plates.



Photo 16. Filling the frame with sand (tando).

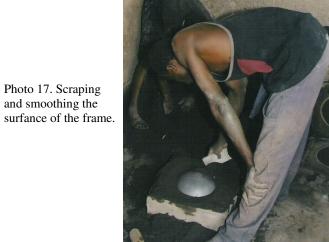




Photo 18. Added the top frame (sapo), filled it with sand and ramming it clockwise.



Photo 20. Wetting the sand on both sides to mark the emplacement of the *sapo* on top of the bottom frame (*ruk rogo*).



Photo 19. Boss taking over, placing a metal tube (sprue) in the middle (in contact with the metal mold underneath) and ramming the sand around it to make it firm



Photo 21. Removing the sapo.



Photo 22. Removing both sides of the bottom frame and then both halves of the metal mold.



Photo 23. Wetting the handles before removing the metal mold.



Photo 24. Spreading a type of powdered clay (go:re) after smoothing the side of the sand mold.



Photo 25. Finishing drawing a motive on one side.



Photo 26. Spreading go:re on the inside section of the sand mold.



Photo 27. Drawing a motive on the other side, using a broken handle



Photo 28. Placed one half of the sand mold back and smoothing the inside section with the back of a spoon.



Photo 29. Smoothing the inside section again with the back of a spoon and checking the emplacement of the first half of the bottom frame around it.



Photo 30. Placing the second half of the bottom frame back around the inside section. Checking the space between the outer and inner molds and pressing the frames to adjust it.



Photo 31. Carefully placing the *sapo* back on top of the bottom frame, making sure that the marks that had been made fit correctly in their exact position.





Photo 33. Pouring the molten aluminum into the mold.







Photo 35. Taking the casting out of its mold.



Photo 36. Failed pot: they did not press hard enough and some aluminum leaked out.



Photo 37. Apprentice (right) filing imperfections off the castings.



Photo 38. Sawing the tips (sprues) of the castings.



Photo 39 & 40. Filing the castings and plugging any holes.

more aluminum at each melting cycle to pour in both molds at once, instead of doing one after the other. His reply was very revealing. According to Paul, it was possible, but not very useful. Since they do not have a lot of work (i.e. they do not have many orders), they do not need to hurry – "if there is not much work [to do], we don't rush." 10

Limitations to the rate of production are therefore mostly structural: the importance of the demand shapes the organization of work, which maintains a technology that only allows for the production of one big or two small items at a time. In other words, "even if we hurry, [the quantity of aluminum] will not be enough." Working with only one furnace and a crucible that allows a limited quantity of aluminum per melting cycle, these small workshops tend to make about twelve to twenty pots or other items a day. 11 One aluminum-smelter declared that he produced twelve big pots (size 30-40) a day. 12 Another explained that if he had enough aluminum he could produce up to twenty pots a day.

At Moussa's, the intensity of work is much greater. He has specialized in producing the largest aluminum pots and their lids (size thirty to sixty), even if he is also producing smaller pots at a lesser level. 13 Each team is producing only one type of pot every day. They do not have to worry about getting supplies or dealing with clients and concentrate all their effort on the production of the number and size of pots they have been asked to produce by the boss. The rhythm of work is thus much faster. The norm is that the main teams (producing the biggest pots)

¹⁰ "Tom sãn pa waog ye, tõnd pa yagdr ye." Fieldnotes, December 28, 2002.

¹¹ Paul, as well as the majority of small aluminum-smelters, produces pots of small size, mainly from size 1 to 10. When he receives orders for larger pots, he buys them from other workshops such as Moussa's. They also produce a variety of other goods upon demand (from smaller-size pots and their lids – size 0.5 to about size twenty-five, pans, skimmers, ladles, spoons, cake pans, teapots, bowls, and other cooking utensils).

¹² These sizes come from the original cast-iron pots that were imported from Europe. The size numbers are embossed on the pots and their lids.

13 We will see in chapter XII that Moussa mostly contracts out the production of smaller pots.

work 150 kg of aluminum per day, producing twelve pots size 30. One worker calculated for me that at the end of the week (six workdays), one team would have worked 900 kg to a ton and produced seventy-two pots size 30, which are worth 936,000 F CFA. While a smaller workshop produces about twelve to twenty items in a ten-hour workday, Moussa's workers produce about twelve pots to fifteen pots (depending on the size) in six or seven hours. Indeed, as I have shown earlier, the teams begin to work at about half past seven in the morning and end around two o'clock in the afternoon, once they have finished producing the required number of pots.

At Moussa's workshop, workers are proud to say how much or how fast they can produce. Issou, taking care of the production of lids, proudly told me that he could, ideally, produce up to fifty lids a day. To justify this, he explained that he had already made 150 lids in three days. But he could not do it anymore, he added, because of the shortage of aluminum. He Between 1999 and 2001, when the market was good and they had a lot of work, Hamidou could also file seventy to a hundred pots per day. Léon, the young leader of team 4a, was the one who asked me to time his production cycle. Trying to beat his time, he managed to produce several pots of size 10 in ten minutes (instead of twenty), from the time he put the filled mold upside-down to the time he poured the molten aluminum in. In the end, he did not even ask me to time him anymore. He was monitoring his time with his own watch that he had hung on the wall!

At Moussa's, workers use several techniques to work faster, especially by finding ways to save energy. For instance, the boss made his own aluminum molds to replace the heavy, castiron ones. He carefully measured their dimensions and weight so that they are light enough to

¹⁴ Interview carried out on January 24, 2004, at a period when there was a severe shortage of aluminum. The boss, Moussa, was waiting for a truck-load of aluminum coming from Ghana.

¹⁵ Léon's conception of the production cycle differed from mine as he considered only his own part of the job. He did not count the time taken to fill the metal mold with sand, since it was his apprentice who was doing it. In reality, the whole production cycle lasted about fifteen minutes (instead of twenty).

save the worker considerable energy.¹⁶ Work is thus easier and can progress faster. In addition, the boss brought nets from Ghana that are made with synthetic fibers. They were originally meant for another use but he uses them to sift sand in order to remove impurities. They can sift larger quantities of sand at any one time and it is much faster than using sieves, which "take a lot of time!" Léon identified three criteria for someone to be 'good' in aluminum-smelting: 1) experience, 2) good physical conditions, and 3) speed.

Technical strategies: embodied knowledge and efficient routines

There is "technical efficacy" in the artisans' procedures and technology and in the way they device "tricks" to improve the effectiveness of their production process (Schwint 2002:53). This efficacy is driven by the desired end-result and by economic constraints (2002:134). Artisans recognize this themselves by using the terms "la débrouille" or "système D" (D for débrouille, the act of fending for oneself), which emphasize their ingenuity in precarious conditions (lacking time, materials, technical, and financial means) (2002:135, 150-1). However the artisans also take pleasure in creating and working in such conditions, taking "risks," and creating something out of this process (2002:108, 222).

This response to the challenges of their working conditions is well summarized in the artisans' notion of "tour de main" or "coup de main" (Schwint 2002:88). This expression describes the competence of the artisan that is embodied in his gestures (simple, efficient, and precise), routinized through repetitions, even though there is always some variation and

¹⁶ Moussa explained that the cast-iron molds are "heavy and big... you get tired [with them]... you will have no strength left" ([Kut rugdo ya] zisgo la bedre... fo yesdame... fo pãnga setame). Interview Feb. 13, 2004.

¹⁷ Moussa does not know how to call this net so he called it "grillage" (French for wire netting).

¹⁸ These idiomatic expressions are not easily translated in English. They could be expressed as "having the trick," flair, ability, or know-how.

improvisation. At a "glance" (*coup d'œil*), he is able to quickly evaluate the situation and is able to adapt and anticipate if necessary. This is truly "embodied knowledge" (*savoir du corps*), highly complex and only verbalized or transmissible with difficulty (2002:93). However there are also some approximations in the artisan's work, as he must find a compromise between "precision" and "speed" (*rapidité*) to reach a very practical goal: to get a decent result (2002:95-97).

In similar ways, Burkinabè smelters manage the production process through embodied knowledge, routinized practices, and 'tricks.' For many technical aspects of the production process, producers just 'know' how to do without necessarily being able to explain it in detail (Schwint 2002:92, 176). Experienced smelters just 'know' when the aluminum is hot enough to be poured and how fast. When it is glowing "red," it is ready but if it is still "black," it is not ready. Once it is hot enough, it must be poured quickly. If these two conditions are not fulfilled, there will be holes ($v\tilde{o}re$) in the final product. At Moussa's, each team has a person fully dedicated to the furnace, spinning the wheel, adding the necessary aluminum into the crucible, and checking the melting process. In smaller workshops, the boss has to check the melting process very regularly, up to once every minute, 20 since the apprentice dedicated to it is not competent enough yet.

In addition, aluminum-smelters just 'know' how much aluminum they need for each pot and which proportion of hard and soft aluminum to melt, without ever measuring it in a precise

¹⁹ An American craftsman notes that if the molten metal is too hot, the end result will be too dark. On the other hand, "the shiny surface is the result of carefully selecting the right pouring temperature" (Hartman, Daniel B. 2006).

²⁰ In one instance, I noted that during an 18-minute period (a melting cycle), Paul interrupted his work on a mold ten times to check the melting process (about every one or two minutes): doing such things as adding aluminum, checking, adding charcoal, removing the dross, or reducing the quantity of aluminum to avoid any outpouring. (Fieldnotes, Dec. 19, 2002).

way. ²¹ For example, the teams at Moussa's workshop melt a mixture of about forty percent of soft aluminum and sixty percent of hard aluminum. In team #3, Ali mixes about three kilograms of hard aluminum and two kilograms of soft aluminum to make a pot #12, while in team #2, the 'wheeler' adds four pieces of hard aluminum and five pieces of soft aluminum to the aluminum that is already melting in the crucible. One of the workers told me that they could use only hard aluminum but the final product would turn out black. Adding soft aluminum renders the pot white. This was confirmed in another instance, when Léon, the leader of team #4a, complained to his wheeler that there was too much hard aluminum: "Wagda ya wusgo, wusgo, wusgo! ... Ning bugsgo ti ruko yi sablga" ("There is way too much [hard] aluminum! ... Add some soft [one] so that the pot will not come out black").

There may be another reason for mixing the two types of aluminum. In his workshop, Paul asked his apprentice to add more soft aluminum as the mixture was too hard. They were running the risk of failing with the pot ("ruko na sāmame"). Since these aluminum alloys do not have the same proportion of aluminum, hard aluminum supplies may contain alloys that are not as flexible as soft ones. As a result, if the mixture is too hard, the molten aluminum will not be fluid or flexible enough and the end product will break.

In the same manner, smelters know how the texture of the green sand must be and what to do to modify it when needed. When the proportion of sand is too great and the green sand becomes too sticky, they just add some more sand (without strictly measuring the quantity) to

²¹ 'Hard' (or 'dry') aluminum (*wagd koεεnga*) and 'soft' aluminum (*wagd bugsgo*) correspond to different types of aluminum alloys. The former is certainly a mixture of aluminum and copper (high-temperature and wear resistant), which is commonly used to make engine parts such as pistons and cylinder blocks. The latter, on the other hand, must correspond to different kinds of aluminum alloys, which are more ductile. It is found in a variety of scrap goods: beverage and food cans, window frames, printing plates, and aluminum sheets) (Key to Metals Database 2005b).

balance it. Green sand should also have the right degree of humidity: if it is too dry, the smelters explained to me, they will not be able to make the mold because it will not stick together (*tabende*). However if it is too wet, the mold will hold but the pot will fail (*ruko na sãmame*) because the sand will cool the aluminum cast too fast and this will produce corrugations on the surface of the pot. In the example above, Paul had to remake the sand mold in the cope for that reason (see photo. 40).

To preserve the right level of humidity, one team leader at Moussa's workshop pours water in the sprue where the molten aluminum has just been poured and draws a line in the sand of the cast with the handle of a spoon. When I asked him about the reason, he replied rather vaguely that "the water wants to come down [the sand mold] and it's not good" (Koom n date n sigi ti ka soma ye). I presumed the line was meant to prevent the water from going further down, wetting the sand and the wooden flasks too much, thereby cooling the aluminum too fast.

Another important point is that aluminum-smelters have designed techniques to reduce production costs, especially in terms of aluminum. They are doing so by three means: making lighter and thinner metal molds, using less aluminum, and making the sand mold thicker at its bottom. Moussa explained to me how the pots' molds have evolved through time and became lighter. In 1974, a mold for a pot #10 weighed 4.5 kg. Now, it has declined to 3.5 kg. Likewise, the mold for a pot #5 used to weigh 2-2.5kg and now weighs 1.5-1.7kg. "We gained knowledge and thus, profit" ([Tõnd pama] bãngre [la] pam yõodo). Indeed, not only do they save energy by manipulating lighter molds but they also use less molten aluminum as the molds are thinner.²² What happened is that they gradually replaced the cast-iron molds (kut moule – literally, 'iron

²² Another factor is that when making a mold out of pot, it tends to come out slightly smaller than the original. That is why the pots have gradually become smaller in size and weight than older ones.

molds') that were initially imported from Europe and later produced in South Africa and in other countries, with aluminum ones. Ismaila, the boss' nephew, insisted on the fact that these molds are not "randomly" made: "they have to be made very carefully to be usable. Otherwise, there will always be some imperfections." Indeed, making the molds is a very delicate operation, as they should be perfect in order to produce flawless pots and thus, gain time in the finishing phase (filing off and fixing holes).

Even if the molds are lighter, producers use one or two other techniques to reduce the quantity of aluminum, depending on the workshops. At Moussa's, workers remove about 0.5-1kg of aluminum from the standard weight of the pot, depending on its size. Yacouba, the leader of team #3, explained that instead of pouring four kilograms of aluminum to make a pot #10, they use only three and a half kilograms. He justified his action saying that if they made the pots with four kilograms of aluminum, they would not be able to make the twenty-two pots that were required for the day, as there would not be enough aluminum. In team #2, Malik always removes a small container of molten aluminum before pouring the rest into the sand mold. He explains that a pot #30 should weigh between eleven and a half kilograms and twelve kilograms but if they pour all the aluminum contained in the crucible, it would be too much. That is why they always remove about one kilogram.

Finally, all aluminum-smelters use a third technique to reduce the quantity of aluminum poured into the sand cast. They add more sand on the bottom of the sand mold (which is upsidedown) to make this part thinner in the final product (see Operational sequence 2). Paul explained that when they fasten the two parts of the metal mold with a belt, they cannot pound as much

²³ « [Ils ne sont pas] fabriqués au hasard. [Ils] doivent être très bien faits pour être utilisés. Sinon, il y aura toujours des erreurs » (French). Interview September 25, 2003.

sand as they would like to when ramming. Since they do not want the finished product to be too thick, they add more sand after removing the mold to make the bottom of the sand mold thicker – thereby pouring less molten aluminum. Once again, smelters use an approximate method to measure how much sand should be added. Paul merely specifies that he will add just enough so that it "will not be too thick, for it to be OK" (pa na yii taoko. Na zemse). Likewise, Yacouba, the leader of team #3 at Moussa's uses the same word "zemse" (lit. "to make equal") to explain that he adds just enough to be 'even' or to reach the 'right' dimension.

At Moussa's workshop, the story goes that it is Philippe, the leader of team #1 (which makes the largest pots) who discovered the technique of adding sand to the bottom of the mold. The young men working there recount that the boss had brought large pots from Ghana to begin their production and sawed them into halves to make his own molds. After some time, they found a way to make lighter pots in order to reduce the production costs and increase their profit margins. They comment that "Philippe can make it so that it comes out light and there is profit" (A Philippe tõe man ti a yit faaga [ti] yõod be me). They called it "bomber la me" (to bulge, Fr.). Moussa explained to me that they "bulged" the bottom so that it would come out "nicer." Aluminum-smelters only do it for the biggest pots (#12 and up) as it avoids filing them to remove any additional thickness. If they had to file them, it would be tiring and they would burn their hands.²⁴ In contrast, they do not bulge the smaller pots as they can effectively file them at the end of the production sequence.

²⁴ "Rug beda, sõgo ya toogo, fo yeeme ... Ne rugd beda, hã sõ, fo nugu na winga woto" Fieldnotes, February 13, 2003.

Aluminum-smelters do not waste any ounce of raw material, as it is their main productive ressource. Besides limiting its quantity for each pot produced, they also carefully save the dross²⁵ and the sprues to re-use them. Paul sets apart all the sprues that he cuts from every item produced and puts them in a bucket hanging on the ceiling of his workshop.²⁶ In his view, as in the view of all the other smelters doing the same, he is saving free aluminum: "Ya économie" (It's a saving). Another smelter weighs his saved aluminum to better assess how much free aluminum he was able to set aside. In two months, he was able to collect thirty kilograms of aluminum: "Woto, fo tõe bānga yōodo. [La] fo sān nyenge tao tao, fo pa mi yōod ye" (This way, you know your profit. [But] if you melt it right away, you will not know your profit [how much free aluminum you gained]). This is a practical way to save and produce additional pots, since he does not have access to a bank loan to invest in his activity. The sale of all the pots produced from this saved aluminum will bring a net profit since he considers that he did not pay for the supply.²⁷

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²⁵ "Aluminum Dross: Dross is a by-product of primary aluminum melting. It consists of aluminum metal and other impurities and is frequently used in secondary aluminum production." (Source: North Carolina Division of Pollution Prevention and Environmental Assistance (DPPEA). http://www.p2pays.org/ref/01/text/00778/glossary.htm

²⁶ They call the sprue or tip of the pot that is cut "*ruko nõre*," which literally means "the mouth of the pot." ²⁷ He actually paid for it since this 'refined' aluminum comes from the aluminum scrap that he initially purchased. But this aluminum has already gone through a melting cycle, out of which he produced some items. Since the profit obtained from the sales of these objects covers the production costs, aluminum-smelters consider that the refined aluminum obtained from melting the sprues is a free gain for them.

Operational sequence 2. « Bulging » the sand mold



Photo 41 and 42. Philippe sprinkling additional sand on the bottom of the mold.



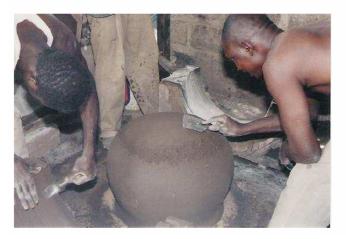


Photo 43. Smoothing the additional sand with a spatula.



Photo 44 and 45. Smoothing the additional sand with a spatula, until it is completely integrated into the sand mold.



Besides saving the sprues, producers also set aside the slag produced from melting scrap aluminum, which still contains some aluminum. Some smelters sell it to other colleagues for additional income, while others melt it themselves for additional, free supply.²⁸ Paul opted for the first option. He did not want to spend time re-melting the dross and chose to sell it to other smelters. He sold a full bucket for 1,300 F CFA, from which one could extract about two

²⁸ Since aluminum supplies are mixed with other substances, the melting process generates this slag, which can be considered as a loss from the initial quantity of aluminum paid for. In sum, while they are not 'gaining' anything free, they are actually reducing their loss of supply.

kilograms of aluminum.²⁹ However other producers, such as Moussa, chose to melt the dross themselves and save the additional aluminum thus produced. One Sunday per month, Moussa had one or several workers melt the dross.³⁰ Given the quantity of aluminum worked each week in his workshop, it was very profitable for him to recycle the large amount of dross that had been set aside. Moussa had a welder make a rectangular mold for him, in which he could melt the refined aluminum into blocks of twenty kilograms. Every month, he saved about two hundred kilograms of refined aluminum. From May 2002, when he began this practice, to February 2003, he had already saved one ton and five hundred kilograms of aluminum blocks. He had calculated that one ton of refined aluminum was worth 900-950,000 F CFA, from the sales of the goods he would be able to make from it. Moussa anticipated that by May, he should have saved enough to be able to reimburse his debts, which amounted to 1.5 million F CFA.³¹

Quality and aesthetic considerations

Techniques are also used or even added to the production process for aesthetic and quality purposes. I have shown that producers are careful to mix the right amount of hard and soft aluminum for the pot not to come out black. In addition, they sprinkle *goore*, kaolin powder, on the sand mold for the sole purpose of making the final product "white" (pelga) and "nice" (neere). Special care is given to the selection and melting process of aluminum scrap. Iron

²⁹ I would venture that the smelter can extract more than 2 kg from this 1,300 CFA-worth bucket. Otherwise, this refined aluminum would be quite expensive (650 F CFA/kg), not including the labor invested in re-melting it. Yet, smelters would certainly argue that it is 'pure' aluminum since it has been refined. It contains no impurity, and thus, no financial 'loss.'

³⁰ Aluminum-smelters call the dross with different names: wagd bindu (lit. 'aluminum excrement/waste'), wagd regdo (lit. 'aluminum dirt/waste'), or wagd sagdo (lit. 'aluminum dirt/garbage').

³¹ Interview, February 13, 2003.

³² See Operational sequence #1, photographs #17-20.

parts are carefully removed (both prior to and during the melting process) and any impurities are skimmed from the surface of the molten metal. Indeed, iron parts can explode during the melting process and cause injuries.³³ In addition, the impurities contained in the aluminum will make holes in the final products. To help separate the aluminum from any other metal or foreign matter, the smelters pour in carbon powder contained in electric batteries. Carbon attracts the impurities, making it easier for smelters to remove them with a skimmer. When they have no carbon available, some aluminum remains attached to the impurities that are removed, causing a loss of supply.

Aluminum-smelters draw on their technical knowledge and experience to ensure the quality of the final product and avoid errors as much as possible. For instance, the hole in the ground where they place the mold upside-down, as well as the one carved into the pot's mold are essential to the production process. If they were not there, the molten aluminum would not be able to degas and the mold would explode because of the pressure. In addition, once the molten aluminum has been poured into the sand mold, workers quickly add some water in the mold opening (sprue) and remove the extra aluminum that remains in the opening. Water is poured to cool down the sprue faster so that when they lift the pot to empty it of its sand, it will not break and damage the pot (sāma ruko). They may also fill the opening of the mold with sand to prevent the molten aluminum from bubbling and making wrinkles on the surface of the pot, making it unmarketable.

Finally, aluminum-smelters occasionally take the time to add some drawings on the sand mold to make it look nice. As Issou was making a new mold for a lid size 40, he erased the

³³ During the melting process, iron parts fall at the bottom of the crucible and can explode because of the heat. One wheeler at Moussa's workshop has been injured at one eye because of such an explosion.

original design and made a new one, drawing a leaf and stamping with a small metal tube that made a kind of sun on the sand mold. He commented that "if the mold looks nice, it is good" (Hān moule ya neere, ya soma). However, most aluminum-smelters do not spend time drawing on the sand mold. They only do so upon demand. According to them, "people" – especially "women" – do not like it because it is more difficult to clean. Dirt gets stuck in it and it is more difficult to remove than if the surface is smooth. Paul explains that these drawings are just "amusing. It's not serious... If I put some, it's good. If I don't, it's good [too]... Some people want it. They'll say: 'Ah, it's nice! Do it for me!" Yet, he does not want it to be a systematic practice because "it's nice but it's a pain" (ya soma la ya namsgo). He knows that if he begins designing it for each pot, he will have to continue because the clients will ask for it, not realizing that this additional work is not counted in the price. At Moussa's workshop, the sole designs are those that are already on the original molds, which get impressed into the sand mold.

Aluminum-smelters are quite efficient in meeting the consumers' demand. They found a balance between producing goods that are cheap and durable enough for the local population while including some aesthetic elements that do not slow down the production process too much. While the technical processes barely vary from one workshop to another, the capacity for some to produce a large amount of pots is mostly structural. It lies in the ability to separate production activities from marketing activities, which few producers can afford.

³⁴ Fieldnotes, January 25, 2003.

³⁵ "Ya amusement bala. Ka sérieux ye... Mam sãn ningi, ya soma, mam sãn pa ning ye, ya soma... Neb kẽrba ratame. Ob yeela ti 'ah, ya neere. Ning ma!'" Interview, December 26, 2002.
³⁶ Fieldnotes, February 2003.

Chapter X. Techniques at work in tinsmithing:

Chains of production, efficient routines, 'tricks,' and innovations

Basic technology of a fairly recent activity

The activity of tinsmithing – producing tin ware – emerged in the sixteenth century, with the production of tin-plates, but developed mostly in the seventeenth century. The manufacture of tin-plate – a thin sheet of iron or steel that has been dipped several times in molten tin – began in Bohemia in the sixteenth century and later spread to Saxony, then France, and soon after to England. In 1697, Major John Hanbury invented the method of rolling iron plates by means of cylinders. This made the region of Pontypool, Wales a major tinplate producer and Great Britain became the chief source of the world's supply until the decline of this activity in the early 1900s with the rise of the plastic industry (New Encyclopaedia Britannica 2002b:791a). Tin-plate has mostly been used in containers for food preservation and in tinware and other household utensils.

The development of this activity in Europe and in the United States of America began to compete with that of the coppersmith (Monte nd; France Pittoresque 1999; Stonehouse Lighting 2003; Richmonville nd¹). Indeed, since the Middle-Ages, the coppersmith was already manufacturing cooking ware and other kinds of utensils (boilers, instruments for distillation, or even art pieces and objects for the Catholic cult), using copper or brass (Trésor de la Langue Française Informatisé nd). In the New World, tinsmith shops gradually began "to spring up on the landscape where tinware competed with redware ... [ranging] from coffee pots to chandeliers." The advantage of tinplate was that the sheet "was relatively strong with a shiny

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¹ Permission from author.

non-corrosive finish" (Monte nd). Nowadays, tinsmithing ranges from handcraft production of all kinds of small household objects (lighting devices, home and decorative tinware) to bigger, machine-made products such as tin ceiling, boilers, gutters, and pipes, which are manufactured in the industrial sector.

The basic work of a tinsmith is to lay out, cut, bend, and assemble metal sheets to make various kinds of products. While Western tinsmiths use tin plates, African tinsmiths recycle all kinds of scrap metal (used roofing sheets, oil barrels, and car bodies in particular). Their hand tools have barely varied through time and space. Tinsmiths mainly use tinsnips (shears in Burkina Faso), mandrels and hammers of different shapes, solder, and a soldering iron. In addition, Burkinabè tinsmiths use chisels and hammers to cut thick metal sheets and a $p\tilde{a}bga$ (pl. $p\tilde{a}bse$ from $p\tilde{a}be$, to beat), which is a long, flexible metal slat used to flatten the sheets.

In his workshop, Martin has a variety of tools, which mostly consist in recycled spare parts and some manufactured items. There are hammers with different heads (big/small; large/thin; flat/sharp) for different purposes. Pieces of railroad tracks are used as anvils to beat the metal flat or to fold it at a ninety-degree angle. Mandrels (truck spare parts) of various forms are used for shaping the objects: Martin places the sheet on top of the mandrel's hole (big/small or round/square/straight) and then beats the metal to give it the shape of the hole, using the mandrel much like a mold. Martin calls this system "la machine africaine" (the African machine). Some years ago, he bought pruning-scissors (in place of tinsnips in Western shops) but he regularly borrows a pair of shears from a neighboring colleague, because he finds it easier to handle. He

² In Burkina Faso, solder is mostly used by tinsmiths (mostly from the Dafing ethnic group) producing buckets and water-cans – to make them water-proof. The tinsmith I worked with for this study did not produce this kind of objects and did not use solder for his work.

also borrows the $p\tilde{a}bga$ from the same colleague, as it is much more efficient than a flat-end hammer to flatten a metal sheet. In addition, Martin has in his toolbox two measuring tapes, a pocket calculator that I had given him, a sharpening stone that he found in the trash, and self-made compasses (a thick wire curved in an arch).

If the Western production of tinware was largely geared towards home utensils (such as containers, pots, pans, cups, lanterns, and buckets), the production of tinware in Ouagadougou is very varied, including tools for other trades and a few spare parts. While Dafing tinsmiths mainly produce buckets and water-cans in great quantity (see note 2), the others offer a wider range of products, tailored to consumer demand. During the inventory stage of my work, I recorded approximately thirty-five different items produced by tinsmiths and Martin himself makes more than fifteen of these. These goods range from cooking and home utensils (charcoal/wood/improved/shavings/tea stoves, cake tins, doughnut pans, frying pans (similar to the Chinese wok), lids, mugs, peanut roasters, buckets, dustpans, piggy banks, pigeon houses, and trunks) to equipment for other trades (funnels for milling machines, chicken feeders, and water-cans for market-gardeners). Tinsmiths also offer some repair services, fixing broken or worn items, especially by replacing the used parts. Martin is among the few tinsmiths in the capital city who can reproduce the seats of bicycles and scooters.

Depending on the products to be made, tinsmiths use different types of sheet metal. When making buckets, water-cans, and other light objects, they employ "light" or "soft" metal sheets

³ Here is Paul's complete list of products: 'Yamaha' motorcycle seats, plows, buckets (big & small), charcoal stoves, wood stoves, improved stoves (*foyers améliorés*), shavings stoves (*foyers à copeaux*), cake tins, peanut roasters, doughnut pans (*mas-laaga*), funnels (round & square), chicken feeders (*nõs dibo*), shelves for freezers, barbecue grids, and ovens.

(*tôle faaga* or *tôle bugsgo*) ⁴ such as galvanized or aluminum sheets used for roofing. The latter have the advantage of looking nice and shiny, thus attracting the customers. However producers like Martin are used to working with "heavy" sheet metal (*tôle taoko*) such as iron sheets, ⁵ thick oil drums, or car bodies. Although these thicker sheets are not as aesthetically pleasing to the eyes, they are well suited to the production of stoves, funnels, peanut roasters, and other objects that need long-term durability.

Tinsmiths are able to evaluate any scrap metal and sheets to anticipate what products they can make from them. From this assessment, they readily calculate how much they can earn and which option (between various products) is the best to optimize their earnings. For instance, Martin assessed that he could make one oven and six or seven buckets from a big metal sheet (2.5 meter-long) that he had bought for 3,000 F CFA. On another occasion, he had bought four sheets for 7,500 F CFA and he expected to make twenty to twenty-four buckets from them (about five or six per sheet). If he made twenty buckets (worth 1,000 F CFA per unit), he would earn about 20,000 F CFA. The value of eight buckets would cover the expenses and the rest (about 12,000 F CFA) would be considered as a profit.

The tinsmith makes similar calculations with oil drums. Depending on the drum's degree of wear and the pending orders, he evaluates how he will exploit it. For one barrel bought for 3,000 F CFA, he had the choice between making six or more Yamaha seats (worth 2,500 F CFA each) or six wood stoves (worth 450 F CFA each). At another time, he received an order for three peanut roasters. To make them, he needed to buy two barrels: one half of a barrel to make

⁴ *Tôle*: French for galvanized sheet metal.

⁵ Paul explained to me that he does not use steel sheet metal as it is too hard for him to use. The metal is not flexible enough and will end up breaking.

the drawer (*coffre*) of a big oven that he was making, while the other half would be used to make one peanut roaster (*machine*). He would then utilize the second barrel to make the other two "*machines*." Yet he was embarrassed because at the time of the order, he did not have any barrels, "while [the order] is due this week."

Since they always have several pending orders concurrently, tinsmiths try to choose the most fitting scrap metal for each product. Referring to some heavy metal sheets that he had just bought, Martin commented that "there is another man [tinsmith] who buys this kind of sheets too, but he doesn't know much. He makes buckets with them ... As for me, I don't want to make buckets. [I want to do something that is] more profitable: the machine [peanut roaster] is more profitable, the Yamaha seat ... since this metal sheet is heavy." Martin is also careful not to use good metal sheets to make items that "eat up" a lot of metal. He complains in particular about improved stoves (foyers améliorés), which "waste a lot of metal while it doesn't bring me much money." That is why he decided to make only one such stove for a woman selling degue (a sweet mixture of millet and curds or yogurt). As another woman had ordered about three of them, he would try to find a used oil barrel to produce her order instead of using his best supply.

To sum up, tinsmiths use a fairly simple technology, using hand tools to give shape to various kinds of metal sheets and scrap. Their level of skill varies depending on their specialization and on their ability to work different kinds of metal and to make more or less sophisticated objects. To better illustrate these variations, I will compare the production process of a big funnel – used to pour grain into grinders – and the reproduction of a bicycle seat to

⁶ « Y a un monsieur qui a achète ces tôles aussi, mais il connaît pas beaucoup le travail. C'est des seaux qu'il a fait avec ... Moi je veux pas faire les seaux. [Je veux faire quelque chose] de plus rentable: la machine c'est plus rentable, la selle de Yamaha... comme la tôle est lourde. » Fieldnotes, March 28, 2003.

⁷ « Les foyers, ça gaspille beaucoup de tôle alors que ça me rapporte pas beaucoup d'argent » Fieldnotes, March 28, 2003.

replace the broken, original one. Both operational sequences were made without interruption.⁸ The first technical process only required basic tinsmithing skills: laying out the metal sheet, drawing the pattern onto it, and then carrying out successive and alternative actions of cutting, folding, bending, flattening, and hammering. Since the process was already known and a pattern was available, the work was done in fifteen to twenty minutes (without the welding process).⁹ In contrast, making a bicycle seat was brand new to Martin and illustrates the conception-execution mechanism that takes place in the creation of a new object, as I will show below.

The making of a bicycle seat: Creation, innovation, and the dialectic between conception and execution

Without acknowledging it, the artisan is "a creator of means of production," constantly looking for new techniques and "appropriate [technical] answers" (Schwint 2002:216). This type of creativity is as much a practical necessity as the outcome of a sheer interest in meeting technical challenges and acquiring knowledge (2002:215). Yet, most artisans tend to minimize this aspect of their work, especially when comparing themselves to artists. In their discussions, they qualify themselves as "good technicians," able to find clever technical solutions, rather than

⁸ This is not always the case, as the tinsmith can carry out several productions at the same time and alternate between them, depending on the urgency of the orders, the availability of supplies, and the need for cash money.

⁹ Martin went to a neighboring welder for any welding job. This welder was located about 500 meters from his workshop, on the other side of the road.

Operational Sequence 3. Making a funnel for a grinder

Photo 46&47 . Marking the outline of the pattern on the metal sheet.





Photo 48. Changed the position of the pattern to be able to draw both sides of the funnel on one sheet.

* The former marking is crossed to avoid any mistake (see next photograph).



Photo 49. Beginning to cut the pattern with snips.

Note the crossed line where the pattern was initially placed.





Photo 50. Close-up of the crossed outline & new one.



Photo 51. Flattening the sheet with a pãbgha (a thin, flexible metal slat)

Photo 52. Knocking the edge to make a lip, in order to form a U-shaped channel.



Photo 53. Fixing the two sides together, hammering on the seam.

Photo 54. Hammering on the inside of the seam to make it hold tightly.



Photo 55. Hammering the top edge outwardly.

Photo 56. Hammering the bottom edge outwardly as well.





Photo 57. Bending the iron wire to fit the shape of the funnel.



Photo 58. Folding the top edge over the wire.



Photo 59. Hammering the edge to wrap the wire.

Photo 60. Making a tube that will be fixed at the bottom of the funnel.



Photo 62. Finished funnel, displayed with other goods in front of the workshop.



Photo 61. At the welder's shop, welding the tube at the bottom of the funnel.



being creative (2002:219).¹⁰ I encountered a similar situation in Burkina Faso. While producers are not exclusively focused on inventing new items as some artists may be, they are very much creative in transforming raw materials, adapting their designs to local, practical uses, in addition to designing new technical procedures to satisfy consumer demand.

In general, when a client requests a new product, the artisan generally asks to see a model or a sample of it. He can then undertake "a technical reading of the model according to his own [stock of] knowledge" (Schwint 2002:56). The artisan appropriates the production system, envisioning all the technical operations and the tools and types of supply that he would need to carry it out. The first attempt will often be a mere "copy" of the model, in order to "record the principle" (*enregistrer le principe*) as a woodworker explained to Schwint. Yet, a copy is never final. The artisan always adapts the process to "his habitual way of proceeding, his means of production," and the characteristics of the materials that he uses. There is a "translation process" (*processus de traduction*) that takes place (2002:56). To do this, the producer needs both a "capacity to anticipate" and an ability to grasp the main information and synthesize it (2002:57). There is thus a very close relationship between conception and execution, "and even conception *during* the implementation [process]" (2002:58, my emphasis). As one woodworker shared with Schwint, "we realize [what we are doing] while doing [it]" (2002:58).

This is clearly revealed in Martin's work, when confronted with new situations. In the case of the bicycle seat, the technical reading unfolds, as Martin looks at the original object, measures it, makes a rough cut in the metal sheet, then ponders again about how to proceed. What is

¹⁰ This echoes Levi-Strauss' discussion on "le bricoleur" who uses "devious means" to carry out a task, composing and making do with a limited and heterogeneous number of tools and materials. His practices contrast with those of the artist or the engineer (1962:30-1).

[&]quot;on se rend compte en faisant."

significant is that the technical process remains flexible enough to enable constant checking in order to quickly notice any minor error, adjust it, and carry on. In all, it took Martin a little more than forty-five minutes to make his first bicycle seat. This extract of the description of the production stages illustrates the back-and-forth movement between conception and execution (I highlighted the conceptual parts in bold):

1) Martin places the original seat on the metal sheet and draws its shape on it. 2) He cuts a square around the seat's design [photo 64]. 3) comes to sit on the wooden stool and 4) compares the dimensions of the original and the copy [photo 65]: "[one] needs to be a designer as well" ("faut être dessinateur aussi"). The original is 23cm-long while the copy measures 24 cm. He leaves it like that for now and 5) starts cutting the shape with the chisel and hammer. Noon. 6) hammers the remains of the metal sheet out; 7) flattens the copy of the seat; 8) measures its width again. 9) Martin refines the edges of the seat by cutting some bits out with the chisel; 10) looks at its overall shape; 11) flattens it again; 12) measures its width again; 13) cuts again on the sides; 14) hammers its edge on the side by holding it vertically; 15) draws a triangle inside, by looking at the original [photo 66]; 16) hammers along these lines to make the triangle shape stick outside as if it was sinking; 17) measures the back of the seat, which will be the height and 18) traces a line with the sharp end of the chisel to indicate the limit of the back and 19) hammers on the line to make it sink a bit [photo 65]. Now, Martin begins to 20) make some parts sink and others stick out, folding the sides also [photo 69 & 70]. 21) 12:10pm. Martin changes hammers. He takes a small one, all in metal, to give a finer shape... Martin checks the original again, makes the edge on the front: "here, I need to 'break' the middle' ("là, il faut que je casse le milieu"). 22) Martin hammers in the front to make it fit in the rubber cover of the seat. 12:20pm ... 28) Martin places the copy of the seat in its rubber cover to try it [photo 71]: it is not quite perfect – not curved enough. So 29) Martin hammers the front because he saw that in the original, there was a nail that would be there so he needed to make sufficient space. 30) Now, Martin compares the measures of the original and the copy. 31) He hammers in the very front of the seat. 12:32pm. 32) places the copy again inside the rubber cover, looks at it carefully [photo 72]. presses it with his hand and 33) resumes hammering on the top and the sides.

At that stage, Martin wonders why the copy does not fit as perfectly as the original when he places it in the padded seat cover. I suggest that the front part of the copy may be too wide. He then measures the depth in front of the seat¹² and finds that the original is 3.5cm-deep while his copy measures 2.5cm-deep. He thus needs to deepen the front part of the seat, which will narrow its width.

12:40pm. 34) **After realizing the problem** at the front, Martin resumes hammering the front of the seat, in its depth and sides. 12:40pm. 35) Martin **tries the seat again** and it stills doesn't fit [photo 73]. 36) So he hammers it again on the front part. 37) **He looks at it** and says: "*you know, I think that I will leave it as*

¹² I would have expected him to measure the width...

such, huh..." ("tu sais moi je pense que, je vais laisser ça comme ça, hein..."). 38) Yet, he hammers it again a bit, replaces it inside the rubber cover; 39) hammers it again a bit, 40) **compares the shape with the original**, 41) hammers again on the rear part and its sides. 42) "there's something that doesn't work..." ("y a quelque chose qui va pas..."). 43) He resumes hammering, 44) **tries to fit it** in the rubber cover. 45) 12:45pm. "I will leave it like this" ("Je vais laisser comme ça"). But now, it fits. Martin explains: "I found out that there [on the front of the seat] I hadn't hollowed it enough" ("Moi j'avais trouvé que là [the front of the seat], j'avais pas creusé assez"). 46) He makes two holes in the front, where the seat will be screwed on the bicycle tube. He makes the holes by placing the seat on top of a bolt and piercing them with a pin ("pointe"). He then enlarges the holes with the pin. [The copy of the seat is finished – see photo 74].

All of Martin's innovations follow the same pattern as the case of the bicycle seat. Firstly, a client comes asking if he can make or reproduce an item that he has never done before. Then, he assesses its feasibility by looking at it, making a technical reading of the object, conceiving and anticipating the stages, the necessary supplies, the required techniques, the difficulties, and the possibilities.

The conception goes on during the experimentation itself, through trials and errors, adjustments and adaptations. For instance, Martin made his first oven as a woman showed him a model that she had brought from Mali. After figuring out what to do, it took him three weeks to make it. He invested about 15,000 F CFA in scrap sheet metal and wanted to sell it for 35,000 F CFA. He certainly considered this first "prototype" to be profitable as he was now ready to make others, believing that he could produce additional ovens in a week. He also wanted to improve his model, especially by adding some "*foam*" inside to save energy. As the orders came along, Martin gradually improved his technique and increased his retail price accordingly, rising from 10,000 F CFA to 20,000-22,500 F CFA.

¹³ Paul called it "*mousse*" (French for foam), referring to some kind of fiberglass to insulate the oven and prevent unwanted heat loss. He eventually did it and his improvement was successful.

Operational Sequence 4 . The reproduction of a bicycle seat





Photo 64. Cutting the outline of the original pattern after having marked it.

Photo 63. Taking the dimensions of the original seat.



Photo 65. Comparing the 'old' and the 'new' and thinking about 'how' he will proceed.



Photo 66. Looking at the original piece (right) and mentally conceiving the process.



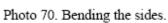
Photo 67. Marking a triangular shape in the middle of the seat and beginning to hammer it down.

Photo 68. Shaping the back of the seat.





Photo 69. Shaping the sides.





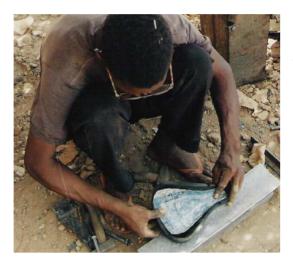


Photo 71. Placing the new seat in the seat cover to see if it fits and checking what needs to be improved.





Photo 72 & 73. Two other trials after successive improvements.



Photo 74. Finished seat. There only remains to make two holes in the front of the seat in order to screw it on the bicycle.

Trials and errors: calculations, anticipations, and corrections

Conceiving, calculating, and anticipating are a fundamental part of the tinsmith's work, in order to be technically and economically efficient. The artisan's ability to anticipate is closely linked to his knowledge acquired from past experiences but also to the capacity to filter out the information, focusing on the most important aspects to be able to grasp "the logic of the technical operation" (Schwint 2002:57). For instance, the tinsmith also performs a technical reading of the raw materials in order to optimize their utilization and minimize their waste. On one occasion, Martin made a peanut roaster and I noticed that there was a hole of about two centimeters in the used metal sheet he used to make the body of the roaster. When I mentioned it, he merely replied: "it's the door. Everything has been calculated!" — meaning that he will make the door at the very place of the hole so that even a material defect could be exploited.

The calculation of the margin (*la marge*) embodies quite well the fragile equilibrium that the artisan tries to maintain between precaution and precision, calculation, anticipation, but also approximation in his work. As Schwint noted for the French wood-workers in the Jura region, artisans do calculate, anticipate, and preserve a margin for errors, in order to produce something of quality and reduce their costs of production (2002:63). Every stage of the production process is anticipated before measuring or weighing the raw materials in order to leave a sufficient margin in case of errors (2002:65). Schwint explains that the "margin thus represents a mode of rationalizing risk (*l'aléatoire*) [and] uncertainty (*l'incertain*)." He argued that "[t]he artisan must [...] be, all at once, precise enough to compensate for the weakness of his means of production

 $^{^{14}}$ « Ça, c'est la porte. Tout est calculé! » Fieldnotes, March 28, 2003.

and approximate enough to do 'just enough [...] to pass"¹⁵ (2002:115). Far from being a type of carelessness, it is rather an "adjusted precision" (précision ajustée), which requires a "good knowledge of the clientele's norms, a great precision, [...] a strong prediction ability," as well as the capacity to make up for the "approximate result" (résultat approximatif) in order to meet the client's demand (2002:116).

Martin's attempt to repair a cooler brought by a female client perfectly illustrates this tension. The bottom of the plastic cooler was broken and the client asked Martin to add a metal case around it to prevent leaks. He also had to make a new lid. While trying the strip of metal sheet around the rectangular cooler, Martin insisted that he wanted the case to fit very tightly around the cooler. Indeed, the case had to hold by itself and should not slip down, even if Martin would add a bottom underneath it. From his measures, he calculated that he should remove one centimeter from the strip's length to fit perfectly, but Martin was afraid to cut it too short and spoil the whole work. So he only removed five millimeters.

After fixing the two edges of the strip together, making a U-shaped channel, he fixed the strip onto the cooler: "it works" ("ça marche"), he says. It was actually a little too long and he could have removed about three millimeters from the length. He realized that the first mark that he had drawn on the metal sheet was good¹⁷ but he was now afraid to re-open it and re-make another U-shaped channel. Indeed, the metal would be too fragile and might break at the position of the first seam. Martin decided instead to fold the top edge of the strip inward: "so that it won't

^{15 &}quot;'juste ce qu'il faut,' 'que ça passe'" (Schwint 2002:115).

^{16 &}quot;I want it to be tight" ("je veux que ça force").

¹⁷ This is the mark that he made on the metal sheet before cutting it. This mark was the exact measure of the cooler's dimensions. Being prudent, Paul had maintained a 0.5cm-margin, as I mentioned above. He is now realizing that he could have gone ahead and cut the strip at the exact dimensions.

hurt [anybody]" ("pour pas que ça blesse"). This was a strategic way to solve two problems at once, reducing the length and making the strip tighter around the body of the cooler.

Shortly afterward, Martin exclaimed: "do you know that there is a mistake?" Measuring again both lengths of the strip (on each side of the cooler), Martin realized that one side was longer than the other, with an additional centimeter. He quickly identified the origin of the problem: the difference came when he added another strip of metal onto the initial one to have the right dimensions. Now Martin was convinced that he "should have cut this [additional] centimeter" at the first mark that he had made. When I asked him if this was a serious mistake, he replied: "Well, no. I speak for the next time..." Since the angles of the cooler were rounded and not sharp (adding some length), he knew that the case would fit. If they were sharp, he would have had to redo it and remove the extra centimeter.

The same process of trials and errors took place while Martin made the lid of the cooler. At first, the dimensions were too large compared to the top of the cooler and at the first trial, Martin saw that the lid was too big to even fit on the cooler. He had to measure his draft again, re-open the folded angles and cut a wider slot at each angle to shorten the lengths. Then, he realized that the part of the lid that would fit inside the cooler was too deep. It would use up space that the female client would need to fit as many bags of water as she could for her business. So he had to correct that mistake also. When he was about to complete the lid, Martin commented on the time it took him to carry out this order: "it's because I hadn't taken the right measures ... this is what delayed me... I was afraid [to spoil the whole process]!" After all these trials, errors, and corrections, the lid fitted nicely on the cooler and the order was successful, both fitting the

¹⁸ "Bon, non. C'est pour la prochaine fois que je parle..."

^{19 &}quot;c'est parce que je n'avais pas pris les bonnes dimensions... c'est ça qui m'a retardé... J'ai eu peur!"

technical characteristics of the cooler and respecting the client's practical needs in using her cooler.

These examples demonstrate how the producer maintains a dynamic and flexible balance between different priorities and constraints: technical, economic (costs of production, including the time and effort spent), aesthetic, and pragmatic. The latter implies an implicit knowledge of the clients' environment, needs, and uses of the products ordered. This perfectly illustrates the capacity that artisans have to be both precise and approximate, drawing on their stored knowledge and accumulated experience to adapt to the specificities of each situation, and resulting in the "relative precision" of their work (Schwint 2002:116).²⁰

Time is money?

Time as well as the effort (both physical and mental) put into the production process are two factors that are definitely taken into account in the artisan's production strategies. No matter the environment, the bottom line is "to produce a certain quality in the least amount of time" and find the appropriate balance between the time and cost factors to reach this goal (Schwint 2002:52). The artisan thus develops several "tricks" (*combines*) to gain time, to get around a problem, to reduce his costs of production, and to anticipate, adjust, and make up for a mistake (2002:193).

Producers have thus a specific way of managing time. Most of them know how much time they need to produce a particular item, even as a rough estimate. One tinsmith in a large Dafing workshop claimed to be able to produce between twenty and forty buckets per day, depending on

²⁰ With the concept of "précision relative," Schwint is referring to Zarca who contrasted the "spirit of calculation" ("l'esprit de calcul") of the industry to the "approximation" ("l'à peu près") of the artisan (1986: 141).

the demand. Martin remembers that before the devaluation of the CFA franc (in 1994), when things were cheaper, he was able to buy two oil barrels per day and produce ten to fifteen frying pans daily. He also estimates that he can make a motorcycle seat in one day or a big oven in one week. Another, older tinsmith recounts that he was able to produce twenty charcoal stoves per day when he was younger, while others only made ten.²¹

These rough estimates can be quite precise and idealistic at the same time. One particular explanation from Martin will illustrate this. One day, as he was making shelves to fit in a freezer, he explained to me that he could make shelves within two hours. But then he added that he would need more time in this particular instance because he had not cut all the parts. If he added the time for making the shelves' legs, it would take him about three hours. He justified this delay by arguing that "the sheets are not normal." If they were, he could work faster. However in this case, he had to work around the holes in the metal. I found this to be an interesting argument. Martin was defining the norm for the quality of raw materials by something that was actually not the norm: sheet metal without any holes. Working with scrap metal, he was constantly dealing with imperfect, abnormal sheets, unevenly damaged by holes, folds, and rust. Hence, Martin established a norm of what had been discarded as abnormal or defective, distinguishing among materials closer to the norm (without holes, folds, and rust) and those which were more damaged and thus more difficult to work with. Nevertheless, Martin's

²¹ It is difficult to compare tinsmiths' estimates with an accurate timing of their production processes. Indeed, their work is often interrupted by clients, suppliers, or visitors. In addition, they often suspend their work to carry out another order, for momentary lack of supply, or because it is the end of the day. Among the few technical processes that I was able to time accurately, I found that Martin is able to make a funnel in twenty minutes, a small bucket and a small cake mold in five minutes.

²² Indeed, I noted one day that Martin took fifty minutes to make the four legs for an order of shelves.

²³ "Les tôles ne sont pas normales."

evaluation of the time needed to make shelves was grounded in his experience and rather accurate.

Saving bits of metal for the next "occasion" 24

Saving every bit of metal that can have a potential use is part of the artisan's economic logic. First of all, the artisan is careful only to use what he really needs for his project, thereby preventing any unnecessary losses of raw materials. Secondly, any pieces of material that can still be used in one way or another will be diligently set aside and saved for future utilization. As one wood-worker declared to Schwint in his study, "I don't like [...] throwing a piece of wood, I always try to do something [out of it]" (2002:63).²⁵ Following the same approach, tinsmiths do not waste any piece of sheet metal. At Martin's workshop, small pieces are set aside in a metal box, on top of his thatch roof, or behind the two back poles holding his stand. He will look through them to find the appropriate piece when making small items or components of larger products.

When working on the order of forty cake tins, Martin turned to this stock of small pieces to make several tins, placing his pattern right next to any hole in the metal in order to optimize its use. He was even pleased to have kept pieces of aluminum sheet metal. He had initially thought of selling them to an aluminum-smelter but transforming them into cake tins was more profitable. While he would not even have earned 100 F CFA from selling one piece, he could now gain between 500 and 600 F CFA by transforming it into cake tins. ²⁶ The only true waste

²⁴ Schwint 2002, p. 116. Herzfeld also observed that artisans such as leather-workers train "the apprentice's eye to measure the best way of cutting a piece of leather so as to waste the smallest amount" (2004:154).

²⁵ "J'aime pas ... jeter un bout de bois, j'essaie toujours d'en faire quelque chose."

²⁶ Paul calculated that he could make five or six cake tins, worth 100 F CFA each, out of one metal piece.

for Martin consists in pieces of metal that are too small or too damaged to be usable. Martin will eventually throw them away behind his workshop, but before too much accumulates, passers-by can help themselves during and after working hours.

Quality choices, aesthetic, and safety issues

Tinsmiths – like aluminum-smelters and rubber-workers – produce goods that are utilitarian in nature and because of this, they are meant to be low cost and affordable to everybody. Yet, producers and clients are still concerned about quality and aesthetic issues, even if in a relative way. Like the wood-workers, tinsmiths carefully choose the materials they will use for their production (Schwint 2002:62-3). They thoroughly check the piece of scrap metal, looking for any hole or defect that might spoil the production. Looking for a piece of metal to make shelves, Martin put away a piece of sheet metal that had a hole in it: "ka soma ye" (it's not good). The daily use and pressure on the shelves would soon enlarge the hole and the shelves would end up breaking apart.

Choosing the right materials and working conscientiously right from the beginning is a way to subsequently save time, energy, and money. Indeed, as Martin explained while repairing a used bucket, he would rather change the whole bottom of the bucket than try to seal off the hole, which might not last. The first option was more expensive (400 F CFA)²⁷ but it would last.

Otherwise, "if it leaks, he [the client] will come back again." He added that even if his repair

²⁷ Repairs for bucket can range from 100 to 400 F CFA, depending on the amount of work and metal that are necessary

²⁸ "Si ça coule, il va revenir encore."

ended up failing and the client had to come back, the price of the second repair would be included in the first one.

Despite their utilitarian purposes and their materials coming from used metal parts, tinsmiths sometimes exploit the diversity of shape, texture, and color of scrap metal for aesthetic purposes. Having begun making an oven with white sheet metal, Martin was waiting to find similar metal to continue it and maintain an aesthetic harmony. He wanted all the sheet metal to "look nice" and did not use other pieces of sheet metal that were available in his stock, because they were spotted with black or orange stains. On another occasion, he looked for the "nicer" side of a metal strip to see which one would be visible on a freezer's shelves. One side had a black streak and the other had orange spots. While I suggested the second side, ²⁹ Martin considered that the first one was "nicer" and placed it upward. We obviously had different perceptions of what was "nice" and "clean."

In fact, the idea of nice contains both an aesthetic and a sanitary dimensions. Since several of his tin goods are used for cooking, it is important for producers to make safe goods that will not intoxicate their users. Tinsmiths remove the paint if necessary and choose parts that are grease-free and coating-free. When making of cake tins, Martin identified the nicer side that would make the inside of the mold, as it would be the one in contact with the cake mix. This would also be the most visible side, the one that needed to be aesthetically "nice." A similar process unfolded when making a peanut roaster: Martin put the 'dirty' side on the outside in order to have the 'clean' one inside, which would be in contact with the peanuts. This sheet metal was coming from a van and had a thin layer of blue carpet that covered the inside walls of

²⁹ I did not find the small orange spots to be an aesthetic problem, compared to the more important black streak on the other side.

the van. By placing it on the outside, the synthetic material would be burnt up at the first use of the peanut roaster while the peanuts would be in contact with the safe side, inside.

The notion of "nice" is thus a compound that includes such characteristics as being clean — in other words, not dirty-looking, but also shiny and being in the whiter range of hues, rather than dark. By implication, a "nice" part would thus be "clean" and "safe" for the user. However making something "nice" also implies an idea of technical and aesthetic perfection. Martin commented that it was difficult for him to make the edge of round cake tins look "nice." He had tried many times to make a good, round fold on the top edge of the cake molds but had not found the right technique. In addition, he explained that he did not have the "right" tools to do a good job. As a result, his cake tins were not as aesthetically perfect and harmonious as he wanted them to be.

Because of the nature of his work, the tinsmith is constantly moving back and forth between conception and reproduction. His accumulated knowledge allows him to experiment and launch new items quite successfully, providing him additional sources of profit. At the same time, his decisions in terms of innovations and technical choices are balanced by economic constraints and objectives. We will find similar features in the work of tire-workers, who also combine "technical efficacy," "economic efficacy," as well as creativity (Schwint 2002:171).

Chapter XI. Techniques at work in rubber-working:

Chains of production, efficient routines, 'tricks,' and innovations

Tire rubber: Brief look at recycling and re-use in industrial vs. developing countries

More than the previous two recycling activities, the origin and development of rubberworking are directly linked to the market economy of industrial countries. In 2001, the United States produced 281 million scrap tires in one year, among which fifteen million were exported (about nine percent). Europe generates 250 million of scrap tires every year and about the same percentage is exported. All in all, "[a]bout 10 percent of scrap tires generated in industrial countries are sold as used tires each year, most going to Eastern Europe, Africa and Latin America" (Ohio Dept. of Natural Resources 2005b). The rest is increasingly being recycled, into energy recovery (fuel), civil engineering applications (athletic and recreational surfaces), re-use and retreading, or landfilling (RMA 2004, SpecialChem 2004).

While hand reprocessing of used tires has always been a marginal activity in industrial countries, "[t]here is an enormous potential for reclamation and reuse of rubber in developing countries" (Practical Action nd.:3). Indeed, rubber material is relatively easy "to reform by hand." It is very similar to that of leather and has in fact "replaced leather for a number of applications" (Practical Action nd.:5). Development agents note that the tools necessary for the transformation of tires are relatively few and inexpensive "along with a wide range of improvised tools for specialised applications" (nd.:5). Indeed, an old Burkinabè tire-worker

¹ Sources: Ohio Department of Natural Resources 2005a, 2005b; Institute of Scrap Recycling Industries 2004; Rubber Manufacturers Association (RMA), nd.

² Here are some figures illustrating the recycling of scrap tires in the United States (1999): Energy recovery (40%), rubber recycling for civil engineering applications (9%), rubber recycling, other applications (7%), re-use/export (6%), landfilling (38%) (SpecialChem 2004).

recalled how he first began working with leather to repair bicycle tires and make sandals.

However, he soon realized that when it was raining, the leather would soften, wrinkle, and not fit anymore. So he switched to tire rubber and began from there. The activity then developed, expanding the models and designs, along with the growth of an accumulated and collective experience.

Tire construction: Different components for different uses

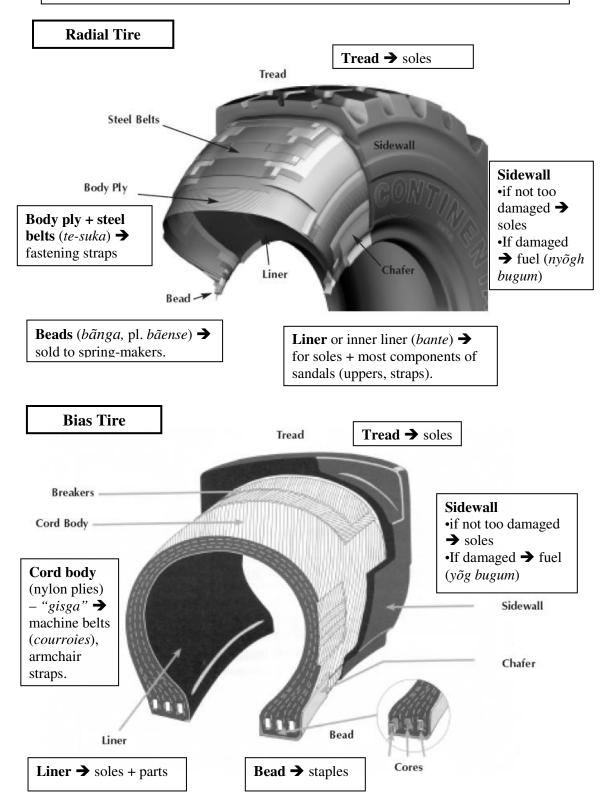
Tire and inner-tube workers make a variety of goods depending on the type of scrap materials that they are using.³ In addition, they also make different products depending on the type and the part of the tire they are working with. It is thus necessary to look at the composition of a tire to better understand how it is exploited by rubber-workers. Tires are made up of "natural and synthetic rubbers, carbon, nylon or polyester cord, sulphur, resins and oil" (Practical Action nd.: 2). Most of them are either radial- or bias-ply tires, which are the two most common designs for tires on cars or trucks (see figure 6).⁴ Underneath the *tread*, there are several layers (called *plies*) made of different kinds of material that cross differently depending on the tire design and act as reinforcement (New Encyclopaedia Britannica 2002c:794b). In a radial tire, the most common automobile tires, plies of cords are made of steel wire, which "runs from bead to bead laterally to the direction of motion, [that is why] the design is called 'radial'" (Continental nd.).

In bias-ply tires, the "cord body [or carcass] ... consists of layers of nylon plies." Unlike the radial tires, "[t]hese cords run diagonally to the direction of motion," hence its name

³ See chapter III.

⁴ The illustrations used in this figure are graciously provided by Continental. http://www.conti-online.com/generator/www/us/en/continental/otr/themes/tech_dnloads/hidden/otr_constr_pdf_en.pdf

Figure 6. Radial vs. Bias Tires: Components & Uses by Rubber-Workers



(Continental nd.). In addition to the plies, tire constructors also add layers of *belts* or *breakers*. In radial tires, the belts are made of "layers of steel cord wires," while in bias tires, the breakers are made of "nylon, aralon, or steel wire." For both types of tire, the tread is made of "specially compounded rubber" to resist wear, cut, and heat. "The *sidewall* is a protective rubber coating [...] designed to resist cutting, scuffing, weather checking, and cracking." The *liner* is part of "all tubeless pneumatic tires. It covers the inside of the tire from bead to bead." Finally, the *bead* is a "bundle of bronze coated high tensile strength steel wire strands [...] It anchors the bead on the rim" (Continental nd.).

Burkinabè rubber-workers have learned to identify each type of used tires. Due to the nylon plies in bias tires, they call them "gisga pneu" (cotton thread tire) or "lamd pneu" (cotton tires). Radial tires are named "kuta pneu" (iron tires) because of the steel wire. Due to the different components of these tires, producers cannot do the same things with them. To identify which type of tire they are dealing with, they look at the inner edge of the tire that fits around the rim: if they see some strings of iron through the damaged parts, it is a "kuta pneu," a radial tire (see photo. 75-6).

Rasmane and Boureima, the two rubber-workers I worked with most closely, principally work with "bante" or liners. The advantage of "bante" is that even if the tire is badly damaged, the liner remains intact, most of the time. Liners are themselves identified and categorized according to the serial number of the tires they are coming from.

⁵ From gisga (cotton thread), lamdo (cotton), and pneu (French for tire). See photo 76.

⁶ From *kutu* (iron). See photo. 77 & 78.

⁷ "Pneus twe same wosgo ti bante kietame" (The tires can be severely damaged but the liner remains). Boureima. Fieldnotes, June 17, 2003.

Figure 7. End-of-life tires



Photo 75. Used tire: the bead has been removed, as well as the tread (left) and the sidewalls.



Photo 76. Damaged bias-ply tire (gisga pneu): we can see the nylon threads coming out.





Table 1. Tire components & uses.

Tire components	Radial Tire (Kuta pneu)	Bias Tire (Gisga pneu)
Tread (pneu) * if damaged	cannot make sandals * fuel (yõg bugum)	sandals (soles) (nvedre, pl. nveda) * fuel (yõg bugum)
Plies (te-suka)	straps to fasten things (sũudu)	belts (<i>courroies</i>), armchair's straps
Bead (<i>bãnga</i> , pl. <i>bãense</i>)	sold to spring-makers to make springs (ressorts)	staples
Sidewall * if damaged	Soles * fuel (yõg bugum)	soles * fuel (yõg bugum)
Liner (bante)	Soles, sandal parts	soles, sandal parts

Rubber-workers are not always able to choose the quality of their supply of liners. Before the next arrival of supplies, or in times of shortage, producers often come back with a bunch of liners of unequal and poorer quality. Since they have been exposed to the sun for quite some time, the liners were "damaged quickly" (sãma tao-tao): their shiny, black color has turned into a washed-out grey and they are marked with wrinkles and cracks. Sandal-producers also need to protect the liners and tires from rain and humidity. At night and in case of rainfall, they cover their supplies with plastic sheets so that the metal in the tires (staples, plies, beads) will not "rust" (mõgame). If the metal gets too rusty, it will not be of any use because it will break.

Table 2. Types of liner and their uses.

Size of liner = Size of the tire	Provenance	Use
# 24	construction machines (machine damba)	Big sandals (for adults)
# 1200	truck (mobil bedre)	Big sandals (for adults) ⁸
# 900	Trucks with small rims (mobil bedre la jante ya bãnga)	Children's sandals ⁹ (kamba nveda)
# 1000/20	Trucks with small/narrow rims (mobil bedre la jante ya bãnga)	Children's sandals (kamba nveda) * # 900 & 1000/20 are equivalent (zemsa taaba) in that they are narrower (bãnga)

Due to these potential flaws, Boureima and Rasmane always look at the back¹⁰ of each piece of liner when beginning a new pair of sandals to verify whether there is any crack or

⁸ "The inside [diameter] is large. If we see that the inside [is] large, [we make] big and thick sandals" ("A puga ya yalãnga ... Hã mik ti a puga [ya] yalãnga, [na man] n'ed bedre [la] taoko"). Boureima. Fieldnotes June 19, 2003.

⁹ If we see that it's not large, [we make] a small model." (*Hã mik ti ka yalãng ye, [na man] model bõnga*). Boureima. Fieldnotes, June 19, 2003.

The exterior of the curved side, the one most exposed to the sun at the supplier's place.

wrinkle. If there is a doubt, they bend it to uncover flaws. If there are cracks, they conclude that "its back is dead/spoiled" (a pore kiime/sāmame). A bad liner "is hard" (ya kveyenga), meaning that it has lost its elasticity and if one bends it, it will "break" (kaogame). Alternatively, a good liner is "soft" (bugsgo) and flexible. It does not have wrinkles or cracks that might spoil the whole sandal after some time. If the piece of liner has only a few damaged areas, the tire-worker removes them by cutting them off, especially when these areas are on the edges.

As any other type of artisans, sandal-makers do not like to waste any part of the supply (Schwint 2002:63). Every piece of liner, tire, or inner-tube will be fully exploited in the production of sandals or set aside for secondary uses. Hence, soles are drawn side by side on the liner, without leaving any gap between them. If parts of the liner are not good, they will be cut into pieces to be sold for fuel (yōg bugum). If a strip of liner is not big enough to draw an additional sole, it is saved for the making of smaller parts such as uppers or straps. A section that is too small to make adult-size sandals can be used for children's sandals. Producers let the children collect bits of liners fallen to the ground to sell them as yōg bugum. Sandal-makers even collect small pieces of inner-tube from colleagues working with such supplies (making puisettes or straps) in order to make "flowers" to decorate their sandals. Almost nothing is discarded as true waste.

Producers who work with tires have another source of revenue with their waste. Due to the number of tire-workers at Cité An II market, used tires accumulate at one end of the alleys and

¹¹ It has been hardened by the sun and thereby lost its elasticity. This is why it can easily break when bent. For that reason, it is improper for making sandals since the latter need to be flexible.

¹² During the rainy season, firewood is wet and it is harder for women to kindle their fireplace to cook. That is why they turn to $y\tilde{o}g$ bugum during this season.

¹³ "Tõnd data kos bamb ne pagba pugõ n ditê" ("We want to sell them to the women inside [selling in the Cité An II marketplace] and eat" – with the money earned). Boureima's nephew, about 10 year-old. Fieldnotes, June 16, 2003.

the city authorities are not pleased about this situation. Although waste collectors already come several times a week, waste continues to accumulate. At the time of the study, Ahmed, the president of the tire-workers' association, was discussing with the city authorities about finding a better solution. ¹⁴ In the meantime, tire-workers sell these tires to construction workers for 100 F CFA each. The latter place them on top of big boulders and burn them, making it easier to break the boulders and make gravel for the composition of tar afterward.

In addition to making sandals, Rasmane and Boureima also provide other types of products and services. Boureima complements his earnings by making *yõg bugum* (fuel) from unusable tires and liners, especially during the rainy season (photo. 82). He also makes fastening straps or machine belts from bias-ply tires (*gisga pneu*), on occasion. Boureima and Rasmane also add heels to tire sandals or even manufactured, Western-style shoes, and add tire soles to leather sandals in order to reinforce them and make them more durable.

Rubber-workers' toolbox and work practice

Each rubber-worker has his own set of tools and as we have seen above, these tools are relatively few, inexpensive, and simple. The minimum necessary to get started would be a pair of scissors, tongs, a hammer, a knife, and a sharpening stone (see photo 84). Rubber-workers' main tool is the knife. New knives have a long blade and therefore, are used to cut liners into smaller

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¹⁴ He commented that "sagdo ya wvsgo" ("There are a lot of wastes"). Fieldnotes, July 10, 2003.

Figure 8 Rasmane & Boureima's main production



Photo 77. Boureima's main model: « *tapettes* »



Photo 78. Rasmane's main models with different soles. Left: undecorated tire soles. Right: decorated *bante* soles.



Photo 79. Same model as in photo 78 but made with liners washed-out by the sun (the decorative pins have not been added yet).



Photo 80. Exceptional order of « *nasar nueda* » (sandals specially made for Europeans).



Photo 81. Children's version of *« tapettes »* with an additional heel strap.



Photo 82. Bundle of *yõg bugum* made from bits of liners.



Photo 83. Piece of tire tread added on the soles of leather sandals.

sections, soles, and straps. After a while, the blade wears out and breaks. Tire-workers do not throw them away but sharpen the remaining section of the blade and use this smaller knife to carve designs in the soles and straps. Hence, they alternate between the long and the small knives (or newer and older ones) to carry out the main tasks of their production process. To have a better grip, they often wrap a strip of inner-tube around the handles of knives in order to pad them. Scissors are mostly used to work on inner-tubes. In addition, tire-workers tend to have two pairs of scissors: a small one and a bigger one. The former is used to carry out more detailed work, such as cutting "flower-shape" uppers, while the latter is used to cut strips or uppers from inner-tubes or liner parts.

Sandal-makers work seated at one end of a wood bench, which is also their workbench.

When performing more minute tasks such as carving, they add a small wooden stool on top of it to get closer to the piece in progress and better control their movements. In addition, they always have a small container with water placed next to them. When cutting and carving, they regularly dip the blade into the water to cut the liner more easily or to sharpen it from time to time.

To draw the soles, tire-workers use a range of patterns that they have available in their toolbox. These patterns constitute an array of soles of different sizes and shapes, made up as producers found a good shape to add to their collection or a size that they did not have (see photo. 85-6). These patterns are made of any material available at the time when the tire-worker made them: car mats, tire liners, or plastic sheets – as long as the material is rigid and thick enough to be handled. When they do not have the appropriate pattern, they either borrow it from a colleague or choose the closest pattern available and draw a larger outline around it. This additional dimension is judged by the worker just by looking at the piece and drawing around

with his pen. In a similar way, sandal-makers also have a set of patterns to make uppers of different designs (photo 84). They draw the chosen pattern on the liner with a pen and then cut it with scissors before carving the soles. Some workers have written their name on the patterns to make sure that nobody will take them inadvertently.



Photo 84. Rasmane's set of tools (from top to bottom and left to right):

- Piece of wood used as mini "workbench," box of nails and rivets, pen,
- Knife, valves, small pair of scissors, patterns of front tabs (nvedr zugu),
- Pliers, needle (piim), big and medium pairs of scissors, ball-peen hammer, smaller knife for minute carving



Photo 85. Rasmane's range of sole patterns and sizes.



Photo 86. Soles: various shapes and designs

When the straps are ready to be fixed, the producer needs to make a hole at one end for the thong to go through, as in the case of V-shaped thong straps. In the case of a single strap going through an upper (Rasmane's main model), the thong will go through a hole made in the upper. To make these holes, which have different diameters, Boureima and Rasmane use a series of valves from inner-tubes of different sizes (#13, #14, etc.). These valves are hollow, so that when the workers hammer them onto the liner, they remove some rubber and make a hole. They use the bigger valves to make the hole in the straps where the thong will go through. Smaller ones are used to make smaller holes in the uppers to fix decorative pins (see below). As for the knives, the tip of the valves is regularly whetted on the stone in order to remain sharp.

Finally, when producers need to add a heel onto sandals, they scrape the liner from which the heels will be cut in order to remove any dirt and make it adhere better onto the sole. To do that, Boureima transformed the lid of his Nescafe tin box in which he stores his nails and decorative snap fasteners into a brush. He made numerous holes in the lid so that the metal surrounding the holes sticks out on the other side and renders the lid abrasive. Once the liner strip has been scraped, he applies some Neoprene glue onto it, as well as on the sole where the heel will be added. When the two sections have dried a little, he sticks the tip of the liner strip at the place of the heel. He then cuts the rest of the strip, making a square-shaped heel. When the glue has dried, he cuts the heel to give it a round shape at the back and adds nails to fasten it securely.

As most tire-workers in Cité An II market, Rasmane and Boureima work mostly for retailers. This is the reason why they often carry out orders of ten to fifteen pairs of sandals. Tire-workers all agree that working with liner is "hard" (toogo). Compared to simpler models made with inner-tube straps or sandals made with rough tread and tire plies, liner-sandals are more complicated. They require carving ornaments on the soles and straps, and this is what takes time and is considered hard. They all argued to say that one cannot make even ten pairs of decorated liner-sandals in one day: "it's impossible" (ka tõe ye). Usually, they make about five to six pairs a day and need two days to complete an order of ten liner-sandals. In contrast, they can easily make ten pairs of plain models in one day, but rarely more than that.

Because they work on order, tire-workers have organized their production by working in batches. They rarely work on a single pair of sandals from beginning to end. Instead, they work on a batch of ten pairs, on average, and complete each stage of the process for the ten pairs before moving on to the next one. They begin by completing all the soles first, drawing, cutting, carving, and making the slots in them, where the straps will be fixed. Then they produce the straps, cutting and carving them as well. Next, they prepare ten pairs of thongs, cutting and shaping them as well as making the ornamental disks that go with them (*flowers*). If the producer is making a model of sandals with an upper, he will then make a batch of twenty uppers, possibly decorate them, and make slots for the strap to go through. Once all these elements are prepared, the sandals are ready to be assembled. The producer puts the straps together and adds the thong and the optional upper. This assembled element is then placed onto the sole, sliding and adjusting the tips of the straps and of the thong into the pre-cut slots. Lastly, all the assembled

elements are stapled onto the soles. Once this last operation has been carried out on the ten pairs, the batch of sandals is finished and each pair of shoes is tied together with a rubber band made from an inner-tube. In the following operational sequence, I have reconstituted an ideal technical process from the production of different batches of sandals. The purpose is to illustrate the technical phases in a clearer way as if it were the same pair of sandals that was being made.

Technical efficacy, time management, anticipation, and flexibility

As in the other two craft activities, production is not dissociated from conception. This characteristic is perhaps even more salient in tire-working, as the work process is organized in stages for the production of sandals in batches. Rubber shoe-makers have to anticipate and distribute their tasks in order to maintain a smooth rhythm of production. The repetition of the same gestures for each stage of production is an efficient way to work faster and neatly. Yet, this routine may also be enlivened by creativity in carving decorative designs on the sandals. As Rasmane explains, creativity is essential for the success of his business: "Yam ya ribo... Yāmb sēn pa tar yam, yāmb pa tõe n di ye." "Yam" is an elaborate concept connoting mind, intelligence, spirit, capacity to learn and take good decisions, but also being smart, shrewd, and crafty. Once again, this draws us back to the notion of mètis described by Détienne and Vernant as a "practical and crafty intelligence," "wily and versatile, astute and resourceful" (Schwint 2002: 17, 101-2). Rasmane explained that tire-workers "strive to find ideas... If you do not come up with a new model, you cannot work ... If I take this [piece of] bante, [I will think

¹⁵ "Intelligence is [your] food... If you don't have intelligence, you cannot eat" Rasmane, Fieldnotes, November 29, 2002.

¹⁶ Alexandre: 1953; Nikiema and Kinda 1997:1136.

Operational Sequence 5. Reconstituting the process of sandal-making.

Sequence 1: The making of "tapettes" decorated with "flowers"



Photo 87. Cutting the uneven edges of a strip of « bante" (inner liner)



Photo 90. Tracing the other side of the pattern



Photo 88. Laying the strip before drawing the

Photo 91. Looking for the right size of pattern to draw on the remaining piece of "bante"



Photo 89. Tracing the outline of the pattern



Photo 92. Cutting the sole out of the "bante"



Photo 93. Drawing the shape of the patterns on the sole (decoration).



Photo 94. Looking at the drawings before reproducing them on the second sole



Photo 95. Carving the designs on the sole.



Photo 96. Carving a heart-shape design.



Photo 97. Cutting a slot on each side of the sole, near the back, where the straps will fit



Photo 98. Cutting a slot in thickness of the sole, on the front. The blade pushes in until it reaches the slot that was previously cut on the front of the sole (making a way for the thing).

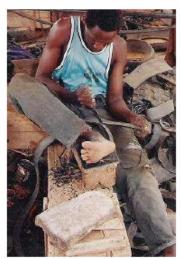


Photo 99. Cutting a strip of "bante" to make the straps.



Photo 100. Cutting the "bante" in its length.



Photo 101. Cutting straps out of the strip of "bante." The first one is used as a pattern for the others, in order tfor all of them to have the same dimensions.



Photo 102. Carving designs in the straps.



Photo 103. Cutting one end of each strap to make it round.



Photo 104. Making a hole in the rounded end of each strap, where the thong will go through. Boureima uses an inner-tube valve to do so



Photo 105. Cutting a series of circles out of the "bante."



Photo 106. Cutting slits all around the circle to make a "flower" (fleure).



Photo 107. Cutting thin strips of inner-tube to make a spiral around the thong.



Photo 108. Rolling the inner-tube strip around each thong (yōr bānga) to make a spiral. The thongs are pieces of "bante" that were already prepared before starting this series of sandals.



Photo 109. *Yðr bānga* (thong)



Photo 110. Unfolding a roll of wire (tire bead) to make staples.



Photo 111. Folding and cutting staples with a pair of pliers.



Photo 112. Adjusting the length of the straps.



Photo 113. Placing the straps into the side-slots.



Photo 114. Stapling the thong into the front slot of the sole.



Photo 115. Stapling the sides of the straps into the side-slots of the sole.



Photo 116. Finished pair.

Sequence 2. The making of another version of « tapettes » with a decorative upper



Photo 117. Drawing the pattern of the upper onto a strip of "bante."



Photo 120. Making holes in the uppers, using an inner-tube valve.



Photo 122. Sliding the straps into the slots of the uppers.



Photo 118. Cutting the uppers with scissors.



Photo 119. Carving designs on the uppers.

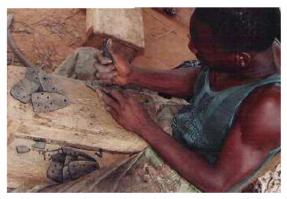


Photo 121. Cutting two slots in-between two pairs of holes, where the straps will go through.



Photo 123. Adjusting the length of the straps before sliding them into the side-slots of the soles.



Photo 124. Finished pair, after adding decorative snap fasteners (see below).

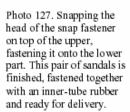
Sequence 3. Placing decorative snap fasteners onto yet another version of "tapettes"



Photo 125. Piercing a hole in the upper with a needle.



Photo 126. Placing the lower part of a decorative snap fastener (*rivet*) underneath the upper.





about] *which model I will make... So we* [have to] *think.*"¹⁷ Based on this operational sequence of sandal-making, I demonstrate how the organization of work is conceived in order to be the most efficient technically, in time management, but also in creativity.

Each stage of production is clearly visible in the spatial organization of the workspace and the tasks in process. When beginning to trace the outline of the sole pattern on the strip of liner, the tire-worker proceeds by pairs. After drawing both sides of the pattern (right and left), one against the other, he cuts the piece of liner and puts it on his left side, on the ground. He then continues to draw the next pair, cuts the strip, and puts it down on his left side. Once all the pairs have been drawn, he cuts them out of the strip and piles them up in front of him, on the bench.

Sometimes, he piles them by pair, crossing each pair over the previous one, to make sure that he will not mix them up. Then, he puts all the pairs of soles to be carved on the ground, on his left side, and begins to carve them, pair by pair. When a sole is carved, he places it on the ground on his right side. This movement goes on, one stage after another, with the worker placing the pile of sandals on one side, working it out on the bench, and putting on the other side the ones that have been carved. During the work process, the producer often interrupts his work in-between two stages to reorganize the soles by pair, according to the set of designs he carved on them or count the number of items that have been worked (such as straps, thongs, "flowers"), and move on to the next phase.

Each phase of the production process is thus neatly organized and spatially separated from the others. However the tire-worker also distributes his tasks temporally. To gain time, some parts can be done ahead of time so that when an order for a batch of sandals comes in, they are

¹⁷ "Ob baodame n pam idée… Yãmb sẽn pa pam modèle palle, pa tõe tomd ye… Mam sẽn dik bante kãnga, m na man modèle bugo… donc [m] tagsidame." Rasmane, Fieldnotes, July 21, 2003.

ready to be used. For instance, a small batch of straps, "flowers," thongs, or uppers may have been put in a tin box, ready to be used. Often, these small jobs are carried out in the evening, when it is too late to begin an entire new batch of sandals but when there is still time to do something. Rasmane explains that it is at that time, around five o'clock in the afternoon, that "we sit and do small tasks until we resume again the next day." Likewise, Boucare often continues his work at home, in the evening. He plans how many sandals he might complete at home in order to anticipate what will remain to be done the next morning. "Mam calculdame," he says, expressing his way of reflecting, planning, and anticipating his work.

Despite this rather neat organization of their work, tire-workers also enjoy a certain flexibility in the order in which the production stages are performed. Even if the main ones are always carried out in the same sequence (soles first, then the straps, and so on), some minor steps can easily be interchanged without any technical consequences. Tire-workers can thus choose to cut the slots in the soles right after carving them and before making the straps, or cut them after making the straps and thongs and just before placing them on the soles. Likewise, they can decide to first place all the sets (straps and thongs) on the soles before adjusting and stapling them in a subsequent stage or adjust and staple them as soon as they are assembled onto the sole. The order in which these operations are performed does not affect the technical process *per se* and only depends on the tire-worker's personal decision, which can vary from one batch to the next.

If rubber sandal-makers cannot make more than five or six ornamented pairs a day, they all agree that it is because of the carving and the other decorations involved. Making a plain sole, a

¹⁸ "Tõnd zi n man tom bõngo ti beogo tõnd le singame." Rasmane, Fieldnotes, April 10, 2003.

¹⁹ "I'm calculating," (Fr. calculer, to count). Boureima, Fieldnotes, April 11, 2003.

pair of straps, a thong, and assembling them does not take much time. However tire-workers such as Rasmane and Boureima have deliberately chosen to refine their models by adding technically 'unnecessary' parts such as "flowers," uppers, and snap fasteners and by carving designs. While cutting a sole takes about one minute, carving it takes up to five or six minutes. While a strap is cut in just a few seconds, carving it will require about four minutes. Since a pair of sandals is never done in its entirety but is always part of a batch, it is difficult to assess the average time required to make it. Yet, if each stage lasts between one and four minutes for each part of the sandal (from cutting to carving), one sandal requires about twenty-five minutes of work and therefore, a pair of sandals can be completed in about fifty minutes. If this is the average time to produce a pair of rubber, carved sandals, tire-workers need about eight hours to produce ten pairs, which in fact they rarely do.

Calculations, precision, and 'tricks'

As Schwint noted, the work of artisans ranges between precision and approximation (2002:95). To produce sandals that are acceptable to customers, tire-workers have to meet certain quality criteria that require a mixture of "rough exactitude." For instance, they have to make soles that are smooth enough yet not completely even, place the straps as flat as possible in the side-slots, or staple the thong at the right spot in order to leave enough space for the foot without pulling the straps too much. At the same time, there are some techniques to make sure that both right and left sandals are different. While these standards are essential for making satisfactory sandals, they are met according to approximate techniques and routinized, embodied knowledge.

Many times, the sandal-maker merely 'knows' the right dimensions or position of a component. For instance, before fixing the thong in the sole, he has to make a space for it in the thickness of the sole. He cuts a first slot on top of the sole and then slits a second opening in front of it, in its thickness and pushes the tip of the scissors until it meets the first slot on the top (fig. 9a-9b). When I asked Boureima how he managed to make the two openings meet, he merely replied: "tõnd makame" (we point [at it]). Likewise, when making straps, the sandal-maker often cuts the first strap just 'knowing' its approximate length. Then, he takes the first one as the standard measure for cutting the others. At other times, he merely cuts a band of liner to make it about four centimer-wide and folds it in four sections to 'see' if he can make four straps with it. If he can, he folds the band into two, cuts it in the middle and then repeats the same operation for the two smaller segments. He has now four straps ready to be carved.

When the sets of straps and thongs are ready to be placed on the sole, their adjustment is also made based on the worker's accumulated experience. He begins by pushing the thong through the opening in the sole with the tip of the scissors. Dipping it into water beforehand makes it easier to press through. Once it comes out on the other side of the sole, the sandal-maker can then adjust the length of the straps (fig. 9c-9d). This adjustment varies with the worker's experience and preferences. Boureima, for instance, measures the length of the strap that should fit in the side-slot by placing his thumb onto the sole. He then marks the right place on the rubber, places the strap on top of it, and cuts the extra-length with his scissors. At other times, he does the same as Rasmane who simply places one end of the strap in the slot, evaluates

²⁰ From *make*, to measure, to trace, to aim, to try; to try (Alexandre 1953; Nikiema and Kinda 1997:526).

its right length by looking at its overall shape and position, and cuts the extra length. He then places it back, adjusts it again, and cuts it once more to reach its right dimension (fig. 9d.).

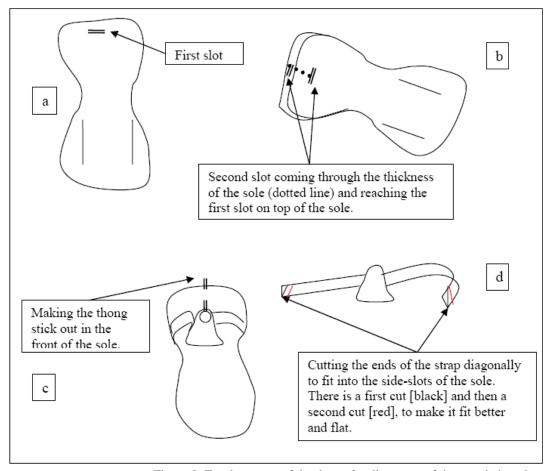
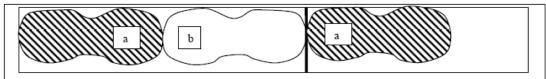


Figure 9. Emplacement of the thong & adjustment of the strap's length

The distinction between right and left sandals also has to be evident and accurate. Every part is made to fit either a right or left shoe. Firstly, when drawing the soles, the sandal-maker outlines one side of the pattern and then flips it to draw the other side (see fig. 10a). The same technique is used to make uppers, flipping the pattern on the other side to make both right and left sides (fig. 10g). Each upper bends towards the big toe (fig. 10d). Rasmane explains the importance of making both sides for uppers as essential: "You have to! If you take the 'plus'

Figure 10. Right & left sides.



a) Drawing a pair of soles: a) one side of the pattern = left shoe; b) other side of the pattern = right shoe.

The sandal-maker then cuts the section with the drawn soles [vertical trait] and continues drawing another pair.



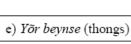
b) The inclination of the inside & outside straps determines which side it is.



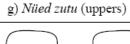
c) Outside strap inclined to remain flat on top of the foot.



d) Similar system for sets of single strap + upper: both the upper and the thong have a different inclination for each side. They incline toward the big toe.



f) *Lüadse* (straps)





Left side = gwaboga.



Right side = retungo.



Left side Right side



Left side



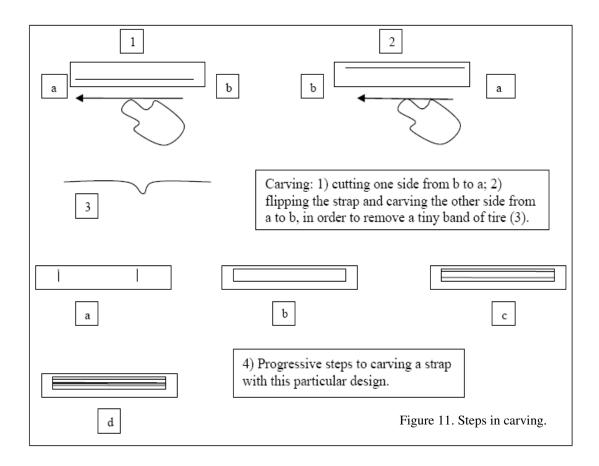
Right side

[side, i.e. the right one] *and put the 'minus'* [side, i.e. the left one] *instead*, *it cannot work*."²¹ The V-shaped straps have both sides as well: the strap that bends the most is the outside one, which needs to remain as flat as possible on top of the foot (fig. 10b, 10c, 10f). If he places the right set instead of the left, "*it will work but it won't be nice*."²² And if he inverts the straps of the same set, it will not work at all. Lastly, the thong itself is slightly curved in the direction of the big toe. After sliding it through the hole of the strap-set or the upper, the sandal-maker twists it a little on one side or the other, in order to fix it in the right position (fig. 10e). The set of straps and thong is now ready to be stapled onto the sole.

Tire-workers also use a variety of techniques and 'tricks' to increase their efficiency. Since cutting and carving are a big part of their work, they have developed methods to be both precise and fast. Once the sole has been cut with the long knife, the sandal-maker switches knives to carve it with a smaller one. The process of carving involves the removing of a tiny strip of rubber at the surface of the sole by making a V-shaped cut. He proceeds by slightly inclining the knife so that the cut will not be too deep when tracing the desired design. Then, he turns the sole around to follow the same cut, but this time the knife is inclined on the opposite side (fig. 11.1-11.2). This movement results in a shallow V-shaped cut. The tire-worker then removes a thin strip of rubber from the surface, which creates a design engraved in the sole (fig. 11.3). All the designs that are made on soles, straps, and uppers are carried out using this technique (fig. 11.4).

²¹ "Ya kielgamde. Fo sẽn rik "plus," n ning "moins" zinga, pa tõe zems ye." Rasmane, Fieldnotes, June 19, 2003.

²² "Zemsdame la ka neer ye." Rasmane, Fieldnotes, June 19, 2003.



When making "flowers" to decorate the sandals, tire-workers have also developed a technique to make acceptable aesthetic pieces in the least amount of time. Taking a piece of inner-tube, they begin by making a batch of squares of about five centimeter long. Then they cut the angles to make a disk. Once this is performed, they begin to cut the 'petals' of the "flower" by removing tiny triangles on the edge of the disk, turning it counter-clockwise (fig. 12). Since these "flowers" are made of inner-tube, the sandal-maker does not need to use a valve to make a hole in the middle. He merely folds them in two or four and cuts the middle with his scissors. They are now ready to be mounted onto the thongs.

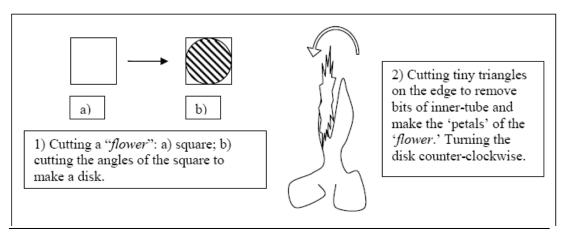


Figure 12. Cutting a "flower."

One last technique that tire-workers use to help their production go smoothly is employed during the carving process. When decorating the soles, the sandal-maker carves three lines around the sole (fig. 13a.). Sometimes, he leaves these lines plain; at other times, he carves them further, making a 'checkerboard-like' design (fig. 13b.). The sandal-maker first incises a cut perpendicular to the three lines. Using the same carving technique as described above, he holds the knife slightly bent on the same side and turns the sole around as he slits other lines, keeping the same – approximate - interval. When he has finished, he flips the sole around and does the same, still holding the knife slightly inclined. In doing so, he is removing a small V-shaped bit of rubber, leaving a notch on the surface.

In this procedure, it is important for the worker not to cut twice at the same place, in order not to remove too much rubber. To better remember where he started the notches, the sandal-maker begins this phase by removing two nicks consecutively, bending the knife on both sides to fully remove the rubber parts (fig. 13c). Once this is done, he can now cut the two rounds of stripes without hesitation.

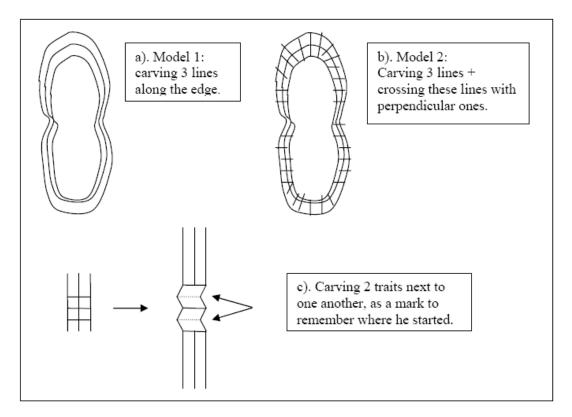


Figure 13. Carving the edge of the sole

Quality and 'safety' issues

During the production process, sandal-makers are very much concerned with meeting standards of quality and safety. They are careful to make the soles as even as possible. Without taking the time to make a sole totally smooth, they remove any important bulge in order to maintain a minimum level of comfort for the sandal-wearer. Similarly, major protrusions in the uppers or straps are also removed. Sandal-makers also pay special attention to the adjustment of the length of the straps. They modify the length in two separate instances in order to not make any mistake and to make sure that it lays flat on the sole. If it is not well done, it will make a hump and "it's not nice." Plus, it will not be comfortable for the wearer. 24

²³ "Ka neer ye." Rasmane, Fieldnotes, June 19, 2003.

Sandal-makers have developed techniques to guarantee a certain durability and safety in their sandals. For instance, when making a set of strap/thong/upper with a single strap, they make the slots in the upper in a way that they will not cleave further and impair the upper. To do so, they end each slit with a hole (*boko*) on both sides (fig. 14). After making the upper, they punch six holes in it with a small inner-tube valve and a hammer (fig. 14a). They remove the rubber that gets stuck in the valve with an iron wire and repeat the same operation five times. It is only then that they cut two vertical openings between two pairs of holes (fig. 14b). The remaining two holes are the place for the decorative snap fasteners (*rivets*).

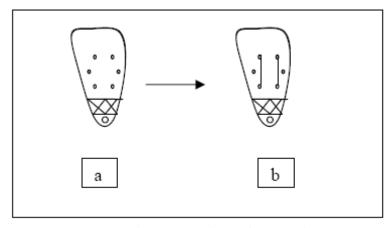


Figure 14. Cutting 'safety' slots in the uppers.

The other elements are also securely fastened. The spiral on top of the thong is not only meant for decorative purposes but to prevent the thong from falling through: "If you roll [it around] like this, it cannot go through." The tip of the nail that fixes the spiral onto the thong is also carefully bent and flattened against the spiral. Snap fasteners are pressed with a pair of tongs to make sure that they will not pop out later. Sandal-makers are also careful when positioning the

²⁴ It is interesting that Rasmane expresses his concern in aesthetic terms (*it's not nice*) and not in terms of comfort or quality. Yet, I would argue that these aspects are included in the notion of being 'nice.' ²⁵ "Hã vila woto ti ka tõe fõge." Rasmane, Fieldnotes, April 18, 2003.

staples. Firstly, they make sure that the staple does go through the sole correctly. Once it does, they bend the tips toward the sole, so as to not hurt anybody.

Sandal-making, an aesthetic performance

Unlike inner-tubes, liners offer plenty of possibilities for creativity through carving. Each pair or batch of sandals differs from the other as Rasmane varies the combination of designs on the sole, on the straps, or on the upper. Only the soles made of tread cannot be carved. When beginning a new batch, Rasmane spreads out his patterns and looks for new compositions in order to vary his work and produce sandals that "*look nice*." If he does not vary his designs, "*it's not good*." Indeed, it is important to offer some variety to his clients to choose the one they prefer. In addition to varying his combinations of geometric patterns, the sandal-maker also creates new designs in order to diversify his sample.

The first area of variation is the sole. The sandal-maker chooses amongst a range of patterns of different shapes: the plain ones $(w\tilde{a} \ simple)$, worn by men and women alike; the ones with a "round" heel $(a \ sega \ ya \ giliga \ bala)$; and the ones with a "square" heel $(a \ sega \ ya \ carr\hat{e})$. The latter two are only worn by men. The distinction made between male and female sandals is rather simple. According to Rasmane, "female sandals [are] small, [while] male

²⁶ "Fo na man dessin modèle bugo ti yi neere-neere." "You will [look for] which model to make that will come out really nice" [lit. 'nice-nice']. Rasmane, Fieldnotes, July 21, 2003.

When I asked him why he changed motives from one series of shoes to another, Rasmane merely replied "*Baafi!*" ("Nothing"). But if he keeps doing the same thing, "*ka soma ye*" ("it's not good").

²⁸ See chapter XII on marketing. The clients' ability to choose is expressed in comparative terms: what is "nicer"– "neere yida" – than something else.

²⁹ Lit. "simple cut," from wage, to cut and simple, French for 'simple, plain.' Rasmane, Fieldnotes, June 3, 2003.

³⁰ Lit. "its waist is just round."

³¹ Lit. "its waist is square."

sandals [are] big."³² The sandal-maker starts by carving either the lines on the edge of the sole or the designs in the middle. After drawing one or two patterns on the sole, he begins to carve the inside, filling the shapes with all kinds of geometric patterns – horizontal, vertical, diagonal, or crossed lines.

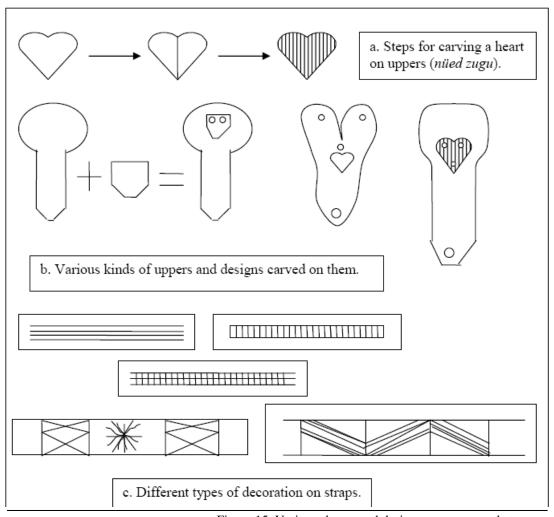


Figure 15. Various shapes and designs on uppers and straps.

32 "Pagha nveda [ya] bõgse [la] rowa nvede [ya] bedre"

The sandal-maker proceeds in a similar way to decorate the straps and uppers (fig. 15). Much like the soles, the uppers offer a great variety of shapes, of designs carved on them, and of filling (fig. 15a-15b). While he uses patterns for the uppers, the sandal-maker does not for the straps. He decorates the latter by carving directly onto them, resorting to his imagination and his mental stock of patterns to carve up to four different designs on a pair of straps (fig. 15c).

Sandal-makers also vary the way in which they assemble the set of decorated straps, uppers, and thong (fig. 16). Some uppers are just placed on top of a single strap and fastened to it with silver snap fasteners (fig. 16a).³³ Other sets are composed of a thong passed through the holes of two straps and ornamented with a pair of "flowers" (fig. 16b).³⁴ More recently, sandal-makers began to place two "*flowers*" instead of one, judging it to be "nicer." A third arrangement consists of a single strap slid through the slots of a decorated upper (fig. 16c). Lastly, a rectangular-shaped upper can sometimes be fastened onto a single strap with snap fasteners and the strap will be decorated afterwards (fig. 16d).

The silver snap fasteners are added mostly for decorative purposes. Even if they are used in a practical way to fix the uppers on the straps for some models, the decision to use these kinds of fasteners rather than plain staples is purely aesthetic. Rasmane is very conscious of this: "if we don't put it, ... it's not nice." Many times, he adds a third fastener on the upper, even though

 $^{^{33}}$ Hã dogle n ning plaque. Lit. "when we put [the upper] on top [of the strap] and place the [upper]." French 'plaque,' lit. plate, meaning the upper.

[&]quot;rivet." Lit. "Sandals [for which we] do not put rivet [i.e. snap fasteners]" – from French

³⁵ "Nye hã ka ning ye... ka neer ye." Rasmane, Fieldnotes, June 18, 2003.

two would be enough to attach the upper on the strap. ³⁶ By placing the third fastener in a triangle with the other two, he creates a "nicer" harmony. 37

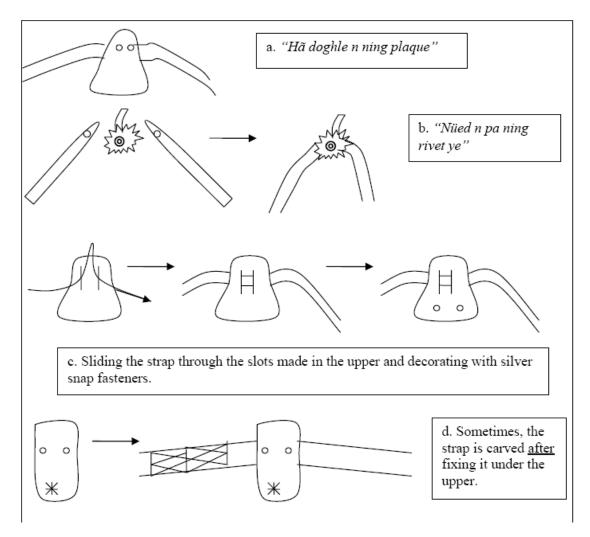


Figure 16. Different combinations of straps and uppers.

Sandal-makers' repair service

The production of tire-sandals also involves a customer service. The main causes for repair are a broken thong or strap, which have worn out after some time. In that case, the client or retailer may come back to the producer to have it repaired for a small fee or even for free,

 ³⁶ See the heart-shaped designs in the uppers (fig. 18b).
 ³⁷ "Sẽn ratẽ ti yi neere ya..." If [one] wants [it] to look nice..." Rasmane, Fieldnotes, April 10, 2003.

depending on the type of transaction. One retailer explained that "there is no other place [to go to]. You have to come here for repair." When the thong is broken, the sandal-maker removes the staple that is holding it and also the straps and the "flowers." He makes another thong or takes a new one that was already prepared in his stock, replaces it, and staples it back. The same process applies to the replacement of a broken strap: the producer removes the staples that are holding it, uses it as a pattern to cut a new one from a bit of liner, carves the new one, and replaces it on the sole. Before stapling it, he asks the client (if he is present) to try the sandal in order to adjust the dimension of the strap.

In tire-working as in aluminium-smelting and tinsmithing, the technical processes are economically oriented. Tire-workers have organized their production in batches to increase their efficiency and level of precision. They combine efficient routines in terms of work organization and techniques with small innovations and creativity to renew their production range. Even though the aesthetic components are slowing down the production process, it adds value to their finished products that is translated in a higher profit margin. I will show in the next chapter how the aesthetic aspect of their production of tire-sandals is a strategic marketing choice.

³⁸ "Zinga to ka be. Ya tılɛ ti fo wa ka n malge" One of Rasmane's client retailer, Fieldnotes, June 11, 2003.

Chapter XII. Marketing strategies: From production to delivery

Basic marketing theory teaches that a trader must define his or her product, promote and distribute it, in addition to maintaining a relationship with his or her customers over time. This strategy is summarized as the "marketing mix" or the "four P's": Product, Price, Place (or distribution) and Promotion. More than just selling and advertising, marketing also includes product development, packaging, pricing, distribution, and customer service. In this chapter, I use these aspects as a guideline to examine these Burkinabè producers' strategies in placing their items on the local market.

Products and their market: strategic choices

Each producer keeps making choices concerning the products he decides to fabricate. Some make clear, strategic marketing choices in their range of production, others decide on a selection for lack of technical competence. For example, Martin is keenly aware that producing frying pans or buckets is not profitable when he can make other products – like peanut roasters – that are more lucrative in relation to the effort and money spent. Tire workers also specialize in one area or another depending on their capacity and willingness to do more or less strenuous work. The majority of aluminium-smelters are not able to make complex items such as teapots or jugs, as they have never learned how to do them during their apprenticeship. Boubacar is one of the few in the capital city who are able to produce various models of teapots and pitchers.

While producers often have a limited set of products in which they specialize, they do observe the market to adapt their production to consumers' needs and preferences. With the

arrival of new consumer products on the market, new needs arise. People buying deep freezers need shelves to store water bags and other drinks for sale. These shelves are only made by tinsmiths who use aluminum sheet metal and tailor them to suit each freezer's dimensions. Car parts (in aluminum or in rubber) and armchair straps are among the new products that have emerged along with the consumer market. The presence of an increasing number of dry cleaners in the capital city was an opportunity for Alassane to develop a new type of production in addition to making springs. He began to use specific types of tire beads to make clothes hangers.

Producers adjust their production range to satisfy consumers' changing demand and preferences. They readily abandon models that fall out of fashion or do not generate enough profit. When I asked, purposely naïvely, why Moussa gradually modified his production from small to large and very large pots, his answer was very obvious: "ob radam wey!" (they buy!). Zakaria too stopped producing a cheap type of tire-sandals to make a more sophisticated and expensive one, thereby increasing his profit margin. On the other hand, supplies are too scarce to waste them in making unwanted articles. If there is no demand, there is no purpose in producing them. That is why the production of water-cans or wood stoves drops during the rainy season when they are not needed.

There is another reason for diversifying the range of production. Even if this is a more marginal motive, it is important. While Martin may be the only producer to have expressed this thought during my study, he may have verbalized what others could not and may represent the position of other producers whose workshops I did not study. Martin believes that it is important

¹ Moussa, owner of the largest aluminum-smelting workshop. Fieldnotes, February 3, 2003.

² He justified his choice, saying that "yãoã ligda ka waog ye" (this one [doesn't bring] much money). Fieldnotes, August 28, 2003.

³ Water-cans are mainly used during the planting season (May-July), which corresponds to the dry season. There is no need of them during the harvest season (August-November). Source: FEWS NET 2006. Seasonal Calendar.

to keep improving. "I prefer creating [new things] instead of always doing the same thing. I want to go forward. I want to progress." Born in a blacksmith family, he quickly dropped forging to make small items such as knifes and rakes when he was young. He learned how to make frying pans in Côte d'Ivoire and when he came back to Burkina Faso, he continued to add new articles to his range of production (buckets, stoves, motorcycle's seats, freezer's shelves, and ovens). Not willing to "go backward," he counts on his accumulated experience and skills to produce bigger and more profitable items.

Stock issues: maintaining a stock and/or producing to order

The capacity of holding a large stock of merchandise is a powerful tool to control and manipulate prices. On a smaller scale, storage helps traders "bridge over fluctuations in price and supply which they cannot control directly" (Clark 1994:157). However, few producers are able to create and maintain a stock of merchandise for two main reasons. Firstly, they do not have a sufficient working-capital fund to acquire supplies and produce goods that would not be sold immediately. Secondly, the market is already quite saturated because of the high number of competitors and the limited purchasing power of the population.

The workday of most producers unfolds by receiving and carrying out small orders from individual clients and retailers. Unlike potters in Nigeria (Allen 1983), they do not rely on intermediary traders to access the market and do not "go around to sell" their products, like

⁴ "Moi je préfère même de créer beaucoup [de choses], au lieu de faire toujours la même chose. Je veux avancer. Je veux progresser." Interview. August 13, 2003.

5 "Je préfère progresser que reculer." Martin, tinsmith. Interview, August 13, 2003.

peddlers. Rather, clients come to their shop to order, often after spotting the workshop along the street or being recommended by somebody else. Although a producer rarely refuses an order because he has too much to do, he can turn it down if he lacks supplies or if he does not have enough money to purchase some.

Those producing without orders rely on their network of clients or on their location to sell what they have put on display or in storage. This is the case of Rasmane and Boureima, who sometimes produce batches of tire-sandals without having a specific order for them. However they know that among the retailers coming every two or three days to replenish their stock, one will certainly be interested in them. In contrast, Martin's few attempts to produce without orders were rather risky. When he brought two large funnels to feed grinding machines to a retailer in the central market, the latter had no need for them. He ended up giving them to a "younger brother"* (petit frère)⁷ who had a shop in the same marketplace and would wait for him to sell them.⁸

Producers are aware that holding a stock is a strategic advantage for their business in order to attract clients. Without any product on display, they run the risk of losing clients who want to buy an item straight away. Yet, many admit to be too "poor" to hold any (ya talga). The recurrent shortage of money prevents producers from expanding their activity and gaining greater control over prices and the flux of supply and finished products.

⁶ "Tõnd ka tõe giligidame n koos ye." (We cannot work around to sell [our merchandise]). Rasmane, tire worker, Cité An II. Fieldnotes, April 10, 2003.

⁷ I use the asterisk sign (*) to signal when the speaker is switching from Moore to French.

⁸ This illustrates the advantage of having a network of 'reciprocal relationships' in order to help one another in times of scarcity – i.e. buying supplies/goods even if the market is low against the guarantee of having prime access to this supply when there is a high turnover (see Clark 1994, Finan 1988).

Shops that are able to hold a substantial stock can do so because of a larger turnover. Moussa's aluminum-smelting workshop is a good example. His client network consists of large retailers scattered in various towns of the country who regularly order large quantities of pots. To fulfil these orders, Moussa has gradually increased his pool of workers to approximately forty to fifty, divided in seven production teams (see chap. IX). These teams are fully dedicated to the production process and do not intervene in the marketing aspect of the enterprise. Here, production reaches its highest potential as workers can work from three to five tons of aluminum per week. At this level of production, the enterprise needs large amounts of aluminum which it imports from Ghana (at a higher cost), as the local supply cannot meet their need. They use this supply to maintain a large stock of pots of various sizes in order to respond quickly to their retailers' large orders. The boss frequently checks how much stock he holds in two storage rooms inside his compound and adjusts the teams' production to restock certain categories of pots that are becoming scarce.

Innovating and creating new products

While creation is central to producers' work, it is not "socially recognized." They very rarely use the terms of "creation" or "invention," speaking rather about being crafty or "finding solutions" to their problems (Schwint 2002:219; also see Herzfeld 2004:40). Yet, while producers do not speak explicitly about invention, they are very proud to declare themselves the first to have achieved or thought of something. They take pride in the intellectual and practical

⁹ They are able to execute an order of 400 pots in seven working days, distributing the work among several teams. One team is able to produce ten pots #30 and up to twenty pots #12 in one day. In contrast, other producers do not even keep a strict account of how many items they produce per day.

process they went through to find the best way to carry out the order and the accumulated experience they had to draw on.

While Paul admits that he "didn't get to invent a new model*," 10 he boasts "we work with knowledge." Indeed, Paul had to draw on his experience and know-how to devise a system to make a replica of a broken car ring or to produce 2,940 identical parts for ceiling fans that a trader had ordered. To produce the fan parts, Paul created a new mold made of two blocks of aluminum, which he pressed tightly with a clamp while pouring the molten aluminum into a small opening. Since the part he was to make was small, this device allowed him to speed up the production process as he did not have to break and re-make a mold for each part (see photo. 128-29). The procedure was fast enough for the aluminum mold not to melt while in contact with the hot, molten metal. After presenting his invention to me, Paul exclaimed: "I'm smart!* ... I am very intelligent!"

Many creations are in fact direct copies of imported, industrial goods, which are not affordable for the majority of the population. Clients turn to local artisans to see if they can meet their needs at a lower cost than regular shops. Other items are imitations of samples brought by clients, such as Martin's first oven or moped seat and Rasmane's latest model of tire-sandals. Finally, some items have also been introduced by development agents, such as the improved stove.

Development agencies, in collaboration with local governments, have trained many tinsmiths in the Sahelian countries to make improved stoves in order to reduce wood consumption. These

 [&]quot;Inventer modèle* palle, tõnd na ka pam ye." Paul, aluminum-smelter, Patte d'Oie. Fieldnotes, February 2003.
 "Tõnd toma ne bangre." From 'bange: 'vb. "To know from acquired science, to know [by experience], to learn."

⁽Alexandre 1953). This type of acquired knowledge is not limited to intellectual knowledge but includes practical, embodied knowledge.

¹² "Je suis intelligent!... M tara yam wʊsgo!" (Lit. I have a lot of intelligence). From 'yam:' mind, intelligence; will. (Alexandre 1953). Fieldnotes, June 19, 2003.

closed stoves have the advantage of protecting the hearth from the wind, slowing down the burning process. The goal is to replace the open-hearth made of three stones which are consuming too much wood. According to one tinsmith, development agents also taught tinsmiths how to make peanut roasters.





Photo 129. Series of ceiling fan parts that have already been cast and polished.

Photo 128. Paul pouring aluminum into the mold that was specially created for the purpose of this order of ceiling fan parts.

Producers are prudent regarding creativity and innovation. They want to make sure that their products respond to real needs and remain adapted to local demand and purchasing power. In other words, any innovation or improvement should be marketable. ¹³ This may be the reason why Burkinabè producers appear ambivalent regarding the aesthetic aspect of their production.

¹³ Scholars have noted that unlike artists, artisans do not create solely for the sake of creation but produce or reproduce forms and products that are useful "for the benefit and needs of the City" (Miquel et Ménard 1988:103, *In* Schwint 2002:217). In fact, Schwint reminds us that the term '*métier*' (trade, craft) bears a "fundamental logic of service" as it derives from the Latin word *ministerium*, "function of servant, service" (2002:217).

On the one hand, they respect some minimum aesthetic criteria when making an item. On the other hand, this is not a priority that should slow down their work. Aluminum-smelters adorn their pots with drawings only upon request, arguing that clients (especially women) are "not interested" in buying decorated pots. ¹⁴ Most often, they make do with patterns already embossed in the original mold. For instance, Moussa's molds #1 to #20 are reproductions from cast-iron pots originally made in South Africa or Central African Republic by "White people" (nasaar dãmba). They are adorned with a rooster which, according to him, clients "like" (ob nõnga).

Clients' feedback, positive or negative, is the key indicator for producers to know whether their goods are of quality, affordable, and functional. When he created his first oven, Martin never carried out a market study to compare its price to manufactured ovens or to check the price range people would be ready to pay. Instead, he affirmed that "I know full well that if I do [it], people will buy [it]*." The fact that many people stopped at his shop to ask where the oven that used to be on display had gone was a clear indication of interest.

These innovations constitute an economic capital that producers try to conceal from potential competitors. Yet, working in an open space and displaying their goods to attract clients, producers have only limited control over their expertise and cannot easily prevent somebody else from imitating them. That is why they have to quickly identify fake clients who try to see how they make a particular object. As a young man stopped on his bicycle to look at Martin's oven, the tinsmith barely looked at him and did not greet him. He replied very briefly to his questions, until he said, trying to cut it short: "Well, you're not ready* [to buy it]. When you're ready*,

¹⁴ "Ka neb [pagba] pa rat ye." (Here, people [women] don't want [decoration]). Quote from two young salesmen working for Moussa. Fieldnotes, January 22, 2003.

¹⁵ "Je sais bien que si je confectionne, les gens vont acheter." Martin, tinsmith, Patte d'Oie. Fieldnotes, April 3, 2003.

then just come [back]."¹⁶ As the man kept looking at the oven, Martin stood up to explain that what the man thought to be a cooler was a 'cooler' of another kind.¹⁷ When the young man had finally gone, Martin turned to me and exclaimed: "The way he asks me, I know that he is stealing ideas."¹⁸ That is why he made him believe that it was a cooler. If he had already seen an oven, he could easily reproduce it from what he had observed at Martin's workplace.

Subcontracting practices

Producers may occasionally buy some items from other colleagues or even regularly subcontract part of their stock to other workshops. They may do so for three main reasons. Firstly, it enables them to present a diversified range of products to the customer, including items that the producer does not make himself. Secondly, it is a strategic way to sell goods that require no production effort while providing a profit margin. Lastly, it can satisfy occasional orders that the producer has no time or not enough supply to carry out in order to satisfy the client and make him/her come back. All of these motives have a clear marketing purpose.

The most common practice is for producers to buy a certain number of items from other craftsmen to diversify their stock. Martin is a good example of this. Even if he is able to produce a large array of goods, he chooses to buy some of them from other tinsmiths to spare him the work of looking for the right metal supplies and producing the items. He buys small articles made in light metal such as small buckets or dustpans from young boys working in the neighborhood. Occasionally, he buys knives and pickaxes from blacksmiths during the rainy

¹⁶ "Bon, yamb na pa prêt wa ya. Hã ya prêt, bi wa bala." Fieldnotes, August 13, 2003.

^{17 &}quot;Yãoã ya modèle* a to" (This one is another model).

¹⁸ "De la manière dont il demande là, je sais que c'est un voleur d'idées."

season. Martin is careful in choosing his suppliers: "Each time I know someone who works well, I buy [some items] for display." On the other hand, he refuses to buy from tinsmiths who do not produce goods of quality, even if they reduce the price. Aluminum-smelters often buy teapots or kettles from other craftsmen, as few are able to make them.

In some instances, there can be a real division of labor at the collective level. Moussa, for instance, subcontracts his production of smaller aluminum pots to several workshops located in other neighborhoods. In a system similar to that observed among wood-carvers in Ghana, Moussa provides his associated shops with aluminum on a regular basis against the production of pots (Silver 1981:47-9). In doing so, he only has to pay for their labor. At times, he may distribute up to twenty tons of aluminum to various shops for the production of pots. Moussa thus maintains his assortment of pots while keeping his own teams on the production of larger – and more profitable – pots, which the other shops are not able to produce. This system is also beneficial to these small shops, enabling them to keep producing in times of scarcity of supply or slow market.

Finally, producers may turn to other colleagues for sporadic, marketing needs. If a client orders an item that the producer does not have in stock, has no pattern for, or does not have either time or supply to make, he can turn to another colleague to provide it. He rarely sends the client to another shop or even tells him or her that he bought it elsewhere. This strategy may be a way to keep the client dependent on him for the desired products. However, many clients are aware of this practice and find it advantageous as it saves them the time to search for the right item and provides a certain guarantee that the item will be of quality.

¹⁹ "Chaque fois que je connais quelqu'un qui travaille bien, j'achète pour venir exposer." (French). Martin, tinsmith, Patte d'Oie. Fieldnotes, February 18, 2003.

These transactions give the producer opportunities to generate a profit margin as substantial as possible. Since producers know each other, they buy the item at a wholesale price and resell it to the customer at a retail price that can vary depending on the opportunity. In one instance, Paul received an order for a basin, for which he had no model. He took the order anyway, in order to earn something from the transaction. He calculated that he would buy the basin from another aluminum-smelter for 7,500 F CFA and sell it to the woman for 12,500 F CFA, generating a 5,000 F CFA-profit margin. However, since his female client intended to bring the amount of aluminum necessary for its production (10kg, worth 5,000 F CFA), he would not gain anything from the transaction. So he decided to sell the basin to her for 10,000 F CFA in order to maintain a profit margin of 2,500 F CFA.

In order to keep their clients and prove themselves worthy of their trust, producers carefully choose the colleagues from whom they buy. If their colleagues are absent or unable to provide a desired item, producers would rather wait than turn to someone else in the meantime. In addition producers always check the quality and finish of an item bought elsewhere. They repair the eventual defects without mentioning it to the client or reducing the price, as this is a normal fact of the production process.²¹

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²⁰ Himself would not provide the aluminum to the other aluminum-smelter. He would keep the aluminum for his own production, thereby gaining 'free' aluminum.

²¹ It is interesting to note that finding holes in a pot, for instance, does not invalidate their statement that this particular workshop produces 'good' pots. In one such instance, Paul merely commented that he would "fix [the pot] a little more" (mam na malga m paase) but he was not dissatisfied with his colleague. Fieldnotes, December 31, 2002.

One last segment of the range of goods that these producers put on the market consists in secondary products derived more or less directly from their main production. Firstly, all producers sell as much waste as they can. For instance, tinsmiths like Martin save small pieces of aluminum sheets that he cannot use and sells them to aluminum-smelters when he has accumulated a large volume. Likewise, tire-workers sell pieces of tire and *bante* as "yõg-bugum" to female traders who sell them in bunches. Often, they let the children collect and sell these small pieces to obtain pocket money. Aluminum-smelters may also choose to sell aluminum waste from the melting process to other smelters (see chap. IX). Even old, damaged jute sacks containing charcoal may be sold to craftsmen who will make ropes from them. Depending on their degree of wear, they are sold for 25 F CFA to 100 F CFA per sack.²²

Producers, especially aluminum-smelters and tinsmiths, also sell goods that are peripheral to their main activity. Aluminum-smelters often sell copper that is mixed in the aluminum supplies they have purchased. Paul sells a kilogram of copper ($z\tilde{u}udu$) for 250 F CFA.²³ In general, they sell it to sculptors working with bronze or to brokers. In Moussa's workshop, the trade of copper takes another dimension. Moussa buys copper from scrap-dealers and when a large quantity has accumulated, the scrap copper is transported to Ghana for resale.

Moussa resorts to other sideline activities to generate additional profits that are reinvested in the production of aluminum pots. He and his sons purchase scrap iron that, like copper, is sold

²² This practice has only been observed at Moussa's workshop, where charcoal bags are bought in large quantity. Other aluminum-smelters hardly ever buy a full bag of charcoal and therefore, do not have any jute sack to sell. ²³ But another young man working in Moussa's workshop sold copper for 400 F CFA per kilogram.

in Ghana to be recycled.²⁴ They buy iron for 10 F CFA per kilogram and sell it in Ghana for 30-40 F CFA per kilogram. The gains, which are quite substantial, are reinvested in the purchase of aluminum, which may generate additional profits from the sale of finished products. In addition to trading scrap iron and copper, Moussa saves used car batteries that are also exported to Ghana to be recharged and sold.²⁵

On a smaller scale, aluminum-smelters save and sell any metal or spare parts found in the aluminum supplies they buy. These parts are often too damaged to be reused but when they can, they are a source of additional income. Paul's apprentices save nuts, hubs, and other small parts that mechanics buy for about 10 F CFA per unit. More rarely, they may sell a reusable cylinder for 200 F CFA. Producers may also provide various services for a small fee. For instance, mechanics regularly come to Paul's shop to heat exhaust pipes from mopeds to remove grease. They usually pay a token price of 100 F CFA (or 50 F CFA) for using his fireplace.

Pricing issues: 'fair' price, 'true' price, and variable prices

Burkinabè's conception of a 'good' price is fairly close to that described by Dilley among Tukulor weavers in Senegal. Among the latter, "[t]he true price refers to the way in which the return on the sale of cloth can be seen to embody *production costs* (e.g. price of yarn, costs of subsistence) plus a culturally construed idea of a fair make-up – *that which will maintain the weaver in his social station*" (Dilley 2004:803, my emphasis). To him, this vision resembles that of the European idea of a "just price." Quoting Tawney, Dilley writes that "[i]t is right for a man

²⁴ Scrap iron is sold in the industrial port of Tema, next to the capital city of Accra. There, scrap iron will be shipped to Asia (especially China) where it will be recycled.

²⁵ In May 2005, I received an email from one of Moussa's nephews who used to work with him, telling me that since the trade of aluminum pots was not doing well, Moussa was developing the exports of scrap iron to Ghana.

to seek such wealth as is necessary for a livelihood in his station. To seek more is not enterprise, but avarice, and avarice is a deadly sin" (Tawney 1948:44, *In* Dilley 2004:803). There are thus two main components in establishing a price: covering the production costs and maintaining one's social position according to cultural standards.

That is to say, a price is a cultural construct that encompasses more than economic concerns. Rather than a notion of fixed, indefinitely stable price, "the Tukulor have a notion of 'true' price ... [which] rests on the idea that, after recouping money laid out on raw materials, the weaver is rightly owed an income to maintain himself" (Dilley 1986:145). Alternatively, there are cultural and religious sanctions against abusive pricing. Muslim principles imply that one should not deceive fellow Muslims "by extracting larger profits than were rightful" and live "a lifestyle not in keeping with his social position" (Dilley 1986:139). There are thus "social and magical constraints" against abusive practices, especially in a society where "social inconspicuousness is sought" (1986:140).

In Burkina Faso, producers also set prices that vary according to the costs of production to which is added a margin. Production costs include mostly the costs of raw materials necessary to produce an item, without counting a 'wage' or any reproduction costs. This minimum price is the lowest acceptable price to keep them on working. Then, they add to it a profit margin that is approximate, flexible, and variable. It is in this margin that producers calculate their reproduction costs and their profit. It includes the "food" (*ribo*) necessary for them and their family, the physical effort put in (*tulgo*, ²⁶ *pãnga*²⁷), and their profit (*yõodo*). The profit margin is the element that varies the most in a price. Producers attempt to increase their margin whenever

²⁶ Tulgo: the heat, but also the sweat coming out of the body when making an effort (see Alexandre 1953).

²⁷ Pãnga: "[physical] strength, energy, vigor" (Alexandre 1953) and "power" (Nikiema and Kinda 1997:637).

they can. Alternatively, they may have to reduce it to a minimum or even sell at a loss in times of cash emergency.

Here, for instance, is how Martin calculated the price of two items. To charge a client for the repair of her cooler, he reckoned that he had used two meters of sheet metal, which he bought for 2,500 F CFA. To this basic production cost, he added 1,000 F CFA of labor. Thus, he would charge his client 3,500 F CFA for the work done. The price of his first oven was also a rough estimate of his expenditure. Initially, Martin wanted to sell it for 35,000 F CFA, estimating that he had invested about 15,000 F CFA of metal sheet to make it. However his price turned out to be unrealistic as women were ready to buy it only for 15,000 F CFA. He then remembered that he must have actually spent between 7,500 and 9,000 F CFA for sheet metal to make the oven ("10,000 F CFA maximum"). He estimated that if he invested this amount in each oven and needed two days to make it, he would earn between 6,000 and 7,500 F CFA of (gross) profit. While I suggested that it might not be worth the effort and time spent, he disagreed. A mere civil servant (fonctionnaire) would never earn such good money in so little time. "There is money!" However the only problem was that the market was very limited. If people would order and buy more, he mused, he could make good money.

The basis for establishing a price is therefore the costs of production. Producers know how much they spend on materials and the type, number, and price of goods they will be able to produce from them. This knowledge enables them to assess their profit margin and judge whether their pricing is correct and beneficial to them. Tinsmiths and tire-workers often proceed this way as they buy supplies in bunches of uneven quality, size, and shape. They do not always

²⁸ Plus, I informed him that my husband had bought a used gas oven for 25,000 F CFA.

²⁹ "Y a de l'argent!" Martin, tinsmith. Fieldnotes, January 27, 2003.

know in advance what they will make with these materials, depending on orders, on seasons, and on their decision to maximize their profit margin.

In aluminum-smelting, prices are calculated with greater precision as supplies are bought by the kilogram (aluminum) or in sacks or buckets (charcoal), which makes the price easier to calculate. In addition, producers know exactly how many kilograms of aluminum are used for the production of each item. In Moussa's workshop, the boss is much more inflexible about prices because he needs to cover important production costs and pay a sizable labor force. Some of his workers explained that they cannot sell a pot #30 below 12,500 F CFA. This price covers their expenses on aluminum (*wagdo ligdi*), charcoal (*sala ligdi*), and labor (*ribo ligdi*). "*If* [it is] 12,500 [F CFA], [we] *can get a little profit, buy more aluminum and continue working.*" "However if a retailer asks for 11,500 F CFA, Moussa will refuse because "there's no profit" (yõod ka be).

As Dilley noted, artisans justify price increases in terms of the rise of supply costs.

Alassane, a spring maker, expressed it very clearly: "Since [there is] a tendency to buy more expensive metal [during the rainy season], we too raise our price. [But] if we pay less, then we can reduce [our price]. But if [...] the metal ... gets more expensive, it's not our fault..."

Likewise, the prices of aluminum pots follow the variations of the price of aluminum supplies, which goes up and down seasonally.

In addition to the basic costs of supply, producers also take into consideration the level of effort put into the production process. This is revealed particularly when a product does not cost

³⁰ "Hã tusa yiibu la kobs-nu, tõe n yak yõod bilfu, n da wagdo m paase n kiete n tumda." Moussa's workers, aluminum-smelter, Zogona. Fieldnotes, January 25, 2003.

³¹ « Puisqu'on a tendance à acheter les fers plus chers, donc nous aussi on augmente le prix. Donc si on gagne moins cher, là on peut abaisser. Mais si [...] le fer nous vient plus cher aussi, c'est pas de notre faute.. » Interview, August 26, 2003.

them anything in terms of supply. Ali, for instance, makes rubber joints with pieces of rubber scrap ("this is stuff [that we] throw away")³² and that is why "there is no price." He explains that "even if it [sells for] 100 [F CFA], I can sell [it at that price and] I won't fall." Yet, he adds that "I am the one who works and suffers... I sit and work, it's a waste of time!* That's why I sell it for 150* [F CFA]" (my emphasis).³⁴

It is based on these considerations that producers set the wholesale and retail prices of the goods. "Wholesale prices" (*prix en gros*) are intended for clients who are retailers (i.e. who buy in large quantity), long-standing clients, or clients who have some kind of social ties with the producer. These are the bottom-line prices under which the producer knows that he would sell at a loss. "Retail prices" (*prix en détail*) are meant for all the other categories of clients: one-time clients, individual customers buying one or two items at a time, strangers, or wealthy-looking people. One tire-worker put it this way: "If [he or she] wants one or two [items] and we don't know the person, we sell [at] retail* [prices]." Retail prices are fixed in a rather subjective manner: "You just need to add some amount on top of the wholesale price. It may be 5,000 [F CFA], it may be 4,000 [F CFA], I take [it]."* Retail prices provide opportunities for the producer to increase his profit margin in a significant way, whenever he can. Depending on the

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³² "Bamba ya bum n lobe." Interview, July 21, 2003.

^{33 &}quot;Ba ya pisi man tõe koosame m pa lvi ye."

^{34 &}quot;Ma me tome n namse... Mam zi n tomna, c'est perte de temps! C'est pour ça que j'ai vendu ça à 150."

³⁵ "Sẽn rata a ye bi a yiibu la tõnd pa mi a soaba ye, tõnd koozda détail." Rasmane, tire-worker, Cité An II. Fieldnotes, July 11, 2003.

³⁶ "Il suffit d'ajouter quelques sommes sur le prix en gros. Que ce soit 5000, que ce soit 4000, je prends." In this case, Martin discusses the prices of funnel. A large funnel costs from 2,500-3,000 F CFA (wholesale) to 4,000-5,000 F CFA (retail). Fieldnotes, February 27, 2003.

item (i.e. small vs. big), producers add between 100-200 F CFA and 2,000 F CFA or more to the wholesale price to sell on retail.³⁷

Another aspect in pricing is the consideration of the purchasing power of consumers. This is what Dilley mentioned as the "right" price, which reflects the real value of the product without abusing people (1986:139, 145). Producers are very much aware of their clients' purchasing power, mostly – I would argue – because they belong to the same socio-economic group. For instance, Moussa clearly knows that he cannot sell an aluminum pot #2 for 1,250 F CFA while its current price is 1,000 F CFA. If he tried, there would be "profit ... but the client* will not buy [at this price]." Yet, they also tend to set their prices higher than the real prices as they anticipate their clients to bargain. One tinsmith expressed the matter this way: "[With] Africans, [if you tell them] the correct price, they will say 'barka.'" Prices are thus flexible but remain constrained by the clients' purchasing power and cultural conception of a right price (i.e. what they are ready to spend for such an item).

Although producers set their prices according to their production costs and a moderate profit margin, their conception of a right price can be challenged by other workers. One recurrent argument is that "other" producers "cut" the prices unfairly. Somehow, they manage to sell cheaper than they and since their profit margin is already limited, they deduce that these rival craftsmen must either have access to cheaper supplies or sell at a loss – running the risk of

³⁷ For instance, tire-sandals with carved decorations are sold 400 F CFA (wholesale) and 750 F CFA (retail); a tin bucket is sold for 800 F CFA (wholesale) or 1,000 F CFA (retail); and an aluminum pot #30 is sold for 13,500 F CFA (wholesale) or 15,000 F CFA or more (retail). A young aluminum-smelter declared that his profit margin was around 100-200 F CFA on a wholesale price and 300-450 F CFA on a retail price.

³⁸ "Yõod be me la client ka na n da me." Fieldnotes, January 29, 2003.
³⁹ "*Barka*" is the Moore term for "thank you," which in bargaining is a request for the seller to reduce his/her price. *Barka* (Arabic): blessing; thank you; *koos barka*: to bargain (*barse*) (Alexandre 1953). Martin, tinsmith, Patte d'Oie. Fieldnotes, February 27, 2003.

failing. These practices exert a real pressure on them as customers and retailers may justify their bargain by referring to these cheaper prices. "If you don't have any means* [to have a stock of goods to better control market prices, you just accept the deal saying] 'give me the money' but.. there's no profit [in the] sale." Many producers also believe that market traders are responsible for the prices going down as they have more influence than producers. The latter, not having enough means to hold a stock, are pressured to sell their production to meet their immediate needs and keep the enterprise going – whatever the price level.

This peer-pressure may explain why producers working in the same area often sell at the same prices. Wan observed that *gari* sellers who cluster in the same market location are "all selling at the same price," which can get the "inexperienced shopper" a little confused about where to "get the best buy" (2001:232; see Elyachar 2005:156). Paul pointed out that "all pots [in] Patte d'Oie [neighborhood are] almost* at the same* price. It's the district.*" Martin also observed that he and the other two tinsmiths working in the same area sold buckets at the same price (800 F CFA, wholesale). However in other places, buckets sell for 700-750 F CFA.

To counter these price-cutting practices, producers try or wish to come together in a professional association. They believe that if they had an organization that sold supplies to all producers at the same price, there would be no more abusive sales price differences. ⁴² Yet, as in many other instances, they have not managed to organize themselves in cooperatives to

⁴⁰ "Fo sẽn pa tar moyen [...] 'wa ne ligdi!' bala... yod ka tar nyõdo." Ahmed, aluminum-smelter, Tanghin neighborhood. Interview, February 10, 2003.

⁴¹ "Patte d'Oie rughdo fã, presque ya même prix bala. Ya secteur damba." Paul, aluminum-smelter, Patte d'Oie. Fieldnotes, February 2003.

⁴² Saul noted a similar attempt among grain traders in Burkina Faso to organize themselves in a large association to better control prices. But unlike aluminum-smelters and other producers, they were successful. "The organization is aimed at controlling the interests of powerful merchants vis-à-vis lesser traders who might be tempted to increase their share by price competition and is effective because these lesser traders are ultimately dependent on the major merchants in many ways" (1987: 87-88).

coordinate their effort. 43 Aluminum-smelters tried to do that a number of years ago but they "could not find an agreement." They argued that since they do not buy aluminum at the same price, they cannot sell their production at the same price.⁴⁵ One rhetorical way to counter this pressure is to insist that cheaper goods are of poorer quality than theirs. Cheap supplies are of poorer quality and therefore, the end products will not be durable. Thus, Moussa acknowledges that his pots are more "expensive" (togho) but they are "good" (i.e. of good quality). 46

Variable prices and price variables

Seasonality may be the most regular and easily identified factor of price variation. Prices tend to rise during the dry season, right before harvest time (April-May) and then go down during the rainy season and after harvest time (mid-July-November). In addition, harvest time coincides with the beginning of school (September-October), which takes a toll on the family budget. Paying school fees and supplies take priority over the purchase of utilitarian goods such as aluminum or tin ware. 47 Sale pick up again in December, during the holiday season. 48

In the same way as the gari traders of Ibadan described by Wan, very few producers are able to stockpile aluminum supplies when prices are low, even though they can readily anticipate

⁴³ See Silver (1981: 46): "In the mid-1950s, the Nkrumah government 'encouraged' the Akuraa artists to form a carving cooperative" but it did not work out.

44 "Ka tõe wum taaba." Moussa, aluminum-smelter, Zogona. Fieldnotes, January 31, 2003.

⁴⁵ "Neb fãa ka pam wagda même prix, tõnd pa tõe wum taaba." (Not everybody buys aluminum at the same* price*, [so] we cannot agree." Moussa is talking for himself in particular, since he has to import his supplies from Ghana. Moussa, aluminum-smelter, Zogona. Fieldnotes, January 31, 2003.

⁴⁶ "Ya toogo la rugda ya soma" (It's expensive but the pots are good). Fieldnotes, January 29, 2003. He justifies his prices saying that it is because he buys aluminum in Ghana, which is more expensive than the one bought in Burkina.

⁴⁷ O'Connor recorded a similar phenomenon in Peru, where the sales of handicrafts follow the agricultural cycle: "During the agricultural cycle there is a periodicity of disposable cash in the household ... [especially] immediately after the harvest" (1996: 34; see also Wan 2001:230).

⁴⁸ Clark too noted that "[h]olidays stimulate demand for both special holiday items and everyday goods. Consumers time needed purchases like new clothing for the holiday period in addition to those they buy as gifts" (1994: 164).

price variations through the year (2001:228).⁴⁹ The situation may be most challenging for tinsmiths. At the beginning of the rainy season (July), the price of buckets goes down from 750 F CFA to 650 F CFA⁵⁰ because there is no market for them. Ironically, the price of iron scrap rises at the same time. In that case, some tinsmiths choose to remain idle, waiting for the price of supplies to go down, rather than producing at a loss. Tire-workers are also confronted with this phenomenon. During the rainy season, "the market is down, there's no money, but there is tire.. [i.e. supply]."⁵¹ During the dry season, "people buy [i.e. the market is up] but there is no tire."⁵² As a result, tire-workers are compelled to adjust their prices accordingly.

Prices also vary with the quality of the product. If an item is made with quality supplies – more expensive – and quality work, its price will rise. Following this principle, Martin refused to sell a tin basin to a woman who wanted it for 1,500 F CFA. Indeed, this price was for a cheaper basin made with light sheet metal. "But if I sell [the one] with heavy sheet metal for 1,500 F CFA, for how much will I sell [the one with] light sheet metal now?"*⁵³ He knows that people do not see the amount of work put into the production of an item. "People see what is small, but they don't see the quality."*⁵⁴ His female clients "want what is good, but they don't want to pay [for it]."*⁵⁵ Many producers complain that their clients do not acknowledge their skills and the quality of the work, this explains why clients always want to bargain the prices down.

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⁴⁹ A young trader of aluminum-ware working with Moussa reckoned the price variations of an aluminum pot #30 with great accuracy: April-May = 14,000 CFA; end of June-beginning of July = 13,500 CFA; end of July = 13,000 CFA; August = 12,500 CFA; November = 12,000 CFA. Fieldnotes, January 22, 2003. ⁵⁰ Wholesale price.

^{51 &}quot;Raaga hã ka be, ligdi ka be, ti pneu be me.." Ousmane, tire-worker, Samandin. Fieldnotes, August 27, 2003.
52 "Neb raadame la pneu ka be."

⁵³ "Si je vends avec la tôle lourde à 1,500 FCFA, à combien est-ce que je vais vendre la tôle légère maintenant?" Martin, tinsmith, Patte d'Oie. Fieldnotes, February 26, 2003.

⁵⁴ "Les gens voient que c'est petit mais ils voient pas la qualité." Martin, tinsmith. Fieldnotes, February 25, 2003.

⁵⁵ "[Les femmes] ... veulent ce qui est bien, mais elles ne veulent pas payer." Martin, tinsmith. Fieldnotes, December 12, 2002.

Finally, once the product has found a steady demand, producers may also increase their prices over time. This is the strategy that Martin chose when he first launched his production of ovens. As he gained experience and kept improving his model (adding fiber glass, aluminum paint, and rivets), he produced better and nicer ovens. However he decided not to increase the price straight away in order to encourage clients to purchase his new product. As he gained more clients, he would increase the price.

Promoting and selling their goods

From the spatial location of their shop to the strategies put in place to make their goods more appealing, producers attempt to promote their production for better visibility in the market. In addition, they deploy various approaches to attract more clients and keep them over time, by clever bargains to providing customer services. Yet, producers are not all skilful marketers.

For producers, unlike traders, selling the product occurs in addition to their production activity and it is "a time-consuming process" (Allen 1983). Artisans have to make themselves available to buyers, both spatially and temporally, and they often alternate between production and marketing activities. Burkinabè producers rely on a network of suppliers and clients to maintain a regular flow of supplies and dispose of their merchandise. Their relation to other producers, blending competition and mutual exchange of services, also plays an important part in their success.

Producers use a variety of strategies to promote their goods, often involving "the form of nonprice competition," such as finding a "good location in the market" or "playing with volumes" in using different measuring units (Saul 1987:80). Silver notes that Ghanaian wood-

carvers decided between "leaving [their] goods on display near the shed in the hopes of attracting occasional buyers; [...] carrying carvings to local markets; and [...] selling to professional traders." They also had to be very sensitive to the rapidly changing trends in the tourist market if they wanted to remain successful (1981:45).

Burkinabè producers want their workshops to be visible and easy to get to. This is why, instead of feeling threatened by the presence of other producers in close proximity, most craftsmen find it to be advantageous. Indeed, it makes it easier for customers to know where different craftsmen are located and to find what they are looking for. Rasmane and Boureima believe that the fact that tire-workers are gathered in Cité An II marketplace makes it easier for their main clients – retailers coming from villages – to find them in the city. In addition, clients can quickly "see the range of goods on offer and make comparisons concerning style, quality and craftsmanship" (Alexander and Alexander 1987:46).

Yet, some producers did the opposite, moving away from districts where too many craftsmen were gathered, to find a different location. This is the case of Hamidou, a trunk maker, who left the crowded marketplace in Baskouy to settle in a residential area of Kologho Naba. Since he is not easily visible, he had to show his place to clients and retailers to make it known. Some aluminum-smelters have left the old aluminum-smelting neighborhood of Tanghin to settle in Tampouy, a district expanding along the road leading to the northern town of Ouahigouya. The recent developments of these activities make Martin complain that there are now "too

many" tinsmiths. There is a tinsmith in every single neighborhood, sometimes two in "every block!" *56

The aim of producers in choosing a location is to be visible. That is why most of them settle in spaces inside or around marketplaces or along main commercial roads. This is very strategic as they can attract new clients who happen to pass by and notice their shops. In contrast, poor locations are difficult to find and remote from the main market areas. This is why Paul thought that one of his colleagues was not doing well because "[his] *place is* [too] *far.*" Martin changed locations several times in order to be easily available to customers. Together with other traders, he was evicted by local authorities from a busy avenue and lost all of his clients. He then struggled many years before acquiring a stall in a marketplace situated in the vicinity of his current location (*Quinze Yaare*). But his business never picked up because nobody knew about this marketplace that was out of sight. Martin eventually left when he found a new location, along another busy street, even though he did not find it as good as the previous location. 58

The disadvantage of not being visible is clear: clients do not know where the artisans are and producers have to go through a network of retailers to deliver their goods. This situation took a dramatic turn when the central marketplace – Rood Woko – closed down in May 2003 after a fire broke out. Many producers who were distributing their production to retailers located

⁵⁶ "tous les six mètres!" "Six meters" is the standard width of a street separating two blocks in the districts allotted by urban planners in Ouagadougou. This expression is the equivalent of the American 'block,' in smaller dimensions.

⁵⁷ "[A] zinga zãrame." Paul, aluminum-smelter, Patte d'Oie. Fieldnotes, March 27, 2003.

⁵⁸ Martin explained that his customers have to go down a slope to come to him and this is "not easy for women... If I didn't have quality [products], people would not come down... But fortunately, [...] I make quality [goods]." ("C'est pas facile pour les femmes... Si je n'avais pas la bonne qualité, les gens n'allaient pas descendre ... Mais heureusement [...] je fais de la bonne qualité." Martin, tinsmith, Patte d'Oie. Fieldnotes, February 27, 2003.

in the marketplace did not have an outlet any longer and their clients did not know where their workshops were. This happened to Abdul Wahab, a tire-worker located in Samandin who used to deliver his tire-sandals to traders in Rood Woko. He was caught totally unawares and was left struggling to find new channels to keep his business going.⁵⁹ By contrast, Alassan's business of spring-making was not really affected by the closure of the market because his clients already knew his place.⁶⁰

The display of goods in front of the workshop is a way to make the products visible and advertise their activity. Alexander and Alexander noted that Javanese traders who had a bad location in the marketplace could "compensate [...] by an attractive display of goods" (1987:45). Wan explained that traders demonstrate their competence through the presentation of their goods and that "[i]t is the abundance of food that is the attraction for buyers" (2001:233).⁶¹

Producers are careful to place an assortment of their products on display in front of their workshop. Usually, they display them on the ground, lined up or piled up, depending on the type of goods (see photo. 130-33). At Moussa's workshop, piles of aluminum pots are stacked up one on top of the other as a way to advertise and to make it easier for people to spot their location ("ya publicité*"). Paul displays his orders on a table to show interested passer-bys his range of production (aluminum pots of various sizes, pans, lids, mortars, or cookie cutters). Martin is also very strategic in displaying his production. It is a way for him not only to show his range of

⁵⁹ He explained that "clients ... are lost now, ah! That's why it is hard now. I don't have orders anymore." (Clients ramba... menema mosã, ah! Kitam ti lebga toogo masã. Commande ka le tõe pam ye). Abdul Wahab, tire-worker, Samandin. Interview, August 27, 2003.

⁶⁰ "It disrupted us. But since many clients knew where we were, they [still] come to order! … So we can say that, thank God, it's all right. Yeah. […] Otherwise, it would be a pity [he laughs]." (Ça nous a perturbé. Mais comme y avait beaucoup de clients qui savaient là où on était, ils viennent passer les commandes! …donc on peut dire que grâce à Dieu! C'est bon. Ouais. […] Sinon ça allait être dommage). Alassane, spring-maker, Samandin. Interview, August 26, 2003.

⁶¹ See Clark (1994:152-3, 155) for similar practices in the central marketplace of Kumasi.

⁶² Even though these pots are not initially displayed for marketing purposes but are waiting to be filed.

products but also to prove that his goods sell rapidly. As items are bought by clients, his articles on display change regularly, showing potential customers how well his business is faring. Martin even exhibits unfinished items, which he will complete only if a client is interested. He has also adopted a new way to present his production. As I offered him a small photo album, he readily arranged the photographs I took of his different production items. He is now using this 'portfolio' to show his work to interested clients, especially when he does not have specific items on display.

In contrast, displaying their goods is less of a priority for Rasmane and Boureima. Unlike other tire-workers in the marketplace of Cité An II, Rasmane rarely has tire-sandals lined up in front of his shop. He does not even try to maintain an assortment of his different models of sandals. The reason is that he is already located inside a specialized section of the market. There are few passersby in this market, except people who already know the place and what they are looking for. Secondly, most of his production is sold to retailers who know his shop and his production range. His shed-partner Boureima, however, has a wooden table to present a few items at a time (tire belts, $y\tilde{o}g$ bugum, 64 or a few pairs of sandals).

Making goods attractive

Even though these craftsmen produce utilitarian items, aesthetic issues are a real component of their work. In aluminum-smelting, artisans may add decoration to their green sand molds that will be embossed in the final castings. Every aluminum product coming fresh out of

⁶³ Talking about a bottomless stove on display, Martin said that "*I'm not in a hurry. If someone wants* [it], *then I will know how to find a bottom.*" (C'est pas pressé. Si quelqu'un vient prendre, là je saurai comment faire pour trouver un fond). Martin, tinsmith, Patte d'Oie. Fieldnotes, February 27, 2003.

⁶⁴ Pieces of tire gathered in bunches that are used to kindle fire (especially during the rainy season).

the cast is filed in order to be smooth and shiny. In addition, the mixture of hard and soft aluminum is carefully balanced to make the aluminum come out "white" and "shiny," the way that female buyers prefer.⁶⁵ Finally, any repair is covered with aluminum paint so that the item keeps looking nice and bright (see chap. IX).

In tinsmithing too, the outward appearance of an item is important. Women appreciate items made with nice and "*shiny*" sheet metal, such as shelves for freezers made from aluminum sheet metal. ⁶⁶ To satisfy his female clients, Martin began to paint his ovens with aluminum paint in order to give them a nice finish. Lagui Moumouni believes that his products are nicer and of better quality than those of other tinsmiths. Being "nice" includes both the outward aspect of the item – its shape, color, smoothness, and finish –and the technical dexterity involved in making it.

The aesthetics of Rasmane's tire-sandals is definitely a part of the production process. For each pair, he chooses among his various patterns to make uppers of different shapes and carve diverse motives on the soles and straps. His goal is to make "nice" sandals "so that when their owner goes home, s/he is happy." He also chooses "popular" models (ya populaire*) to satisfy his clientele's tastes. His client-retailers may also be demanding in terms of aesthetics. As Rasmane was ready to carve the straps of an old model of sandals, the retailer refused, saying that "it will not be nice" (ka na yi neer ye). The straps were from a tire with cotton fibers, which was not meant to be carved. The retailer removed the old straps and Rasmane had to cut new ones in bante, carve them, and place them back on the shoes.

⁶⁵ Some clients actually come back to complain that their pot has become 'black' over time – which is purely an aesthetic issue.

^{66 &}quot;A lvitame" (It shines).

⁶⁷ "M datë ti yi neere ti a saba sën kuili ya, a suri ya nongo." (I want [them] to be nice so that when their owner goes home, s/he is happy [lit. his/her heart is happy]). Rasmane, tire-worker, Cité An II market. Fieldnotes, July 15, 2003.



Photo 130. Display of pots not yet polished in front of Moussa's workshop.

Photo 131. Display of bowls and other items in front of Paul's workshop.

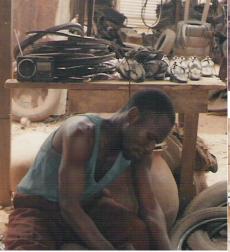


Photo 132. Table displaying beads and sandals behind Boureima. Marketplace of Cité An II.



Photo 133. Display of various tin goods in front of Martin's workshop.

Craftsmen are also concerned to produce good items. This is one argument they highlight to compare themselves to others and justify their higher prices. Moussa believes that a good aluminum pot is one that "is strong..., not too heavy..., smooth, [and] has no holes." His nephew is confident that "with us, the pot ... is flawless." Good tin products are made with "heavy" sheet metal in order to last a long time. 70 In the same way, quality tire-sandals have to last. If they are made with "thick inner-tube* and pins*," they can last for three to four years. 71 Even if other models do not last as long, they are still much more durable than manufactured, imported thongs.

Durability is one of the most important criteria when comparing products. "Adaktable" (imitations) metal buckets are therefore better than plastic buckets that are easily worn out by the sun and end up "breaking" (ça se casse). However "one can do anything with", buckets made by tinsmiths such as shower or make cement. 73 Aluminum pots heat more quickly (a windga taotao) and are not as breakable as clay pots, which are thicker (tãndo ruko ya taoko). Aluminum teapots are heavier and thus more durable than imported, enamel teapots, which are more fragile. Also, when the teapot's paint wears off, it gives a particular flavor to the tea that people do not like. Finally, knives' handles that are made of tire last longer than wooden handles that can be eaten by termites.

^{68 &}quot;tara pānga... ka zisgu wʊsgo ye... ya saalga, ka man võya." Moussa, aluminum-smelter, Zogona, Fieldnotes, January 29, 2003.

⁶⁹ "Chez nous, la marmite ... est sans faute." Ismaïla, trader of aluminum pots, Zogona. Interview, August 21, 2003. ⁷⁰ Martin commented that one of his clients got "good stoves" because there were "heavy, ... durable." (Vraiment la femme-là, elle a eu de bons fourneaux. C'est lourd, c'est durable). Martin, tinsmith, Patte d'Oie. Fieldnotes, April

⁷¹ This particular tire-worker was talking about a specific model made with thick, inner-tube straps and two pins (*chambre à air taoko ne pointes*). ⁷² "On peut tout faire avec." Martin, tinsmith, Patte d'Oie. Fieldnotes, August 20, 2003.

⁷³ According to Martin, a manufactured plastic bucket costs around 1,000 F CFA and an "original," manufactured, metal bucket costs about 3,000 F CFA. Tinsmiths' buckets are in-between, costing from 1,000 F CFA to 1,500 F CFA (retail prices).

While producers do not advertise their products on posters and billboards, they use other means to promote their goods on the local market. First of all, they count on their clients to promote their workplace by word-of-mouth. When a mechanic came to order a car part made of aluminum, Paul expected to be rewarded not only with a sizeable profit margin but also with the mechanic recommending him to other people. In fact, many clients came for the first time after seeing a friend, a relative, or a neighbor using or wearing a product that s/he had bought at the producer's shop. This aspect of advertising can also be carried out by retailers. This is the case of Papa, one of Rasmane's young retailers, who wears the sandals that he is selling. Calling himself a "fashion model" (mannequin), he "advertises" the sandals that he sells by wearing them (man manda publicité). Indeed, it would not be suitable for him to sell tire-sandals and wear "closed shoes" (chaussures fermées). People would ask him "why do you sell these [tire-sandals] but you wear those [European shoes]?" 74

Producers do not directly advertise their products by placing distinctive signs either on their products or on their shop. While many services advertise their activity by hanging signs on top of their shop with drawings illustrating their work, very few producers do so. I only saw one tinsmith who had put a sign on top of his shed where he had painted a sample of his production: a stove, a bucket, a trunk, and a cart rim. He explained that with this sign, people knew what he was able to produce, even though he did not always display all of these items.

Artisans rarely sign their production with a trademark in order to be identified. While aluminum-smelters may use patterns with a particular symbol already embossed in them, these

⁷⁴ "Bõeninga fo koozda ara la fo ningda bãmba?" Papa, tire-shoes retailer. Fieldnotes, July 7, 2003.

do not constitute a trademark for clients to recognize their products on the market. Even if some items bear a logo, clients have no way to identify who produced them.⁷⁵ Paul contended that aluminum-smelters are not concerned about making their products distinguishable on the market because they do not take their work "*seriously*." If some workers do mark their production with a specific sign (for instance, a Mercedes logo taken from a car), Paul affirms that there is no copyright on the design and that anybody can reproduce it.⁷⁷

Nevertheless, some producers place a mark on their articles to make their authorship known. Some aluminum-smelters emboss their initials in their castings while some tinsmiths add a "signature" to selected products. Martin for instance, cuts a star-like motif on the body of his improved stoves as a (trade) "mark" (c'est une marque). Yet, he never uses it on other products. When he worked in Côte d'Ivoire, he had a special chisel with the shape of his initials to stamp on his products. When he left, he left the tool with his boss and never tried to make another one. Lagui Moumouni argues that putting his "signature" on his production of stoves is a 'must.' He too cuts a star-like symbol on his stove "to make [it] nice ... [and] to show my name – if [they] go [to the market], they know that they are made here [...] It's like my

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⁷⁵ "If you don't go to [the production place], you cannot know [who made the pot]" (fo sẽn ka kieng ye, pa tõe bang ye). Paul, aluminum-smelter, Patte d'Oie. Fieldnotes, February 7, 2003.

⁷⁶ This is an implicit comparison to Western 'professional' attitudes in business. "*People don't take their work seriously... It's like a game.*" (Neb ka rikd a tuma sérieux ye... tuma ya wa remdame). Paul, aluminum-smelter, Patte d'Oie. Fieldnotes, February 7, 2003.

⁷⁷ According to Herzfeld, "[t]he yoking of aesthetics with something like a claim on absolute originality is a refraction of Western European ideological individualism; there is no universal principle that logically requires that such a connection be made" (2004:39).

⁷⁸ "I never thought of doing it with other items." (Je n'ai pas songé à le faire avec d'autres choses). Martin, tinsmith, Patte d'Oie. Fieldnotes, April 4, 2003.

signature ... If they see it, they know [...] that Lagui made [them]."⁷⁹ He even dropped a former trademark to let his former apprentices reproduce it and made a new one for himself.

Reaching the marketplace: distribution issues

In addition to producing and promoting their goods, producers often deliver them to their clients, be they individual customers or retailers. This commitment varies depending on the level of production, the type of clients (individual vs. retailer), and the nature of their relationship. Most of these craftsmen produce to order and let their clients come to their shop to order and collect their purchases. When ordering, producer and client agree on the day and time to collect their item(s). Some producers view this procedure as an issue of power: letting the clients come to them strengthens their position as independent producers. The reverse – taking their production to people who did not order anything and enticing them to buy their merchandise – would be a sign of weakness. In that case, the producer would be "giving weight" to the retailer, who can then "buy as he wants, at the price he wants." Producers who depend on a network of retailers to deliver their production are therefore in a position of weakness.

Most producers I worked with only deliver their production on occasion and do it free of charge. It is a favor to their clients as a way to encourage them to come back or to thank them for their regular or large orders. This is the case of Paul who, from time to time, fastens a pot or

⁷⁹ "Yãoã mandame ti fo me yưưc yi – sẽn kienga, ob mi mi ti ya ka la b man yãoã [...] Ya wa mam "signature"... Sẽn né nyãwa, ob mi [...] a Lagui mane." Lagui Moumouni, tinsmith, Paghalayiri. Interview, September 11, 2003. ⁸⁰ "Le fait de se déplacer pour aller chez lui lui vendre, tu lui donnes du poids [...] Il achète comme il veut, au prix qu'il veut." Ismaïla, Moussa's nephew, trader of aluminum pots. Interview, August 21, 2003. A young retailer of aluminum pots also working for Moussa once complained about a retailer who had refused to purchase pots during the rainy season (downtime). In a position of 'weakness,' the young retailer considered the retailer not to be a "good client" because he lacked solidarity in times of need. As a result, he stopped working with him.

⁸¹ See the case of Abdul-Wahab, tire-worker (above). Some producers leave their shop every three days to sell their goods to rotating village markets, a practice that make them take time off from their production activity.

other items on his moped and delivers them to a client living in the neighborhood. He explains that "it's up to them" to show him where they live and have their order delivered. ⁸² It is a way for him to please his regular clients: "He is happy! It's a client*." Martin and tire-workers of Cité An II only deliver orders to their clients from time to time. Institutionalizing this practice would be too time-consuming and detract time from production.

The only workshop that almost always delivers its orders and charges for their delivery is Moussa's. Since Moussa mostly produces large orders for retailers, delivery is included in the transaction and taken into account in bookkeeping. The rate is fixed at 3,000 F CFA for twenty pots delivered. All Once the order is ready, pots and lids are taken out of the storage rooms and displayed outside the boss' compound. Pots are organized in piles of ten or fifteen, depending on their size and attached together with a string through their handles. The lids are put into jute sacks. Once the order is complete, a team of young men puts everything on a wooden cart that is pulled and pushed by two or three men, depending on the weight (see photo 134). They cross the city to deliver the order to the retailer's shop or if the client lives in another town, to the appropriate bus station. There, the pots are loaded on the bus and shipped to the retailer's destination. Sometimes, the order is so big that the young men have to make two or more trips to deliver it. When the order is smaller, retailers can call a taxi to collect it.

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^{82 &}quot;Be ne neba raabo." Paul, aluminum-smelter, Patte d'Oie. Fieldnotes, February 2003.

^{83 &}quot;A suri ya nõngo wey! Ya client."

⁸⁴ For instance, a young retailer working with Moussa had to pay 8,500 F CFA for the delivery of 64 pots. These orders can range from 50 to 400 pots. Fieldnotes, January 22, 2003.

⁸⁵ It is interesting to note that even though the boss' second son uses a pick-up truck for his scrap iron business, it is never used for the delivery of pots (whether for his own or his father's account).



Photo 134. Off for the delivery.

Since most orders are collected by the clients, producers need a relatively safe storage space to keep them before they are collected. This is not an issue for some producers. Paul locks his production inside his shop and the stands of tire-workers in Cité An II marketplace are guarded at night by a watchman. Because Martin's shed is relatively isolated and open, storage is a matter of concern. He usually stocks his tools, supplies and goods in a nearby garage that is guarded at night. When he has expensive items (supplies or products), he prefers locking them in his rented stand inside a nearby marketplace. Even that may not be safe enough. For example, on the day when he had finished a big oven, he asked his client to collect it as soon as possible. He did not like the idea of keeping it in his little storage space for fear that someone might steal it.

Burkinabè producers are definitely strategic in the way they promote and sell their goods.

Their main aim is economic, meaning that they seek to produce wealth, generate a profit margin,

and preserve their position in a very competitive market. They make choices to maintain their production and expand their activity whenever they can. They find ways to balance conservative choices to preserve their enterprise from failing with more audacious ones to adapt to the market and to a changing demand. At the same time, these choices are motivated by the social concern of maintaining their social status and, if possible, improve it within a certain, socially acceptable limit. When this fragile equilibrium is broken (as in the case of the central market closing down), the livelihood of the producer and his family can be seriously threatened. These marketing practices therefore aim at meeting both economic and social expectations for the producers' lives but also for those of their clients, as I discuss next.

Chapter XIII. Building and dealing with the clientele

Anthropologists have long observed that traders tend to spend time and effort in developing long-term relationships with their clients in order to provide some stability to their business. Clark noted that "[d]eveloping strong customer relations is considered by traders to be an essential factor in capital accumulation and upward mobility for the fortunate few" among Kumasi female traders (1994:239). They help even out "short-term fluctuations in supply and demand through coordinating the buying and selling decisions of their customers" (1994:229). Developing "personalized commercial relations" is thus vital for any trading activity, even though the majority of the transactions may be impersonal (1994:216, 230).

Traders apply the term 'customer' to a specific category of people with whom they have developed personal ties. These relationships involve a minimum level of trust and include mutual exchanges of services (Clark 1994:231). "Cheating or deception on quality should not occur. Prices offered should follow current levels with minimal bargaining." And because trading partners trust each other, it "substantially reduces time spent on inspection of goods, price comparison, search and bargaining" (1994:231).

Yet, contrary to many popular ideas about commercial relationships in African contexts, not only are business relations far from being all personalized, and very few involve relatives. In her survey, Clark observed that "[h]alf of the Kumasi Central Market traders surveyed reported no regular suppliers (50 percent) and 48 percent reported no regular buyers" (1994:239). Among the relationships that were personalized, the length reported by traders was relatively short, ranging from two to four years only. This amounted to "less than half the median length of time

they had been in their present trade, 7.3 years" (1994:232). In addition, the survey revealed that "[a]lmost two-thirds [of the traders] had no relatives trading in their commodity as potential customers (61.9 percent) and 20.9 percent had only one" (1994:233-4). Another remarkable aspect of these customer relations in Kumasi was that traders "rarely socialize with customers outside the marketplace" (1994:233).

What we can conclude from these observations is that traders build their marketing activities on both impersonal and personal relationships. Both are vitally important for their business as they enable for flexible and opportunistic transactions to take place as well as some stability. Impersonal or one-time transactions may evolve into personal and long-term ones if the partners find that their interests are met. While it is to the advantage of traders to develop stronger and durable customer relationships to provide some stability to their business, many of their sales and profit are the result of one-time transactions. This duality between long-term and short-term interests draws on economic and social considerations in the way producers deal with their clientele also in Burkina Faso.

Building the clientele: strategies and challenges

Producers distinguish two main categories of customers, yet rarely talk in terms of "clients.' The first category of customers is referred to in terms of "people" (neba), "women"

¹ Likewise, local Javanese traders identified "three categories of customers" (See Alexander and Alexander 1987:46). The first type consists in "casual buyer[s] whom the vendor may never see again." Their transactions aim at "gaining a good price" in the acquisition of a good or service and are mostly void of any other social content. The second type of customer is "a customer who buys on a regular, but not necessarily exclusive, basis." The relationships with this kind of customers are "cordial" and bargaining is limited to a few bids. There may even be some "[c]oncessions of quantity [...] on cheaper items" (1987:46). With the last type of customers, relationships are similar, except that "credit is extended to the customer for periods ranging from a day to a month" (1987:46-7).

² Singular: *neda*.

(pagba), or the "owner" (soaba) of the item produced.³ They are one-time clients or regular ones. It is mostly in the latter case that producers speak of them as "clients," using the French word. When qualifying someone as "client," producers imply that this person has been a regular client for some time and/or that s/he is buying for substantial amounts of money. Consequently, a person may have purchased items from a producer for less than a year and be called a client if she⁴ has bought some significant items. The second category of customers comprises retailers (commerçants), professional traders in the capital city, in surrounding villages, or in more distant towns who regularly come to replenish their stock, buying larger quantities than individual customers. While Paul (aluminum-smelter) and Martin (tinsmith) mostly deal with "women," they also work with a small number of retailers. In contrast, Rasmane (tire-worker) and Moussa (aluminum-smelter) normally work with retailers from villages and remote towns.⁵

One of the best ways to evaluate the importance of the clientele is when producers face a situation of losing it. When Martin was compelled to leave his good location along a busy avenue in 1996, he did not have the time to inform his clients. The police forced him and other traders to clear the avenue and left them no time to prepare their departure. As a result, Martin lost all his clients. He explained that "if I had been able to keep my clients, I would not have gone through that misery all that time." In contrast, when Paul saw that the city authority was

³ Without calling the person a "client," producers say that "the woman" (paga) or "the man" (raoa) have come to pick up their order. Or they will say that "the owner of [pot] #6" (numéro 6 a soaba) has arrived.

⁴ Since customers are mostly female (especially with aluminum-smelters and tinsmiths), I use a female pronoun to designate the clients.

⁵ Moussa explained that in the beginning, he was mostly working with individual customers and had few 'big' clients. Now, it is the reverse. Women rarely come to him because he is more expensive than other places. However he has "more than ten persons ... coming from the province" (neb sen yita province ... yida piiga). He designates this category of regular clients by the term "clients" (Tond pam clients wvsgo m paase – We gained many more clients; my emphasis). Moussa, aluminum-smelter, Zogona. Fieldnotes, February 3 and 8, 2003.

⁶ "Si j'avais pu gardé mes clients, je n'allais pas rester dans la misère [tout ce] temps." Martin, tinsmith, Patte d'Oie. Fieldnotes, August 18, 2003.

beginning to clear out peddlers and shops in the vicinity, he knew that it was time to look for another location. When he found one, he moved the production activity to his new place while keeping his first place as a retail shop. Clients continued to come there to order and Paul was able to inform them of his future move – whenever the authorities would ask him.

Building a clientele takes time. Beginning with limited funds and contacts, craftsmen mostly produce small orders for individual customers. As their network of clients expands, money flows in and their capacity to buy more supplies increases, enabling them to produce larger orders for retailers. This is how Paul explained his progression. When he began in 1995, he was only working with individual clients who ordered a few items for personal use. He was not working with any retailer because he had no money to produce a large quantity of items. As his activity expanded, retailers noticed his workshop when passing by and began to do business with him. At the time of my study, his shop had been open for eight years and seven retailers regularly traded with him. Two of them had worked with him since the beginning; they had known him when he was still an apprentice at his former boss' workshop. Two others had been working with him for three years and the remaining three for a year or less.

The specificities of a clientele of retailers

Retailers constitute an important part of the producers' clientele, if not in numbers, at least in terms of sales and earnings. Indeed, even if most producers deal with individual customers purchasing one or two items at a time, retailers represent a non-negligible outlet. As Martin explains, selling to retailers is advantageous as they refurnish their stock of supplies regularly. Even if they sell "en gros" (at wholesale prices) and thus earn less than with retail prices, this is

compensated by the regularity and the amount of the sales. Since most retailers also have limited funds, they come every few days to the producers' shop to replenish their stock. They usually buy between ten and twenty pieces at a time, sometimes less,⁷ and hawk them in the capital city or in village markets.

When the market is down, retailers can represent a last resort for producers to keep their business going. However, this strategy is quite risky as it creates a dependency on the traders (see chap XII). Philippe, a team leader in Moussa's large aluminum-smelting workshop, relies on two or three retailers settled in different neighborhoods of the capital to sell his personal production of aluminum-pots. He never produces on order and when he makes some, he merely sends a young boy to check if anyone would be interested. However he complains that "money doesn't come [by] anymore." It may take up to two or three months for retailers to repay him and recently, he had to request the money they owed from them. Producers attempt therefore to find a balance between retailers' orders that are more important but sometimes irregular and that of individual customers, who come to order one or two items at a time.

As I have shown, Moussa is the only producer who systematically sells his production on credit, because of the scale of his orders from retailers. Moussa's appointed 'bookkeeper' explained to me that they "sell on credit" (kozda samde) to some of their retailers who do not even pay anything when collecting their orders. Traders often pay a first installment upon collecting their order and pay the balance later, after having sold part of their stock. They may send the money via a safe network of intermediaries or by coming in person. This management

⁷ Of course, orders can also be much bigger. Paul got once an order for 80 mortars from a retailer in the central marketplace and on another day, an order of 2940 spare parts for ceiling fans for a Lebanese shopkeeper. However Moussa is the only one who can provide retailers with hundreds of pots at each order.

⁸ "Ligdi ka le wat ye." Philippe, aluminum-smelter. Fieldnotes, February 17, 2003.

caused Moussa major problems a few years earlier. In 1999, the market for aluminum pots went down. Yet, Moussa had sold pots to retailers on credit for large amounts of money. Due to the recession, several of his clients were not able to reimburse him – one of them owing him 250,000 F CFA. As a result, he was not able to pay his own suppliers of aluminium. One of them sued him and in 2003, he was still paying back his debt. Moussa learned his lesson the hard way. "I don't do that anymore... I [only] give small [amounts on credit]."

All of the other producers are very reluctant to sell on credit to retailers. Their finances, their stock, and the range of their orders are too limited for them to take the risk. For Paul, the reason is clear: "we don't have the means" (tõnd pa tar moyens) to let the client-retailer go without paying straight away. Even if he may sell some pots on credit, the amount due does not exceed 5,000 F CFA and will be paid in full within two business days.

Since they regularly come to the producer's shop, retailers already place their next order when collecting their merchandise. Before leaving, they agree on the number and type of items to be made and the date when they will return to collect them. They may pay the producer when ordering or when collecting the goods, depending on the availability of cash. Papa prefers paying Rasmane when ordering for fear of "eating" the money. Most of the other retailers pay him when picking up their order.

⁹ "Mam ka le man woto... mam kõta bili-bilfu." These small credits range around 15,000 – 20,000 F CFA. Moussa, aluminum-smelter, Zogona. Fieldnotes, January 29, 2003.

¹⁰ "A zue kõ mam ligdi [...]. A wa rabitẽ la mam da pa pam ara ye [pneu relief]. La a kisa mam ligdi sinon a na n dime." (He has already given me the money [...]. He came two days ago but I didn't have [tread]. But he gave me the money otherwise, he would have eaten it." Rasmane, tire-worker. Fieldnotes, July 7, 2003.

Retailers can be quite demanding concerning the quality of the items produced. While they do not watch the production of aluminum goods, ¹¹ they may sit and watch tinsmiths or tireworkers as they are waiting for their order to be completed. It is in tire-working that I have observed the most remarks about the work being done. In some instances, the tire-worker may show his work to his client-retailer to make sure he is satisfied. At other times, he might make a decision without asking for the client's opinion. Retailers seem less demanding for tin or aluminum goods, maybe because the possible errors are not as easy to spot or change once an item is made.

Ordering process: first contact and exchange of key information

New customers often provide some personal information in the course of their interaction with the producer to provide a social background to their relationship. At some point of the conversation, they identify themselves and explain how they came to know about the producer and his workshop. Here is a good example of how a first encounter may unfold. A woman entered Paul's aluminum-smelting workshop toward the end of the afternoon. After the usual greetings, she immediately asked Paul if he could make a new key head for her broken car key. Paul replied that it would cost her 500 F CFA. After negotiating the price, the woman began to enquire about Paul's identity. She asked where he was from and as he replied that he was "gurunga," she wanted to know where he was from exactly in the Gurunsi region. She then revealed that she was Gourmantché and Paul explained to me that "they are our in-laws." The

¹¹ In aluminum-smelting workshops, visitors sit outside the shop where they can watch the final production stage (filing). There is usually no space inside the shop to sit. Plus, it would be too hot.

^{12 &}quot;C'est nos beaux." Fieldnotes, January 29, 2003. Paul is referring to joking relationships (parenté à plaisanterie) which exist between Gurunsi and Gourmantché ethnic groups.

conversation went on as Paul had an "older brother" (kẽema) who had recently married to a Gourmantché woman and had gone through complex engagement ceremonies. It was only when she was about to leave that the woman gave her name and explained how she had come to him: her husband was working with a man who had his key repaired at Paul's workshop. In other instances, customers may begin to introduce themselves first, explaining how they knew about the producer's shop, exchange some social information, and then come to the heart of the transaction.¹³

Since most transactions consist of placing an order, the ordering process roughly follows the same pattern. After exchanging some greetings (but not always), the customer expresses his request, asking whether a particular item is available for immediate purchase and if not, ordering it. The second step is to inquire about the price and bargain over it. Usually, the bargaining process is not long as both parties find an agreement quite quickly (see below). Once the deal is settled, the producer lets the customer know when his item will be ready. Before leaving, the client is asked for a down payment as a guarantee that validates the deal.

Producers take some precautions when taking an order, especially when they are not familiar with the client. The major strategy they use to guarantee that the client will in fact come back to collect and pay for the work, is to ask for a down payment (*avance*). The customer makes a deposit on the day of the order, then pays the rest when collecting the items. This practice is advantageous to both parties as the client pays in two installments, while the producer maintains a steady cash flow and is able to purchase the necessary supplies. In doing so, it is

¹³ Like Saul noted in Burkinabè grain markets, "[i]t is remarkable that in all these dealings ethnicity plays a very small role [...] Traders in villages as well as in cities associate on the basis of interest, and relationships across ethnic boundaries are as common as those within them" (1987: 78).

quite rare that a client does not come back for his/her item. When it does happen, producers end up selling the article in order to cover the production costs. In one instance, Martin had begun making an improved stove for a client who had ordered it. However since the client was not coming back, he left it unfinished to take care of other orders that would be quickly paid for. He only resumed working on it when the client appeared to enquire about the order – convincing Martin that the client was really serious about purchasing the stove.

Apart from rare exceptions, producers do not hand over the items ordered if the customer has not paid in full. It would be too hazardous, as Paul had already experienced. When a car mechanic came to ask him to fabricate a new spare part, Paul agreed on the deal and the mechanic gave him 3,000 F CFA as a first payment. Several days ensued when the mechanic kept coming to change the order, going down from ten parts to four, and then two. After that, he asked Paul to reproduce another spare part. Two weeks later, the client had still not paid him for the work done and Paul was really unsettled by this: "[this] mechanic is a phony [...] If it's about money, he doesn't want to come. If it's for work, he comes. Don't you see? [...] [He's doing it] on purpose! [...] This mechanic is a pain. Africans are a pain... He is exasperating us." Fortunately, Paul was finally paid about a month later but he would certainly be more demanding the next time this mechanic comes back.

One strategy that producers are rapidly adopting to facilitate the orders and their delivery is the use of the telephone. A few years ago, Moussa had a telephone line installed in his compound, mostly to receive orders from his clients. He also receives phone calls from his sons or other young collaborators who regularly call from Ghana to inform him of their purchases of

¹⁴ "Mécanicien ya faux-type [...] Sẽn ya ligdi, a pa rat wat ka ye. Hã ya từm, a wata ka. Fo pa ne? [...] Ya poghobo! [...] Mécanicien ya yelle. Ni-sablesa ya yelle... A namsida tõndo." Fieldnotes, December 19-24, 2002.

aluminum supplies and their day of delivery. The other producers increasingly buy mobile phones to receive their orders, even though most of their clients still visit their workshop to order. Paul even wrote his cell phone number on the metal door of his shop. He wrote it on both sides, using chalk, so that potential customers might read the number during (open door) and after hours (closed door). He planned to paint it later on so that it would not fade in the rainy season.

The process of bargaining

The study of bargaining practices in Javanese markets by Alexander and Alexander provides a useful backdrop against which we can look at the way Burkinabè producers handle their negociations. Referring to Dewey's work, they explain that "the intensity of bargaining [varies] in terms of the qualities of the commodities and variations in supply: the more standardised the commodity and the more regular the supply, the narrower the range of bids and the less intensive the bargaining" (1962a:74-6 *In* Alexander and Alexander 1987:42). Since prices in Javanese markets are "conceptualised as a range," the practice of bargaining aims at obtaining "a price at the lower end of the currently prevailing price range" (1987:44). ¹⁶ In reverse, traders seek "to sell as high a price as possible" to generate a "*good profit*" (my emphasis). Lying and bluffing are therefore allowed, in this context (1987:44).

There are two main types of bargaining techniques: verbal and non-verbal. The first one encompasses "maintaining sales patter and switching currency units," while the other type

¹⁵ The purchase of units for their cell phones is still quite expensive for them.

¹⁶ The authors contrast this conception with the meaning implied in the English word 'bargain:' "obtaining goods below the usual price" (Alexander and Alexander 1987: 44).

consists of "interchanging items, 'walking off,' and […] 'adding extra'" (Alexander and Alexander 1987:47). The practice of walking off is used solely by buyers and for different reasons: to fake lack of interest to persuade the seller "to lower her price," "to gain a breathing space," or, among sophisticated buyers, to signal that "the buyer is confident that her knowledge of prices is correct" (1987:52-3).

The authors propose an "alternative three-stage model" to conceptualize the bargaining process. "The Initial stage where the seller drops the price considerably with each offer; the Plateau stage where both participants reiterate prices; and the Settlement stage characterised by matched bids of relatively equal increments culminating in the agreed price" (Alexander and Alexander 1987:57). It is in the first stage that the seller quickly identifies whether the buyer has sound knowledge of the current price range. "If a trader feels her customer may be ignorant of current prices – she is a stranger, is too well-dressed, is buying a rarely purchased item, or the market is fluctuating – then her initial offer will be at least three times above the current price range" (1987:57). When the negotiation has reached the Plateau stage, the seller ceases negotiating if the buyer's bids are "well below current prices" (1987:58). If the buyer has a relatively good knowledge of the prices, the seller gives up on the prospect of making extra profit "and tries to maximise the price within the current range by persuading the buyer to pay a premium for quality" (1987:58). After searching and testing their information in the first two steps, the two parties are then able to settle rapidly on the agreed price in the last phase (1987:59-60).

Clark's observations of bargaining in Kumasi Central Market confirm that the "primary variable" in haggling is "either price or quantity […] holding the other aspect constant"

(1994:129). Basic foodstuff and indivisible, common items are bargained over quantity, while more expensive or less commonly purchased commodities are bargained over their price

(1994:129-30). In quantity bargaining, the add-on system is a way for the seller to convey "an

image of generosity" while rendering price comparison more difficult for the buyers (1994:132).

In price bargaining, reductions tend to be limited, as Clark observed that they rarely exceed ten

percent (1994:201).

In Burkina Faso too, producers expect their customers to bargain. By nature, their products

constitute rather infrequent purchases for individual customers (vs. foodstuff) and since they

cannot be divided, the bargain is over price and not quantity. Most transactions are rather brief,

as both parties usually have some prior knowledge on the price and quality of the desired item.

Producers therefore add no extra (lenga)¹⁷ to their sales and, as Alexander and Alexander

observed, they tend to justify their prices and persuade their clients by boasting on the quality of

their items (1987:58). The tension of the bargain arises in satisfying the customer's need while

meeting the producer's profit expectation. Being familiar with the bargaining system, both

parties compare each transaction with past ones, in order to obtain a good deal for the former and

avoid "unexpected losses" for the latter (Clark 1994:128-9).

Here is an example of a bargain that clearly illustrates what is at stake:

When Paul's apprentice and I came back from purchasing a large pot from another aluminumsmelter, we found two women checking out a pot and negotiating its price with Paul.

Woman: "Ya wana?" (how much?)

Paul: "kobs-nii la pis-nu" (4,250 [F CFA])

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¹⁷ "Lenga" is the local word employed to mean the add-on that can be given with the purchase of foodstuff, for instance. The word comes from the verb lemsé (to taste). Paul, aluminum-smelter, translated it as "come and taste" (goûtez voir), an invitation to 'taste' the product and come back to buy more. However he went on, saying that there was no 'lenga' with aluminum pots: "Add-on with pots? … Pots have no add-on" (Ruk leng wa? … Ruk ka tar leng ye). Likewise, there is no bonus with tin goods. However, there may be with tire goods, such as adding a few bits of tire in the bunches of yõg bugum.

Woman: "man sugri." (Please. Lit. Have mercy)¹⁸

Paul: "Yamb data a wana?" ("How much do you want [for it]?) – thereby inviting her to bargain.

Woman: "kobs-yoobe" (3,000 [F CFA])

Paul: "Ay! Barka!" (Wow! Thanks!) and he gets back to preparing a crucible. The woman prompts him again, asking for his price and Paul replies: "Wa ne kobs-nii" (Give me 4,000 [F CFA]) – thus reducing his offer by 250 F CFA.

The woman counter-bids: "kobs-yopoe" (3,500 [FCFA]), increasing her initial offer by 500 F CFA. Paul: "Ka ta ye. Kobs-nii la pis-nu ti tõnd n tõe pama noaga n di." (It's not enough. 4,250 [F CFA] so we can buy a chicken and eat). Here, Paul gets back to his initial offer.

The woman too comes back to her initial offer (kobs-yoobe, 3,000 F CFA).

So Paul repeats his second offer: "Bi f wa ne kobs-nii" (Then give me 4,000 [F CFA]).

Woman: "Donc ya kobs-nii? Ne linga?" (So it's 4,000 [F CFA]? With the lid?). She shows here that she had been testing her information until now.

Paul: "N-gye" (Yes).

However the woman continues to ponder the offer and does not make any move to finalize the transaction.

So Paul presents one last bid, lowering his last offer by 100 F CFA: "Bif wa ne kobs-yopoe la pisnii" (Then give [me] 3,900 [F CFA]

The woman discusses the offer with her friend and leaves, saying that she will come back: "Tõnd na lebga wa" (We'll come back).

Paul replies: "Sida?" (True?), knowing that her reply signals the end of the bargain and doubting that she will indeed come back to conclude the deal. [Fieldnotes, December 31, 2002].

In this interaction, we clearly see the different strategies used by both parties in their attempt to strike a bargain. Right from the beginning, the negotiation centers on the price. While the client pleads for "mercy," the seller fakes to lose interest in the deal when the buyer's offer is well below the price range. The latter has to stimulate the bargain again and the seller offers a price slightly lower than his initial bid. However since the buyer's counter-bid is still below his range, he gets back to his initial offer. The bargain seems to be stuck between the first and second offers. When the buyer acknowledges that the seller's last offer reflects the current price range, she is not ready to act on this new information and ends up leaving without finalizing the transaction. Whether she was genuinely not expecting this price difference or had no intention to spend this amount of money, she had gained some updated information about the current price

¹⁸ Sugri: Pardon, forgiveness, mercy. Man sugri: have mercy, let sb. off. (Alexandre 1953).

range that she would be able to use in subsequent transactions. Finally, the formula that 'one will come back' is a customary way of aborting a transaction without offending the other party.¹⁹

Bargaining is about finding a compromise between the seller's and the buyer's interests. Both parties attempt to find a middle ground between their offers and expectations of a good deal – e.g. in terms of price and quality for the buyer and in terms of profit margin for the seller. In another instance and with another aluminum-smelter, the parties concluded on the sale of a small pot for 1,250 F CFA, midpoint between the buyer's initial bid (1,000 F CFA) and the seller's one (1,500 F CFA). In one particular transaction, Martin illustrated this compromise by saying that it is a matter of "helping one another" (sõng taaba). The client, who had come to have a tin dish repaired, pleaded Martin to "have mercy. Make it cheap [...] we are all ... the same [lit. we're from the same people]." However as he was still negotiating the price Martin had given him, the latter declared: "if you know [that the situation is hard for both of us], then see to it that we help each other" (hãn mi man ti ya sõng taaba).

Yet, there is a subtle line between "fixed" and "negotiable" prices. Martin explains that when taking an order, he is the one deciding the price (It's my price). However when a client is interested in an item on display, he can bargain and it becomes "the client's price" (le prix du client). To him, there are "fixed prices" (prix fixes) and "negotiable prices" (prix à débattre). The first ones reflect the quality of goods (different qualities, different prices). The second

¹⁹ There is another similar strategy that is used to politely decline an invitation to bargain. When a trader calls a passing-by, potential client, the latter replies "*m watame*" (I'm coming). Most of the time, the customer has no intention to effectively come back but sends an indirect, yet clear, signal that s/he is not interested in the deal. This ends any further haggling.

²⁰ "Man barka. Ti ka yi wʊsgo ye [...] Tõnd fãa... fãa ya neba a ye..."

²¹ "C'est mon prix." Martin, tinsmith, Patte d'Oie. Fieldnotes, August 20, 2003.

indicates that in Africa, people like to bargain and "will ask [you] to lower [your price]."²²

Martin thinks that bargaining is "a waste of time" (une perte de temps) and a risky business. One can lose customers who do not like to bargain or the reverse, lose clients who expect the seller to bargain while he does not. This situation creates a kind of vicious circle.

Bargaining is so much part of the expected process that producers often encourage their clients to engage in haggling. After stating the price for a pot size 2 that a woman had asked for, Paul enticed her to begin bargaining: "barse!" he said. 23 On another day, one of his apprentices came to him with a pot that a customer had brought for repair. The pot was so damaged that Paul asked for 200 F CFA to fix it. When the apprentice went back to the customer to report the price, he did not open the negotiation so Paul shouted: "Find an agreement!" Unsettled, the apprentice came back inside the workshop and let the boss handle the customer, mumbling something like: "you told me 200 [F CFA] and now you're telling me to bargain..." Upfront, Paul asked the client how much he was ready to pay to get his pot repaired (Yamb na yao wana?). When the man replied "pisi" (100 [F CFA]), Paul concluded: "Give [me] 150 [F CFA]. The pot is dead" (Wa ne pis-tān. Ruko kiime.). Without bargaining further, the client accepted the deal, acknowledging that Paul knew what he was talking about.

When producers and clients find it difficult to agree on a price or when the customer's counter-bid is too low, producers often resort to a rhetoric of survival and other justifications to validate their price. When a woman was still debating the price over a charcoal stove, Martin

²² "Ils vont demander de baisser."

²³ "Bargain!" Paul, aluminum-smelter.

²⁴ "Wum taaba!" Literally, "understand each other."

²⁵ This clearly shows that bargaining is a practice that must be learned and that not everybody is gifted in it.

²⁶ "How much will you pay?"

asked her: "You can't [pay]? But what will I do to eat?"²⁷ Paul too, often refers to the need for the price to be high enough for him to "eat." When a young woman was firmly negotiating the price of a pot, Paul exclaimed: "You don't want me to eat!"²⁸ and then, pointing at her moped, he asked: "This Ninja [brand name of the moped] is for whom?"²⁹- implying that since she was wealthy enough to buy a moped, she could very well pay for his pot. As the woman insisted that his price was "too much" (c'est trop!), Paul wittily replied: "don't say it's too much. I can take 50,000 [F CFA] and eat [it] all."³⁰

Producers can therefore be very firm in their negotiations, as I have shown in the excerpt above. When a client's counter-bid is too low, producers often reply that "it's good but it doesn't match." Most of the time, they remain inflexible or lower their price just a little and the customer has to raise her bid if she really wants to get the deal. Between the need to guarantee a minimum profit margin and the necessity to sell, producers have to find the right balance. To a client who was not ready to pay the price initially offered for a pair of tire-sandals, Rasmane encouraged him, saying "Give [me] 500 [F CFA] and add something for me." He was thereby signaling to his customer that he could not go below 500 F CFA but was still giving him an opportunity to strike a deal by adding whatever amount he could (or would) to help the producer.

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²⁷ "Yamb pa na twe ye? La na man wana wana n di?" Martin, tinsmith. Fieldnotes, July 24, 2003.

²⁸ "Tu veux pas que je mange!"

²⁹ "La Ninja-là, c'est pour qui?" (French).

³⁰ "Faut pas dire c'est trop. Moi je peux avoir 50,000 et manger tout." He was jokingly implying that the requested amount was not "too much" for him. Quite the opposite, there was no upper limit to a 'good' price, from his perspective... When the woman understood the joke, she retorted quite seriously: "No, it's too much for me, not for you" (Non, pour moi, c'est trop, pas pour toi). Fieldnotes, December 21, 2002.

^{31 &}quot;Ya soma la pa ta ye." Literally, "it's good but it does not reach [the appropriate price]."

³² "Wa ne kwaboga la n yak bumbu n kõ mam." Rasmane, tire-worker, Cité An II. Fieldnotes, June 3, 2003.

Dealing with clients: strategies and favors

The attitude of the producer toward an incoming customer can vary greatly from one transaction to another. He may sometimes interrupt his work and walk toward the client to receive his request. At other times, he may barely look up and will listen to the customer's need while continuing working. It seems that these attitudes vary with the type of clients coming in (i.e. if the producer knows him/her or not, if s/he is a regular client, or if s/he looks well-off) and whether the person is really interested in purchasing something or is simply looking at the merchandise. When one of Rasmane's clients arrived, a civil servant working at the national company for electricity, he arranged a small wooden stool for him to sit down and interrupted his work to take care of a broken tire-sandal that the client was wearing. Producers like Paul or Martin also stop their work to go to a client who is calling them from the street or from their nearby house or workplace. They generally do that for people they know, who have already purchased articles from them and who generally call them to place a new order.

Yet, whatever the outcome of the transaction or the type of relationship they have, producers and buyers are always very respectful. Unless they already know each other, both producers and customers use the formal 'you' (yãmb) to address each other. Clients call the producer "patron" (boss), by the name of his occupation, 33 by their ethnic group (More, Gurunga, or Busanga, for instance), or by another deferential term (i.e. ba for father, nin-kẽema for old man), but very rarely by their first name. The same is true for the producers. Likewise, they always say goodbye with a blessing. 34

³³ When there is one: *Ruko soaba* (lit. the owner of the pot) for aluminum-smelters, *nveda rãmba* (lit. shoe people) for tire-workers, but I never heard people call tinsmiths by their occupation, except *seau rãmba* (lit. bucket people), which is a generic name for tinsmiths, even though they do not all make buckets.

³⁴ See Chapter XIV.

Respecting the local social code, producers rarely end an interaction without invoking the name of God (*Wēnde*, *Wēnd Naam*) to bless their customers, and vice-versa. There is a variety of such blessings that apply to all kinds of situation and relationship. Producers wish their customers "God's protection to go home in good health or peace" (*Wēnd na kuta ta ne laafī*) or that God allows them to go through the day in good health or in peace (*Wēnd na sōsge laafī*). In return, buyers wish that God "unlocks" the market for them (*Wēnd na lok raaga*), ³⁵ that God resolves and settles any matter (*Wēnd na mange*), ³⁶ or simply that He blesses them (*Wēnd na reege*). ³⁷

Reducing their price is often presented as a favor to the person. These are mostly token discounts as they involve small amounts (50-100 F CFA up to 250 F CFA). The reductions granted by the producer vary according to what seems reasonable with respect to the total amount of the sale. Yet, they are significant in two ways: firstly, in a petty economy, even 50 F CFA has utility value.³⁸ Secondly, they represent a commercial favor that bears a strong social value and offers an invitation and a guarantee for future transactions. Paul knew this very well when he lowered the price of an aluminum pot to encourage the buyer to come back. "I reduced [the price] a little bit. It's [her] first time [buying with me]. I want her to come back. "³⁹ Rasmane often considers the social status of his clients when removing a token amount to help. After taking 100 F CFA off the total price of a purchase by an old retailer, he explained that "the old [man] said that he doesn't have a lot of money so I lowered [the price]." Rasmane even

³⁵ From the verb *loké:* to detach, to untie, to release (Alexandre 1953). ³⁶ From the verb *manghé:* to repair, fix, settle, solve (Alexandre 1953).

³⁷ From the verb *re:ghé* or *de:ghé*: to fulfill, to grant a prayer, a request.

³⁸ Many peddlers, apprentices and other low-income people eat for 75-100 F CFA from street food vendors.

³⁹ "Mam barsa bilfu. Ya nõr pipi. M data n ti a lebghõ wa." Paul, aluminum-smelter. Fieldnnotes, February 2002.

⁴⁰ "Vieux yella ti ye ligida ya bilfu ti mam barse." Rasmane, tire-worker, Cité An II. Fieldnotes, July 10, 2003.

removed 50 F CFA from the total amount due by one of his retailers (550 F CFA) because it was the morning. It was a favor to encourage him for the day.⁴¹

Concealing certain information can also be a way to maintain a good relationship with the client and preserve the transaction. Upon finishing an order for a woman who had ordered three stoves, Martin did not want to struggle to make a door for the smallest stove (*I will get tired*).⁴² However he did not want to explain his reason to the woman who, he was sure, would not understand. He anticipated that if she asked, he would tell her that there was no metal left, "period." Otherwise, "there will be [endless] discussions."

In contrast, some strategies can be employed to signal lack of interest in the transaction, such as purposely ignoring the other. This practice may be used by both parties: the producer or the client. For instance, Rasmane and Boureima did not reply to a man greeting them while looking at some inner-tubes that Boureima had just bought. They did not seem to pay attention to him and the man ended up leaving without purchasing anything. In another instance, it was the client who neglected to reply to Rasmane's invitation to try on a pair of tire-sandals he was looking at. The man was clearly not interested in purchasing them and left without even replying to Rasmane. Commenting on a particularly exasperating client, Martin exclaimed: "Did you see that when he was here, I was not even looking at him... because I know who he is [i.e. the kind of person he is]."

⁴¹ "Ya yibeoghẽ ti mam yeta ti a bas piga." (It's the morning so I told him to leave 50 [F CFA off]). Fieldnotes, July 10, 2003

⁴² "Ça va me fatiguer." Martin, tinsmith. Fieldnotes, April 7, 2003.

^{43 &}quot;Point."

⁴⁴ "Ça va être des discussions."

⁴⁵ "Tu as vu que quand il était là, je ne le regardais même pas… parce que je sais qui il est." (French). Martin, tinsmith. Fieldnotes, April 4, 2003.

In addition to the strategies observed above, clients use every social link they can find to compel the producer to lower his price. This tactic is often a successful alternative when the producer is reluctant to reduce his price. As a man came to Paul's workshop to inquire about a pot #3 with its lid, he found it expensive (2,500 F CFA), even though the lid was included. As a last resort, the man exclaimed: "I'm a client!" (Mam ya client wa!). Paul had no other acceptable option but to accept to reduce his price to 2,000 F CFA. He explained to me afterwards that this man was an "old client" (client kudre). He was a civil servant at the state company of electricity and bought from him "all the time." Martin too had to yield to similar strategies from his clients. One day, a woman arrived in the morning to order some shelves for her freezer. She conversed with Martin in Dioula and began to persuade him to reduce his price from 10,000 F CFA to 8,000 F CFA. Martin first tried to find a compromise, offering to make the shelves for 9,000 F CFA. However the woman insisted, saying that "I'm a relative" ("je suis un parent"). Martin could not get around this argument: "since she's dioula and I speak dioula, she said that I'd better do that for her." "47

Some clients may draw on appealing promises to get a deal. One man had come for the first time to Martin's shop to have a new bicycle seat made.⁴⁸ Introducing himself, he was careful to mention the person who had commended him. However when Martin told him that it would cost 1,000 F CFA to make a new seat, the man began to bargain. Cleverly, he promised

⁴⁶ Martin learned Dioula during his stay in Côte d'Ivoire. He translated the conversation to me in French after the woman left.

⁴⁷ "Comme elle est dioula et que je parle dioula, elle dit qu'il vaut mieux que je fasse ça pour elle." Martin is actually not related to her but the fact that he speaks Dioula (while people in the capital city are mostly moorephone) has created a social bond that the woman astutely used in her favor. Martin, tinsmith. Fieldnotes, February 21, 2003.

⁴⁸ See chain of production in chapter VIII.

Martin that he would advertise his place to other people if he would make the seat for 750 F CFA and the tinsmith agreed.

Talkative clients may use their oral skills to convince, complain, plead, argue, and persuade the producer in order to strike a deal. Usually, producers are quite annoyed with this kind of customers, and often go back to work to get the production going while listening to their plea. To one young woman who kept complaining about the price of a pot #6, Paul replied: "Miss, you have to talk," meaning that she had to make a decision. The woman went on, saying that if she wanted any kind of pot, she would go to the market to buy it. Upon hearing this, Paul responded: "Oh, so you want quality? But you don't want to pay for [it]?" The young woman snapped back, complaining that "the pot that you made for me last time was not good... It turned black." Then, she went back to the price issue, referring to other Togolese women who had bought pot #4 or #5 for 2,750 F CFA. However Paul was not duped: not only was this price for a pot #4 but she wanted a pot #6, which ought to be more expensive. Finally, after much discussion, the young woman did not even make any decision. She left, saying that she would ask somebody else's advice and would let him know what she had decided the next day. After she left, Paul simply concluded: "she talks a lot." **

Lastly, clients can trick the producer by paying less than was agreed. Alexander and Alexander noted something similar in Javanese markets, which they called "shortchanging."

Upon paying for a purchase, "the buyer hands over a series of small coins and walks off before

⁴⁹ This may also be an indirect way to signal the customer that they are a bit annoyed and are waiting for her to take a decision.

⁵⁰ "Ah, donc c'est la qualité que vous voulez? Mais vous voulez pas payer qualité?" Paul spoke French as the woman was Togolese. Paul, aluminum-smelter. Fieldnotes, December 21, 2002.

^{51 &}quot;La marmite que vous m'avez fait la dernière fois, c'est pas bien [...] Ça noircit."

⁵² "A gomda wʊsgo ."

the trader can count them" (1987:53). Usually, there is "one coin short." This practice, qualified by sellers as "dishonest," is countered by the latter "refusing to hand over the purchase until the price is paid" (1987:53). In Burkina Faso, I have only observed a few similar cases and the deception was only for a small amount of money. One case was a young girl who had ordered a few cake dishes from Martin. After agreeing on the price (lowered from 250 F CFA to 200 F CFA), Martin carried out the order straight away, while the girl was sitting on the bench in the shed. When the order was completed and the time came for her to pay, the girl handed him only 150 F CFA instead of 200 F CFA and laughed. Martin looked at her, quite surprised, but did not say anything. The girl offered to give him some oranges that she was selling in exchange but Martin refused, saying "tomorrow" (beogho). 53

These examples illustrate well how both producers and clients play on different scales of value to generate various types of gains (Guyer 2004:49, 51; also see Elyachar 2005:144). In addition, their strategies and reactions reveal that they do not all have the same level of aggressiveness and perseverance. Some might be more resolute than others to strike a good deal that is in their favor. Others surrender more quickly. While the buyer may have everything to win and nothing to lose in bargaining aggressively,⁵⁴ the producer has to find a balance. On the one hand, he may give some leeway to the buyer to encourage her to come back and get some cash in. On the other hand, he may choose to preserve his interests and the market.⁵⁵ Finding a compromise between these opposite interests may not always be successful.

⁵³ Martin already knew the young girl as she was a peddler, selling oranges in the neighborhood. Fieldnotes, February 25, 2003.

⁵⁴ To a certain extent, as the buyer does not want to spend too much time searching for the right item, going to different workshops, with the risk of finding more expensive items and/or of less quality.

⁵⁵ Indeed, producers are very much concerned by not 'spoiling' the market by 'breaking' the prices, thereby encouraging buyers to bargain even more.

A bargain fails when the parties are unable to reach an agreement. The buyer's offer is too low and the producer does not accept to go lower than his minimum price while the customer is not ready to spend more than she expected. Yet, even if both parties cannot find an agreement, the social bond is preserved to allow for future deals and to save face or one's reputation. After failing to find an agreement, a girl insisted not to let the bargaining end on a negative note and prompted Martin to provide an alternative. Otherwise, the shelves' owner would think that the tinsmith "doesn't want to help her" (pa rata song yenda). Martin understood the message and mentioned that if they wanted, he could repair the shelves with "regular sheet metal" (tôle zaalga), which was cheaper than aluminum sheet metal. In doing so, Martin left her an opportunity to come back.

It is interesting to note that producers rarely feel sorry to have missed an opportunity, either by not being able to strike a bargain or by missing a client during an absence. It seems that buyers' refusal to pay the requested price is part of the routine and producers – as well as apprentices – resume their work without being apologetic about a failed bargain. They usually do not even comment on the deal, except to say (sometimes as a complaint) that the buyer did not want to "pay." 56

⁵⁶ This is what Martin said in the example given above when the shelves' owner refused to pay for the repair. When his neighbor, a bicycle mechanic, asked him what was going on with the girl, he merely replied that they did not want to pay for the repair. This type of interaction consolidates producers' recurrent remark that buyers "want quality but do not want to pay for it."

Accommodating the client: providing raw materials to pay less

In an economy of scarcity, both of money and supplies, it is an advantage to producers and clients if the latter provide some raw materials for the production of the desired item(s). These supplies are considered to be free since the client did not purchase them but collected them (old pots or pans, empty cans, or bits of sheet metal). ⁵⁷ Providing part or the totality of the materials necessary for the production of goods allows the client to only pay for the labor, which can considerably reduce her expenses. It is also an advantage for producers (mostly tinsmiths and aluminum-smelters) who do not have to draw on their stock of supplies. ⁵⁸ Yet, aluminum-smelters still have to tap in their supplies since customers often bring soft aluminum (tin cans, old pots and pans) rather than hard aluminum (cylinder, for instance).

Since aluminum-smelters know exactly the amount of aluminum necessary to produce a particular item, it is easy for them to calculate how much the customer should pay according to the quantity of aluminum brought. The aluminum-smelter weighs the supply brought by the client and calculates its value in relation to the current cost of aluminum. For instance, a woman came to Moussa's workshop to order a pot #2 with lid. She had brought two old pots weighing 1.5 kilograms, the exact weight that was needed to make her order. ⁵⁹ The value of what she had provided was 975 F CFA, which the boss rounded off at 1,000 F CFA. Since the initial cost of a pot #2 with lid was 2,000 F CFA, the woman had to pay only 1,000 F CFA. Even so, the boss was kind to her as he lowered the price to 850 F CFA.

⁵⁷ Even if some may have been purchased some time before, this initial investment is considered to be paid off as the item has been used for a while and is now damaged or empty of its original substance (i.e. cans).

⁵⁸ I have never seen a customer providing supplies to a tire-worker. This type of material (rubber, tire) is less accessible to people than tin or aluminum.

⁵⁹ This kind of practice implies that customers plan their purchase ahead and come to order when they have collected enough supply to lower the price in a substantial way.

While tinsmiths make the items with the supplies provided by the client, this is not the case for aluminum-smelters. The latter add the materials brought by customers to their own stock and use whatever supply comes first. What matters is to know the quantity brought by the buyer, not the supply in itself, which will be melted anyway. Alternatively, the metal brought to tinsmiths will not be melted so its characteristics remain visible. In addition, tinsmiths are often short in supply so they readily take the one provided by their client to make their order. Lastly, since each type of metal has different properties (i.e. hard vs. soft, thick vs. thin), they cannot be used for any kind of goods. Barrel lids are perfect for frying pans or doughnut dishes as they are thick and "heavy" (lourd), as Martin says. However they are not suitable for freezers' shelves, which must be produced from aluminum sheet metal, which are lighter, more flexible, and do not rust. 60 Sometimes, when the supplies provided by clients still have some use-value, producers may choose to keep them for other uses rather than transform them.

Catering to the clients: the value of knowing customers' preferences and trends

In his study of "economic custom in a competitive marketplace," Plattner (1983) examines the components that make up an economic relationship between a buyer and a seller. This relationship includes "interpersonal history, values, and qualities of personalities" and pertains "to economic custom as well as to profit" (1983:848). He argues that "[s]trong equilibrating relationships are embedded in a thick fabric of meanings and reciprocities." Indeed, even an anonymous exchange is never "purely" economic, since the fact that each actor has a social status – a race or an ethnic identity, for instance – gives social meaning to the exchange"

⁶⁰ Since aluminum sheet metal is more expensive, not all customers can afford it. As a result, they order shelves made with other sheet metal (iron, other alloys) which have the disadvantage of rusting.

(1983:849). In addition to this, Plattner argues that the quality of an economic relationship varies with the type of goods exchanged. Goods whose quality can only be experienced after the purchase (such as used cars) necessitate access to reliable information and therefore, the establishment of a dependable relationship with the seller as a "substitute for knowledge" (1983:850). In a context of "[v]ariable-quality goods, [...] scarce capital, and insufficient transportation and communication systems," it is crucial for both sellers and buyers to establish a long-lasting, reciprocal relationship "to stabilize their business" (1983:851). Whether in "in industrialized commercial societies as well as in the agrarian world," Plattner concludes, "economic custom is important" (1983:856).

In the African context, personalized customer relationships, based on trust, are salient in a mostly unpredictable and competitive market. In Kumasi, Ghana, it is vital for traders to cultivate networks of customers "in order to expand their volume of business" (Clark 1994:216). In Nigeria, Yoruba yam traders have developed this type of relationship with long-distance trading partners in order to guarantee an access to timely information critical for their business and diversify their sources of supply in case of shortage (Trager 1981:137). Such reciprocal relationships may entail very little social content (1981:144).

In Burkina Faso, the principal advantage for building long-term relationships, in addition to guaranteeing a certain quality of production, is to facilitate payment. Indeed, most producers agree that not everybody may pay upon collecting the item(s) without giving a first payment upon ordering. This is how Paul explained his actions: if a person comes with some aluminum, she does not need to pay a first installment (*une avance*). If a customer does not have any

⁶¹ See also di Luzio (2006:551-55) for an interesting analysis of "impersonal trust" between professionals and their clients.

aluminum and he does not know her, she will have to make a down payment. Finally, if he knows her, she does not need to pay anything at first and he can even deliver the item(s) to herupon request. Martin even allows long-standing clients to postpone their payment (*payer à crédit*). Giving the examples of several of his regular customers who had not yet paid for the orders they had already picked up, he explained that "since they are old clients, I'm sure [they'll] come back [to pay], even if it can take time."

Interestingly, producers' conception of an old (i.e. steady) client is rather subjective and even minimalist. For instance, Paul explained that some of his most regular customers had come to his workshop since he began, in 1995. Yet, a retailer who had purchased from him for a little over a year was already qualified as "old." Martin too did a favor for a woman he had known "for a while" by crossing the whole city on his bicycle to measure her freezer in order to make her some shelves. In fact, Martin had only known her for about a year. However since she passed his shop every day to go to work and greeted him, she offered sufficient social guarantees for him to trust and help her. By contrast, Rasmane considered Papa to be a recent client as he had begun to do business with him "less than two or three months ago" at the time of the study. To qualify as an "old" or regular client, it seems that a customer has had to be coming to the producer's shop for more than a year and to have made several purchases.

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⁶² "Comme ce sont des anciens clients, je suis sur qu'ils [vont] revenir, même si ça va durer." Martin, tinsmith. Fieldnotes, March 4, 2003.

⁶³ "Comme ça fait longtemps qu'on se connaît..." (Since we've been knowing each other for a while...). Martin, tinsmith. Fieldnotes, February 20, 2003.

⁶⁴ "Papa singa ne mam ka ta yum de. Ka ta kiug a yibu bi a tãbu." (Papa began with me not even a year ago. Less than two or three months ago). Rasmane, tire-worker. Fieldnotes, June 11, 2003.

Social aspects of the customer relationship

The fact, as Plattner noted, that no economic relationship between a buyer and a seller is totally anonymous, is absolutely true in the Burkinabè context. From the very first encounter, there is always some social content to the interaction between a producer and a customer. As I have shown earlier, clients often provide social information to identify themselves and explain how they came to know the producer's place. After a while, these relationships regularly involve social talk (asking about the family or relatives), light chat, jokes, and even favors such as offering snack food or a drink to the client. In the market of Cité An II, clients sometimes sit in the tire-workers' shed for a while. Since their work is not as noisy as the metal workers, customers may rest and chat while waiting for their order to be done. This is the case of Papa, a young retailer who comes about every two days to collect a new stock of tire-sandals from Rasmane. During the preparation of his order, Papa enjoys sharing stories and commenting the news with Rasmane and his shed-partner Boureima.

Depending on the relationship, producers also grant small favors to their customers. For instance, Rasmane often offers snacks to his clients while they are waiting for their order to be completed. Martin may even give small amounts of money to needy customers he knows (old women, young girls). One day, he voluntarily blessed an elderly woman that he knew by giving her 200 F CFA. He justified his action by saying: "when I have, I'd rather give."

 $^{^{65}}$ "Quand j'ai, je préfère donner." Fieldnotes, April 3, 2003.

Customer service: repairing damaged goods

One last aspect that these producers use to build and maintain their clientele is to provide repair services. Whether the goods to be repaired comes from their workshop or not, producers readily repair them for a small fee. This service is an integral part of their work as it provides additional earnings and is a way for them to acquire new clients or sustain previous customer relationships. Producers are the only ones who are competent to repair or change a part on the items they produce. The only exception that I have observed are retailers of aluminum pots who have the necessary toolkit to fix small holes (aluminum rod, small hammer, and aluminum paint).

Aluminum pots need regular repairs due to their frequent utilization on the fireplace. Despite women's precaution in handling them, notably by covering the bottom with wet clay as an additional layer, the heat often makes holes in the pot. If the hole is not too big, the aluminum-smelter can easily fix it for a fee of 100-200 F CFA. Since it is a malleable metal, he cuts a portion of aluminum wire and gently hammers it to seal the hole. If the hole is too big, he will not attempt anything but will advise the client to melt it and make a new one. Tinsmiths and rubber-workers too regularly provide repair services, replacing broken parts for a small fee. Their fees vary according to the size of the repair and the amount and quality of the supply needed for it.

Producers sometimes decline a repair if they know that it would be too expensive for their customers. Knowing their clients' purchasing power, they quickly identify when a repair might exceed customers' expectations and what they are ready to pay for. Instead, they offer their clients to make a new item. Martin, for example, was given a smashed bucket to repair. Since the

bucket had been made with thick, "hard" sheet metal (tôle dure), it would break if he tried to arrange it. The other option was to change the damaged area altogether but he already knew that it would be too expensive for the client (500 F CFA). After explaining all of this to the woman, the latter did not say anything or try to bargain. When Martin told her, half-jokingly, that she should ask him to make another bucket, the woman replied that she would first explore the matter with her family. ⁶⁶

From producers' marketing practices to their strategies to build and maintain their clientele, economic and social considerations interact in shaping, facilitating, or constraining these interactions. However, it is difficult to ascertain which aspect – economic or social – prevails over the other, and there is no heuristic interest in doing so. On the one hand, bargaining is a social phenomenon serving economic purposes and both producers and customers draw on their status and their relationships to gain some advantages. In some circumstances, preexisting social bonds can facilitate a transaction (by ensuring the quality of the work or providing a guarantee for payment) but in others, it can also be a hindrance to economic purposes. Indeed, producers are often solicited by acquaintances, friends, or relatives to give a favor or reduce a price. On the other hand, economic constraints (such as generating a profit margin to cover the costs and provide for labor reproduction) also put some limits to the social pressure of giving favors. In this way, producers' choices and strategies reflect their individual experiences and self-perception as economic and social actors.

⁶⁶ This type of reply does not guarantee that she will effectively come back. But at least, it preserves the relationship to allow for future transactions.

Chapter XIV. Bookkeeping and accounting:

Assessment and management of money, profits, and losses.

This chapter presents one of the key aspects of this thesis, as it reaches the core of my argument about the production of gains. Not only are these artisans mindful of the flow of money coming in and out of their economic activities, but they also deploy various strategies to maintain, increase, save, and invest their profits – even though they are not always injected back into the enterprise itself. Even if none of them keep accounts in a systematic way, they utilize various techniques to keep track of their receipts and expenses, be they mental or material ones. As any entrepreneur, they attempt – at least – to guarantee a minimum profit in order to reproduce their activity and their labor force and optimally, to increase it. In this chapter, I examine how these producers assess their earnings as well as potential losses and how they manage them. These practices fall into the category of accounting, as they provide information to evaluate an organization's performance.

Accounting as a coherent, socio-economic system of thought

According to Pavanello, any economic concept or theory "reflects a system of thought based on logic and having internal consistency" (1995:37). From this premise, he argues that "economic behaviour is always rational" once it is understood in relation to the indigenous economic theory that supports it (1995:52).² Likewise, Mayer and Glave contend that the notion

¹ See chapter XV.

² Raymond Boudon wrote that "one may probably not be able to define the notion of rationality in general, but only within particular contexts of action or interaction" (1983:34; quoted in Labazée 1988:253; my translation).

of "profits' [is] a constructed cultural category arrived at by socially established (accounting) procedures. For that reason, [it] may not have a single definition" (1999: 344). Taking the example of the Nzema people in south-west Ghana, Pavanello attempts to draw "an indigenous theory [of profit] as a self-representation," (1995:37). The Nzema consider that "a man must always obtain a nvasoe [profit] from his work" (1995:38). This profit can take the form of "a surplus product or of income or of added value or of lasting property" and it is always produced by the living (1995:38). The "optimal $nvaso\varepsilon$ " is not so much "a great deal of wealth, which may attract envy, as a standard of living which will assure the standing of a number of children and a self-reproducing nvasoe for the benefit of the sons and the matrilineal family" (1995:53, my emphasis). The Nzema conception of profit is that which remains "out of your suffering," referring to the notion of effort (1995:42). Yet, if the effort does not engender nvasoe, it is not productive work but only "suffering and loss." The rich man is the one who succeeded in accumulating "wealth through his own [individual] work" (1995:49). In a sense, the Nzema economic theory of profit combines "the realisation of individual profit with the social and familial recomposition of the capital represented by the continuity of descent groups" (1995:51).

Ortiz found that peasant farmers most often assess key economic aspects in terms of ranges, qualitative statements, and rough calculations (1979b:68, 72-73). Prices, harvests, and returns "are judged as good or bad in terms of what they did for the farmer rather than the actual amount," and therefore may not be recalled in accurate terms (1979b:71, 74). Yet, it is with this knowledge that they are able to express some expectations about future harvests, even though they are "unable to *forecast future events*" (1979b:75, emphasis in original). This is the reason why Shackle suggested that "[economic] models [...] should envisage decision makers as

focusing on the most familiar or frequently experienced outcome as well as the largest expected profit and the largest expected loss" (*In* Ortiz 1979b:76).

The ability to estimate an outcome is therefore determinant in the decision-making process. To accept change, the individual must be able "to calculate the chance of realising the promised yield" (Ortiz 1979b:77). Clark also underlines that "skills in bargaining and accounting" determine the trader's commercial success and explain why some are moving "rapidly ahead of their colleagues" (1994:169-70). Traders' indigenous accounting practices are vital for them to make decisions as well as "to assess and compare the profitability of past and potential transactions [in order] to monitor their own accumulation rates" (1994:146).

In the light of these studies, scholars have come to the conclusion that African farmers and small entrepreneurs operate in an environment that combines capitalist and noncapitalist principles (Bernal 1994:793; Silver 1981:49). Labazée reminds us that "all forms of exchange are simultaneously economic and social and that in no economy are the qualities and blessings accorded by Sombart, Weber, and Schumpeter to capitalists neither totally met nor totally absent" (1994:212). In order to function, traders mobilize their social resources (notoriety, dependant networks, and other territorial and kin relationships) to access economic resources such as labor force, guarantee the circulation and distribution of their products, and produce a profit margin (1994:215, 226-7). There is an "investment" relationship in which they "spend time and money to establish an authority on the members of these communities, and [there is a] 'conversion' relationship, in which the power relationships are transferred in hierarchical and economically functional links in their business networks" (1994:212).

³ "Neither the assumption that peasants operate on noncapitalist principles, nor the assumption that peasant households operate like capitalist enterprises is able to account for what we actually observe" (Bernal 1994:793).

Indigenous systems of accounting are complex and diverse but all attempt to assess profit and loss in order to make appropriate economic decisions. West African traders use discrete categories and different accounting techniques – "mental, physical, and written" ones – to monitor the flow of their resources, restrict their misappropriation, and attempt to increase their margins (Clark 1994:146). Wan described how female *gari* traders in Ibadan deliberately refuse to keep written records to "conceal their earnings" (2001:236). Instead, they use specially designed money-belts which bear different zipped pockets for specific money accounts. It is only at the end of a sale that the trader takes out the money from a particular part of her belt and "calculates her profit or loss" (2001:236). In contrast, Kumasi traders resort to written accounts to better remember "complicated mental accounts accurately" (Clark 1994:147). This practice also helps them reduce "both honest mistakes and cheating," as well as keep track of credit transactions (1994:148, referring to Babb 1989).

The logic used by Kumasi traders to calculate their incomes brings light to that of Burkinabè producers (Clark 1994:146). Roughly, traders aim at recovering their operating costs and consider the surplus as profits and savings to be reinvested. One accounting method consists in keeping all the sales receipts from each wholesale unit that the trader bought. After selling this unit, the trader "counts up the total and classifies the whole difference between the buying and selling price as income." She then takes out the replacement cost of that unit, pays her supplier, "and uses what is left to pay her future expenses" (1994:146). Whatever remains from these expenses is called "savings' and may be taken out to start a new unit fund" (1994:146-7). The second method is to directly set aside the replacement cost of the wholesale unit. What remains

from the sales' proceeds is considered as "daily income" (1994:147). Taxes, rent, transport, and meals are paid from this fund and again, the remainder is considered as "savings." Traders physically separate these accounts by storing them in different boxes, a practice that helps them "resist demands for that money from relatives or creditors" (1994:147). Even if many are recurrently saying that they are "not making any money" from their trade, what they actually mean is that "they [are] not adding to their trading capital." In fact, the money earned on a daily basis is directly invested in "necessary family expenses," which traders consider to be "part of their overhead rather than as part of their income" (1994:146).

Calculating their yoodo⁴

A Mossi saying states that one "cannot place an empty pot on the fireplace," implying that one cannot work if there is no "food" or "yõodo." As I have shown in chapter VI, Burkinabè producers "are looking for money" (tõnd baoda ligda). Like Peruvian peasants or Nzame farmers, their objective is to make profit in order to "increase the base" (i.e. the household's patrimony or wealth). Generating a "continuing profit" is the guarantee to keep their enterprise going in order to provide for their family and invest in other activities, which might increase their wealth and therefore, their status in their community (Pavanello 1995:51).

Unlike Labazée's bigger entrepreneurs, these craftsmen are not constrained by state institutions to keep books or maintain a yearly accounting system. The only tax they have to pay is attributed by state agents according to a rough estimate of their means of production and

 ⁴ Yõodo: profits, gain (Nikiema and Kinda 1997:1214).
 ⁵ « La tus ruk zaalem bugum ye ». Martin, tinsmith. Fieldnotes, February 18, 2003.

stocks of merchandise.⁶ As the enforcement of this yearly tax is loose, its payment does not really alter their management.⁷ In addition, almost none of these producers have ever received any formal training in basic accounting, except Moussa, prior to receiving a loan from a Swiss-sponsored NGO (see chap. XVI). As a result, few of them have any idea of what they earn on a yearly basis. Their activities having ups-and-downs, they are only able to provide figures about their daily transactions or weekly ones, at the most.

So how do these producers evaluate their profits? Most of the time, they estimate their earnings by removing the "ligdi ma" or costs of production from the sale price. I recorded the notion of ligdi ma only once during my fieldwork, but the explanation given by the two tinsmiths who mentioned it made it a useful, explanatory concept. These men explained that ligdi ma is the initial money invested by the artisan to buy the necessary inputs to make a particular product. They called it "prix d'achat," in French. To calculate their yõodo (profits), they deduct the ligdi ma from the retail or wholesale price (which they called "prix de revient," in French. One of these tinsmiths summarized his mental calculations as follows: "[From] what I earn, I remove

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⁶ This tax is called the *Contribution du Secteur Informel* (CSI; Contribution of the Informal Sector). Mobile agents from the State Treasury (*Trésor Public*) physically visit each workshop and roughly assess the level of activity, the stock, and the economic capacity of the shop owner. The agents then assign the amount to be paid according to a set grid.

⁷ Many producers have actually delayed their payments and may owe several years of this tax to the State Treasury.
⁸ Literally, "mother [of] money." Pavanello noted a similar concept among the Nzema in south-west Ghana: "The Nzema give the name *ezukoa onli* ('mother of money') to the initial investment needed to start up any kind of commercial activity – for example, to the money to buy a grinding machine" (1995:47). In comparison, the Mossi concept of "*ligdi ma*" applies for the production of each item or series of items from the same batch of supply – and not for the start of an enterprise.

⁹ More rarely, an evaluation of their spending can also give them an idea of their income. When I questioned a spring-maker about whether he knew how much he was earning, (as he was asserting to earn more than a fonctionnaire), he replied: "I know that every day, I can spend 1,500 [F CFA]. [...] Yeah, I can spend 1,500 [F CFA] and then, I also save a little. So I know that 2,500 [F CFA] roughly, 2,500 to 3,000 [F CFA], I know that I can earn [that] daily." [je sais que, par jour je peux dépenser 1,500...[...] ouais, je peux dépenser 1,500 et pis, j'économise aussi un peu. Donc je sais que, 2,500, en gros là, .. 2,500 à 3,000 je sais que par jour je peux gagner]. Alassane, spring-maker. Interview, August 26, 2003.

Purchase money.
 Cost price. This adapted terminology actually means the opposite of the standard accounting definitions!

the price of the sheet metal and I take my profit. [In] the profit, I calculate – I take out what I want to keep [savings] and I leave what I can eat with. That's all." As in price formation (see chap. XII), producers take into account each component of their production costs to assess their profits as well as the time and effort spent in performing their work – even if the latter are not always included in the production costs per se. 13

Profits and earnings in Moussa's large aluminum-smelting workshop

Due to his large-scale production of aluminum-pots and the organization it requires, Moussa should have been the best able to provide precise estimates of his expenses and earnings. However, the boss consistently declined giving any details about his earnings during the whole time of my fieldwork. ¹⁴ Therefore, all the information was obtained from discussions with his workers and from rough deductions from the sales and the level of production that I observed.

According to one worker, each team earns half of the net profit generated from every ton of aluminum processed, the boss keeping the other half (100,000 F CFA each). Since the whole workshop (composed of six production teams that do not all work at the same time) transforms about one ton of aluminum every two days, the entire workshop may generate a profit margin of

¹² "Ce que je gagne, j'enlève le prix des tôles et je garde mon bénéfice. Le bénéfice, je calcule – j'enlève ce que je peux garder et, et je laisse ce que je peux manger avec. Et [c'est] comme ça." Martin, tinsmith. Fieldnotes, February 20, 2003.

¹³ I would argue that the calculation of their prices and that of their profits consist in the same mental computation: they take the production costs out of their cost price (earnings) to evaluate their profit-margin (profits). Conversely, they add a profit-margin on their production costs to set their prices.

¹⁴ He only conceded that he had begun by earning 7,500 F CFA of profit in the beginning of his activity (in the 1970s) but "it has become a lot [...] God made it so" (lebga wosgo [...] Wend naam mana woto). Fieldnotes, February 5, 2003.

¹⁵ Each team earns 100,000 F CFA per ton when working for the boss and 150,000 F CFA when working for somebody else. See below.

at least one million CFA francs per month. When the market was faring better, Moussa used to earn about another million of CFA francs worth of yearly profit from the production of his second workshop in Accra, Ghana. In addition, Moussa earns additional income from side activities such as exporting scrap iron, copper, and used car batteries to Ghana, for which I do not have any information.

When Moussa's workers or dealers are asked to provide information on their earnings, they immediately resort to a "typical" transaction as an ideal-type. Their calculations are made on the basis of one ton or a hundred kilograms of aluminum supply processed to produce either an order of eight pots #30 (which require 100kg of aluminum supply) or eighty pots #30, which require one ton of aluminum supply. Table 3 summarizes the mental reckoning of expenses and earnings for the second type of order, as given by one particular dealer. For this particular dealer, who uses Moussa's workers to produce his orders, the ideal solution to increase his profit margin would not be to lower the production costs but rather, to increase the retail price of the pot to 14,000 F CFA. In such conditions, even if the cost of aluminum supply would still reach 750 F CFA per kilogram, he would be able to raise his profit margin to 70,000 F CFA instead of 40,000 F CFA, during the dry season.¹⁷

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¹⁶ This is a very conservative estimate based on figures given to me by workers. If I consider only the four teams that work the most regularly, here is their average consumption of aluminum per day (depending on what they have to produce): Team 1 works 200kg of aluminum per day; Team 2: 125kg/day; Team 3: 100 kg/day; Team 4a: 100kg/day. This amounts to 525kg of aluminum per day or a little more than one ton every two days. The workshop produces five days per week or twenty days per month, on average. Therefore, they process (conservatively) ten tons of aluminum per month, which amounts to a profit margin of one million F CFA. This is a net profit for the boss, as the wages for the workers have already been deducted.

¹⁷ In contrast, the substantial profit margin reported in the table for the rainy season (135,000 F CFA) is indeed a hypothetical example, since the market is usually low during this season. Market retailers would rarely make such an order in this season, even less be able to pay for it on time.

In this dual organization, where the teams work principally for the boss but also for 'satellite' aluminum dealers, ¹⁸ workers earn what we could call wages, which are of a onsiderable size. Léon, a young team leader, explained how his wages have increased as he gained experience in the workshop. While he began earning 3,500 F CFA per week, producing small pots and working 30kg of aluminum daily, he now earns about 3,000 F CFA per day, working 100-120kg of aluminum per day to produce larger pots. The boss pays the team in cash whenever they have worked 500 kg of aluminum or so. ¹⁹ The team leader then splits the total sum into unequal amounts to pay each team member. The next two tables summarize what each member may earn on a weekly and monthly basis and what this 'payroll' amounts to at the level of the entire workshop:

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¹⁸ I call these young dealers 'satellite' as they are independent workers yet remain in a position of social and economic dependence to the boss and his network of clients as well as his workers. In addition, they are all closely related or connected to the boss in some ways: sons, nephews, neighbors, or sons of the boss' acquaintances.

¹⁹ There are no regular 'pay days.' Rather, whenever the boss cashes money in from his customers, he pays his workers. In the meantime, he keeps a count of each team's production in a book (see below).

Table 3. Production costs and profit margin for the production of 80 aluminum-pots #30.

Supplies	Unit price (F CFA)		Quantity	Total (Total (F CFA)	
	Rainy	Dry season		Rainy	Dry	
	season	-		season	season	
Aluminum	600 F/kg	750 F/kg ²⁰	1t	- 600,000	- 750,000	
Wage per team ²¹	150,000	idem		- 150,000	- 150,000	
	F/1t ²²					
Charcoal/food money/delivery				- 75,000	- 60,000	
* charcoal	varies	2,500F/100kg	1t	it varies	- 25,000	
* food money ²³	1,000F/100kg	idem	1t	- 10,000	- 10,000	
* filing/cutting	5 F/1kg	idem	1t	- 5,000	- 5,000	
* repairing holes	5 F/kg	idem	1t	- 5,000	- 5,000	
* crucible	3,000 F/ea	idem	5	- 15,000	- 15,000	
*transportation/ delivery	3,000 F/20 pots	idem	80	- 12,000	- 12,000	
Earnings for 80 pots #30	12,000	12,500	80	+ 960,000	+1,000,000	
Profit margin				+ 135,000	+ 40,000	

^{*} Items not counted by the dealer on this transaction but given by workers about other transactions. Their total amounts to 72,000 F CFA.

Table 4. Details of daily and weekly wages for three teams (F CFA).²⁴ Moussa's workshop.

	Team 1 per week	Team 2 per day	Team2 per week	Team 4a per day	Team 4a per week	Total per week
Leader	32,000	3,500	17,500	3,250	16,250	
Worker 1	27,000	3,500	17,500	2,750	13,750	
Worker 2	23,000	2,500	12,500	2,250	11,250	
Worker 3	23,000	2,000	10,000			
Worker 4	15,000	2,000	10,000			
Wheeler	23,000	2,500	12,500	1,750	8,750	
Helpers	11,000	1,000	5,000			
Total	154,000	17,000	85,000	10,000	50,000	289,000

²⁰ These are the aluminum prices given for those who purchase their supply in Ouagadougou. Moussa buys his aluminum supply in Ghana for the equivalent of 800 F CFA/kg, transportation costs included.

21 Tomda ligdi. Literally, "work money" or "money for work."

22 150,000 F CFA/ton (or 15,000 F CFA/100kg) is the rate for the various "satellite-dealers" who hire the service of

one of Moussa's teams to produce their own orders. The boss himself pays each of his teams 100,000 F CFA/ton. ²³ *Dibo ligdi* refers to the lunch meals which are paid to the workers and amount to about 200 F CFA per person and

per day. ²⁴ I did not include the three other production teams as I did not have enough reliable information about their earnings.

Table 5. Average monthly wages (F CFA). Moussa's workshop.

Monthly wages	Team 1	Team 2	Team 4a	Total 3 teams
(Approx. figures)				
Leader	200,000	75,000	65,000	
Worker 1	108,000	70,000	55,000	
Worker 2	92,000	45,000	45,000	
Worker 3	92,000	40,000		
Worker 4	60,000	35,000		
Wheeler	92,000	45,000	35,000	
Total	644,000	310,000	200,000	1,154,000

Another way to estimate the level of production, earnings, and profit made by this workshop is to assess the amount of aluminum transformed by each team per month. Knowing that the boss splits his profits into two equal parts with the appropriate team and that a team receives 100,000 F CFA for each ton of aluminum processed, an evaluation of the total consumption of aluminum supply in a month would give us a close idea of Moussa's payroll and profit (table 7).

Table 6. Moussa's approximate payroll and profits per month.

	Monthly consumption of aluminum	
	(tons)	Profits: 1t = 100,000 F CFA
Team 1	4,3	430,000
Team 2	2	200,000
Team 3	1,5	150,000
Team 4a	1,3	130,000
Team 4b	0,75	75,000
Team 4c	0,5	50,000
Sub-total	9,45	1,035,000
Team 5 (outside)		10F/kg of aluminum fixed & filed (9450kg x 10) = 94,500
TOTAL	9,45	1,129,500
Boss'		
approx. monthly		
profits		1,035,000

These figures are only approximate estimates. Indeed, each team does not work exactly the same amount of aluminum every day and there may be days when they do not work due to lack

of supply. Also, these three tables do not represent the workers' entire earnings since the latter often alternate production for the boss and for other 'satellite' dealers as well as for themselves, as they acquire aluminum and produce for their own network of clients. In other words, the more enterprising they are, the more workers multiply their sources of income.

In their own words, these workers earn "more than *fonctionnaires*" (civil servants). While the latter earn between 35,000 F CFA and 70,000 F CFA for the lower rank civil servants, the most enterprising of these workers can easily earn between 100,000 F CFA and 200,000 F CFA per month by combining their various sources of earnings. With net earnings ranging conservatively around one million CFA francs per month, Moussa is certainly among the few aluminum-smelters that have reached such a high level of productivity in the capital city.

Earnings in a smaller workshops

In smaller workshops, where the production level is less significant, earnings are not assessed by the quantity of aluminum supply processed but by calculating the profit margin gained on each item produced. However, producers do not assess their daily total earnings. Rather, they evaluate the profit gained on each transaction, without adding them up to estimate how much they earned in a day-worth of production. Paul aims at maintaining a minimum profit margin of 500-750 F CFA on smaller pots (#1/2 to # 5) and 1,000-1,500 F CFA, up to 2,000 F CFA on larger pots (#6 and above). For each item produced, he deduces the costs of aluminum supply and charcoal from the retail (or wholesale) price to appraise his "profit" (yõodo). Yet, this is only the gross profit as he still has to pay his apprentices. Giving an

²⁵ The only assessment I observed was a very practical one, as the producer counted the bills he had in his pocket at the end of the day. However unlike Wan's traders, this was not a systematic or general practice among producers.

example, Paul explains that he sells a pot #2 at 1,500 F CFA (retail price) to cover his aluminum and charcoal expenses, respectively 600 F CFA²⁶ and 300 F CFA. He then adds a 500-600 F CFA profit margin for the retail price (only 200 F CFA for wholesale).

Profits are estimated on an item basis, but also by the money coming in. When clients are coming and there are bills in his pocket, these are good indicators to Paul that this is a "good day" (dar sõngo).²⁷ In one instance, as he was making a new spare part for a mechanic, Paul exclaimed that "there's profit!" (ya yõodo!). Indeed, he only needed 100 grams of aluminum (worth 50 F CFA) but would sell the car part for 4,000 F CFA. On another day, he commented that "we got food" (tõnd pama dibo) as he had earned 8,000 F CFA from another car part order.

Since producers also calculate "their social reproductive costs" as operating costs (see Clark 1994:146), it is necessary to reorganize their mental accounting in order to better assess their earnings. For this purpose, I asked several volunteers to compile their receipts and expenses in a simple, two-entry accounting system.²⁸ Paul was the one who committed himself the most to this task, faithfully keeping his books on a daily basis over a period of five months (much longer than I had asked him to), and even continuing after the end of my fieldwork.²⁹ This wealth of information enabled me to assess more precisely his earnings and how he invested them (see

²⁶ One needs 1.2kg of aluminum to produce a pot #2 and Paul buys aluminum at 550 F CFA/kg.

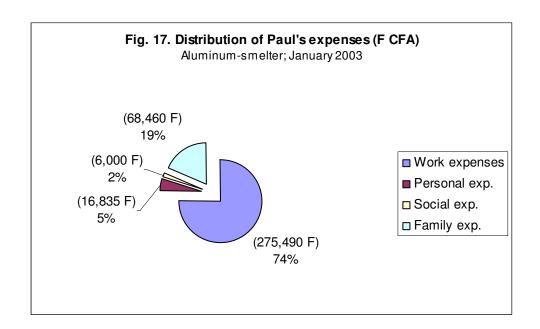
²⁷ "Runda ya dar sõngo. Clients watame." (Today is a good day. Clients are coming). Fieldnotes, January 3, 2003. ²⁸ See chapter III. The directions initially given to the voluntary producers were to enter their earnings in one column (called 'Recettes') and their expenses in another one (called 'Dépenses'). I insisted that they entered any kind of expenses they made during the day, both work- and nonwork-related. This task was most fastidious for Moussa's workers as several did not know how to write in French (although some could write in Arabic as they had attended Coranic schools). Most of them were very irregular, left keeping their books very quickly, and only wrote their expenses without writing their income (fig. 15). This made their data mostly unusable, although it gave me some idea of their living expenses. Only Léon (one of Moussa's team leaders; fig. 16), Martin (tinsmith; fig. 14), and especially Paul (aluminum-smelter) provided more reliable books as they were slightly more educated and found a personal interest in knowing their daily earnings and expenses (fig. 11-13).

²⁹ From his own initiative, Paul improved his bookkeeping by separating his expenses in two columns: work-related ones ("*Dépenses*") and family-related ones ("*Dépenses Famille*"). The third column was for his earnings ("*Recettes*") for which he added a column describing the orders ("*Commandes – Notes*"). See fig. 13.

Table 7 and Fig. 17-18). While the table shows us Paul's net profit according to a Western definition (earnings minus production costs), the pie charts present the distribution of all the expenses that he considers being part of his operating costs.

Table 7. Monthly earnings and work-related expenses (F CFA). Paul, aluminum-smelter

Month of January (2003)			Month of April (2003)			
Earnings V		Work	Net profit	Earnings	ngs Work exp. Net p	
		expenses				
Total	+338,400	-256,630	+81,700	+237,250	-212,050	+25,200
Daily average	+ 14,100	- 10,693	+ 3,407	+ 9,885	- 8,835	+ 1,050

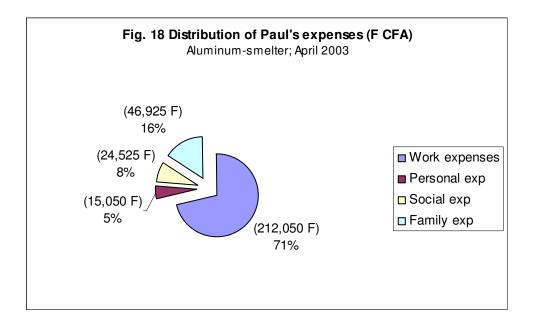


Evaluating the producer's expenses is a useful way to assess the general level of his earnings. ³⁰ I have rearranged the information provided by Paul into four categories. ³¹ *Work*

³⁰ Producers usually do not have any loan that could bias the results. Their activity is their only source of earnings and what they spend is what they have earned through their work.

While I was working with other workshops, I kept visiting him about once in a week to photocopy his notebook. I had asked him to make two distinct entries for his expenses, one for work-related expenses and the other for family-

expenses include all expenses related to the operation of the workshop: purchase of supplies, apprentices' allowances, and meals (morning and noon). I also included gas expenses for Paul's moped as he used it mainly to go to work and transport charcoal, aluminum, and products bought from other aluminum-smelters. Personal expenses consist of Paul's treats (drinks, snack food) and expenses to repair his moped. Family expenses relate to all the expenses to feed, clothe, and take care of his family (i.e. medical bills) as well as gifts and treats for his daughter (i.e. pocket money). Lastly, social expenses concern any alms or financial gifts offered to visitors, beggars, relatives, or associations (i.e. church or regional association).



The contrast shown between Paul's net earnings and his nonwork-related expenses gives us a better appreciation of his real income, his purchasing power and therefore, his socioeconomic standing. Indeed, while a simple calculation of his net profit reveals that he earned 81,700 F CFA in January 2003 and 25,200 F CFA in April 2003, his nonwork-related expenses are

strikingly more important. Altogether, Paul spent 91,295 F CFA in January 2003 and 86,500 F CFA in April 2003 in nonwork-related expenses (personal, social, and familial). During the month of April, Paul had gone to his home-village for a celebration and had withdrawn 20,000 F CFA from his savings account to pay for his trip and bless his family back home. This expense was counted in the 'social expenses' category and considerably increased his monthly expenditure. All in all, Paul's earnings must oscillate between 60,000 F CFA and 95,000 F CFA per month, which is still above low-rank civil servants' salary.

In comparison, Martin has little room for maneuver and this certainly explains why there is little purpose for him to assess his total monthly earnings. What he earns is quickly spent to cover the needs of his household and there is little opportunity left to save. From what he recorded in his book, Martin earns approximately 79,768 F CFA per month.³⁴ Yet, since he spends about 79,248 F CFA for personal and household expenses, there remains only 520 F CFA.³⁵ As Martin commented himself: "*It's true that I have earned* [money], *but since I had some problems, it's as if I had* [earned] *nothing.*"³⁶

Table 8. Martin's receipts and expenses (F CFA); 21-day period (02/25/2003-03/27/2003)

Receipts	Work expenses	Net profit	Average net profit per day	Average non-work expenses per day
+114,750 F	-50,325 F	+64,425 F	+3,068F	+3,048F

³² These nonwork-related expenses represent 25% and 29% (for the months of January and April, respectively) of his total expenses.

³³ Since these 20,000 F CFA do not come directly from his monthly earnings but from his saving account in a community bank (Caisse Populaire), his total, nonwork-related expenses for the month of April amount to 66,500 F CFA.

 $^{^{34}}$ 3,068 x 26 workdays = 79,768 F CFA.

 $^{^{35}}$ 3,048 x 26 workdays = 79,248 F CFA. This is only theoretical, as Martin also spends money on Sundays, when he does not work in the shop. This means that even the 520 F CFA-margin is probably quickly eaten up.

³⁶ « C'est bien vrai que j'ai gagné, mais comme j'avais des problèmes, c'est comme si je n'avais pas eu quelque chose ». It is noteworthy that Martin said that while he was actually keeping books for the purpose of my research... Martin, tinsmith. Fieldnotes, March 3, 2003.

The earnings of tire-workers

Tire-workers also estimate their earnings beforehand, based on the type and quantity of supplies they invest in and on the production they would make out of them. As Kumasi market women, they have an idea of the profit margin to be made from the bundle of supplies they buy, "which allows sufficient margin for [their] average business costs and living expenses" (Clark 1994:146). When Boureima bought a bunch of *bante*³⁷ supplies for 7,000 F CFA that morning, he had already estimated that he could make 35 pairs of children's sandals (300-350 F CFA) and 25 pairs of sandals for adults (500-750 F CFA). From this information, I calculated that he would generate a profit margin of about 16,000 F CFA.

While these tire-workers were able to provide information on their gains for a set quantity of supplies, it was more difficult to assess their monthly earnings. Unlike the other producers I worked with, Rasmane and Boureima were not able to keep books as they were illiterate.³⁹ I could only collect these data orally, each time I visited them but it provided scant and irregular information (see table 10). Nonetheless, what emerges from these conservative figures is that tire-working is the least lucrative activity, with net monthly earnings ranging from about 23,000 to 48,000 F CFA.

These figures partially reflect the situation of these two producers. Indeed, Rasmane produces higher-quality sandals – and thus more expensive – than Boureima, which he sells to a network of retailers who regularly replenish their stock with him. In addition, Boureima's earnings derive in substantial part (about 37%) from the sales of *yõg bugum*, ⁴⁰ which are more

³⁷ Tire's inner liner (see chapter XI).

 $^{^{38}}$ (300 F x 35 = 10,500 F) + (500 F x 25 = 12,500 F). Total = 23,000 F CFA - supply costs (7,000 F) = 16,000 CFA.

³⁹ Rasmane had attended Coranic school for several years and was able to read and write a little bit in Arabic.

⁴⁰ Bits of tire tread used to kindle the fire during the rainy season (sold in bunches).

significant during the rainy season. To sum up, these figures are only meant to provide a ballpark range of their earnings.

With earnings ranging between 30,000 F CFA and 40,000 F CFA, these tire-workers are positioned on the same level as low-rank civil servants' or computer technicians' wages (30-48,000 F CFA per month). Even if he fares much better than a night guard (15,000 F CFA), Rasmane acknowledges that "we craftsmen cannot earn a lot of money [...] There's little wealth ... There's a lot of work but not a lot of money. [If I earn 1,000 F, I will] do my best to leave 500 [F CFA] home [for my wife], to buy water... [If I earn 2,500 F CFA], I'll split the money [in half: for myself and for the household]... I cannot save much." 43

Table 9. Rasmane and Boureima's monthly earnings.

Rasmane's earnings and e	xpenses (F CFA)	Boureima's earnings and expenses (F CFA)		
(12-day period; from 6/11 to	7/15/2003)	(9-day period; from 6/14 to 7/15/2003)		
Total earnings	14,700	Total earnings	22,750	
Work expenses	3,760	Work expenses	6,050	
Household expenses	9,100	Household expenses	2,250	
Net earnings	10,940	Net earnings	16,700	
Net earnings per day 912		Net earnings per day	1,856	
Net earnings per month (average) ⁴⁴ 23,712		Net earnings per month (average)	48,256	

Rough indicators of their earnings

Confronted with the fluctuations of the market and the daily, and sometimes unexpected, needs of their households, producers have to balance the multiple demands on their earnings.

Due to this, it is important for them to have an idea of where they stand and whether they are

⁴¹ Personal communication from a local computer technician working in a cybercafé and giving computer lessons. He was paid on a rate of 300 F CFA/hour and usually earned 30,000 F CFA per month. More rarely, he could work up to 160 hours per month and thereby earn 48,000 F CFA.

⁴² *Paoongo:* goods, belongings, possessions; wealth (Alexandre 1953).

⁴³ "Tõnd nug-tum rãmba, ligda pa tõe pam ti ya wusgo [...] Paoonga ya bilfu... tum ya wusgo la ligdi ka wusgo ye." For instance, if he earns 1,000 F CFA, "na modge ti koaboga pa yiri, n da koom..." If he has 2,500 F CFA, "[na] n yak ligda n pui... pa tõe bĩng wusgo." Rasmane, tire-worker. Fieldnotes, June 12, 2003.

⁴⁴ Assuming that they work about 26 workdays per month.

earning or losing money. When I asked Alassane, a spring-maker, how he knew whether he was losing or earning money, he replied: "It's very easy! It's easy! Ha! When you work, [...] if you see that [the iron supply] does not increase, you know that.. somehow, it doesn't work. Otherwise, if you work normally, you should have a lot of iron [supply]."45 Moussa too does not "look at the books" to know whether he is earning money or not. 46 In a way similar to that used by Alassane, it is the "speed" or intensity of work that indicates whether he is faring well. "It's the speed of work. [If it's] hot [i.e., fast], there are a lot of expenses. But if the work slows down [lit. cools down], there are few expenses [...] You know with your head."47 A fast pace of work is therefore the most unmistakable indicator that the enterprise is doing well as orders are coming, thereby requiring the purchase of supplies and other expenses (Wan 2001:230).

When the demand on their earnings is too high and the latter may not be sufficient to meet all their obligations, these are clear signals that producers may be "losing" money. Martin for instance, asserts: "I know when I lose money." It is not because of mismanagement but rather, because of "unexpected expenses" (dépenses imprévues) such as a child's sickness or school fees to pay. The problem for him is that in such cases, he cannot raise his prices as he would like to in order to solve his problems, as customers would refuse to pay. The only solution is to wait for

⁴⁵ « Là c'est facile même! C'est facile! Ah, quand tu travailles [...], si tu vois que [les fers] ça n'augmente pas, tu sais que y a.. quelque part ça ne va pas! Sinon normalement si tu travailles comme ça, tu dois avoir beaucoup de fers.. » Alassane, spring-maker. Interview, August 26, 2003.

⁴⁶ « Tõnd ka get sebr ye ». (We do not look at the books – in which they write large orders and loans; see below). Moussa, aluminum-smelter. Fieldnotes, February 8, 2003.

⁴⁷ « Ya tuma vitesse. [Sãn ya] tulgo, dépenses ramba ya wusgo. La tumda sãn maagame, dépenses ya bilfu [...]. Fo mi ne zugu. » Moussa, aluminum-smelter. Fieldnotes, February 8, 2003. ⁴⁸ "Je sais quand je perds de l'argent." Martin, tinsmith. Fieldnotes, August 20,2003.

additional or large orders. Philosophically, one tire-worker comments that even if he is not making money one day, he is fine as long as he can eat and stay in good health. 49

Written bookkeeping: specific applications

Producers' recording practices differ greatly from Western accounting, which aims at establishing "the value of assets" and "the value of the global results of a firm's activity" in order to assess its financial health (Bremond & Geledan 1989:85). In contrast, Burkinabè producers do not need a detailed and systematic recording of all their business transactions as neither state institutions nor the working of the market justify it. They record selective information about certain transactions only for short-term purposes.

Most of the time, this information is meant to follow-up on important transactions to avoid making mistakes or being fooled (see Clark 1994:147-8). Paul, for instance, records in an old pocket calendar his most important orders, down payments, as well as the full amount he is supposed to collect (fig.21). During his absences, his apprentices also write down all their expenses and earnings, as Paul usually entrusts them with a specific amount of money to carry out the activity while he is away. By writing their transactions and calculations down, they avoid making mistakes but are also better able to report them to Paul upon his return. ⁵⁰

Djibril, a young 'satellite' dealer of aluminum-pots working with Moussa's workers, only writes important transactions concerning his five main client- retailers. He divided a little

⁴⁹ « Mam hãn wa ka, mam hãn pa koozd ye, mam dita la pama laafi. Ya soma ». (If I come [to work] and I don't sell, [if] I eat and stay in [good] health, it's good.). Boureima, tire-worker. Fieldnotes, June 19, 2003.

⁵⁰ For instance, in August 2002, Paul had left his apprentices alone during two days to go to a wedding. He gave them 9,050 F CFA to buy supplies to keep the production going and pay for their lunch. This was definitely an act of trust on his part.

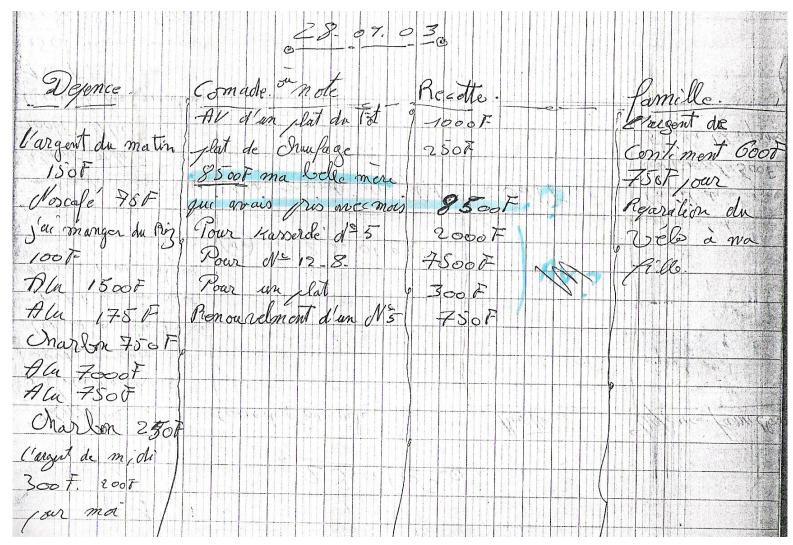


Fig. 19. At his own initiative, Paul later divided his accounting in four columns: Expenses, Order or Note [description of his orders], Receiptss [from his orders], and Family [expenses]

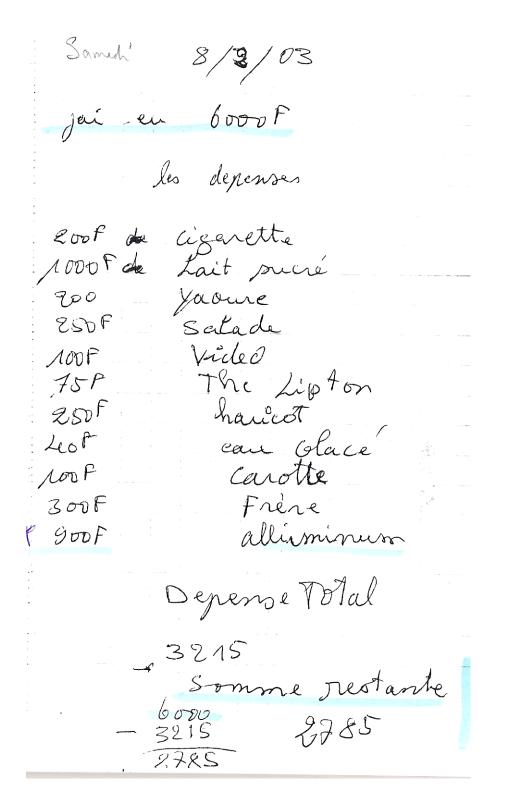


Fig. 20. Léon's bookkeeping. He too buys aluminum for his own production. He took the initiative to calculate his remainder after deducting all his expenses from what he had earned that day from the boss (6,000 F CFA).

notebook into five sections, one for each of his main clients. For each transaction, he recorded the details of the order (size and quantity of pots), the amount of the installments that had been paid, the date when it was paid, and the sum remaining to be paid.⁵¹ Smaller transactions with other, irregular customers did not need to be recorded: "It's my life [...] I eat there so I cannot forget."⁵²

Confirming Clark's observation, the reason why Djibril started to write down his biggest transactions was to avoid being deceived. Two years prior to my study, a client refused to pay the last installment of an order, which amounted to about 25,000 F CFA, alleging that he had already paid in full. Since he had not kept a record of the first deposit, Djibril was not able to pursue his client and lost his money. Since that time, he takes careful note of his major transactions to avoid any further trouble. However there is no intention to evaluate the overall situation of his activity. Indeed, Djibril does not keep track of his expenditures as his aluminum supplies and labor costs are always paid in full. When his book is filled and all the transactions have been finalized and entirely paid for, he merely tears it apart and throws it away, before starting a new one.

It is a necessity for Moussa to keep books because of the volume of his orders. Retailers come from various towns of the country to replenish their stocks and order large quantitius of pots and lids from him. Due to the volume of his business, it is necessary for him to write down the details of each order and calculate the total costs as mental reckoning would not be sufficient. Since he is not literate in French, Moussa is assisted by one of his sons and two other workers (a

⁵¹ Here is the generic model of his bookkeeping: Name of the client; size – quantity of pots (i.e. $n^{\circ}30 - 10$), payé X [paid X amount]; reste X [remain X amount], date when the client has made a down payment (and not the date of the order per se).

⁵² "Ya mam vuma. [...] Mam dita be, donc ka tõe yim ye." Djibril, aluminum-pot dealer. Fieldnotes, February 4, 2003.

nephew and a long-time worker) who keep track of the amounts of money loaned to business partners or of first installments paid by customers, along with his clients' names and surnames, and write the receipts for his clients (see Clark 1994:188). In doing so, if the person "doesn't pay, we'll go after him," Moussa explains.⁵³

When needed, Moussa's assistants take the accounting bag stuck in the branches of a large tree towering over the benches. This bag – a former rice bag – contains a notebook in which they write the details of large orders and calculate the bill;⁵⁴ a receipt book; several stamps bearing the name of the boss, his address and phone number;⁵⁵ a ballpoint pen; and a pocket calculator. In one instance, one of them computed the amount of the order with the calculator and found the total sum of 1,053,700 F CFA (photo. 135). He wrote the receipt accordingly and brought it to the client settled in another neighborhood. The latter would make several payments to pay this bill, even though his order had already been delivered. As the young man explained, "[we] *sell on credit*" ([tõnd] *kozda samde*).⁵⁶

Receipts are mandatory for large orders as retailers need to justify the origin of their stock of supplies in case of a control from the authorities. Moussa explains that "if a person buys pots, they [i.e. he] tell [us] to write an invoice." He dictates the details of the order to one of his literate workers with remarkable precision, quoting from memory the amount due for each series of pots and spelling out their size and quantity (ie. "numéro six: piiga"). Unlike many traders

⁵³ "A sãn ka yao ligda, tõnd babsd a la me." Moussa, aluminum-smelter. Fieldnotes, January 29, 2003.

⁵⁴ The one which he was currently using during my study began with the words: "*Ouvert le 23/12/2002*" (Open/Began on 12/23/2002). Fieldnotes, January 21, 2003.

⁵⁵ The main stamp is round and bears the inscription: "S... Moussa, Forgeron de Secteur 13" [Blacksmith of Sector 13] in a circular fashion and in the middle, his P.O. Box and phone number.

⁵⁶ Fieldnotes, January 21, 2003.

⁵⁷ "Nina sãn n da ruko, ob yella ti tõnd man facture." Moussa, aluminum-smelter. Fieldnotes, February 8, 2003.

⁵⁸ "Number six: ten" – meaning that ten pots of size 6 had been ordered. Fieldnotes, February 3, 2003.

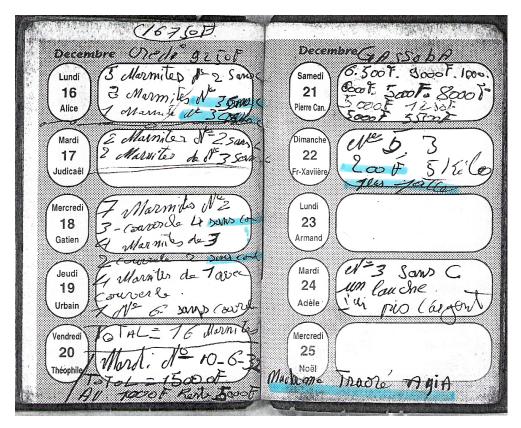


Fig.21. Paul writes some of his orders in an old diary, as well as the prices, total costs, first installments and amounts due, and sometimes the name or nickname (e.g.Gassoba) of the client and the date when the order is due.

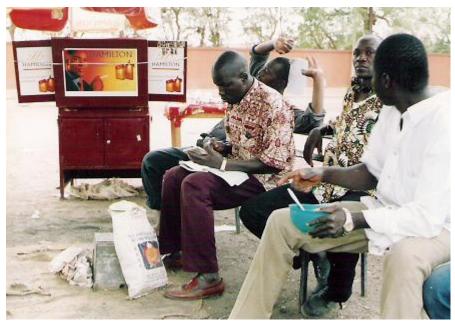


Photo 135. Yacouba calculates the total cost of an order with a calculator, before writing it in the order book. Note the rice bag at his feet, in which are stored all the accounting books.

(see Wan 2001:237, for instance), Moussa is not afraid to declare out loud the sums that he is about to collect.⁵⁹ However, I would argue that the boss is careful to only partially communicate strategic information to his assistants in order to remain the only one making any decision about the course of his business.

Impact of this trial bookkeeping

Keeping a record of their daily earnings and expenses for the purpose of my study was a mixed experience for the volunteers. Most of them – especially in Moussa's workshop – did not see much purpose in doing it and therefore, their motivation quickly declined. Others, like Paul, had a mixture of reactions. On the one hand, he appreciated the idea of knowing how much he earned and spent and wanted it to become a habit. 60 His apprentices, who were doing it too, found the exercise to be useful as they could better appreciate their profit (I see/realize my profit... [It's] necessary), 61 but also their expenses. 62 Idrissa, who had a tendency to squander the money he earned on cigarettes and other consumer goods, realized where his money was going and reduced some of his expenditure.⁶³

Yet, at other times, Paul questioned the interest of his accounting. One day, after computing his receipts and expenses over a short period of time and finding a positive balance,

⁵⁹ The reason may be that since his workers see the quantity of pots produced per day and sold at each order, they already have an idea of the amount of the sale anyway.

⁶⁰ "Na yi habitude, yamb san logame." (It will become a habit, when you leave). Paul, aluminum-smelter. Fieldnotes, December 30, 2002.

^{61 &}quot;Mam bãnga yōodo... [Ya] nécessaire." Ousmane, Paul's oldest apprentice. Fieldnotes, February 18, 2003.

⁶² Léon, one of Moussa's team leaders, had a similar reaction as he was happy to find out his daily earnings and expenses. 63 "Mam bõgame" (I reduced). Idrissa, Paul's second apprentice. Fieldnotes, February 18, 2003.

he commented: "It's good, but where is it?" Yet, after a month of bookkeeping, I found a negative balance (-6,995 F CFA). To my surprise, he merely commented: "We're falling... We fell out of the road. That's all." There was no particular distress in his tone. My calculation was merely confirming his belief about his daily life struggle. Nevertheless, he was one of the two producers who continued to keep books after the end of my study. The other, Martin, bought himself a new notebook to write his daily expenses and earnings as well as the day of delivery of his orders. At the end of his notebook, he had written the names of his clients – all female – who had ordered an oven as well as the phone numbers of two of them.

When their activity is not going well, producers have little margin to reduce their production costs and overall expenditure. Moussa explains that "[when] the work is not doing good, you look for wisdom, you look for a solution... Prices are not good. When the rainy season comes, the market slows down [because] many people farm." In difficult times, he had to readjust his business and family expenses. In 2003, he was considering stopping his activity in Ghana as it was not as profitable as it used to be (especially because of increased competition from other aluminum-smelters in Ghana). Moussa also reduced the distribution of aluminum to dependent aluminum-smelters in order to minimize the risks of not having his pots delivered. Lastly, since the market of aluminum pots was not as thriving as it used to, he also tried to reduce his family expenses. He asked his wives not to prepare lunch meals anymore. Instead,

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⁶⁴ "Ya soma, la be?" Paul, aluminum-smelter. Fieldnotes, February 7, 2003.

^{65 &}quot;Tõnd luiame... Tõnd luia sore. Ya woto."

⁶⁶ However, the balance I had computed did not reflect his true earnings in a Western sense. It was a balance between the total of all his earnings and the total of all his expenses (household ones included). This calculation actually followed his own conception of his finances, considering his costs of social reproduction as part of his overheads (see Clark.1994:146).

⁶⁷ "Tʊma [sãn] pa soma, fo bao yam, fo bao solution... Prix ka soma ye. Si∂gho hãn kɛ, raaga maagadame [ti] neb wʊsgo kodame." Moussa, aluminum-smelter. Fieldnotes, February 8, 2003.

each household member had to buy a simple meal from one of his wives selling cooked food (rice and beans) in front of the compound. Paul also recalled instances when he did not eat to keep the little earnings he had to feed his family.

Saving: the key to success?

Saving⁶⁸ takes many forms, as the majority of producers do not place their savings in a bank account. Indeed, "banks are inconvenient and inflexible places with specific hours of operation and numerous cumbersome procedures required for depositing as well as withdrawing money" (2001:237). The best way for traders to save is to convert their capital into goods, which may "act as saving banks for particular expenses," such as financing their "children's education or an upcoming wedding" (2001:238).

The ideal solution for Burkinabè producers remains putting money aside for both their professional and social activities (see Morduch 1999:1606). According to Ismaïla, Moussa's nephew, the most successful workers in his uncle's workshop are the ones who had a capacity to save money to buy aluminum supplies and begin their own production of pots. Abdul-Wahab, an older tire-worker, believes that the only solution for his activity to improve is for the market to improve, so that more money comes in and gives him the ability to set some aside. ⁶⁹ The problem is that "today you earn a lot," [but] you can stay a week* [without] earning anything.

⁶⁸ To save is mostly expressed with the verb "*bīngi*," "to put in a safe place, to set aside" (Nikiema and Kinda 1997:120). An older dictionary defines this verb as "to set aside waiting for maturation (i.e. cereals); to set aside in reserve, as a deposit, to keep with care" (Alexandre 1953).

⁶⁹ "Hãn be ti fo pamda bilfu, fo me n yak bilfu n $b\tilde{i}ngi$, ya soma. » (If you earn a little [more], you too take a little to set [it] aside, it's good.). Abdul-Wahab, tire-worker. Interview, August 27, 2003.

[So] you will take [the little that you have] and spend it [for basic necessities]. How will you save? This work is hard. Don't you see?"⁷⁰

Still, most producers set money aside as often and as much as they can. Money is saved in piggy banks and some use a community bank, both for short-term and longer-term purposes. Many accumulated money to begin their business and buy their first set of tools and supply. Moussa recalled how after six years, he left his first job at a mill with 45,000 F CFA of savings and started anew to learn aluminum-smelting. Likewise, the wheeler of the first team in Moussa's workshop sets aside 10,000 F CFA each week at a friend's house to buy aluminum supplies. Whenever he can, Boureima also sets money aside to replenish his stock of *bante* supply. About two or three times a week, when he receives money from the sale of a batch of sandals or other products, he takes between 500 F CFA and 1,500 F CFA (depending on the amount of the sale) aside as "savings" (économies) for his next purchase of supplies.

A number of producers save their money in small community banks. This is the case of Léon, who began keeping his savings in a local community bank called *Caisse Populaire*. To open an account, the formalities are simplified as the client only has to bring an identity card (*carte d'identité*), two pictures, and a deposit of 1,000 F CFA. At the time of my study, Léon had about 300,000 F CFA in his savings account, which he was able to set aside after a sizeable

⁷⁰ « Aujourd'hui tu gagnes beaucoup, tu peux faire une semaine, ka pam ye. Fo na n dika n man dépenses. Fo na bĩnga wan-wana? Ya [le?] từma ya toogo. Yamb pa ne? » Abdul-Wahab, tire-worker. Interview, August 27, 2003. ⁷¹ Out of 23,000 F CFA earned per week, he gives 10,000 F CFA to his wife, save 10,000 F CFA for aluminum supplies, and keep 3,000 F CFA for himself, which he "eats all" (m di fãa). He saves the money at his team leader's house and stores his stock of aluminum at another colleague's house – for he has more room than he. Fieldnotes, February 4, 2003.

⁷² When he earns 1,500 F CFA, Boureima gives 500 F CFA for his wife's daily purchase of food, he saves 500 F CFA for his next purchase of supply, and keeps 500 F CFA with him for other personal or professional expenses. During the same period of the study, Rasmane was not able to save any money as he had more constraints to face. While Boureima has no children (they all died at a young age), Rasmane has two young children. One of them was often sick and he had to pay for medicine and other medical bills. As his neighborhood was in the process of being allotted by town planners, he also had to pay a fee to apply for the ownership of his lot where he had built his house.

transaction of aluminum pots. Paul too has a savings account in a Caisse Populaire, although he initially declared that he did not earn enough money to save. 73 While he asserted that saving money to buy more aluminum supplies would be useless as it would take too much time, ⁷⁴ I learned later that he was saving money to pay for his daughter's school fees and other social expenses.⁷⁵

Moussa is the only producer who tried to open a bank account in a regular bank. Three years prior to my research, he had opened a bank account at Bank of Africa with the help of his literate young assistants. Keeping his savings in his house was not an option, as it was not secure enough. ⁷⁶ In addition, he hoped that by saving a substantial amount of money in the bank, he might obtain a loan for his business activities. That is why he made an important deposit of two million CFA francs (about \$3,000) upfront.⁷⁷ However since he got into debt shortly after that, he was not able to save anymore and his project did not work out.⁷⁸

There is an abundant scholarship on rotating savings and credit associations (ROSCAs) or tontines in West Africa. Yet, I found that such associations do not seem to work among these male producers. Among my initial sample of sixty producers, very few belonged to any type of group or association contributing to a tontine. Among the aluminum-smelters, only two

73 "Moyens wa, ka sek n bīng ye." ([I don't have] sufficient means to save). Paul, aluminum-smelter. Interview, January 28, 2003.

⁷⁴ "Sãn bĩngda ligdi, ka na pam tao tao ye. Na kaosame [tõe ta yuma a yiibu]. Na ka mams ye." (If you save money, it will not go fast. It will last [it can take up to two years]. I've never tried [yet]) In addition, he says that "fo tõe bingame, ti raag ka be, ti fo rik n di." (You can save, but if the market is down, you will take [your savings] and eat [them]). Paul, aluminum-smelter. Interview, January 28, 2003.

He had recently withdrawn 40,000 F CFA to go to a funeral in his home village. See Chapter XV.

⁷⁶ "Fo pa tõe bĩng rogõ... Ya rabeema." (You cannot save in your house... I would be afraid." From rabeem: fear, dread, shyness (Alexandre 1953).

⁷⁷ In 2000, the exchange rate was 651 F CFA for \$1.

⁷⁸ "[Mam da ratẽ n] bĩng ligdi ti ob wa n peng mam. La ligdi ka be, [mam] pa tõe bĩng ye." (I wanted to save money so that they could [give me a] loan. But there's no money [anymore], [so I] cannot save." Moussa, aluminumsmelter. Fieldnotes, February 13, 2003. However, Moussa still uses this account for his transactions.

belonged to the professional association (*groupement*) "Songtaaba."⁷⁹ They met every month and gave an individual contribution of 15,000 F CFA.⁸⁰ These collective savings were placed in a bank account (in a community bank). With the help of a German-sponsored association, the Bureau des Artisans (The Craftsmen's Office), this association was able to obtain a loan of three million CFA francs, which was split among fifteen members.⁸¹ One of these aluminum-smelters received 250,000 F CFA to invest in his activity.

The other *tontine* attempts were short-lived. In a context of recurrent money shortage, *tontines* are rather fragile. While a group of people – not always from the same trade – decides informally to put their savings together in order to better face life's daily challenges, the very reasons that motivate them to create a *tontine* can also bring it quickly to an end. Rasmane and Boureima began a *tontine* with eight other tire-workers in Cité An II market. Everyday, they each gave 100 F CFA, which amounted to 1,000 F CFA per day. At the end of a 30-day period, they reached the amount of 30,000 F CFA, which they divided between two people, giving 15,000 F CFA to each. They continued for approximately five months, until everybody had received a portion of money once and then they stopped, probably because of the decline of earnings during the rainy season. Martin too had participated in a *tontine* with thirteen other traders, who were saving 500-1,000 F CFA each week. However, the participants quickly began

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⁷⁹ *Songtaaba* is a widely used name for this kind of association as it means "helping one another" in mooré, which could be the equivalent of "solidarity.'

⁸⁰ This is quite a substantial amount which, I would argue, certainly deters many producers from participating.

⁸¹ According to the president of the association, this amount was "*not enough*." They had initially applied for a loan of 10 million CFA francs but 'only' got 3 million F CFA. However, while he claimed that each creditor received between 50,000 F CFA and 75,000 F CFA, they more realistically received around 200,000 F CFA each, like one of the aluminum-smelters testified. They will have a year and a half to reimburse it with the proceeds earned from their investments. Interview, February 10, 2003.

⁸² Two of Paul's apprentices, who had started a *tontine* too, illustrated this very well: "We don't save anymore... There's no money" (Tõnd pa le tõe bĩng ye... ligdi ka be). Their tontine did not last more than a week. Ousmane, Paul's first apprentice. Fieldnotes, February 18, 2003.

to have problems and missed their turn. The treasurer also took money from the collective savings, so the project died.

Saving in the form of goods may actually be the surest way to hoard assets while protecting resources from everyday demands or temptations. Functioning with limited working capital,

Martin often resorts to this strategy and is very conscious that it is an actual saving strategy:

"I cannot say that I have a fixed agenda like this, saying that each day, I save.. 500 or I save 1,000 [CFA] francs. No! You see, when there is an opportunity [and] I can save, I do it [...] I take the example [when] I bought the iron [supply]: it was an opportunity. [Because] I [know] that if I keep the money, the hard cash, I will eat it. So I [bought] it now, I stored the sheet metal. Period. It's [a form of] saving." 83

This practice acts also as a protection against thieves. Martin explains, "even if there are thieves that enter [the compound], they will only find some iron. While I know that in the iron [supply], I can have [make] many things. You see?" Moussa also uses this strategy on a larger scale by converting all the profits earned from his workshop in Ghana into aluminum supply, which is then shipped to his workshop in Burkina Faso. 85

Producers may also invest their money into products bought from other craftsmen as another form of saving. Again, Martin occasionally buys charcoal stoves from other tinsmiths and explains that "even if [he] resell[s] the stoves at the same price at which [he] bought them

⁸³ « Je peux pas dire que j'ai un programme fixe comme ça, en disant que chaque jour, j'économise.. 500 ou bien j'économise..1,000 francs – non! Tu vois lorsque l'occasion se présente, je peux économiser, je le fais. [...] Je [prends] l'exemple [quand] j'ai payé le fer: l'occasion s'est présentée, et je trouve que si je garde l'argent, l'espèce, je vais le bouffer et j'ai pris ça maintenant, j'ai stocké avec les tôles. Point. C'est une économie. » Martin, tinsmith. Interview, February 20, 2003. This is a good illustration of the *mètis*, a concept developed by Détienne and Vernant (1974), which implies an "opportunistic sense" (Schwint 2002:140).

⁸⁴ « Même si y a des voleurs qui vont rentrer [dans la cour], c'est le fer seulement qu'ils vont trouver. Alors que je sais que dans le fer, je peux avoir beaucoup de choses. Tu vois? » Martin, tinsmith. Interview, February 20, 2003. ⁸⁵ Léon, who has worked in this workshop in Accra for several periods of time, explained the process: "[Ne rugdo ligdi, tõnd] n yak n da wagdo. Hãn [ya] wɒsgo, [...] ob tool ti wa ka." ([With the money [from the sales of pots], we] buy aluminum. When [there is] a lot, [...] they request [that it] comes here [in Ouagadougou]). Léon, one of Moussa's team leaders. Fieldnotes, February 4, 2003.

[i.e. wholesale price],"⁸⁶ he recovers his initial money to buy sheet metal. In other words, he "withdraw[s] [the money] as savings."⁸⁷ Putting aside sprues, aluminum dross, or any other reusable supply is also an act of saving (see chap. IX, X, and XI).

All these producers would like to save more to have a financial buffer against unexpected demands and live a more comfortable life. However, the economic reality makes these savings rather short-lived. As Martin claims, "a poor can never save [...] because he doesn't make any money. If you're making money, you can save. But if you don't make any money, it's difficult to [save]"88 Owing 20,000 F CFA to his daughter's school, Martin does not even try to save money little by little to solve his debt. Whenever he earns a large enough amount of money, he will take about half of it to pay part of his debt. "If somebody comes ... and orders [a motorcycle's] seat or shelves... well, if I do the work [and] find that I [earned] 10,000 francs ... I can take 5,000 francs to give [the school] and keep 5,000 [F CFA], well to do something [else] with."89

⁸⁶ « Même si je revends les foyers au même prix que je les ai achetés... » Martin, tinsmith. Fieldnotes, February 25, 2003.

^{87 «} J'ai enlevé ca comme économie ». Martin, tinsmith. Fieldnotes, February 25, 2003.

⁸⁸ « ...un pauvre ne peut jamais économiser [...] parce qu'il gagne pas. Si tu gagnes, tu économises. Si tu gagnes pas, c'est dur [...] d'économiser ». Martin, tinsmith. Interview, February 20, 2003. Another common response is that "there's no money to save!" (Ligdi ka be n bîng ye!).

⁸⁹ « Si quelqu'un vient, il me donne une commande de ...selles ou bien d'étagères... bon si je fais le travail, en trouvant que j'ai eu 10,000 francs, avec les 10,000 francs, sur place, je peux enlever les 5,000 francs pour aller donner et garder les 5,000, bon pour faire quelque chose avec. » Martin, tinsmith. Interview, February 20, 2003.

Due to limited funds, producers generally avoid buying or selling on credit. Failure to be reimbursed threatens their economic stability and survival (see Clark 1994:240-1). Stories of clients not paying back their debts are widespread and constitute a strong warning against this practice. Abdul-Wahab has experienced this. When a fire broke out in the central market and caused the local authorities to shut it down, he lost track of a trader who owed him money from the sale of tire-sandals. "I don't know where he's gone. I asked [...], I looked for his place [house], but [...] I haven't found [it]. But I continue to go [there, looking for him]" (see Clark 1994:206). Another aluminum-smelter lost 65,000 F CFA about twenty years ago, after selling pots to a retailer on credit, who went to prison for forgery. "Everything was lost... But he has a wife and children, [so] I couldn't say anything. "92 Moussa too lost 250,000 F CFA after a trader from the town of Koudougou went bankrupt and did not take any action either. However when another man refused to pay his debt after buying pots from him on credit, Moussa asked one of his nephews, who was a policeman (gendarme), to sue the man who was residing in another locality.

The only form of debt that producers may allow themselves to get into is borrowing money from friends or relatives over a very short period of time. This practice is mostly resorted to for

⁹⁰ I make the distinction between credit and loan to better understand producers' rhetoric – even though the latter use the same term for both (*samde*: credit, debt or *crédit*, in French. Alexandre 1953). The first term designates any cash advance they may receive from an acquaintance that will be refunded shortly. It also designates the action of purchasing a good (usually for a relatively small amount of money) without paying it right away. The second one characterizes the service of bank or micro-finance institutions lending money to clients against the payment of interests and the provision of guarantees.

⁹¹ "Je sais pas où il est parti. J'ai demandé [...] m bao zingũ la [...] m na ka niã a zinga. La m kıtem kẽndalame." Abdul-Wahab, tire-worker. Interview, August 27, 2003.

^{92 «} Fã meneme... La a tara paga la kamba, [mam da] ka tõe yel baafi. » Aluminum-smelter. Fieldnotes, September 25, 2003.

^{93 &}quot;Ob luime... pa tõe yao ye." (They fell... [They] cannot pay). Moussa, aluminum-smelter. Fieldnotes, January 29, 2003.

social purposes but also occasionally for work-related matters. At a time of shortage, Paul borrowed 4,500 F CFA from a friend to buy aluminium and keep working. One day, Martin had a great opportunity to buy a large quantity of iron sheet metal for the amount of 45,000 F CFA. Since he already had 25,000 F CFA available, he borrowed 20,000 F CFA from a neighboring trader, which he refunded as soon as he received money from the sale of an oven. Even though most of these debts are paid back within a few days, producers remain reluctant to borrow money or buy on credit, as they are fully aware that it is often difficult to repay.

Some producers have had problematic experiences from loans obtained through microfinance institutions. In 1992-93, Martin borrowed 100,000 F CFA from a micro-credit association that targeted women but also loaned money to men. Even though this loan was helpful, it was too difficult to reimburse. Martin had to use the loaned money to solve unexpected problems, instead of investing it into his business. He even had to sell his pigs to be able to pay the money back. ⁹⁴ After this experience, he does not want to hear about loans anymore. "*I'm afraid of loans*," he concludes. ⁹⁵ He considers that people who are constantly looking for loans "don't believe that they can solve their problems themselves." ⁹⁶ Such people "end up becoming beggars."

Yet, other producers strongly believe that obtaining a loan would be the ideal solution for their business to prosper. "Money is the solution, [...] with loans, with [financial] aid." Regardless of their limited funds, they do not doubt that they will be able to reimburse it.

⁹⁴ As a Protestant, Martin may raise pigs – unlike Muslims.

^{95 &}quot;Avec les prêts, j'ai peur." Martin, tinsmith. Fieldnotes, February 12, 2003.

^{96 «} Ils ne pensent par qu'ils peuvent régler leurs problèmes eux-mêmes. » Martin, tinsmith. Fieldnotes, 19, 2003.

⁹⁷ « par finir ce sont devenus des mendiants. » Martin, tinsmith. Fieldnotes, 19, 2003.

⁹⁸ "Solution ya ligdi [...] ne samde, ne sõngre. » President of an association (*groupement*) of aluminum-smelters. Fieldnotes, February 10, 2003.

Alassane's comments capture producers' way of reasoning. He claims that if he had 500,000 F CFA, he would invest in buying a large quantity of iron supply. The profit from its transformation into springs and clothes hangers would amount to one million CFA francs. However while he might borrow 5,000 F CFA or 10,000 F CFA from a friend in an emergency situation, he would never ask a friend for such an amount of money for his enterprise. The only acceptable solution would be to obtain a loan – even if he never attempted to acquire one.

"A: We want this [obtaining a loan]. To work.

I: Have you already tried to obtain a loan somewhere?

A: No, no.

I: Why not?

A: [...] I never thought of it! Asking for loans, no, no, no.

I: Would you like to have one?

A: Yes, I'd like to.

I: But the problem with a loan is that [...] even during the rainy season, when you don't have money to reimburse...

A: No, it's not a problem!

I: But you will also have to pay interests.

A: Yeah... about 110,000 to 115,000 [F CFA – for a loan of 100,000 F CFA, e.g.]. I know. [...] It doesn't bother me. It's not a problem. We'll reimburse with the interests, it's not a problem.

[...]

I: [What would be a good loan for you,] to develop your workshop?

A: Well, one million is good.

I: *If they give less,* [...] *it's not interesting* [for you]?

A: It's [still] interesting. Even 500,000 [F CFA], it can work.

I: What would you do with this money?

A: With this money, since I know that iron [supply] is cheaper during the rainy season, I can store it so that, during the dry season, we begin to produce. I know that it will bring [fruit]. There's no question about it. It pays well.

I: And what would you do with the profits to progress?

A: Well, with the profits, I would do what I said: the lottery stall [he laughs].

Alassane, spring-maker. Interview, August 26, 2003.

Indeed, like many Burkinabè men, Alassane often bets on the horses, hoping to win some day. ⁹⁹ Knowing that betting is a popular practice in Burkina Faso, he would like to open a lottery stand to sell tickets.

⁹⁹ Among the many producers that played at the national lottery for horse-games (PMUB), one tire-worker acknowledged that he was playing horses with the hope of winning enough money to open a small shop and sell spare parts.

Many producers believe that they will not qualify for loans and do not even try to apply. Malik believes that his house and his moped or his brother's salary as a teacher are not enough guarantees to be eligible for a loan from a regular bank. Ismaila believes that a bank loan would not help him "because they will not give me enough money.. and for me, what I need to really get well, is a sum around 400,000 – 500,000 [F CFA]. If I have 400,000 – 500,000 CFA francs, I can already work alone, you see, without [doing] odd jobs for people. Yet, if you want [...] a loan that reaches that level, you really need to have [saved] at least eight million CFA francs." 100

In this chapter, I attempted to demonstrate the diverse methods that these producers use to assess their gains and loss. Like Kumasi traders, they "make practical and conceptual distinctions between working capital, capital growth, expenses, and disposable income, although they use local terminology" (Clark 1994:146). In their calculations, they are very careful to recover their operating costs while maintaining a profit margin as substantial as possible. In fact, most accounting and investments strategies focus on this profit margin as it is the most variable and sought-after component. Firstly, this margin is extracted out of the interplay between various scales of value (see Guyer 2004). Secondly, producers have to make critical choices in the ways they invest their earnings: in their work activity, in social expenses, or in savings. What motivates their choices plays an important part in their strategies and priorities, as I discuss next.

¹⁰⁰ « puisque ils vont pas me donner suffisamment d'argent.. et moi, ce qui me faut pour que je puisse vraiment aller bien, c'est une somme qui tournerai autour de 400.000 – 500.000 francs CFA. Si j'ai 400.000 – 500.000 francs CFA, je peux déjà commencer à travailler tout seul quoi, sans le petit travail avec les gens. Et pourtant, si tu veux [...] un crédit qui atteint ce volume là, il faut vraiment que tu aies misé au moins, 8 millions de francs CFA comme ça. » Ismaïla, 'satelite' aluminum dealer, Moussa's nephew. Interview, August 21, 2003.

Chapter XV. Working for social gains

After demonstrating in the previous chapters the dynamic and purposely economic organization of these activities, I would like to dedicate the last two chapters to another important aspect, that of their meanings. Indeed, as Karl Polanyi argued half a century ago, "economic action is embedded in social life and social institutions" and these production activities do not fulfill a sole economic purpose (Darr 2003:32). In fact, because they are organized according to economic principles and meet economic expectations, they are also able to satisfy social expectations. In his pioneering study on the gift, Marcel Mauss wrote that "what [people] exchange is not solely property and wealth, movable and immovable goods, and things economically useful. In particular, such exchanges are acts of politeness: banquets, rituals, military services, women, children, dances, festivals, and fairs, in which economic transactions is only one element, and in which the passing on of wealth is only one feature of a much more general and enduring contract" (Mauss 1990 [1950]:6-7).

In this chapter, I want to draw attention to the close interaction between the economic and social motivations of these producers. Producers seek to attain a wide range of social achievements through their activities. This endeavor influence their conduct and strategies to produce a sufficient profit-margin to sustain themselves and their families. The dimensions highlighted in Mauss' essay cast light on behaviors that might seem quite irrational from a narrowly economic standpoint. To illustrate his case, Mauss recalls a story very similar to what is commonly observed in other parts of the world like Africa. In his home region of Lorraine, in France, he knew a family that lived modestly but "ruined itself for the sake of its guests on saint

days, and at weddings, first communions, or funerals. One must act the 'great lord' upon such occasions" (1990:84). Mauss held that such practices continue to exist, as people spend "with the utmost extravagance on guests and on feast days, and with New Year gifts" (1990:84). The purposes of such practices are not only economic but social and symbolic. "To be the first, the most handsome, the luckiest, the strongest, and wealthiest – that is what is sought after, and how it is obtained [...] In this case riches are from every viewpoint as much a means of retaining prestige as something useful" (1990:96).

Drawing on Guyer's work on the notion of "marginal gains" (2004), I argue that producers generate various types of gains from their activities, by "their ability to bridge enduring disjunctures." In their work, they constantly strive "to link different standards of valuation in a gainful way" (Geschiere et al. 2007:38). While they organize and manage their work to generate economic profit, producers are also driven by social motives that strongly influence their work organization. From the utilization of the workspace, to the way they relate to one another, invest their money, and live their religious beliefs and practices, producers tie their activities to a wider social reality from which they cannot be detached. In essence, craftsmen's work involves a "broader perception of knowledge (connaissance) that links expertise (savoir), way of being (manière d'être), ethic, life project (projet d'existence) and relationship to the world (rapport au monde)" (Schwint 2002:243, my translation).

¹ See Chapter V.

Workplaces are often open spaces. They allow other kinds of activity to take place and are accessible to people other than the workers themselves, at least to some extent. In the African context, the blacksmith is a typical example. Besides being a "skilled worker," the blacksmith is often also a "big man" and a "medicine man" (Lancy 1980:267). Due to his specific role in the community, "the forge, also, serves as a public gathering place, a place to exchange gossip." If the blacksmith knows how to appropriately use the information exchanged in his workspace to judge in the court, "his prestige will rise and he will more often be a party to gossip." However if he fails, he might not only lose his status of a big man but also as a skilled worker, "because he may lose all his clients" (1980:268). Clearly, the economic and social statuses of a producer are intertwined, and these relationships are manifested in the use of the workspace itself.

In Burkina Faso, there is a regular flow of visitors, friends, and relatives visiting the workshop, even if very briefly. Friends stop to say hello, joke, chat a little, sometimes for less than a minute, and move on. Producers always have a wooden bench in the workshop or outside in the shade to accommodate their visitors and their clients. Depending on the person or the amount of work to do, they may interrupt their task for a while or, instead, exchange some news while carrying on their work. Some visitors stay outside the workshop, standing at the door or peering through the window, while others enter the production area to chat, look at the work, and sometimes even give a hand, just for the fun of it. This sometimes happens in Paul's workshop, where a visitor may replace an apprentice at the wheel for a moment when the latter has to do something else.

In all the workshops I studied, there was never a day without visitors coming to greet the boss or his apprentices. These visitors include relatives or suppliers, merchants in other trades, members of the same religious or village communities, or neighbors with whom they have developed a friendship (photo. 136-7). However they can also be beggars soliciting for alms or peddlers attempting to sell goods. Among his visitors, Paul had a "friend" (zoa) and tradesman selling goods in Côte d'Ivoire, a neighbor selling fuel oil nearby, and mechanics working in neighboring shops who had come for a short chat. Likewise, as a man called on Martin in his workshop, the latter introduced him to me saying: "This is my treasurer" (Ça c'est mon trésorier). The man was the treasurer of a local branch of the Assemblies of God Youth Ministries,² of which Martin himself was the vice-president. He had stopped by to greet Martin and exchange information about some impending meetings and left shortly after.

A large number of these short interactions with sociable visitors and close friends consist in making jokes. Such teasing is often accompanied with gentle insults and name-calling. Among my sample of producers, Paul the aluminum-smelter was the most extrovert and convivial, and a lot of his exchanges with visitors and even his apprentices were playful. In one instance, a man arrived around noon to greet Paul. The latter jokingly called him "El Lagui Amadou," as if he had been to Mecca. The man joked back, pretending to destroy the clay cast with his foot, to which Paul replied, referring to me: "The White [woman] will beat you up!" Seeing that the pot that Paul was working on had failed (there was a hole in the cast), the man, teasing him, said in French: "OK, I will pay you. This is a loss, isn't it? How much is it?" Paul replied in French as

² Jeunesse des Assemblées de Dieu, which Martin designates by its acronym, JAD.

³ "Nasaara na pãbda fo!" *Nasa:ra* (from Arabic; pl. *nasa:rba*): European [White people] (Alexandre 1953).

⁴ French is often used when joking as if to signify that they are switching the language code.



Photo 136. Paul and his apprentice Ousmane chatting with a neighboring mechanic at the end of the day (around 5 p.m.).



Photo 137. Boureima and Rasmane posing with a friend, a retailer of tire-sandals, who is also one of their clients.

well: "A thousand francs." The visitor took 250 F CFA out of his pocket and said, still in French: "I forgot, I haven't eaten yet." A rumpus ensued as Paul and his three apprentices tried to grab him and take his money, until the man fled outside and left (photo. 138).

Producers may also offer gifts in the form of snacks or small sums of money to their visitors – as well as receiving similar gifts from them. For the amount of 25 F CFA to 100-200 F CFA, they may buy all kinds of soft drinks, snack food, or cola nuts from peddlers passing-by to share with their guests. Others will have someone prepare tea to share with their company. More rarely, they may give visitors a small sum of money (of about the same value as the snacks), just for the purpose of blessing them. One day, as Paul had earned a significant amount of money from repairing a car part (8,000 F CFA), he offered 750 F CFA to an older man who stored his painting and masonry equipment in his shop. When he had no job to do, the man waited on Paul's bench outside his workshop, chatting with him and neighboring shopkeepers. Since Paul knew his precarious situation, he offered him small monetary gifts from time to time, whenever he could.

Because the workspace is open to the outside, producers can easily solicit or be solicited by peddlers who pass by. All kinds of street vendors stop in front of or even enter the production space at the demand of the workers to show their goods. Producers may interrupt their work for a short while to purchase traditional medicine, some pieces of second-hand clothing, snack food, and many types of local biscuits and pastries, soft drinks, local porridges and other kinds of cooked food (photo. 139). Habitual peddlers who pass the workshop as part of their regular

⁵ Visitor: « Bon, je vais vous payer. Y'a [une] perte non? C'est combien? »

Paul: « Mille francs »

Visitor : J'ai oublié, je n'ai pas mangé » Fieldnotes, December 18, 2002.

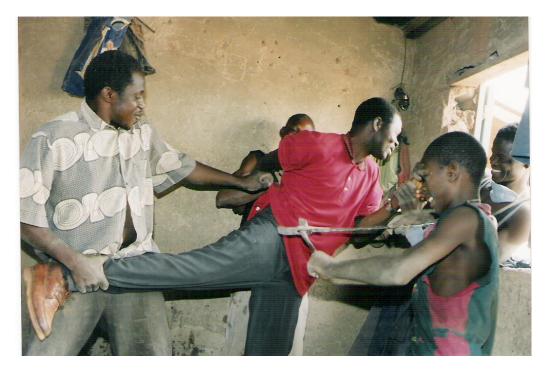
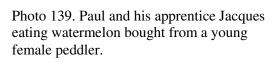
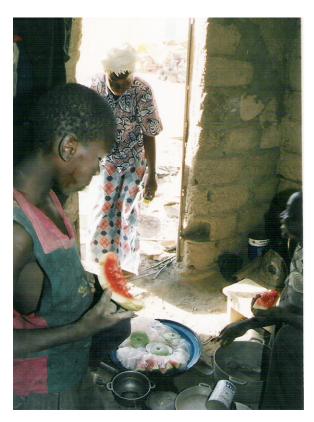


Photo 138. Paul and his apprentices jokingly 'attacking' a friend.





circuit often become friendly, exchanging jokes, and even asking producers for services such as repairing a broken thong from flip-flops.

When economic relationships are also social ones – or vice-versa

It is difficult to determine when a particular relationship is mostly economic or social. Most of the time, these dimensions are intertwined and mutually reinforcing – for the better or worse. Studying the social networks of a small contractor in Alabama, Clawson writes that his ties are both "professional" and "social" (2005:278). As his clients know him personally, they will hire or recommend him more easily "because they know he will complete the work in a timely, competent, and courteous manner and because they like him" (2005:278). In turn, the contractor takes advantage of his personal relations to gain access to key information "for his own benefit and to be used in trade for other people's information" (2005:255). In ways that are very close to what can be observed in an African context, this contractor is always looking out for information, greeting acquaintances as he drives by and noticing every change in the surroundings. Even his activities during his days off are sources of information, when gossiping, being at the bar, or going to church and provide opportunities to develop and maintain his networks. Nevertheless, "[t]hough he is keenly aware of the professional benefits that may accrue from socializing, [...] he resists framing his social interactions as mainly strategic" (2005:247).

In Burkina Faso too, professional relationships mix both economic and social dimensions.

Between bosses and their apprentices, clients, and suppliers as well as among apprentices and craftsmen, such economic relationships are never dissociated from their social and cultural

background, which provides them a space to happen and to grow (Elyachar 2005:152-3). The relationship between the boss and his apprentices is thus a moral one, rooted in a culture where age groups matter. The boss is clearly a patriarchal, even paternalistic figure, who considers his apprentices as "children" (kãmba) and is morally responsible for them. Indeed, apprentices are merely called "work children" (tom kamba; sing. tom biiga) or simply "children." As such, apprentices are expected to show respect to their boss, obey him, run errands at his request, and do all the lowly tasks that a young person can do for an older one.

Yet, the relationship between bosses and their apprentices/workers may be ambiguous, ranging from authoritative to friendly and sometimes even quite permissive. The master's authority may be put to the test as apprentices, like children, may behave in an impertinent or even rebellious manner. This was well illustrated as Paul returned from an errand and found that his apprentices had not begun working during his absence. He turned to his friend sitting on the bench and complained: "I came and left. They haven't started... It's not worth it*." He then turned to the young man, selling car parts in the next shop, who was chatting with his apprentices and told him: "Mister the journalist, I'm going to ask you to leave the kids so that they [can] work."8 However, the young man, being slightly insolent, did not leave the very moment Paul asked him. As I have already shown, "impolite" apprentices are eventually asked to stay at home, sooner or later. Even if a boss may seem slack, his patience only lasts but for a certain time toward the apprentice who keeps breaching moral codes (see chapter VIII).

 ⁶ See chapter XI.
 ⁷ « Mam sig n log. Ob na pa sing ye... c'est pas la peine. » Paul, aluminum-smelter. Fieldnotes, December 21, 2002.
 ⁸ « Monsieur le journaliste, mam na bõnsa wa, bas kãmba ti ob tumde. »

When the relationship is good, bosses can be quite friendly with their apprentices. This was especially true with Paul who is the most convivial producer of all. He was often poking fun at his apprentices, who usually enjoyed it very much and had enough liberty to reply back. He regularly addressed them with funny or kind nicknames, calling his oldest apprentice "Oussou," "Koro," or "vice-president" (vice-président) and his youngest one, "Chauffeur" (fireman)¹⁰ or "Monsieur Zo," alternatively. On Christmas Day, they were all invited to visit him and share his meal but only Ousmane was able to do so.

Relationships among apprentices also extend beyond work itself. Even though they may not know one another before entering the workshop, they quickly build bonds both at work and outside. Joking, playing games, and sharing food, drinks, or break times together are the main ways in which apprentices express and build their friendship while at work. Being all male activities, jokes and name-calling among apprentices quickly 'degenerate' into a rumpus and fake fights, which last only a few seconds. Attributing nicknames is also a way to demonstrate friendship. When Moussa re-built the additional workshop in the back of the compound, the young men immediately named their new workspace by painting their nicknames on the walls: "Coro¹¹ Maro" or "Al-Kaida" for one supporter of the Islamic movement, "Shocky Shock" for another martial arts movie fan, "Zidane" or "Zizou" after a famous French soccer player, or "Coro Lapin" 12 because of his long, rabbit-like front teeth (photo. 140). Close and, of course,

.

⁹ Paul told me that "koro" means boss or chief in dioula.

¹⁰ Literally, "the one who heats up" (from *chauffer*: to heat up). As his task was to turn the wheel in order to blow air below the fireplace where the aluminum is melting. In standard French, "chauffeur" means "taxi/bus/truck driver."

¹¹ From *koro*: chief, boss in dioula.

¹² Lapin: French for 'rabbit.'

related apprentices also share life-crisis events together, such as weddings, name-giving ceremonies, or funerals as well as other festivities.

While relationships with clients or suppliers are mostly professional, they may sometimes become friendlier. Some of these relations grew into friendships while others began as friendships or mere acquaintances, which led them to become clients. For instance, one of Paul's regular female clients once invited Paul to attend a wedding in her home. Another one lived in the same compound where Paul used to live when he first arrived in the capital. When Paul opened his own workshop, she began to buy pots from him. Producers may also buy snacks or



Photo 140. New workspace. The young workers immediately 'baptized' their new space by painting the walls with some of the workers' nicknames.

drinks for their clients or suppliers, depending on the relationship, the time they have, the cash money available, and their mood.

Craftsmen also have their own network of collaborative partners, with whom they exchange various kinds of service such as tools, supplies, storage space, sending clients to one another, or helping carry out a large order (Elyachar 2005:138-40). This is particularly the case when workshops are located in the same vicinity, such as the tire-workers in Cité An II market. In the neighborhood of Tampouy, two aluminum-smelters located within a few feet of each other help each other during slack times. As one was more successful than the other, he loaned aluminum supply to the other when he ran short. The latter then produced pots for him and was only paid for his labor input. In doing so, he did not remain out of work, kept the shop running, and above all, still earned a living for himself and his apprentices. Producers explain such reciprocal behaviors by saying that "we help each other." This solidarity may also acts as a buffer against fraudulent clients.

Investing into social networks: transforming money into social gains

Scholars have long shown the tight relationship that exists between money and prestige, wealth and social status. Through lavish consumption practices in religious festivals and other outward displays of wealth such as in houses, cars, clothes, or hairdos, people from all societies and age groups spend a considerable amount of money, time, and effort to demonstrate their power and thereby, affirm their identity and place in society. In Yoruba social life, "[m]oney and status [...] are closely linked, but to be flush with money has no social meaning without some

¹³ "Tõnd sõngda taaba." Rasmane, tire-worker. Fieldnotes, July 21, 2003.

means of transforming it into a meaningful form of wealth" (Wan 2001:244). Even if female *gari* traders enter the trade primarily to provide "sustenance" for their children, they have many other social expectations from their earning activities (2001:246). To establish their status as social and economic leaders, *gari* traders build houses and become involved in the reciprocal cycle of festivals, proud to fill their house with "supporters, kin, and friends" (2001:248). In other words, "[t]he accumulation of profits is fundamentally and organically linked with the maintenance and support of the social networks that fund life crisis celebrations, and thus establishes personal identity and provides long-term spiritual distinction" (2001:249).

Reviewing studies on African entrepreneurs, Eckert underlines the historical tendency towards 'unproductive' display of their accumulated wealth (Eckert 1999). Likewise, McCaskie pointed out the "powerful drive to demonstrate status as consumers among the new Asante business class in the inter-war period" and Bayart wrote that "African entrepreneurship has been oriented to consumption, display and munificence and has lacked the discipline associated with productive accumulation" (Eckert 1999:111). Such behaviors are transmitted to younger generations, as "the children are socialised into the norms of success and particular ways of acquiring and managing prestige" (Lawuyi 1997:483).

In Burkina Faso also, money is a powerful tool to gain social status and power, even if it may not be as manifest and profuse as elsewhere on the continent. If the producers I studied are far from earning as much money as the most successful traders and entrepreneurs, they are still driven by similar motivations and concerns. A man's success is evaluated by his capacity to feed his household, support a number of dependents (wives, children, and kin) as large as possible,

acquire valued material and prestige goods such as a house, a motorcycle, a car, and invest in social networks through religious and other social celebrations and events.

A man's ability to establish, sustain, and broaden his family is a source of pride as it validates his social status and power. Boureima believes that the principal role of the money earned in his activity is "to care for" and "look after the family" (giet famille rāmba). ¹⁴ Talking to his younger brother ¹⁵ about the enviable position of "fonctionnaires" (civil servants), he commented that if he studied well, he might become a civil servant, "raise [a family, and] look after [them]." ¹⁶ He also added that he "could take a loan to get married [or] to buy a motorcycle." ¹⁷ Through his perception of the life of a civil servant, this tire-worker revealed his conception of a good life: having the means to marry and raise one's family in a comfortable enough way. ¹⁸

Most of these producers have the responsibility to care not only for their own family but also for other dependents. They handle the household's main expenses such a paying the rent, daily providing money for their wives to purchase vegetables for the sauce ($z\tilde{e}ed\ ligdi$), ¹⁹ buying a bag of rice or corn flour when needed, ²⁰ supplying charcoal or wood, kerosene for the lamp, barrels of water, ²¹ and other necessities for the house. ²² While most producers give 500 F CFA to

¹⁴ Boureima, tire-worker. Fieldnotes, June 16, 2003.

¹⁵ A young teenage boy in his third year in junior high school.

¹⁶ "Fo tõe zã bãmba, [fo tõe] get famille dãmba."

¹⁷ "Fo tõe rika samde, n yak n furi, n da montere."

¹⁸ He was married himself but had lost two children and was hoping to save enough money to buy a moped, some day. In the meantime, he commutes by riding his bicycle.

¹⁹ Lit. "money for the sauce." From *zeedo*: sauce and every thing that is used to make a sauce. All kinds of vegetables and leaves (Alexandre 1953).

²⁰ For one worker at Moussa's workshop, a 25kg-bag of rice, which cost 7,000 F CFA, can last a month. Another buys a larger bag of rice, worth 12,500 F CFA, which lasts him a little more than two months. A bag of corn flour costs between 12,000 F CFA and 15,000 F CFA and lasts a bit more than a month. Since women alternate between rice and corn flour, two large bags can last up to three months.

From 200 F CFA to 400 F CFA the barrel of water, depending on the season.

their wives everyday for the "sauce" (15,000 F CFA per month), Moussa spends 5,000 F CFA per day to feed his family and calculated that it is worth "more than a million" per year. ²³ He also buys clothes and sportswear for his children. In addition, producers take care of important expenses such as school fees and supplies as well as medical bills. As one tire-worker said: "We [are] ten [in my compound]. I'm the only one who takes care of everything." ²⁴ Even if his wife sells small cakes, she keeps the earnings for her personal expenses and not even for the "sauce."

As the main source of income, producers are also expected to help the extended family. Léon, for instance, has to look after his family, since his father migrated to Gabon to work. He supports his mother and younger siblings who still live in his home town. "*The big family* [costs me] *15,000 F* [CFA] *per month*"²⁵ In addition, he has to give 500-600 F CFA daily to his exgirlfriend with whom he had a baby to take care of all the expenses for the child.

The month of September is always difficult for producers and household heads, as they have significant expenses on their children and other siblings who attend school. As public schools are overcrowded, an increasing number of parents enroll their children in private schools, for which they have to pay higher fees. They also need to purchase school uniforms and all the necessary supplies. To meet these obligations, they save as much as they can and often pay in several installments. For instance, Paul had been paying for his younger brother's

²² Here is an example of how Ismaïla, Moussa's nephew, spent his earnings (17,500 F CFA) from the resale of 70 kg of soft aluminum from newspaper publishing houses: 7,500 F CFA (rent), 500 F CFA (kerosene), 1,000 F CFA (bars of soap), 600 F CFA (cooking oil), 2,000 F CFA (money given back for a job that he was not able to do), 500 F CFA (gas for his moped), and 500 F CFA (2 days of food). All in all, he spent 12,600 F CFA within two days. With the remainder (4,900 F CFA), he would try to find another deal to earn more money. Ismaïla, 'satellite' aluminum vendor, Moussa's workshop. Fieldnotes, January 24, 2003.

²³ "Ka million la zaka?" Moussa, aluminum-smelter. Fieldnotes, February 5, 2003. It actually reaches 1,825 million F CFA.

²⁴ "Tõnd piiga. Fãa ya mam ye bala h n gɛta yelle." Ali, tire-worker. Interview, July 10, 2003.

²⁵ « Grande famille wa.. 15,000 francs par mois. » Léon, team leader, Moussa's workshop. Interview, September 26, 2003.

schooling since his first year in junior high school and he was now in his fourth and last year. His brother had come from the village to ask him for 25,000 F CFA to pay his school fees and 10,000 F CFA for transport and school supplies. Paul would first give 15,000 F CFA in September, then 5,000 F CFA in November and lastly, 5,000 F CFA in December.

One spring-maker concluded that because of all these expenses, "one cannot have many children as before." Having children is getting expensive and "with malaria and things alike, [...] money scatters." He continued, saying that "before, there were fewer problems but now, with two children, there are more and more problems. [...] Before, our ancestors cultivated in the fields and needed a lot of children to help them. But it's not the case anymore." Now, producers have to face the constraints of modern life in the capital with its higher cost of living.

Social purposes for saving

In order to face ordinary as well as special expenses as best they can, producers must set money aside, whenever possible. One tire-worker explained that "you save little by little. You never know! If you don't save, you will not be able to get your own house. If you don't save, you will not be able to find a wife and marry her. Yeah!"²⁹ Even if it is difficult to save because of recurring lack of cash and every day demands, it is necessary in order to anticipate crises events,

 ^{26 «} On ne peut plus faire beaucoup d'enfants comme avant. » Alassane, spring-maker. Interview, August 26, 2003.
 27 « Avec les paludisme et consorts, [...] l'argent ça s'éparpille. » Alassane, spring-maker.

²⁸ « Avant, il avait moins de problèmes mais maintenant, avec deux enfants, il y a de plus en plus de problèmes [...] Avant, nos ancêtres cultivaient dans les champs et avaient besoin de beaucoup d'enfants pour les aider. Mais ce n'est plus le cas. » Alassane, spring-maker.

²⁹ "Fo bĭngda bili-bilfu wey! Tu sais pas! Hãn ka bĭng fo ka na togỡ pam dogỡ n gãnda. Fo sãnn ka bĩng ye, fo ka na togỡ pam paga n fur la. Hé!" Abdul Wahab, tire-worker. Interview, August 27, 2003.

such as a sickness, a pregnancy, a name-giving ceremony, a wedding, or a funeral.³⁰ Alassane explained that if someone saves for his child's name-giving ceremony, "people understand and will leave you alone," because it is a socially accepted reason to save. However relatives could not accept that saving for his enterprise could take priority over helping them financially. In this context, saving aims primarily at providing a safety net in case of emergency rather than at investing in their professional activity.

Producers make the most of favorable economic conditions to save for important expenses. When Martin came back from Côte d'Ivoire in the early 1990s, the market for tin goods was thriving and he took advantage of this to save for his wedding. "At that time, it was working, I [could] really save." In a year and a half, he was able to save enough to get married, in December 1991. Since the market was still doing well, he continued to save after his wedding. "After my wedding, the frying pans worked, the job itself was working well. So [...] I saved up to 100,000 [CFA] francs or more than 100,000 [F CFA]! In my house!" In contrast, it took five years for a young tire-worker to save 100,000 F CFA for his wedding, as his activity was not faring well. "If you can save 100,000 [F CFA] in one year, it's good. I thank God [for it]. But if you take five years to save 100,000 [F CFA], it's misery."

In general, producers save for between one and two years to prepare for such big events as their wedding. Depending on their means, their personal contribution goes from 100,000 F CFA

³⁰ Among the Akan for instance, "funeral celebrations are unthinkable without the ingredient of money" (van der Geest 1997:541).

³¹ « En ce moment comme ça marchait, vraiment, je peux économiser. » Martin, tinsmith. Interview, February 20, 2003.

³² « Après mon mariage, les poêles marchaient, le travail même marchait bien. Donc [...] j'ai économisé même jusqu'à 100,000 francs ou bien plus de 100.000! dans ma maison! » Martin, tinsmith. He saved this amount between 1991 and 1994.

³³ « Hãn tõe tigsi tus pisi yum de, ya soma. Mam puusa Wênd naam barka. La fo sên rik yum a nu n tigs tus pisi, ya nim-bãnga. » Issouf, tire-worker. Fieldnotes, September 2, 2003.

to 500,000 F CFA. Alassane, for instance, spent about 300,000 F CFA on his wedding, with 200,000 F CFA from his own pocket. It took him two years to save this amount. Saving "little by little" (bing bili bilfu) is the surest and most realistic way for these producers to set aside the necessary amount of money while continuing to face their daily needs. Once they are married, producers know that they have to keep money aside for oncoming events such as their wives' pregnancy and their future child's name-giving ceremony as well as eventual sicknesses. When Djibril was married during the summer 2002, he kept saving to prepare for the birth and name-giving ceremony of his firstborn since his wife was already pregnant. In February 2003, he had saved 200,000 F CFA from his sales of aluminum supplies and pots and was ready to organize the ceremony for his son.

Living without any kind of health coverage or state insurance, savings act as a safety cushion in case of emergency. Boureima, a tire-worker, explains that "if [you] don't save, and something comes up [...], to whom will you borrow [money]? [...] Unless you don't have [enough] money to save, you've got to save." Alassane held that saving is essential to "fix his problems [...] because.. problems come from everywhere." Many producers' savings have been spent by a child's or a spouse's sickness or delivery. When Bassirou's wife was pregnant, she fell ill and he had to spend 200,000 F CFA on medical bills. Their baby also had health problems and he had to spend another 200,000 F CFA on medical care. During four months, he

³⁴ "Hãn ka bĩng ye, ti bum sãn wa be [...], ãnda soaba fo na ye n dege? [...] Sãn ka fo ka tar ligda n bĩngi, ya tilae ti fo bĩngi." Boureima, tire-worker. Fieldnotes, June 12, 2003.

³⁵ « On règle ses problèmes [...] Parce que.. les problèmes ça provient de partout. » Alassane, spring-maker. Interview, August 26, 2003.

had to pay 5,000 F CFA every week to treat his baby. Now, "there's no money left" (ligidi ka be).³⁶

Producers also save for other significant investments such as purchasing a moped or building a house. Between 1991 and 1994, when the tin market was doing well, Martin "was able to save up to 125 [125,000 F CFA] or more [...] to be able to pay for the moped that I have today."³⁷ But in 1995, he was evicted from his location and it has become more difficult for him to save since then. Boureima also had stopped playing at the lottery to begin saving for the purchase a moped.

Beyond direct family matters, producers also save for social and religious purposes. Ousseni, who has been to Mecca five times, continues to save for his next trip. Many years earlier, he had paid for his first pilgrimage to Mecca by making and selling tire-sandals. He had saved a total of 150,000 F CFA to pay for his plane ticket (75,000 F CFA) and the other half to pay for his food and other expenses. Since then, he has been to Mecca four other times, even though the costs of such a pilgrimage have greatly increased, reaching 1.5 million F CFA just for the plane ticket.

Coming from various regions of the country, producers also participate and contribute financially to their village associations. Every two weeks for instance, Rasmane attends a meeting for people coming from the area of the town of Sapone, where he is from. At each meeting, "we give 100 [F CFA] to save [...] It's our joint money." With this collective money, they contribute to weddings, funerals, and other life crises that happen within their community.

³⁶ Bassirou, team 1's wheeler, Moussa's workshop in aluminum-smelting. Fieldnotes, February 4, 2003.

³⁷ « Même si j'enlève 2.500 [pour] économiser, j'ai toujours [2,500 F CFA] en poche, pour manger et pour.. mes besoins. Tu vois? Donc c'est pour cela que j'ai pu économiser jusqu'à.. avoir une somme de 125 ou bien plus de 125 pour pouvoir payer ma mobylette que j'ai aujourd'hui là. » Martin, tinsmith. Interview, February 20, 2003. « Tond kisa pisi-si n bingi [...] Ya tond făa ligda. » Rasmane, tire-worker. Fieldnotes, July 21, 2003.

At an individual level, Paul also regularly sets money aside in a community bank to cope with unexpected, social expenses. In January 2003, he had to go to his home village for a funeral. He withdrew 40,000 F CFA from his savings account to pay for his bus fare and monetary gifts to his relatives back home. Even though he claimed to be unable to save for work purposes, he was compelled to withdraw money from his savings account for social and family reasons.

Finally, some workers, especially young and single men, save for longer-term, personal projects. In Moussa's workshop, one young man disclosed that he was saving to go to Switzerland or the United States. He knew that he needed about a million of CFA francs to go. His plan was to work there during six months, from dawn to dusk, make money, and come back to Burkina Faso. Another worker, Léon, intended to go to Gabon, where his father and older brother were already working. He had heard that aluminum pots sold at a much better price there so he planned to open his own workshop, work, and save money. "If you stay there three years, you will make good money." In this world of currency shortage, saving money is therefore a way to buffer unexpected cash outflows but also to finance shorter or longer-term projects as well as nurture dreams.

³⁹

³⁹ Paul quoted a Mossi proverb (*yel-būndi*) to illustrate this practice: "*Ba-yiri ka lobga ne kugri ye, lobga ne tān-dagré*" (We cannot throw stones to our ancestor's village, only mud). He explained this saying by the fact that "one cannot forget one's homeland, [because] one will come back [there] later" (On ne peut pas abandonner sa patrie, on y reviendra plus tard). In other words, people should invest in their village, even if they live in Ivory Coast or in another town because one day, they might need some help from their village. Paul, tinsmith. Fieldnotes, February 27, 2003.

⁴⁰ "Fo sãn zi be yuma a tãa, fo na pama soma." Léon, team leader, Moussa's workshop. Fieldnotes, February 4, 2003.

One of producers' recurrent maxims is that "there are a lot of expenses" (dépenses waogome). This statement summarizes what most workers around the world observe as well: the money earned is spent as quickly as it came in to meet daily needs and other social demands. Most producers, even those that are not yet family heads, have social obligations which can be quite costly. They also make personal choices about their lifestyle, for prestige reasons sometimes, which also have a financial cost. Among all the producers studied, Moussa is by far the most prosperous one. As a faithful Muslim, he translated his wealth into a large family, marrying four wives and bearing many children, who cost him 5,000 F CFA daily to feed.

This 'traditional' value of investing one's wealth into people is not always shared by the younger generation. According to his nephew Ismaïla, Moussa did not manage his wealth well. During the 1990s – and before 1994 – Moussa was making "a lot of money." He was buying several tons of aluminum on credit and "the profits he was making were not a joke! Because there was a time when if you bought aluminum for 500,000 [F CFA], you had about 400,000 [CFA] francs of profit. Even more. [...] During that time, he did not take advantage of it, he thought about women. He made children" According to Ismaïla, his uncle Moussa "did not succeed in his work." He went on, saying:

"if I were him, I would have managed better than this. It would even be an enterprise. ⁴⁴ An enterprise. Why? Because, in addition to producing [aluminum] pots, I would create a welding shop, on the side, and [I would] have my own retailers of [aluminum] pots downtown to deal with the clients from the provinces. Indeed, clients coming from provinces are not interested in knowing where the pots are produced. They

⁴¹ "Énormément d'argent." Ismaïla, aluminum 'satellite' dealer, Moussa's workshop. Interview, August 21, 2003. ⁴² « le bénéfice qu'il se faisait, ce n'était pas du jeu! Puisque y a eu une période où l'aluminium, si tu achetais à 500.000, tu avais à peu près 400.000 francs de bénéfice. Même plus. [...] Pendant ce temps, il n'a pas profité, il a pensé aux femmes. Il a fait des enfants. » Ismaïla. See also Marie 1997c, p.268 for a similar disapproval of younger generations.

[«] Le patron n'a pas réussi dans son travail. » Ismaïla.

⁴⁴ My emphasis.

want to buy the pots and go back. And I would have my own guys, my own people to send me charcoal and where ... the enterprise stands today, I would buy a car for the deliveries and everything. I would not settle for marrying women and making children."⁴⁵

Ismaïla also disagreed with other investments that his uncle had made. In August 2003,

Moussa bought a more recent "Yamaha Dame" motorcycle to replace his old one. He bought it second-hand for 800,000 F CFA, while a new one cost 1.2 million F CFA. Still, Ismaïla disagreed. His uncle should have waited to have enough money to pay all of his workers from whom he had bought aluminum on credit and who were still waiting to be reimbursed. Then, he could see if he could afford another moped. Instead, he took the money that he had earned from selling large pots to refugee camps managed by the Red Cross and spent it that way.

This confrontation of values reveals quite clearly the changes that Burkina Faso is undergoing. Life in the capital is becoming increasingly expensive and the younger generation is facing a new set of economic constraints, which makes the continuation of their parents' practices and lifestyle more difficult. In addition, the media (especially television) and the availability of imported goods have a definite influence on youth. Aware that they cannot do as before, the younger generation may actually not even desire it, aspiring to a better, Western-like lifestyle.

Yet, despite their diverging views, the younger generation is still subject to – and participating in – the social obligation to give and display wealth and status, even if to a different degree. Through this apparent waste of money, 46 there is a confrontation of values and practices

⁴⁵ « Si j'étais à sa place j'allais mieux m'organiser que ça. Ça serait même une entreprise. Une entreprise, pourquoi? Parce que, je vais, en plus de la fabrication des marmites, me créer un atelier de soudure, à côté et avoir mes propres vendeurs de marmites en ville qui puissent avoir des clients des provinces, puisque les clients venant des provinces, ils ne cherchent pas [à] connaître là où sont fabriquées les marmites. Ils cherchent à avoir des marmites et à retourner. Et j'allais avoir mes propres gars, mes propres personnes qui partent m'envoyer le charbon et là où ... est l'entreprise aujourd'hui là, j'allais m'acheter un véhicule de livraison et tout tout. Je n'allais pas me contenter de me marier à des femmes, faire des enfants. » Ismaila. Interview, August 21, 2003.

46 It is always a 'waste' from the other's standpoint: foreigner, outsider, younger or older generation, and so on.

which do not only aim at achieving personal pleasure or a level of satisfaction, but also "the consolidation or revalidation of prestige, the search for a reputation or influences, which can, in turn, draw benefits [which are] not only symbolic, but also fundamentally economic" (Palenzuela & Cruces 1995:135). Quoting Mauss, the authors write that "In doing so, not only one improves oneself, but one also improves one's family on the social scale" (Mauss 1960:201-2, *In* Palenzuela & Cruces 1995:134).

Ceremonies such as weddings, funerals, or name-giving ceremonies are occasions for ostentatious display of wealth and power, which have substantially inflated people's spending in recent years (Marie 1997c:275; Werbner 1990:279). They are occasions for the "staging of the law of debt" as well as "a privileged instance to renew the contract linking individuals to their community" (Marie 1997c:274-5, my translation). When Moussa lost his mother in September 2003, he had considerable expenses on her funerals. Even if the burial itself was a simple ceremony, more than five hundred people came to mourn and present their salutations to Moussa and his family. Moussa had invited Muslim religious leaders to pray and his wives and other female relatives prepared large quantities of food to feed all the visitors.

Such social events cannot remain private. Being purposely naïve, I asked Moussa's nephew Ismaïla if it were possible for him to carry out a simple civil ceremony at the city hall, for the sole purpose of legalizing his union. His reply illustrated the whole matter: "You cannot get up like this: 'Ok, I have 50,000 [CFA] francs, it's enough to do the paperwork for a civil wedding.'

[...] It's true that it's possible [in theory]. But.. the girl's parents do not know in which situation

⁴⁷ Van der Geest wrotes about the Kwahu, a subgroup of the Akan people in Ghana, that "[t]he ultimate proof of respect and the decisive act of reciprocity is to organise a worthy funeral for someone upon his/her death." Even if it is "well beyond the means of ordinary people," it is a necessary investment in order to "avoid disgrace" (1997:552). "The bigger the funeral, the larger the expense, the greater the tribute to the deceased. Money indeed measures the value of people" (1997:553-4).

you are. And the girl cannot make them understand that her husband's situation is not acceptable [i.e. not sufficient to organize a large wedding]. So you cannot force back the people who will learn that you are getting married. That's why it's always difficult."⁴⁸

In his comment, Ismaïla highlights two main points that are crucial in legitimating such ceremonies. Firstly, to be able to organize a large wedding is a way for the groom to reveal his social and economic power to the community – what Ismaila refers to as his "situation." Secondly, because of his daily involvement in several social networks (kin, friends, and fellow workers), these networks are automatically manifested in such occasions and he cannot possibly ignore them: people will learn that he is getting married and will visit him. He will thus be obligated to receive them in an honorable fashion. These two reasons summarize the moral purpose and importance of such social ceremonies.

The organization of such ceremonies involves the activation of the whole social network through reciprocal gift-giving of various kinds (Werbner 1990:281). While the groom or the father bears the major part of the expenses, the latter will be partly or fully covered by the numerous financial and material gifts offered by family members and guests. When Martin married in 1991, relatives and friends helped him financially or took care of some expenses such as the drinks and every member of his church community contributed also. After the wedding, many people came to congratulate him and offered financial gifts. "Those who came [...] to greet me [and wish] a happy marriage gave me [...] 75,000 [F CFA] or more than [that]. And I

⁴⁸ « Tu ne peux pas te lever comme ça: "allez, j'ai 50.000 francs, ça me suffit pour les démarches pour un mariage civil." [...] C'est possible certes, mais.. les parents de la fille ne savent pas dans quel état toi tu es. Et la fille ne peut pas leur faire comprendre que l'état de son mari n'est pas acceptable. Donc tu ne peux pas refouler le monde qui apprendra que tu as un mariage! Donc ça fait que, c'est toujours difficile quoi." Ismaila, 'satellite' aluminum dealer, Moussa's workshop. Interview, August 21, 2003.

took this sum and I began to spend [it to buy] what was necessary for the house." At the same time, he too had to "thank" his relatives (remercier les parents) who came to his wedding by blessing them financially. So, of the 75,000 F CFA that he had received, he also gave small financial gifts to "other relatives [...], the mamas, whom you should sustain a bit!" All in all, Martin had only about 25,000 F CFA left after this reciprocal giving was over.

Name-giving ceremonies also involve considerable expenses in this reciprocal gift-giving exchange. Djibril, one 'satellite' aluminum dealer working for Moussa, was able to provide a detailed account for the ceremony for his son, as he wrote both his expenses and the gifts he received (photo 141). He noted that he had spent approximately 140,600 F CFA, mainly to buy food, clothes, and other items for the baby. However he certainly spent more as he had saved about 200,000 F CFA in preparation for the ceremony. Yet, the value of the financial and material gifts that he received covered almost all his expenses. His mentor gave him a sheep (worth 35,000 F CFA), while other people gave him financial and material gifts worth 100,000 F CFA. He received 10,000 F CFA-worth of sugar; 235 bars of soap worth 250, 350, or 400 F CFA each; food for the baby such as soup or rice as well as many baby outfits. His wife too received 12,000 F CFA-worth of gifts. With the money received, he wanted to open a saving account for his son, "even if it's [only] 35,000 [CFA] francs." Alassane, who spent about 100,000 F CFA

⁴⁹ « Ceux qui sont venus [...] pour me saluer, "heureux ménage," ils m'ont donné [...] 75.000 [F CFA] ou bien plus de 75.000 [...]. Et cette somme même j'ai pris, [et] j'ai commencé à dépenser [pour acheter] ce qui est nécessaire dans le foyer. » Martin, tinsmith. Interview, February 20, 2003.

⁵⁰ « d'autres parents [...], les mamans, que tu dois soutenir un peu! » Martin, tinsmith.

⁵¹ "Même si y'a 35,000 francs." Djibril, 'satellite' aluminum dealer, Moussa's workshop. Fieldnotes, February 4, 2003.

for his son's ceremony, thought that these were "excessive expenses" (dépenses excessives) – yet, "unavoidable."52

Other festivals are also occasions for gift-giving and sharing with family, friends, and neighbors. While Christians celebrate Christmas, Muslims commemorate the Tabaski or Aïd festival (photo 142).⁵³ To prepare for the Christmas celebrations, Paul bought new clothes for his wife; if he would be paid from an order of spare parts, he would also buy clothes for his daughter. Since visitors would come on Christmas Day to greet him, he bought thirty bottles of soda to welcome them (between 8,000 F CFA and 10,000 F CFA). In a joking manner, he exclaimed: "20,000 [F CFA] would be great for me!... [We can] eat a lot, drink.." He then added that if he did not have enough money, he would flee his house and invite nobody. Indeed, not having enough money to celebrate these festivals is considered shameful.

The place of God at work and the place of work in relation to their religious convictions

In the last section of this chapter, I would like to consider the place of work with regard to producers' religious life. While these men work to satisfy social and economic goals, they also ultimately fulfill spiritual aspirations in doing so. Religious and moral values actually provide a framework to justify and give meaning to their work. In addition, work is not an end in itself but may serve larger objectives, some of them religious, and may even be interrupted for religious reasons.

⁵² "dépenses inévitables." Alassane, spring-maker. Interview, August 26, 2003.

⁵³ Tabaski is the name given to the Aïd-el-Kébir Muslim feast in West Africa. It is the biggest Muslim holiday, the Feast of the Sacrifice, which celebrates the sacrifice of Abraham's only son (Ishmael, for the Muslims). As an act of remembrance, Muslims traditionally sacrifice a sheep for their family – when they can afford it. ⁵⁴ "Tusa naase seka mam soma!... di wʊsgo, yʊ.." Paul, aluminum-smelter. Fieldnotes, December 21, 2002.

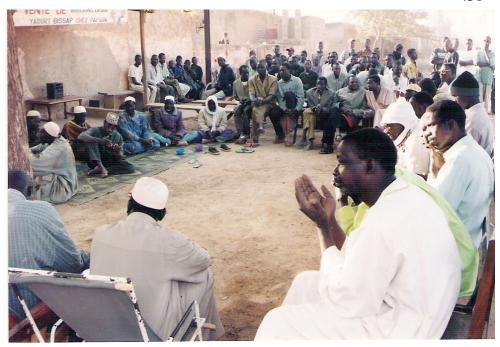


Photo 141. Name-giving ceremony of Djibril's son. Moussa (forefront, right), his neighbor and boss, is also attending the ceremony, praying along with the religious leaders.

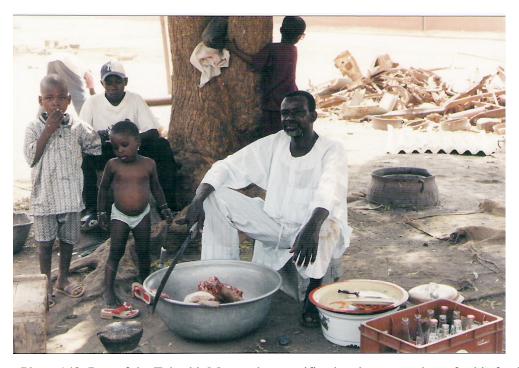


Photo 142. Day of the Tabaski. Moussa has sacrificed and cut up a sheep for his family.

Producers' workdays are regularly interrupted by prayer times. While Christians – catholic or protestant – may go to a mass or prayer meeting before starting their workday, devout Muslims suspend their work to observe five prayer times per day, three of which are in the afternoon. Depending on the organization of the workspace, producers may pray either in the workshop or go to the nearby mosque, if there is one. Moussa, a pious Muslim, built a small shed outside his compound wall as a prayer space. He often leads the prayer himself, while other workers stand behind him to pray. At the Cité An II market, Muslim traders also built a stand at the entrance of the market in order to pray near their workplaces. Usually, these prayer times last between twenty and thirty minutes.

In addition, Friday is a special day for Muslims. While most workers do not work or actively produce on Sundays, Muslims also stop producing on Friday to attend the one o'clock prayer at the mosque. Some may resume their work in the afternoon, while others stop producing altogether. Moussa explains that "today is Friday... [If] the market is hot, [we] can work.

Otherwise, we just pray." On that day, religious producers wear "nice clothes" (fu neere) or special "Friday clothes" (arzoum fuugu) on. When it is time to go to the one o'clock prayer, they remove their work clothes, put on the nice-looking shirt, and go to the mosque. When they have time, they may even ride to the central mosque downtown.

Christian producers have fewer constraints on their workdays. On certain days, Paul wakes up at five o'clock in the morning to go to mass before going to work. Sometimes, he goes back to sleep and arrives late at work. Jacques, one of Paul's apprentices, is also Catholic and attends

⁵⁵ Moussa gave me the times and names of the five prayers. 5 a.m. = *fagiri*; 1:30 p.m. = *zafare*; 3:30 p.m. = *laasare*; 6 p.m. = *magriba*; 7 p.m. = *sãnfo*. Moussa, aluminum-smelter. Fieldnotes, January 21, 2003.

⁵⁶ "Runda ya arzūma... Raaga [hãn] wĩngame, tõe tume. Sinon, ya pusgo bala." Moussa, aluminum-smelter. Fieldnotes, January 31, 2003.

catechism twice a week. Every Thursday and Saturday, he leaves work between two and four o'clock and comes back to resume working. Before starting his workday, Martin, who is Protestant, always takes some time for personal worship and devotion. After taking his equipment out, he sits on his toolbox or on his wooden bench, pulls out his pocket Bible, and begins to read a portion of scripture.

Producers also take days off to celebrate religious ceremonies (Elyachar 2005:156). At the end of the 30-day Muslim fast (*Ramadan*), producers usually stop working for three days. Some may still come to their workshop but do not produce anything. They carry out small jobs like repairing items or buying supplies. During the fast, it is difficult for many producers to keep up the work pace. Many are too tired to work the full day and some fall so ill that they have to stop fasting. Of course, producers do not work when there is a wedding, a name-giving ceremony, a funeral, or even a commemoration of death in their family or close social networks. When the person is not too close socially, they may only take a few hours off to attend the ceremony or greet the family and come back to resume working. As Marie wrote, attending the funerals of others is a way to guarantee that one will not die alone and live on as a wandering ghost (1997c:275).

No matter their faith, giving alms also has an important place in producers' moral convictions. There is rarely a day without beggars passing by their workshops, asking for money with many blessings. Mauss wrote that "[a]lms are the fruits of a moral notion of the gift and of fortune on the one hand, and of a notion of sacrifice, on the other." Through this "ancient morality of the gift," giving alms "has become a principle of justice," as the wealthier ought to help the poorer (1990 [1950]:23). Enumerating the five pillars of Islam, Moussa explains that to

be a good Muslim, one has to pay the *zakatt* (give alms). Giving an example, he says that if one earns one million CFA francs, one should give 25,000 F CFA to the poor, that is, one fortieth of the wealth.

In a society where everyone is struggling to get by at some level, giving even a token amount is a way to encourage and show solidarity. Ismaïla, Moussa's nephew, who qualifies himself as a "deist," gives alms to the poor and street children as a way to thank God for his mercy. "I often help them by giving them money [or] something to eat, like sugar, sugar packs or something like this." While producers may give 100-200 F CFA to people they know and wish to help or encourage, they usually give less to beggars – around 25 F CFA. Indeed, there are some implicit rules in giving alms. Martin explains that "one cannot know who's who" that is, one can never be sure whether the person in need is telling the truth. Giving half of the amount requested is a balanced way to bless without taking too much risk either.

Muslim producers consider it a prestigious achievement to invest part of their wealth in the pilgrimage to Mecca. Upon their return, they are respectfully called "El Hadji" or "Lagui." Moussa paid the expenses for his father to do "The Hadj" in 1982 and for his mother in 1995. He explains that "God gave me the capacity [lit. 'the power'] ... for my father and [my] mother to go to Mecca." He adds that people call him "El Hadji," even though he has not been able to go to Mecca himself, as financial difficulties arose. "People call me 'El Hadji.' They want me to go

⁵⁷ « Je les aide, en leur donnant souvent de l'argent, souvent.. de quoi manger, genre du sucre, des paquets de sucre et des trucs du genre. » Ismaïla, 'satellite' aluminum dealer, Moussa's workshop. Interview, August 21, 2003. ⁵⁸ "On ne peut pas connaître qui est qui." Martin, tinsmith. Fieldnotes, April 4, 2003.

⁵⁹ "Wênd naam kõ mam tõgo ... ti baba la ma kẽng Mecca." Moussa, aluminum-smelter. Fieldnotes, February 3, 2003.

[to Mecca] but [I don't have] the money. You will give me the money. "60 Seemingly poor workers like "Lagui," an old tire-worker in Cité An II market, have nevertheless been to Mecca twice in his lifetime.

For the younger generation however, going to Mecca has become a very expensive, almost unaffordable trip. The trip itself costs 1.5 million F CFA and people know that "you have to have something to eat [i.e. money] before going to Mecca!" That is why many younger producers have no intention of doing the pilgrimage. They would rather save the money to buy land and build a house. While some of Moussa's young workers were arguing about this topic, one of them exclaimed: "You will go to Mecca and come back as a penniless 'El Hadj.'" One of them exclaimed: "You will go to Mecca and come back as a penniless 'El Hadj.'" Management of the poor in the poo

Producers' appreciation of their work is rooted in a broader spiritual conception of life. God is omnipresent in their understanding of their role and success and in their motivations. No matter their creed (Muslim or Christian), producers and their clients traditionally invoke the name of God (*Wēnd naam*)⁶⁵ to bless one another (see chap. XIII). Before starting working, one worker in Moussa's workshop shouted to everybody: "*May God help* [our] *work today!*"⁶⁶ When problems arise, people pray that God may "*fix*" (*malge*) them. ⁶⁷ Each time Lagui

⁶⁰ "Neb m bool mam 'El Hadji.' Ob datẽ n ti mam kẽnge [Mecca] la ligdi ka be. Fo na kõ mam ligdi." Moussa, aluminum-smelter.

 ^{61 «} Faut avoir à manger avant de partir à la Mecque! » Abdul Wahab, tire-worker. Interview, August 27, 2003.
 62 "Fo na kẽnga Mecca n lebga El Hadji zaalem." Moussa's worker, aluminum-smelter. Fieldnotes, February 11, 2003.

⁶³ « J'ai beaucoup plus à faire que ça. » Alassane, spring-maker. Interview, August 26, 2003.

⁶⁴ « [C'est quand] la vie est aisée qu'on a tendance à faire ça. Mais c'est pas obligatoire pour nous autres. » Alassane, spring-maker. Fieldnotes, February 11, 2003.

⁶⁵ From Wende: God and naam: power, strength, authority, reign (Alexandre 1953).

^{66 &}quot;Wend na song tumde runda!" Moussa's workshop, aluminum-smelting. Fieldnotes, January 17, 2003.

⁶⁷ "Wend na malge" (or manghé). From *manghé*: to arrange, to fix, to repair, to mend (Alexandre 1953).

Moumouni opened a new workshop, he asked God to bless his activity. "It is like [asking for] good luck." 68

Producers are all convinced that their success – or lack thereof – depends on God's will and provision. Pondering his progress from the beginning when he started with 7,500 F CFA and his situation at the time of my study, Moussa commented that "God helped me" (Wēnd naam sõng mam) and He "made [it possible] for us to progress" (lit. that we went ahead). ⁶⁹ Many producers believe that every "solution is in God's hands." In a time of financial struggle, Martin decided to fast the whole workday and pray all night in his house. The next morning, before even starting his work, a man came to order an oven with a down payment of 7,500 F CFA. Martin was so happy that he went to share the news with his neighbor mechanic – a Muslim – telling him: "You see, I prayed to my God and this is what He gives me this morning, before I even start working!" That day, he earned more money than usual and eventually had 20,000 F CFA in his pocket at the end of the day.

God also intervenes very practically in their work, giving producers ideas, inspiring them, and giving them trading opportunities. He is the one inspiring technical innovations and helping to avoid making mistakes during the production process (see chap. VIII). Ismaïla⁷¹ declares that he cannot go through the day without praying and asking God to open doors for his business activities:

"Each time I have a business to deal with, I beseech Him to help me carry out the deal with success. [...] If a deal works, I will not be able to say that it's because of me. [...] It's God who sent [this] deal to me [...] Otherwise, there are some deals that I have which do not end well. If there's not the will of God, it will not

⁶⁸ « La wa ne 'bonne sance' [bonne chance]. Zu-noogo. » Lagui Moumouni, tinsmith. Interview, October 7, 2003.

⁶⁹ "Wênd naam man ti tõnd kõnga taore." Moussa, aluminum-smelter. Fieldnotes, February 3, 2003.

⁷⁰ "Solution be Wend nenge." Paul, aluminum-smelter. Fieldnotes, January 28, 2003.

⁷¹ Ismaïla does not profess to be a Muslim but declares to be a 'deist,' believing in an all-mighty God with whom he has a personal relation and whom he prays in his own way.

end well [...] Often, there are deals that you know if you get them, ... you can make a lot of profits. But [...] you don't do them [because] God guided you not to do them, because if you do, you could go to the MACO [i.e. the state prison]. [...] [So] God often protects [me] in my business."⁷²

In fact, many producers do not limit their lives to their work activities but have a heartfelt desire to dedicate themselves to God and serve Him. One of Moussa's workers aspires to become a "more," a devoted Muslim who knows the Koran. "I don't want to become rich. I want to become a Muslim." He wishes to "study the Word of God" and go to an Arabic-speaking country to improve his competence in Arabic. Another of Moussa's workers, Ibrahim, converted to the Christian faith during his stay in Côte d'Ivoire. Now back in Burkina Faso, he would like to attend a Bible school to become a pastor, like Martin. Both are very much involved in weekly church activities. Every summer, Martin also takes days off to participate in youth Bible camps, believing God to provide for his family during his absence. "God will provide [...] I'm sure that if I do [that] for God, God will do something [for me]."

Producers' work and earnings take their full meaning within their wider social, economic, moral, and spiritual purposes. As much as their work provides them with financial resources that are vital for them and their family's subsistence, the very fact that they are able to fulfill this role of provider gives them a socially recognized and respected status and identity within their

The state of the s

⁷³ *Moré*, pl. *mwemba*: a Muslim (Alexandre 1953).

⁷⁴ "M pa rat lebga rakãagre. M datẽ lebga more." Hamidou, Moussa's workshop. Fieldnotes, February 5, 2003.

^{75 &}quot;karma Wend goama." From karme: to read, to study, to go to school; gomde, pl. goama: words.

⁷⁶ « Dieu pourvoira [...] Je suis sûr que si c'est pour Dieu que je [le] fais, Dieu va faire quelque chose. » Martin, tinsmith. Interview, February 20, 2003.

community. Despite the actual or perceived scarcity of money, their earnings never serve only economic purposes. Perceived as a gift from God, they are reinvested in ways to please their God, bless people around them, and satisfy moral expectations through giving alms, organizing religious ceremonies, celebrating religious festivals, accomplishing pilgrimage to holy places, and offering monetary and material gifts to kin and socially related people. As I demonstrate in the next chapter, the desire to make and possess more money through work has to do not only with living a materially more comfortable and less precarious life, but also reveals broader moral and spiritual aspirations.

In this chapter, I wish to demonstrate the power of values underlying producers' actions and systems of thought and belief. These values affect the way they assess their situation in terms of prestige, success, and poverty and have dramatic impact on their sense of self. The same observation applies to the way scholars elaborate theories to make sense of others' lives, particularly in the economic domain. Indeed, Bloch reminds us that economic concepts such as the "rationality of the market [and] the notions of value, money, and person that [it] implies [...] are very specific products of a more general political and intellectual history, which forms the foundation of [a system of] thoughts in learned as well as popular circles" (1994, my translation). This results in the production of an "economic mythology" which generates "stereotypical" and "constraining" discourses, such as the belief that "money dissolves social ties" and "founds a society based on pure rationality" (Bloch 1994).

Far from being neutral, money, for instance, is imbued with meanings. The "moral assessments of certain adjectivally marked moneys [...] clearly reveal that people's conceptions and uses of money cannot be dissociated from their cultural context" (Maurer 2006:24). As Carruthers and Espeland concluded, the meanings attributed to money are "consequential. People treat money differently depending on what it means - good or bad, appropriate or inappropriate, right or wrong, dirty or clean" (1998). In fact, "[i]t is not the case that the use of money universally "[gives] rise to a particular world view" but rather that "existing world"

¹ All publications that have been consulted online have no pagination.

view[s] [give] rise to particular ways of representing money" (Parry and Bloch 1989:19, quoted in Walsh 2003:291).

Many anthropological studies have shed light on the changing and often contradictory pursuits of wealth and success as local communities are increasingly integrated in and dependent on the world economy. In Ghana, van der Geest reveals the ambiguous nature of money, "source of happiness and of suffering, sign of respect and of disgrace" (1997:538, emphasis in original). Money is one of the main topics of conversation among Kwahu people, as it is "the symbol of a successful life" (1997:555). When it is available, it allows people to accomplish "what one [is] supposed to do: to bring up children and ensure a good future for them, to work for the wellbeing of the entire family and – if possible – to leave a proper dwelling for them" (1997:555). Therefore, "[t]he most convincing proof of a successful life is money" and what it enables to achieve (1997:536; see Graeber 2001:94). Its reward is "respect" and the "happiness and satisfaction [it brings] to the elder." Money is "a link between people" and a means to measure "the value of *people*" (1997:545, emphasis in original). It may "undermine family solidarity," but it may also reinforce it (1997:554). However, when it is lacking, it causes poverty and makes people "old" and lonely. As one old Kwahu woman said, "If you don't have money, no one visits you" (1997:534; see Falola 1995:168).

Despite the particularities of specific local communities and their socio-economic conditions, the pursuit of wealth in the form of cash and conspicuous display is always at the nexus of changing and contradictory social and cultural values (Osella and Osella 2000). Money

² See also Falola: "Avoiding sickness, prolonging life, acquiring wives and children, and eating well were all desires that consumed much money [...] As in the pre-colonial society, money could be used and wisely managed to purchase [...] fame, [...] honor, and [...] power. The ideal was to have all [...] but above all [...] wealth" (1995:168).

is essentially a means that serves pre-existing as well as new societal ends. It enables people to achieve valued forms of wealth and place themselves in a desired network of social relations. As Wan explained in the context of Nigeria, "[m]oney, and hence wealth, are not abstractions but are the means of creating the socially dense nexus of Oyo Yoruba family, kin, friends, colleagues and neighbour relations that define and constitute success and achievement" (2001:245; see Mace 1998). In Madagascar, young people working in sapphire mines may earn large sums of money but "can't hold on to it" as it is "hot money" (Walsh 2003:290). Practices of conspicuous consumption are "underpinned and shaped by local rural modes, conceptions and categories of wealth, accumulation, expenditure, physical and social reproduction and well-being which originate in [...] (pre)colonial moral matrixes, attitudes, practices and beliefs" (De Boeck 1999a:179, quoted in Walsh 2003:291).

In Burkina Faso too, money is very much sought after, even if it also gives rise to contradictory discourses and experiences. As in Ghana, it is a recurrent topic in conversations and jokes as people complain about its lack or envy its abundance in other people's hands.

Money is perceived as a major factor of success – or failure, when missing. Its absence or lack is therefore closely linked to persistent comments on their situation of poverty, especially in comparison with a stereotypical image of the lifestyle of the West. I argue that these desires for a certain conception of wealth, material comfort, and achievement, increasingly fed by the media, may generate tangible frustrations and concerns among people.

This quest for personal, economic, and social advantages, status, and rights is facing increasing contradictions. In various parts of the world, scholars have observed how people "are subjected to the contradictory pressures to be autonomous and to submerge one's self in

community" (Brison 2003:337). People are caught between older and newer values, ideals, and constraints and these "contradictory ideologies create anxieties for some people." Brison adds that "[s]uch pressures are particularly acute in Third World societies, which are inundated with international media carrying ideologies that both push individual autonomy and achievement and celebrate the virtues of quaint, premodern, communal cultures." In addition, this gap "between exported ideologies and local experiences" may exacerbate anxieties "as individuals strive to become autonomous selves where there are limited possibilities for autonomy" (2003:337). This confrontation with "modernity on the margin is not just a matter of increased exposure to ideas and alternatives [...]. Modernity has a content [...] and this content is backed by the wealth, power, and status of the West" (2003:346-7).

Between ideals and stereotypical images, aspirations and actual experiences, money and its related notions of success and poverty are more than mere abstractions. They are social, moral, and personal constructs that affect people's lives deeply. Like Kluckhohn, I argue that values are "not just abstract philosophies of life but ideas that [have] direct effects on people's actual behavior" – even though it remains difficult to determine "how" (referred to in Graeber 2001:3). As values emerge "in action," scholars can identify them as people invest their "energies in those things one considers most important, or most meaningful" (2001:45; see also Latour and Lépinay 2008:5-6). In the rest of this chapter, I seek to highlight what is important to these Burkinabè producers, through their discourses and actions.

³ Godelier defined values as "principles," "judgments," or "representations charged with a force of attraction or repulsion" (1984:222).

Money: its pervasiveness and ambivalence.

The fact that "there is no money" is a recurrent argument in everyday conversations among these Burkinabè producers (see Marie 1997d:427). Negative comments punctuate their conversations as a continual refrain: "There's no money" (ligdi ka be); "we're miserable" (ya nimbãanega); "we don't have any means" (moyens ka be); or "there's not enough" (ka sek ye). Martin sees life in the capital city as "a struggle" He has to fight every day to make ends meet. Paul too repeatedly comments on how "poor" (talga) he is and how the nation's situation as a whole is "not good" (Burkina ka nom ye). He often commented that "we're poor" (tond ya talga) or that "poverty is the problem" (talga ya yelle). One day, as he saw me taking notes about his wish to have a large sum of money to invest in aluminum supply, he added that I should tell my parents that "my friend" needs money. The fact that I would write a 'book' about his situation was not a satisfying reply. "It's not helpful!" (yoodo ka be! – lit. there's no profit). Even if government agencies or NGOs were to read my 'book,' "they will not know my place... They won't be able to help me. They will help [other] people but not me." As I tried to encourage him as much as I could, he concluded, "then tell [them] that we're miserable and that we are going to die."6

Most craftsmen clearly express their desire to be "rich" (rakãagre) and are not satisfied by their standard of living. Many left their village and farming activities to "look for money" in the capital city (Elyachar 2005:139). Others went to work in Côte d'Ivoire for the same reason. Still

⁴ "Wogodogo ya tebre," which he translated into French: « *Ouaga*, *c'est la lutte*. » From *tebe*: to struggle (Alexandre 1953).

⁵ "Ob na pa bãng tõnd zing ye... Ob pa tõe sõng tõnd ye. Ob na sõng neba la pa tõnd ye. " Paul, aluminum-smelter. Fieldnotes, December 27, 2002.

⁶ "Bi f yell ti nimbãanega yõka tõndo, tõnd datẽ n kime."

⁷ "Tõnd baoda ligdi." (We are looking for money). See Bernal who writes that Sudanese villagers "equate farming with poverty" (1994:796).

others pray or play the lottery, with the hope of earning large amounts of money at once.

Boureima for instance, prays that God will give him five millions CFA francs to build his house, as "money is in God's [hands]." When asked if he desired to improve his business, Rasmane replied as a matter-of-fact that of course, he was "looking for a way to get better ... I want to become rich." Ismaïla too, is not "fully satisfied by the life [he is] living" and his goal is "to have a lot of money, to earn more." For Alassane as for most of these craftsmen, the only solution to improve his lifestyle and his business is money but he does not see any way to get more, as he refuses to borrow from people. 12

These reactions are part of what Leenhardt identified as "subjective poverty." When needs locally considered as "vital" are not met, people regard themselves as poor (2005:18). Of course, their criteria vary in nature and significance across societies. Whether this perception of poverty and deprivation is substantiated, it has tangible effects on craftsmen. In one instance, I visited the president of one of the main associations of aluminum-smelters in the city. The man was quite well-off and was the only one to own an electric furnace. Yet, despite the fact that he could afford paying the electricity bill and purchase this machine, the aluminum-smelter complained that "we don't have [enough] means" (moyens ka be).

⁸ "Ligda be Wend nam zinga." Boureima, tire-worker. Fieldnotes, July 7, 2003.

⁹ "Fo me baoda bumbu n kieng taore... M data lebga rakãre." Rasmane, tire-worker. Fieldnotes, July 21, 2003.
¹⁰ « Nous ne sommes pas totalement satisfaits de la vie que nous menons. » Ismaïla, aluminum-dealer, Zogona.

[«] Nous ne sommes pas totalement satisfaits de la vie que nous menons. » Ismaila, aluminum-dealer, Zogon. Interview, August 7, 2003.

^{11 «} Mon but c'est d'avoir beaucoup d'argent, gagner plus. » Ismaïla, aluminum-dealer.

¹² « La solution seulement c'est qu'il faut avoir ... de l'argent. [...] Ah!.. mais comment faire pour avoir ça? V: y a pas de solution selon vous? S: ah la solution je ne vois pas! ...parce que je ne peux pas aller [emprunter] à quelqu'un, c'est ce que je n'aime pas.» Alassane, spring-maker. Interview, August 26, 2003.

¹³ This study has highlighted seven primary needs, which are deemed essential for a decent living but which are not

¹³ This study has highlighted seven primary needs, which are deemed essential for a decent living but which are not rated in the same order across countries within the West African Economic and Monetary Union (UEMOA): "to be able to get treated when sick, access to water, access to electricity, to have decent lodging, to be able to eat three meals per day, to be able to send one's children to school, and to have a permanent job" (2005:18).

Some experience the lack of money deeply in their most basic, everyday needs. Abdul-Wahab, who lost most of his clients after the central marketplace was closed down, finds it problematic to feed his family. "There's not enough [money]. Not enough. [I] cannot even buy enough food No! [...] Before the market burnt, [...] every day I was earning [something] to eat. But since the fire broke out, [...] wow! It's difficult! It's difficult... Now [we] suffer, yeah, ... because it doesn't work [anymore]. You work, you go to the market [to sell], nobody buys. [...] Where will you get the money ... to feed you?" Another young tire-worker commented: "we just fend for ourselves." 15

As among the Kwahu people in Ghana, the centrality of money is frequently expressed in jokes and greetings – among themselves as well as with foreigners. Van der Geest rightly observes that "[i]n its absence, money is indeed one of the pleasantest things to talk about" (1997:542-3). In Burkina Faso as well, joking about money is a frequent theme for teasing during relaxed interactions among friends, colleagues, neighbors, and visitors. People often pretend to beg for money, to give a generous monetary gift, or to steal money from another person. In one instance, a vendor of second-hand clothes who regularly passed Martin's workshop, shouted to the tinsmith: "Give me 2,000 [F CFA]!" He went on, saying that both Martin and I should each give him 1,000 F CFA "so that I can walk off with [it]." Martin promptly replied: "Give me 1,000 [F CFA] so that I can give you 500 [F CFA]. This is a good

¹

¹⁴ « La avant ti raaga na ka yõk buguma, [...] chaque jour, on gagne à manger. La buguma hãn yõka teka, [...] wouh! Lebga yelle! Lebga yelle... C'est la souffrance maintenant, en tout cas... Parce que ça marche pas. Tu travailles, tu pars au marché, on paye pas. Comment tu vas avoir là? Où tu vas avoir l'argent ... pour te nourrir? » Abdul-Wahab, tire-worker. Interview, August 27, 2003.

¹⁵ « Ya rabaare ... c'est la débrouille seulement. » From *dabaare* : way, means, procedure, makeshift (Alexandre 1953).

¹⁶ "Wa ne kobs-naase." Martin, tinsmith. Fieldnotes, April 3, 2003.

¹⁷ "[ti mam] svi n lo."

deal!"¹⁸ The vendor laughed and said: "I don't have [them]" (ka tar ye) and left. As van der Geest, I was also a regular target for this kind of jokes (1997:541).

Considering that the money earned is barely sufficient to meet daily needs and other unpredictable expenses, producers often regard their earnings as just "food money" (dib ligdi). For instance, when I asked a young man working for Moussa about his income, he replied quite tellingly: "I don't have much. It's only food money." In other words, the money earned from the various jobs that he was doing for the boss was insufficient to be considered as 'real' money. It was "only" to buy food and other basic necessities – not enough to enable him to grow into a mature man and be able to marry and take care of a family (see Osella and Osella 2000). Others explained that the money earned was just "enough to eat" (sek la m dibo). This perception is so strong, that even Ousseni, who successfully evolved from a tire-worker to an entrepreneur and owner of several trucks, commented that he had enough money "to eat." Even more revealing, an aluminum-smelter qualified his earnings at the beginning of his activity in the 1960s as being "enough for Africans." He is convinced that he "cannot earn much [...] if [he] doesn't get some help." He is convinced that he "cannot earn much [...] if [he] doesn't get

The power of these perceptions about their financial situations – whether objectively accurate or not – has a deep impact on the way producers assess and live their lives. Not considering their purchasing power, they base their conclusion that they have "no money" (ligdi ka be) or "not enough" of it (ka sek ye) on the empirical observation that they have "too many expenses" (dépenses ya wvsgo) and that is why there is never "enough." But what does

¹⁸ "Wa ne kobessi ti ma reg koabga n kõ fo. Woto ya yõod wey!"

¹⁹ "Mam pa tar wʊsgo ye. Ya dibo ligdi bala." Hamidou, aluminum worker, Zogona. Fieldnotes, February 5, 2003.

²⁰ "Tõe pam ligdi n ditě." Ousseni, former tire-worker. Interview, July 14, 2003.

²¹ "Ligda zemsa ni-sablsa ligda" Aluminum-smelter. Fieldnotes, September 25, 2003.

²² "Ka tõe pam wusgo ye [...] Tuma sãn pa tar sõngre."

"enough" mean to them? What is their frame of reference to which they compare themselves and appraise their lifestyle?

With monthly income ranging from 30,000 F CFA to 100,000 F CFA for the most part, these producers actually compare well in the national grid of wages. Indeed, the minimum wage was set at 28,811 F CFA per month in 2004²³ and the average wage of a civil servant reached 75,000 F CFA (Lacroix 2002). According to the State Department of Finances, the average yearly expenditure for a Burkinabè household was 72,800 F CFA in 1995.²⁴ In comparison, some of the producers' social and personal expenses alone may reach around 32,000 F CFA per month.²⁵

Living an average lifestyle compared to the seemingly enviable situations of civil servants, why do these craftsmen tend to view themselves as miserable and poor? Why do they see the glass half empty while they could see it half full? I argue that part of the answer lies in the social constraints and expectations that weigh on their earnings as well as in the influence of an imported, cultural, and stereotyped image of what is supposed to be a comfortable and successful lifestyle (Herzfeld 2004). I will develop this argument in the remainder of the chapter.

'Good' and 'bad' uses of money

Money is not an end in itself. What matters is what it enables to be accomplished, keeping a balance between personal and social intentions (see Graeber 1996:6). Among the Kwahu people of Ghana, "money is good but a house is the most valuable thing" (van der Geest

Salaire Minimum Interprofessionnel Garanti (S.M.I.G.). Source: Tribunal du Travail de Ouagadougou (2004).
 Ministère des Finances and du Budget (2005), citing sources from a UNDP report dating from 1995.

These expenses do not include family-related expenditure such as food, rent, or school fees.

1997:545). To "earn people's admiration and respect," it is essential to transform money, which is personal, into something that the family at large can use (1997:545). However, not everybody is able "to reach the level of success and social prestige which entails the completion of a house." Indeed, the town is filled with many unfinished houses "which reveal the unfulfilled dreams of farmers and traders who never got beyond the first stage of their building project" (1997:546).²⁶

Building a house is also an important concern for these Burkinabè producers, among other socially acceptable investments. Owning a house is a sound economic option, a security for the family, and a source of increased status for the household head. Like elsewhere, many craftsmen were able to build their house in prosperous years when they could save (see Osella and Osella 2000:129). Others still strive to save as much as they can, wishing the market to pick up to increase their income and enable them to build. Other positive investments consist in redistributing part of their wealth to the extended family and the local community – particularly by means of organizing religious ceremonies, sending remittances to their kin still living in the village, and giving alms to the poor.

In contrast, producers denounce 'bad' uses of money, both in economic and moral terms. As in many other societies, 'ill-gotten' money (through fraud, conning, or illegal trade such as drug-dealing) is thought to be 'ill-spent' and 'wasted.' In discourses mixed with jealousy, condemnation, or reproach, the wealthy and the youth are the main target of these discussions about ill-managed money. Martin suggested that "those who spend one or three millions [F

²⁶ Scholars observed similar behaviors among Polish (Pine 1994) and Sri Lankan migrants (Gamburd 2004:179), as well as Malagasy people (Walsh 2003:298).

CFA] for their wedding [are] those who want to be seen."²⁷ To justify his position, he quotes a Mossi proverb reminding people that one should "do what you can rather than what you'd like" (Mana f sẽn tõe, la fo vẽn fo sẽn nonge or bas fo sẽn nongo). Several older workers believe that young people do not try to save money as "before." Rather, as soon as they get a bit of money, they spend it on women or whatever they want.²⁸

Conceptions about success

The notion of success is fundamentally cultural, as it is linked to local understandings and practices of wealth accumulation as well as to its opposite – yet related – notion: poverty. Many studies from different cultural settings have recorded that people aspire to a successful life, even though this desire varies in its content and form. Even marginal groups such as young homeless people in industrial countries like Great Britain or Canada desire "to achieve rather conventional goals, such as a home, a family and a job" (Gaetz and O'Grady 2002:434). Most of them take pride in making their "own money and not be depending on welfare" and they "do aspire to take jobs in the formal economy" (2002:441, 451; emphasis in original).

The conception of success of Burkinabè producers is closely linked to that of 'hard work' and of God, Who rewards one's work and piety. As a result, being successful at work brings a sense of satisfaction (van der Geest 1997:548).²⁹ Moussa, the head of the largest aluminum-smelting workshop, believes that it is God who "*helped*" him³⁰ and made it possible for him to

²⁷ « Ceux qui dépensent un ou trois millions pour leur mariage [sont] ceux qui veulent se faire voir » Martin, tinsmith. Fieldnotes, February 19, 2003.

²⁸ « Runda jeune dãmba, ob sãn pam ligda bilfu bala, ya pagba la ob sẽgd kẽnge. Ils cherchent pas à cotiser quelque chose. Or avant là, ce n'était pas comme ça. » Abdul-Wahab, tire-worker. Interview, August 27, 2003.
²⁹ See chapter V on the meanings of work.

³⁰ "Wend naam sõng mam." Moussa, aluminum-smelter. Fieldnotes, February 3, 2003.

"progress" (kẽng taore) and be successful.³¹ Yet, his success is also due to his personal hard work, as he never "asked [anything to] anybody." As a result, "people fear" (i.e. respect) him.³² And since money derives from God, wealthy people should give alms to those who have none. "If you are rich, you [should] give money [alms] to people... It is good [to do so] since it is God who gave [it] you."³³

Producers explain the success of others in terms of these two components: personal hard work and God or luck. Commenting about Ousseni, the former tire-worker who has now become a rather prosperous entrepreneur, one tire-worker said that "he is a hard-worker" (a tvmda wvsgo). He added that Ousseni used to be able to cut up to five tires in one day, which seemed quite an achievement. Another tire-worker believes that it is God who helped Ousseni become successful, giving him money to buy supplies, unlocking the market for him to sell his goods, and thereby, allowing him to become "a boss." Yet for some, success depends on luck. "I can become a boss and [build] my future on [aluminum] pots. Yeah. [Yet] I can become a boss, and then the market will go down. Then I don't have any future. [...] It's a question of luck.*"

Material belongings often strike producers as outward signs of success. As I returned from interviewing the head of the aluminum-smelters' association, Moussa's first remark was about this man's wealth. He asked me: "Did you see his house? Everything belongs to him. On one side, you have the house and the workshop. He has a car, a Vespa [scooter, and] a Yamaha

³¹ "Wênd naam man ti tõnd kẽnga taore."

^{32 &}quot;Mam ka bõns ned ye donc neba zueta mam." Moussa, aluminum-smelter. Fieldnotes, February 4, 2003.

³³ "Fo sãn ya rakãagre, [fo] kõ neba ligdi... Woto ya soma puisque ya Wēnd sẽn kõ fo." Hamidou, Moussa's worker. Fieldnotes, February 5, 2003.

³⁴ "Wênd nam sõngolom ti kẽera pam mobilli n dare wey" (God helped him to buy cars); "La Wênd nam hãn lok fo ya..." (If God 'unlocks' [the market] for you...); "Yễ lebga patron wa runda" (Today, he became a boss). Zakaria, tire-worker. Interview, August 28, 2003.

³⁵ « Moi je peux devenir un patron et puis avoir mon avenir dans les marmites. Ouais. Comme je peux devenir un patron, et puis le marché va descendre. Donc, j'ai pas eu mon avenir. [...] Ya zu-nōgho. C'est une question de chance. » Léon, one of Moussa's team leaders. Interview, September 26, 2003.

[motorcycle]."³⁶ He went on, describing the coolness of the place where this man lived, which was surrounded by trees and located near a dam.³⁷ Paul too, was quick to judge people as "*rich*" from their outward appearance and belongings. He described a rather modest tinsmith as "*rich*" as well (*Ya rakãagre!*), when the tinsmith had bought a Yamaha motorcycle second-hand. Yet, the tinsmith strongly refuted this statement, exclaiming: "*No! I'm not rich!*" (*Ayo! M pa rakãagr ye!*).³⁸

To be fat is also a telling sign of success. A Mossi proverb states that "If my aunt takes good care of me, my buttocks will show it." To be well fed and plump is a clear sign of wealth and comfort. To explain his financial problems, Bassirou, one of Moussa's oldest workers, claimed that he had "lost weight" (mam faagame) and that we could now see his collarbone. As a proof, he exhibited a picture of himself from a few years earlier, where he was sitting on his bed, topless, proudly displaying his large belly. He commented, "I had money [then]!" (mam ra tara ligdi!). At that time, he was not yet married and spent his money "playing with women." However now, he is "miserable" (ya nimbãanega).

Yet, what gives producers a real satisfaction of having a successful life is to reach a sufficient level of comfort to raise their children properly and give them a good education that may enable them to enjoy a good situation in life. Ismaïla summarized this desire well, asserting that "to me, a good life is not to have many houses. For me, it's about the kids. If your children

³⁶ « Fo nyã a villa? Fã ya yẽnda. Côté to, ya villa la atelier. A tara mobil, Vespa, la Yamaha. » Moussa, aluminum-smelter. Fieldnotes, February 10, 2003.

³⁷ Yet, he did not mention that this neighborhood also has the reputation of being filled with thieves, who can hide in the woods.

³⁸ Paul, aluminum-smelter and a tinsmith. Fieldnotes, September 20, 2003.

³⁹ "Pugdba tara m neere, ya kegba wilgdi." From pugdba: father's sister. Martin, tinsmith.

^{40 &}quot;Mam rema ne pagba wusgo." Bassirou, Moussa's worker. Fieldnotes, February 4, 2003.

have a good future, I can say that you have a successful life."⁴¹ When you have died, people "will not talk about [his] houses ... but about [his] children."⁴² That is why Ismaïla desires that if he "dies young, [...] my children will be able to live on their own [and] ... will not rely on anybody to live."⁴³

Jealousy is one of the obstacles to success. As one aluminum-smelter argued, "your comrade does not want you to progress. He wants you to fall... [It's] not easy." Martin summarizes this attitude as "the jealousy of Africans" (la jalousie des Africains). "There are [people who] don't even want you to succeed." According to him, this attitude prevents Burkinabè migrants coming back from Ivory Coast to go back to their village and build a house, for instance. "If [they] don't take your life, it will be something else." People will "start criticizing you [...] and in the end, you will give in."

Senses of happiness and fulfillment

Despite their frequent discourses about lack and poverty, most producers claim to be happy. Asked whether he considered himself to be "happy" $(s\bar{u}-n\tilde{o}go)$, ⁴⁸ Alassane replied: "I

⁴¹ « Une bonne vie pour moi, c'est pas avoir beaucoup de maisons mais, pour moi c'est.. c'est côté enfants quoi. Si tes enfants ont un bel avenir, je me dis que tu as réussi ta vie quoi. » Ismaïla, aluminum-dealer. Interview, August 7, 2003.

⁴² « Puisqu'après ton départ, ils vont pas parler de tes maisons mais ils vont plutôt parler de tes enfants. »

⁴³ « Je veux que même si je meurs tôt, que mes enfants arrivent à vivre d'eux-mêmes, qu'ils ne comptent pas sur quelqu'un pour faire leur vie. »

^{44 «} Ton camarade ne veut pas que tu te développes. Il veut ta chute... [C'est] pas facile. » Aluminum-smelter. Fieldnotes, September 25, 2003.

⁴⁵ « Y a d'autres [personnes] ..., ils veulent même pas que tu réussisses. » Martin, tinsmith. Interview, August 18, 2003.

⁴⁶ « Si on ne t'ôte pas la vie, on peut te faire d'autres choses. »

⁴⁷ « Ils vont commencer à te critiquer [...] et par finir, il faut que tu suives seulement. »

⁴⁸ Sũ-noogo: happiness, joy, contentment. From *sūri*: heart and *nõgho*: good (Alexandre 1953).

can say that I'm happy." 49 He and his family are in good health, so "I'm fulfilled" (Je suis comblé). However he adds that if one of them becomes ill and he does not have the money to pay the medical bills, then he will be frustrated. In a similar way, Zakaria, an old tire-worker, replied to the question on happiness with mixed feelings. He began by replying, "yes, there's happiness" (Eh, sũ-noog be be). Yet, his discourse changed after a while, revealing a source of frustration. Showing the five pairs of sandals that he had been able to make, which he would sell for only 200 F CFA each, he commented: "I don't have money [...] That's why [I say] that I don't like [it]. ... that's why I can say that life is not that good. Hmm. If you don't have [enough money to produce many sandals] to display ..., [you] cannot say [that] life is good. But it's all right. As long as God make [it possible for me] to be alive [he laughs] ... As long as [I am] in good health, my life is good."50

Producers' perspectives on the future of their trades is quite revealing about their level of satisfaction. Many tire-workers for instance, believe that their trade will not last very long. According to Abdul-Wahab, younger men are not interested in cutting tires and making sandals because "it is a job for old men" (ya nin-kẽema tơma). Plus, they want to earn more money than this job can offer. Indeed, if some tire-workers believe that the trade will continue, they would not advice a young man to go into this business: "It's difficult. You cannot earn a living [from it]."51

Tinsmiths and aluminum-smelters are more optimistic about their trades. They know that people will continue to eat local food, which necessitates adapted and large pots that cannot be

⁴⁹ "Je peux dire que je suis heureux." Alassane, spring-maker. Interview, August 26, 2003.

⁵⁰ "M pa tar ligd ye [...] Ya rē, kitem ti mam pa nõom wey [...] Ya rē kiti.. tõe yete vuma ka nõom wusgo ye. Hmm. Fo sãn ka tarê na deglge, ... ka tõe yete.. ob vuma ya nõogo ye. La ya nõogo. Wênd naam h man ti ya.. [he laughs], yãoa kite m vu! [...] Laafi wa kitem be ya, mam vum ya nõogo." "Ya toogo.. Ka tõe pam n di ye."

found elsewhere. In addition, Burkinabè purchasing power will not change overnight to enable people to buy gas stoves. The main inconvenience of their production is the physical strain. When they get old, they will not have enough "strength" (pãnga) to continue working. They know that "machines" will gradually replace them and makes the work easier and faster. This is at least Paul's conviction. He believes that one day, aluminum-smelting will disappear with the arrival of factories and machines. Then, they will stop "suffering" (namse).

For these reasons, many producers do not want their children to continue in their trade (Herzfeld 2004:79-80). Martin for instance, believes that tinsmithing will be out-of-date within four or five years as gas stoves will gradually replace tin stoves. That is why he wants his children to study well, "know the paper" (connaître le papier) and "evolve" (cherchent à évoluer). Alassane too would like his children to do what he could not do: enter the public service and become civil servants (fonctionnaires). Fassmane, tire-worker, like Moussa, aluminum-smelter, both would like their children to take up different jobs so that they can help one another. If one trade does not work well for some time, the others will certainly fare better. Of course, if their children do not perform well at school, they can always fall back on their father's trade but that is not their wish.

In fact, many producers would like to stop their own activity and undertake a new one. Many young men working for Moussa plan to leave. Bassirou, who is one of the senior workers, intends to work at the "forge" until the age of forty – in nine years. "At the age of forty, I quit this job and look for another job, [like] opening a shop ... [where I will] just have to sit and sell

⁵² « A : Bon, ce que je souhaite pour eux [mes enfants] c'est que, je veux qu'ils étudient. Bien! Me: Pour devenir un fonctionnaire? A: oui oui, c'est mon souhait pour eux comme ça. Comme je n'ai pas pu réaliser, je veux que eux au moins, ils auront la chance.. » Alassane, spring-maker. Interview, August 26, 2003.

⁵³ « Nved raaga marchda sõng-sõngo, ti yễ raaga ka marchd ye, sõngda taaba... Sãn be zing a yembre, ya soma. La sãn ya mam yam yakre, mam data ti a bao tvma to. » Rasmane, tire-worker. Fieldnotes, July 7, 2003.

[aluminum] pots." Hamidou as well, who runs all kinds of errands for Moussa and finishes the work on aluminum pots, plans to open a shop (commerce) in ten years. Many producers, like Martin the tinsmith or Alassane the spring-maker, have actually tried to open retail shops. Their attempts failed as the market declined and relatives kept soliciting financial help. Yet, Alassane still dreams that whenever he saves enough money, he will open a "PMUB" (Burkinabè National Lottery) booth and a phone center (télécentre). He is convinced that these two activities will be lucrative: "I got this idea because I'm a bettor. And I know how people spend [money] in this, ha! It can bring me [money] ... "56

Other producers, mostly younger ones, wish to go abroad to another African country or to the West. A young aluminum-smelter tried to go to Gabon in 2001 to work. However he could only stay three months as he did not have the right papers. He then went to Nigeria, where he stayed another three months, working in a restaurant while preparing another attempt to return to Gabon. It failed again so he eventually came back to Burkina Faso and opened his own aluminum-smelting shop. Léon too intended to go to Gabon to join his father who already worked there as a bulldozer driver as well as an older brother. At the time of my study, he was saving to pay for the driver's license, which ranged from 45,000 F CFA to 120,000 F CFA depending on the driving school. His father would take care of the rest (paperwork and transportation costs) to make him come to Gabon. Alternatively, he also considered

⁵⁴ "Yum pis-naase, m [na] bas tum kãnga, n bao tuma to [wa] pak boutique... wa zi bala n koos rugdo." Bassirou, Moussa's worker. Fieldnotes, February 4, 2003.

⁵⁵ « Ah, j'envisageais [d'ouvrir une boutique]. Mais jusqu'à présent je n'ai pas réalisé. Puisque y a les petites dépenses qui surviennent de partout! C'est l'Afrique c'est comme ça. Les petits frères, les grands frères, [moi je suis venu] en aide, c'est comme ça. [He laughs]. » Alassane, spring-maker. Interview, August 26, 2003.

⁵⁶ « J'ai eu cette idée parce que, je suis un parieur. Et pis je sais comment les gens investissent dans ça, hé! Ça peut me rapporter... »

accompanying his older brother who planned to go to Europe. "I liked adventure since my childhood. So I have this in my mind. But I do not intend to make [aluminum] pots elsewhere." 57

Dreaming out loud, many would like to leave their arduous jobs, which require being in good physical condition. "It's [a] good [job] but it [requires] strength. If you don't have strength, you cannot make a lot of money. Voilà." This tire-worker continues, saying that "if I were young, [I would ask] God to help me go to America. But I was [born] in this [tire-working]. I don't have any other job." Working in Moussa's workshop, Léon is aware of the dangers of aluminum-smelting on his health. "This job is too much. It's hard... It's too hard. [...] You suffer a lot. [...] You grow old quickly. [...] Because when you go home, you cannot sleep. You're very tired. [...] Since we work with our strength, the heart works hard. Because you breathe in a lot. [...] So your heart pumps a lot. Then, it will leak." Lifting heavy weights and inhaling toxic exhalations also bring additional health problems (such as back problems).

The turnover of apprentices and young workers can be relatively high because of the difficult working conditions. Very few are able to climb up the socio-economic ladder.

Apprentices may leave tinsmithing or aluminum-smelting to begin a new apprenticeship in wood-working or mechanics. However few mature producers are able to accumulate enough money to become a retailer or begin a new trade all together. Having the responsibility of providing for their family, they cannot afford taking the risk of starting something new.

⁵⁷ « Depuis mon enfance j'ai aimé l'aventure. Donc, moi j'ai ça dans ma tête. Mais je compte pas aller faire des marmites ailleurs.. » Léon, Moussa's worker. Interview, September 26, 2003.

⁵⁸ « Ya soma la ya pãnga. Fo hãn ka tar pãnga fo ka tõe pama ligda wʊsgo ye. Voilà. » Abdul-Wahab, tire-worker. Interview, August 27, 2003.

⁵⁹ « Mam hãn ya jeune runda, mam .. Wẽnd naam [sõng mam] mam ta Amerik bala. Be la mam [doga] bala. M pa tar từmda to. »

^{60 «} Tumna menga, c'est trop. C'est dur. [...] C'est trop fort. [...] Fo namsida wusgo. Ça utilise [cause] de vieillir vite. [...] Puisque quand tu rentres tu peux pas dormir...fo ye wusgo. [...] Tellement, la manière qu'on travaille avec la force, le cœur là travaille fort. Puisque, fo vuusda wusgo [...] Donc cœura pompda wusgo [...]. Par la suite, a na wa talla fuite. » Léon, Moussa's worker. Interview, September 26, 2003.

Depending on what they are considering and comparing themselves to, producers may have both a sense of fulfillment and frustration about their life and work situations. As Herzfeld wrote, there is an "increasingly homogeneous language of culture and ethics" by which people assess their worlds, which "constitutes a *global hierarchy of value*" (2004:2, emphasis in original). They acknowledge to earn "*enough*" money to feed their family and care for their relatives – up to a certain level, at least – but "*not enough*" to enjoy a desired level of comfort and meet the demands of an increasingly expensive urban life. They are doing much better than village farmers who tended to find precarious work as night guards. Even then, their earnings are not as regular as civil servants' or as big as prosperous traders' or entrepreneurs' – or European expatriates'.

These – quite lucid – arguments have a deep influence on the production of stereotypical conceptions about themselves, the state of their country, as well as their African fellows in general. Herzfeld stated that "[p]eople make disparaging comments about their own local cultures because they are already judging them by an intrusive set of standards. The resulting stereotypes, often embodied in increasingly stylized forms of self-presentation, become a form of self-confirming everyday experience." To him, this is a clear evidence of "the ubiquitous but often unobtrusive operation of the global hierarchy of value" (2004:21).

In Burkina, these perceptions are brought out even more clearly when people compare themselves to an idealized and imaginary Western world. In their imagination, rich, northern countries are places of modernity, success, and well-being. There, people do not suffer: they live comfortably, eat well, and can rest at weekends. Paul once said that in Europe, "there's food...

Here, we're suffering. There's dust [i.e. the roads are not tarred]" When I explained that Europeans do not repair as much as Burkinabè do, he declared, "We don't like this [our] job" (Tõnd pa nong từm kãng ye). When I asked which job he would like to do, he replied, "We only want to rest." A producer of inner-tube buckets (puisettes) also made the comment that "in your country [i.e. France], you have means. You can rest on Sunday."

White people also exemplify creativity, innovation, and efficiency. While he was sprinkling the white *goore* powder on a cast, Paul commented that white people would already have invented a machine to blow the powder instead of doing it manually. Likewise, Lagui Moumouni believes that white people can build machines, which could produce twenty to thirty charcoal stoves per hour. Talking about Ousseni, a former tire-worker who turned into a quite successful entrepreneur, an older tire-worker commented: "we Blacks and [you] Whites are very different... Europeans would have created a company" (i.e. a formal, modern business), but Ousseni did not, despite the money earned. 64

Certain work practices are even qualified as 'White' or 'Black.' As he had no time to talk to a neighboring mechanic who had come to visit him, Paul explained that he had become like a "nasaara" (a White) because he had no time to chat. Martin too, was considering working like a "nasaara" by charging his clients for his transportation costs when he visited them to take measurements. Hearing this, a fellow tinsmith remembered that he had forgotten the measures of

⁶¹ "Ya rib bala... ka ya namsde. Ya poussière." Paul, aluminum-smelter. Fieldnotes, December 31, 2002. Van der Geest noted similar comments among the Kwahu people of Ghana. "Talking about 'Aburokyiri,' an umbrella name for all rich northern countries, an old man said [...] 'Life there is sweet'. 'Why?' I asked. [...] 'There is plenty of money'" (1997:542).

^{62 «} Tõnd data vuusame bala." Paul, aluminum-smelter. Fieldnotes, December 19, 2002.

^{63 «} Yãmb tênga, yamb tara moyens. Yamb tõe vuus dimanche. » Maker of inner-tube buckets. Fieldnotes, December 4, 2002.

⁶⁴ "Tõnd ni-sablsa la nasaar dãmba zãra taaba... Nasaar dãmba, ob na man société." Tire-worker. Fieldnotes, July 21, 2003.

the freezer for which he had to make shelves. To him, it was a clear demonstration that he was not working like a white since he had not written down the dimensions. He thought he could remember but he ended up not being able to.

Quite strikingly, producers frequently make implicit comments about the 'inferiority' of Africans (ni-sablsa, lit. Black men)⁶⁵ compared to Europeans (nasaar dãmba, lit. White people). An old tire-worker asserted: "The White [man] thinks [during] the night. When he gets up [in the morning], he has an idea. But the Black [man], he just sleeps. "66 Another tire-worker went on, declaring: "the White, he puts his money in a bank." But in the village, "the old man will dig a hole to hide his money. He will not tell anybody [about it]. His son [or] his older brother don't know about it. If he dies, nobody will know" where he hid the money. 68 Others complain that "Africans are in trouble" (Ni-sablsa ya yelle, lit. 'Blacks are a problem'). Contrary to Europeans, they do not value the producers' work and effort and are not ready to pay the right price. And when they pay, it is "not enough." Paul grumbled: "The African is a pain. [He] wants something that doesn't cost him anything."⁶⁹

The role of the media in influencing these values is undeniable. Hawkins writes that television programming increasingly involves "examinations of ways to live" (2001:412-3, emphasis in original). It has a role, "not simply in making subjects [...] but in unmaking subjects, in cultivating new sensibilities and engagements, in enabling different micropolitics of the self" (2001:414, emphasis in original). In Cameroon as in most African countries, "[i]mages

⁶⁵ From *ni*: man and sablga, pl. sablse: black (color) (Nikiema and Kinda 1997:789).

^{66 &}quot;Nasaara tagsidame yõngo. A sãn yiki, a tara idée. La ni-sablga, a gõe bala." Tire-worker. Fieldnotes, June 19,

⁶⁷ "Nasaara, a bĩngda a ligd bank õ wa." Tire-worker. Fieldnotes June 19, 2003.

⁶⁸ "Nin-kẽema na man boko n bĩng a ligdi. A pa na togs ned ye. A biiga, a kẽema pa mi ye. A sãn ki, ned ka na mi ye." ⁶⁹ « Ni-sablga ya yelle. Ni-sablga rata tvm zéro. » Paul, aluminum-smelter. Fieldnotes, December 18, 2002.

of America are largely transmitted" to local television networks through popular series such as *Dallas* or *The Cosby Show*. "Some depict the dream lives of multimillionaires, others the relaxed atmosphere of American college campuses, still others invite the viewer to enter the warm and cosy world of affluent African-American families. As much as basketball and rap music, these images over the past few decades have helped turn the United States into a virtual reality for a large segment of the African population" (Monga 2000:201).

Burkinabè producers are not exempt from this media influence. State and private television channels ⁷⁰ regularly broadcast American, Brazilian, Mexican or French series and films, as well as locally produced ones that often include similar elements of modern and urban life. ⁷¹ Young people are also fond of Indian "Bollywood" movies as well as Asian kung-fu movies. Even if few producers own a television set (only Moussa does), many watch TV at friends' or relatives' homes, rent films at video stores, or go to the movie theater. They are also well informed of what happens worldwide as they regularly listen to or watch local and French news broadcasts on radio or television. ⁷² Local radio stations targeting youth play musical styles and clips that are currently in vogue in the country, in French-speaking Africa, and on the international scene.

Most young people enjoy both local and foreign versions of reggae, rap, and contemporary R&B music and the clothing fashions that accompany them. Madi for instance, who works at Moussa's workshop, admires trendy American pop stars such as R. Kelly and is always dressed in a hip-hop style after working hours.

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⁷⁰ TNB (Télévision Nationale du Burkina), Canal 3, and SmTv mainly.

⁷¹ Many locally produced television series and films also depict rural life in quite realistic terms.

⁷² Depending on their level of education, producers listen to Moore-speaking radio stations or French-speaking ones, which may be local or French, such as Radio France Internationale (RFI).

Yet, Burkinabè producers have mixed and ambiguous feelings about 'the West' and what it represents. Their premise is that "a well-developed material culture [is] integral to, and an indicator of, any normal or standard, civilized society" (Patico 2005:488). Against this standard of reference, they deem their country "less civilized and sophisticated—in its technology and material culture as well as in its social relations—than Europe (esp. the western and northern countries) and the United States" (2005:488). And even if they may mock and laugh at Western culture at times, they continue to regard it "with powerless fascination" (2005:165; Herzfeld 2004:64). Observing similar reactions among Serbs, Volčič believes that a better "understanding of the subjective positioning of a particular nation within the world order and against the West is crucial to making sense of the globalization process" (2005:158-9).

Like Serbs, Burkinabè conceptions of the West are mostly "essentialist" and may sometimes be negative (Volčič 2005:163). As he was hammering tin parts to fold them into a circle, Martin proudly pointed out that "if it were in your country, it would be easy [i.e. because you have machines]. But here, we work with [our] strength, with [our] intelligence." Another elderly tinsmith observed that White people work inside a building to "hide" their work (i.e. their innovations). In contrast, Africans work outside and if someone asks them how they do something, they will show it. "We don't have anything to hide," he claimed.

⁷³ « Si c'était chez vous, ça serait facile. Mais chez nous, c'est avec la force qu'on travaille, avec l'intelligence. » Martin, tinsmith. Fieldnotes, February 25, 2003.

⁷⁴ "Tõnd ni-sablsa [...] ka tar wala [...] tuma solge." Lagui Issa, tinsmith and former tire-worker. Interview, August 19, 2003.

The ambiguity of foreign aid

Producers' contradictory statements also affect their position regarding foreign assistance. On the one hand, they are proud of fending for themselves without the help of anybody. Bassirou, who is handicapped, refuses to go to an association for handicapped people to get help (*I'm ashamed*). He bought his current wheelchair himself fourteen years ago (100,000 F CFA), when he began working for Moussa. Now, it is worn out and he would like to get a new, motorized one. Even though he could get a new one free of charge through this association, he maintains that he is able to work and earn it himself. After the discussion ended, Bassirou left but the other young men working for Moussa quickly came to me, asking me to purchase the new wheelchair for him...

On the other hand, most producers are convinced that their situation is hopeless without foreign aid (see Ferguson 1992a:85-86). They are convinced that "Africans don't have [any] money. [Therefore] they cannot help one another." The only option and hope is to turn to those who have more money than them, the Whites – i.e. Europeans and North Americans. Despite his relative success, Moussa pleaded to me: "We just want some help [...] We Africans don't have any resources... [We] have nothing... [We] want you and your people to help us." Ahmed, the president of the tire-workers' association in Cité An II market, contended that his trade would not have much future without the help of Europeans. He suggested to me that once I returned to my country, I should buy them used inner-tubes and tires and ship them in a container for them

⁷⁵ "Yãnda tara mam." Bassirou, aluminum-smelter. Fieldnotes, February 3, 2003.

⁷⁶ « Ni-sablsa pa tar ligdi ye. Ob pa tõe sõng taab ye."

⁷⁷ "Tõnd datẽ sõngre bala [...] Tõnd ni-sablsa pa tar moyens ye... pa tar baafi... Datẽ ti fo sõng tõndo ne fo neba." Moussa, aluminum-smelter. Fieldnotes, January 22, 2003.

to keep on working.⁷⁸ As van der Geest, I was regularly solicited to provide bicycles, televisions, cell phones, crutches, helmets, and other items that necessitate a substantial amount of money (see van der Geest 1997:542).

Yet, the few experiences of receiving aid from development agencies have actually not been very conclusive. Many craftsmen are not aware of micro-finance programs and non-governmental organizations (NGOs) that offer loans to low-income professional groups. In addition, their conditions for obtaining a loan are not well adapted to craftsmen needs. They target mostly the rural population and women but more rarely male workers from the urban informal sector. They also tend to work with trade associations (*groupements*) rather than individuals, whereas most of these craftsmen do not belong to any organization (see Morduch 1999:1572; Fouillet et al. 2007:249-50). The amounts of the loan are often well below craftsmen's expectations and are conditioned to prerequisites that producers do not fulfill: many do not have the required collaterals (motorcycle, a substantial stock of merchandise) or a saving account in the institution.

Among those who obtained a loan, the experience produced mixed feelings. A representative of the Bureau des Artisans (Craftsmen's Office) explained that they had granted a loan of 2.7 million CFA francs to an association of tinsmiths and another one of three million CFA francs to an association of aluminum-smelters.⁷⁹ These associations were created mostly for the purpose of receiving these funding opportunities and getting more visibility (see Elyachar 2005:177-9). To obtain loans, the selected producers had to attend a workshop on money

⁷⁸ « Ah! Hãn ka yãmb na leb nasaar tẽnga ti sõng tõndo! Avenira pa waog ye. La hã n dat na loge, bi re adresse ramba, ti - bao chambres à air kuda, pneu kuda, ning - ba ya chambres à air bala. Pneu wa, ye zisa wɒsgo. Tigem bao chambres à air dãmba, ning container dãmba, ti lo ti ba wa Lomé bi - tõnd [tegle?] n deg n wa wa koose, lebgõ envoyer yãmba. Ha ya, ti, kellem n tʊm ne quoi. » Ahmed, tire-worker. Interview, July 10, 2003.
⁷⁹ Interview, December 13, 2002.

management. Even though he ended up not receiving any loan from the Craftsmen's Office, Moussa attended this preparatory workshop. Years later, he remembered the basic principle that "[your] *expenses* should not be greater than your strength* [earnings], *otherwise you would fall.*" He still tried to follow this advice⁸¹ but he did not seem to recall anything else from this training.

Those who benefited from these programs were disappointed, for the most part. The aluminium-smelters' association received less than half of the amount requested (10 million CFA francs). As a result, only fifteen members received a share (CFA 50-75,000) out of fifty, and the amounts received were not sufficient to make a difference. Another aluminum-smelter, who had received CFA 100,000 from another loan (instead of CFA 250,000 requested) calculated that his investment would only generate a profit of CFA 20,000. He concluded that saving money on a regular basis remained the best solution to finance his future investments (see Morduch 1999:1606, 1609; Fouillet et al. 2007:255).

To participate in these associations appears to be more costly than anything else for some producers. They keep paying membership fees at each meeting to cover the running costs of the association without seeing the payback. And when they miss one meeting, they have to pay double at the next one. They may also find themselves paying their loan back more than a year later without seeing much improvement in their professional situation. A tinsmith association had obtained a loan that paid half of the rental costs for a space at the international crafts fair organized in Ouagadougou (SIAO 2002). But since two members were defaulting, the others had to find a way to refund the remaining CFA 6,000. In fact, the participation of tinsmiths' and

^{80 &}quot;Dépenses ra wa yid fo pãnga ti fo lvi." Moussa, aluminum-smelter. Fieldnotes, February 8, 2003.

^{81 &}quot;Mam me mamsame n wa ne." Fieldnotes, February 8, 2003.

aluminum-smelters' associations in this fair did not seem to have brought tremendous changes in their collective or individual situations.

Imagining "nasaar tenga"

These dreams and frustrations induce a minority to attempt to go abroad, to "nasaar tenga." A telling example is that of Karim, Moussa's firstborn son. Despite his father's successful workshop in aluminum-smelting and his own trade in aluminum supplies, Karim was trying hard to go to the United States or Italy. He planned to work hard there for five or seven years, make money, and return to invest in the aluminum trade and have a comfortable life. In 1997 and 1998, he applied for a visa at the American consulate in Ouagadougou. To show that he had enough resources, he opened a bank account and deposited seven million CFA francs in it. Despite all these guarantees, his attempts did not succeed. Another young tire-worker recalled his two failed attempts to go to Europe illegally, via Libya: "I suffered there [in the desert]! [...] Policemen from Niger, ha! They [...] beat us, beat us.. Ha! It's tough!" In the end, he could not go further than Niamey in Niger. Policemen and thugs stole his money and he went back to Ouagadougou after finding a truck that drove him back.

Despite these painful stories of failed attempts, it is those of success that prevail in people's imagination and continue to feed their dreams (see Monga 2000:206). Among producers, almost everyone knows someone who has gone to "nasaar tenga" and is now living comfortably back

⁸² Like the term 'Aburokyiri' for the Kwahu people, "nasaar tenga" (lit. the land of the Whites), is "an umbrella name for all rich northern countries," mostly Europe and North America (van der Geest 1997:542). Lebanese tradesmen settled in Ouagadougou are also called "nasaar damba" (Whites) but their country is not explicitly included in the conceptual space of "nasaar tenga".

⁸³ « Moi j'ai souffert là-bas! [...] Les policiers du Niger là, ah, ils nous ont [...] frappés, frappés.. Ah, c'est grave hein! » Madi, tire-worker. Interview, August 27, 2003.

home. Hassane for instance, has younger and older relatives who live abroad. "They send money... And the rest of the family is comfortable. [...] They are well. I can see that they are well. "85" Idrissa too, an old tire-worker working next to Rasmane and Boureima, has a child who lives in the United States. "My children are important people," he boasts. He boasts. Boureima goes on, explaining that life in Burkina Faso is difficult. "Here, it's very difficult... If you [want to] have a nice house, a motorcycle, and take care of your relatives in the village, it's difficult." In contrast, his friend who lives in Germany "earns a lot of money! ... [It] reaches a million [CFA francs]." Boureima also knows a woman who left for the United States with her husband in 1993. When she comes back, he is sure that she will help him to fill in the paperwork necessary to go there too. He imagines that with the money earned there, he will "build big houses to rent out" ([M na] me zagse, bed-beda, n ning louage).

Even if producers are fairly realistic about the difficulties they could encounter once (and if) they get to *nasaar tenga*, the trade-off seems worth it. ⁸⁹ One client in Cité An II market, who came to buy rubber bands declared that he was ready to wash dishes in restaurants to make money. He knew that with his hard-earned money, he could build apartments to rent. ⁹⁰ One

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⁸⁴ A newspaper article describes similar situations, when a whole neighborhood shares the story of a young man who successfully arrived in Europe and is now able to help his family. In another neighborhood, large villas embody the success of Bissa men who migrated to Italy, encouraging others to do the same (Somé 2006).

⁸⁵ « Ils envoient l'argent... Et puis, le restant de la famille là, ils se sont bien calés là. [...] Ils sont bien! Je vois qu'ils sont bien. » Alassane, spring-maker. Interview, August 26, 2003.

⁸⁶ "[Mam tara] kãmba sẽn ya nim-beda." Idrissa, tire-worker. Fieldnotes, April 12, 2003.

⁸⁷ "Ka ya toogo wusgo... Fo sãn tara zak sõngo, zomb montere, la gɛt village neba, ya toogo." Boureima, tireworker. Fieldnotes, April 12, 2003.

⁸⁸ « A pama ligdi soma! [...] ta million."

⁸⁹ The same newspaper article (see note 123) explains that images of illegal migrants driven back home do not discourage Burkinabè aspirants. Reprehensible actions such as stealing from one's parents are even accepted when they are rewarded by a successful existence abroad with subsequent remittances (Somé 2006).

These are called "célibatorium" in Burkina Faso.

young man commented that "even if it is hard, it pays well." Africans there work hard; they are "courageous." They do all kinds of "forced labor" (travaux forcés) such as being drivers, mechanics, or factory workers. Still, those jobs are not as hard as "here." Alassane argued that even if they worked as hard in "America" as in Burkina Faso, at least they could save because "the dollar pays well!" (le dollar là, ça rapporte beaucoup!). In Burkina, they cannot save because of the "family." 92

It is clear that such dreams of going abroad are rooted in their needs and aspirations at home. They dream of working hard for five or seven years in order to save money and improve their family's standard of living. They wish to build a house, buy a car, and acquire commodities symbolizing comfort. In addition, they want to invest in other activities to secure a stable income: build houses to rent, open a retail shop (*boutique*), or purchase large amounts of supplies to continue to expand the production of their workshop. Since money is available the West, they dream of tapping into these resources to meet not merely their basic needs – which they fulfill quite well already – but more ambitious aspirations of enjoying a "*good life*" as much as Europeans and North Americans.

Of pride and happiness: a possible sense of fulfillment

The drive to go abroad and come back "wealthy" (rakãagre) is at the same time nuanced by convictions that producers can succeed and be happy in their own country. Ousseni for instance, the former tire-worker turned into a successful entrepreneur, believes that going to

⁹¹ « Même si c'est dur, ça gagne beaucoup. » Young Coranic teacher visiting a tire-worker. Fieldnotes, September 2, 2003.

⁹² « Ici on ne peut pas économiser parce que y a la famille. » Alassane, spring-maker. Interview, August 26, 2003.

Europe will not benefit Burkinabè people. "They don't make money [there]" ([ob] pa pam ligd ye). Since he was able to make money in Burkina Faso, it proves that it is possible to be successful at home. "I am 100 per cent Burkinabè. I love Burkina." And even if life becomes more expensive in the capital city, money comes "faster" than before (ligdi keda tao-tao).

Despite his own desires to go to Europe for business purposes, Ismaïla, Moussa's nephew, also believes that Burkina Faso is not a poor country. "Burkina is not poor. But it's the politicians who impoverish it. [...] If they would work as honest people, Burkina would be selfsufficient [...] I believe that our leaders do not want to do anything. They always want to sit and wait for foreign aid, for the West, to enrich themselves." ⁹⁴He sees his country with plenty of resources that the leaders neglect to exploit. They could transform cotton, shea butter, or millet in their own local factories to produce fabric, use shea butter in the production of chocolate tablets, or brew their own millet beer to manufacture a local version of French cider. "You just need to have the will and set up a dynamic team that would do some research for future projects [...] It's a question of will [...] Otherwise, there is no miraculous solution, I don't think so." 95 Ismaïla also believes that aluminum-smelters could improve their production of pots by opening a factory and using machines, "instead of doing it manually [...] and break [the cast] again and [have to] redo it because it did not come out right." In working with machines, the pots will be

^{93 «} Moi, je suis 100% Burkinabè. J'aime le Burkina. » Ousseni, former tire-worker/entrepreneur. Interview, July 14,

^{94 «} Le Burkina n'est pas pauvre. Mais c'est les dirigeants qui l'appauvrissent. [...] S'ils allaient travailler en honnêtes hommes, le Burkina allait se suffire à lui-même. [...] Moi je pense que c'est parce que nos dirigeants ne veulent rien faire. Ils veulent toujours s'asseoir et attendre l'aide de l'extérieur, de l'Occident, pour s'enrichir. » Ismaila, aluminum-dealer. Interview, August 21, 2003.

^{95 «} Il suffit seulement d'avoir la volonté et d'installer une équipe dynamique qui fera des recherches pour des projets futurs [...] C'est une histoire ... de volonté. [...] Sinon ... y a pas de solution miraculeuse quoi .. je ne crois pas. »

96 « Au lieu que ça soit à chaque fois fait à la main, [...] et recasser pour refaire parce que c'est mal sorti. On peut

faire ça à la machine directement. »

even "nicer" (plus jolis) and will attract more clients than the other types of industrial aluminum ware. "But why has it not been done yet? Because people haven't thought about it so far. And they don't believe that it's feasible."⁹⁷

According to UNESCO, "poverty may be defined as a human condition characterized by sustained or chronic deprivation of the resources, *capabilities, choices*, security and power necessary for the *enjoyment of an adequate standard of living* and other civil, cultural, economic, political and social rights" (UNESCO 2007; my emphasis). ⁹⁸ I believe that the main issue that Burkinabè producers are facing is the lack of options to choose and take initiatives for their business that would benefit them, their families, and ultimately, the nation all together.

African intellectuals such as Beninese economist Albert Tévoédjrè have attempted to give a "positive value" to the notion of "poverty," and allowed for a "positive model of development" (1978:18, 27). To him, what really mattered was not "to have" but "to be" (1978:28). Twenty years later, Burkinabè journalist Norbert Zongo⁹⁹ was writing along the same lines, maintaining that "[t]o be rich of one's poverty is to never yield to the easy temptation to 'sell [our] Being [for] the benefit of Having" (2001a:43, emphasis in original). To him, "the United Nations can give us more money but not the main thing: ourselves. [...] We must be confident in our capacity to take our responsibilities, to fulfill ourselves, [and] to thrive" (2001b:56). 100

Despite their desire for a better lifestyle, Burkinabè producers do agree, however, with Norbert Zongo. As I have shown in the beginning of this chapter, they acknowledge being

⁹⁷ « Mais pourquoi c'est pas encore fait? C'est parce que les gens n'ont pas encore pensé à ça. *Et ils ne pensent pas que c'est faisable* » My emphasis.

⁹⁸ Quoting a definition elaborated by the United Nations Committee on Social, Economic and Cultural Rights in 2001.

⁹⁹ Assassinated in 1998 in obscure circumstances.

¹⁰⁰ « Les Nations Unies peuvent nous donner plus d'argent mais pas l'essentiel : nous-mêmes [...] Nous devons avoir confiance en notre capacité de nous assumer, de nous réaliser, de nous épanouir » (Zongo 2001b:56).

"happy" (ya sũ-noogo) and satisfied with their lives, to a certain extent. They take pride in their work and enjoy it. While Paul boasts about the fact that he "works with [his] intelligence" (tõnd tʊme ne bãngre), Rasmane is proud to say to a young female trader who was looking at his decorated tire-sandals that he "cannot do something that is not nice" (mam pa tõe tʊm tʊma sẽ ka neer ye). Lagui Moumouni, a gifted tinsmith, proudly alleges that his "work is outstanding" (tõnd tʊma ya fort). Having traveled and seen different things in his life, he concludes that he is "happy." Ismaila too, Moussa's nephew, claims: "I like my job" (J'aime bien mon travail) as it involves negotiating, finding new clients, dealing with suppliers, and striking new contracts. In entering his personal information when creating a new e-mail account, he chose to define himself as an "entrepreneur" as his professional activity.

Most of them are proud to be craftsmen, as they are independent and can make a living without depending on anybody else. In addition, they are aware of possessing skills and a *savoir-faire* that other people do not have. Lagui Issa, an old tinsmith who is now almost blind, summarizes producers' perception very well: "We didn't go to school, we didn't last in Coranic schools, but we have a brain, we [can] take something and make something [else with it]." The old man was very proud to recount that former President Maurice Yaméogo 103 stopped at his stall to look at his tin trunks and encouraged him saying that he did a "good" job (ya soma). The President gave him a "paper" (sebre – probably a certificate), congratulated him, and gave him

^{101 &}quot;Mam sura nõmame [...]. Mam niã bum toor-toor wey. Waogam wey."

¹⁰² "Tõnd pa karm nasaarande, moeemba me ka waog ye, la tõnd mi yam, n dik bumbu, n man bumbu." Lagui Issa, tinsmith and former tire-worker. Interview, August 19, 2003.

Maurice Yaméogo was the first President of Upper Volta, from 1959 to 1966.

a thousand CFA francs, which, at that time, was a considerable amount of money for the tinsmith. 104

Producers' conceptions of money, success, and poverty are not uniform and can be quite contradictory at times. The reason for this is that they live in a changing and multifaceted world and are confronted with new challenges for which they do not always have the keys to overcome. Producers value their work while considering doing something else. They are proud of their know-how and skills yet may also feel inferior to the "Whites." They claim to be "happy" while dreaming of going to "nasaar tenga" to quickly acquire the money that will enable them and their families to live better. They are looking to the rich and resourceful "Whites" for help while being proud of working hard and being independent workers.

In this chapter, I attempted to demonstrate that these values have a tangible effect on how these producers perceive themselves, their work, their lives, and their future. The widespread desire to go to "nasaar tenga" is more than a trope or a wishful thought. Even if they will never leave their country or attempt to, the frustration that life is better 'out there' has a very real impact on the way they appraise and carry out their lives. Although producers may feel proud of their work and skills, their conviction that they are poor, powerless, and that the solution lies 'outside' may be a real hindrance to their self-construction as individuals and as a nation. Zongo wrote that "without self-confidence, there cannot be any development" (Zongo 2001c:88, my translation). The key is therefore inward and the challenge resides in Burkinabè regaining their

^{104 &}quot;...man sebre n kõ [mam], n félicite [mam] ya, n kõ [mam] kobessi."

^{105 &}quot;... sans confiance, il n'y a pas de développement." The word 'confiance' means both trust and self-confidence, assurance.

"ability to define themselves and express their conscience" and confidence, both at an individual and collective level (Zongo 2001e:87).

Chapter XVII. Conclusion

In this dissertation, I examined how producers in the capital city of Burkina Faso manage to generate gains in producing utilitarian goods from scrap materials. These trades are not traditional activities converted for the benefit of international consumers of 'authentic' art (Appadurai 1986; Herzfeld 2004). They are very modern trades, which have developed with the rising import and circulation of goods, ideas, and people within the West African region and beyond. They are all dependent – at least partially – on imported scrap supplies from Europe and brought to landlocked Burkina Faso after journeying through West African ports. Yet, they do not produce for export but solely for the domestic market, adapting their production to changing needs and targeting both urban and rural populations. Operating outside the circuits of development aid, NGOs, and microfinance programs, these producers have maintained their activities for over three decades, resisting the whims of the domestic and international economies, and seizing every new commercial opportunity that the booming capital city offers.

Gainful and gain-oriented activities

After decades of studies of the informal sector that mostly presented a negative and fragmented portrait of these activities, I was convinced of the necessity to broaden my analysis beyond a strictly economic, Western-centered viewpoint. Inspired by Guyer's work (2004), I suggested examining these producers' practices and organizations in terms of gains. My premise was that for these activities to persist over time, they ought to be gainful economically. But if they do not fulfill all the Western, neoliberal criteria of a sound business, there may be other

types of gains involved. In choosing this open-ended concept of gains, I identified a whole range of positive outcomes that producers make and aim at through their activities.

What I found was that the activities of most of these producers are indeed gainful and gainoriented. My detailed observations of their work organization and technical processes, the
training of apprentices, and their marketing and accounting strategies revealed how producers
consciously endeavor to generate a profit-margin as substantial as possible. Well aware of their
operating costs, they refuse to produce or sell an item if it entails too big of a loss. They often
specialize in the most profitable items and are on the lookout for new trends to carve themselves
a 'niche' in this very competitive environment. Facing different types of technical and economic
constraints depending on the activity, they all manage their enterprise with clear economic
objectives in order to provide themselves with an income and sustain, and if possible, expand
their activity.

This detailed ethnographic account of these three types of recycling activities was necessary to deepen our understanding of how producers operate in the informal economy of Burkina Faso. Focusing on one trade would not have allowed me to gain comparative insights and identify the challenges they are facing and the strategies they use to meet them. Producers have to contend with the structural limitations of the market, the scarcity of cash, the lack of government help and voluntary strategies, but also with their dependency on the international and regional economies for supplies. At the same time, each trade faces different challenges pertaining to the technical nature of the work and the type of goods they produce. While aluminum-smelting requires the presence of apprentices for the production process, tinsmithing and tire-working do not. While metal working produces an expanding variety of goods for the

domestic market, tire-shoe making tends to fall out of fashion, targeting a shrinking market of peasant and elderly consumers.

Given such circumstances, these activities are quite successful. They provide work for recent urban dwellers and school dropouts, enabling them to look after their families and other dependents. Some workshops have been able to expand significantly, hiring up to fifty workers, directly importing their supplies from a neighboring country, supplying a nation-wide network of retailers with a particular range of goods, and diversifying their activities in exports. Without the help of international organizations, foreign investments, or the government, these three trades are able to provide the whole domestic market with goods that are functional and affordable for the basic needs of the population.

This understanding of the workings of the domestic economy is critical for policy-makers and development agencies to tailor any aid programs. These programs should build on producers' skills and strategies if they want to be beneficial at all. Starting from what people already know and master is essential to build their self-confidence. As Elyachar pointed out, producers and entrepreneurs might not need to be in debt through microfinance projects but might welcome additional options to save for both social and work purposes (2005:26-7; Fouillet et al. 2007:249-50). Increasing their capacity to invest through their savings might be determinant for the economy.

The importance of social gains

These activities produce other types of gains that operate with different scales of value (see Guyer 2004:20; Latour and Lépinay 2008:12). Above all, they are essential for these male

producers to gain social status as providers and responsible men in their community. In an increasingly expensive urban lifestyle, producers are often the sole source of earnings for their immediate families and dependents. Failing to meet these needs can not only be disastrous in a society without a social welfare system, but also shameful. This brings a tremendous pressure on them, which can sometimes bring about illness. In the mind of some, especially the younger ones, going abroad, to the West, seems to be the best solution to improve their standard of living in a tangible way.

Producers' economic motivations interweave with social ones, influencing the way they manage their time, space, relationships, and money (Elyachar 2005:140, 150). Their workshops do not exist "in isolation" but are "one node of a complex system of social relationships" (2005:149-50). Their workspace is always open to visitors who pass by and producers may briefly interrupt their work to chat with them or exchange information. They may even close the shop for a few hours or for a day to attend social or religious events such as a wedding, namegiving ceremony, funeral, prayer times, or holidays even though it "might lead to financial loss" (Elyachar 2005:156).

Such events often necessitate the investment of important sums of money which, to a Western eye, might have been invested more productively in the enterprise. It is mostly for these important social events, but also for life's imponderables that producers feel compelled to save as much and as often as they can. In the absence of a reliable social welfare and subsidized education system, these male producers can only rely on themselves to tend to their families' needs and invest in their children's future as much as they can. What producers actually do is to

"shift among modalities of value production and transfer the forms of wealth and power that they produce in one domain to another" (2005:144).

Because of the rising costs of life, particularly in the capital, the younger generation of producers is compelled to make different choices in their social investments. Many do not agree with their fathers' choices of marrying several wives, making many children, or going to Mecca as pilgrims. They know that they cannot afford this lifestyle anymore. Instead, they intend to have a couple of children for whom they will strive to give a better future by investing in their education. The increased access to education and information in the capital will certainly alter the way the next generation of producers manage their enterprise, money, and relationships.

Despite the fact that these producers do much better than making ends meet as they invest in their families and communities, they often assess their situations negatively. Rather than looking at what they are able to achieve, they focus on their expenses, complaining that they do not have enough money and that life, in general, is hard. They play down their the ability – and that of Africans in general – to improve and help one another and place their hope in Westerners to solve their problems (by providing money, consumers goods, or technologies). I argue that their conceptions about themselves are critical to understand their situations and the challenges they encounter. Constantly confronted to values, ideals, and standards imposed upon them by the media and their country's upper-class, they aspire to partake of these new opportunities yet feel frustrated as they seem beyond reach.

This frustration and sense of hopelessness is exacerbated by the structural weaknesses of their national economy. With limited infrastructure, a deficient health care and education system, and a highly dependent economy, these producers do not look to the state for improvement.

Confronted with the absence of voluntary policy-making and vision at the national level and a lavish lifestyle advertised from abroad, it is difficult for producers to believe that change is possible in their daily lives. The solution seems out of their hands and they turn to the West and Westerners for help and for hope. Yet, decades of development programs and legal and illegal migration have not proven very fruitful either. I suggest that the challenge resides not in the means put in place but in people's conceptions about themselves and their situations.

The power of ideas

Many scholars studying the phenomenon called globalization have underlined the power of the media and of political and development discourses and policies on people's beliefs and convictions. Herzfeld, for instance, observed that "people from vastly different cultures appear to share some surprisingly similar values, at least in deciding what is a fitting way of disporting themselves on the international stage." To him, this "increasingly homogeneous language of culture and ethics constitutes a *global hierarchy of value*" that has a very tangible influence on people (2004:2, emphasis in original). In this process, workplaces and schools constitute major "sites of cultural inculcation" (2004:21).

People's perceptions of their distinctiveness, dignity, and sense of selfhood are also embedded in this hierarchy, appraised and devalued at the same time (Herzfeld 2004:210). They rarely "control the criteria of taste for the 'tradition' that they supposedly embody, produce, and represent" (2004:207). These standards are primarily set in places of former colonial powers and by categories of people that are in a position of – political, intellectual, artistic, economic, financial, or religious – power (2004:205).

Elyachar's study (2005) revealed some of the effects of development experts' conceptions about the economy on people's lives. As international organizations and local NGOs began to implement new microfinance programs in Egypt, she showed how neoliberal conceptions of the market were "inextricable from the implementation of new social technologies, and the spread of new social practices" (2005:5). Believing in the idea that the market helped empower the poor, development experts launched "informal economy lending programs" targeting small producers and entrepreneurs. However, these plans were not very successful as development experts did not realize that they were based on their own belief in a market which, "did not in fact exist" (2005:209). The few successful entrepreneurs only arrived "through fraud" (2005:208). Yet, these development ideas deeply impacted people's lives and economic situations, as "craftsmen had been transplanted to [a specialized neighborhood] as the objects of a market experiment carried out on human beings" (2005:209).

New conceptual approaches to the 'real' world

Scholars in the social sciences have also considerably changed the concepts with which they had been making sense of social phenomena. Instead of speaking in terms of separate categories, fields, or structures (social, economic, or political), they began to analyze social events in terms of scales, ranges, modalities, and networks that expand, diminish, overlap, and meet at some points (ties or knots) temporarily or for a longer time. This "erasure of traditional social science divisions" has prompted scholars to "think more creatively about how groups actually do exchange in and out of markets" (Elyachar 2005:157, 25).

Removing these conceptual barriers has opened up a whole new realm of innovating and inspiring analyses to which this dissertation wishes to contribute. Scholars should "think about a multiplicity of markets" since "there is no great divide between societies of the gift and those of the market" (Elyachar 2005:24-5). Indeed, craftsmen participate in all sorts of exchange. They are "involved in markets" and pursuing "economic interests," but are also "constantly engaged in giving" (2005:25, 139). What could be viewed as "a 'loss' from one point of view (of work, of money, or of a worker) is sometimes a 'gain' for the master from another" (2005:152-3).

Craftsmen are "not engaged in a monolithic quest to allocate scarce resources so as to optimize [their] monetary returns" (2005:156). What they do, instead, is modulating between "different value systems" and "neither 'the gift' nor 'the market' is an adequate concept with which to think about what is at stake" (2005:153, 140).

Future challenges

What does the future hold for these Burkinabè producers? According to them, as long as the population's lifestyle and purchasing power remain the same, they will continue to provide needed items that have no imported counter-parts. They also believe that their supply chains will not dry up overnight, even if significant technological changes such as tubeless tires have threatened their sources of inner-tubes. In fact, expanding mass production and consumption may have brought more opportunities for them to tap into new resources and economic outlets. Someone like Moussa has seized the opportunity to diversify his activities by collecting scrap iron, copper, and used batteries to sell them in Ghana, where they will eventually be sold and recycled in China. The spread of new consumer goods such as cars, mopeds (made in China),

and sofas have also brought new needs for spare parts that only rubber-workers and aluminumsmelters can provide cheaply.

At the same time, the rise of Asian economies such as China and India may threaten Burkinabè producers' access to scrap materials. Scrap iron supplies are increasingly shipped to these countries where they are recycled in local industries. As a result, scrap iron has become scarcer and more expensive for Burkinabè tinsmiths, since car owners and mechanics prefer selling to scrap dealers than to craftsmen, who have less purchasing power. A similar phenomenon occurs with scrap aluminum. Many aluminum-smelters buying scrap aluminum in Ghana have noticed that they are not the only ones on the market and have seen its price rise because of the increased demand. China, for instance, increased its imports of scrap aluminum by 9.6 percent in April 2008 compared to the previous year (China Mining 2008). Therefore, the position of African economies on the global market may have a direct influence on producers' capacity to have access to supplies and pursue their activities.

Beyond these trades *per se*, what is at stake is these producers' capacity to rebound and expand their confidence in what they are able to achieve. After all, most of them used to be farmers in rural areas and are now entrepreneurs designing new products for an increasingly urban demand. Even though they may never control the whole range of economic factors influencing their trades, what is important is their ability to regain control of their value as persons in this "global hierarchy." Instead of looking at what they lack – in comparison with those who have, they will then be able to acknowledge what they can accomplish and most of all, who they are. If the people "do not believe in their own strengths," any amount of

¹ In April 2008, China had already imported 720,000 tons of scrap aluminum since the beginning of the year. (China Mining 2008).

international aid will not bear much fruit (Zongo 2001b:56; see also Tévoédjrè 1978:133).

Burkinabè hold their future within themselves.

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Appendix A

Survey form for the inventory of workshops

Date of visit:	Name:	Phone:
Map #:	Secteur #: Stree	t #:
Variables	Variables	Variables
Location/Environment (marketplace, commercial street, residential area, inside a compound).	Rent (Y/N)	Rental cost
Neighboring shops (Y/N)	If yes, which one(s) (kinds of activity)	Raw materials used
Range of products made	Goods displayed for sale (Y/N)	Storage room (Y/N)
Telephone (Y/N)	Water supply (what kind)	Electricity (Y/N)
Working hours	Resting day (Y/N)	If yes, which one(s)?
# of workers	# of apprentices	Relationships among workers (what kind?)
Boss participating in production (Y/N)	# of apprentices	Location of former patron
Other professional activities (Y/N)	If yes, which one(s)?	# of years of boss' apprenticeship
# of years in this activity	# of years owning one's business	Membership in a professional association (Y/N)
If yes, which one(s)?	Father's profession	Education level
Home address	Modes of transportation to work	

Descriptions from photographs:

Description of the building	Inventory of goods displayed	Inventory of shade
Inventory of storage room		

Appendix B

Inventory of Workshop – Partial Data

Workshop # Secteur #+name	Type of Emplacement	Rental (YM) Rental Cost (F CFA)		-
1 secteur 15, Patte d'Oie	commercial sandy street, near a market	3000	≻ 0	N (except the pots being done)
2 secteur 15, Patte d'Oie	Commercial sandy street, next to tarred road	z	>	>
3 secteur 14, Kalgondin	Market	>	>	z
4 secteur 28, Dassasgo	near a Market	>	>	z
5 secteur 28, Dassasgo	Near a market	z	>	N (except the pots being done)
	Next to his compound	>	z	N (except the pots being done)
7 secteur 10, Hamdalaye	Commercial sandy street, next to tarred road	>	>	N (except the pots being done)
8 secteur 19, Nonsin	near a Market	z	>	*
9 secteur 19, Nonsin	near a Market, on a sandy commercial street	X	>	>
10 secteur 11, Kologho Naba	Near a Market and next to commercial street (paved road)	×	>	*
11 secteur 10, Hamdalaye	Commercial sandy street, next to tarred road	>	>	>
12 secteur 20, Tampouy	commercial sandy street, not too far from tarred road	>	>	>
13 secteur 20, Tampouy	near a market and a commercial road	Α.	>	×
14 secteur 20, Tampouy		z	>	N (except the pots being done)
15 Cissin, secteur 16: Paghalayiri		>	>	>
16 Secteur 23, Tanghin	in his compound, residential neighborhood	z	z	z
17 Secteur 3 - Paspanga	tarred road, rue commercante	>	>	>
18 Secteur 3 - Paspanga	tarred road, rue commercante	>	>	>
	tarred road, rue commercante	>	>	>
	Near a market	z	z	>
21 Secteur 15 - Patte d'Oie	Next to a market and on a commercial path	z	> :	>
	On a commercial path and next to a market		> :	> :
23 Secteur 5	Market	2 2	> 3	>:
	Market	z	٠:	-
25 Secteur 5	Market	2 2	× >	≻ >
24 Sected 13 - Patte d Ore	Market	z 2	- >	+ 2
20 Secteur 13 - Patte d'Ole	Market	2 2	- :	z
28 Secteur 14 - Kalgondin	tarred road, rue commercante (more or less)	2 7	· :	· .
29 Secteur 14 - Raigonain	Next to a market and hear tarred road	2 2	· :	≻ ;
50 Secteur 14 - Malgonain	Next to a market and near tarred road	z	× 3	× :
31 Secteur 20 - Tampouy	Near tarred road	2 2	> 2	≻>
32 Sected 11 - Notigino Ivada	Most a modest	z 2	Z 2	- >
34 Section 20 - Dassago	Market		Z > 0	- >
of cecled 19 - Notice	Market	4500 0000 0000	- >	- >
So Secretaring Notice	Market	0007-0061	->	->
	Market	2 >		- >
	Mey ret		- >	- >
	Neartarred road	: 2	. 2	. >
	tarred road, rue commercante	1000 N		. >
	Field		: 2	- z
	100	Z	z	: z
43 Secteur 23 - Tanghin				
	tinsmith market	Z	>	>
	2nd row, 1st stand) A A A A A A A A A A	≻ 0	>
46 Secteur 6 - Cite An II	3rd row, 1st stand	009 A	人 009	>
47 Secteur 6 - Cite An II	3rd row, 2nd stand (left)		Y 009	*
48 Secteur 6 - Cite An II	5th row, last one	009 A	٨٥	*
49 Secteur 6 - Cite An II	4th row, back) A 1	₩ 2009	*
50 Secteur 6 - Cite An II	1st row, 1st stand		₩ 009	>
51 Secteur 6 - Cite An II	1st row, 2nd stand		₩ 009	>
	2nd row, 2nd stand	-26	₩ 200	>
	3rd row, 2nd stand (right)	20. 11	₩ 009	>
	4th row, 1st stand		₩ 200	>
	1st row, back, left		× 009	>
	1st row, back, right		Y 009	*
	4th row, penultimate back	009	× 009	>-
	4th row, last one back	009		> :
59 Secteur 3 - Paspanga	Market	× :		> 3
60 Secteur 11 - Kologho Naba	Market	Y 500	٥.	>

Products made	Storage room (YM) Electricity (YM)		Phone (Y/II) Water supply	Working Hours	Resting day (Y.I	Resting day (YM) If yes, which day?	# of workers
	z		Earthen pot	7am-2pm	>	Sunday	S
small cooking pots + lids + a whole series of molds (moules a galette, pilon, lance-pierres, marmites de toutes tailles, casseroles, etc.)	z	z	None	Sam - Spm	> :	Sunday	4
Cooking pots of different sizes	z z	z z	Z 2	7-am until 3.4pm	- m	Sunday	2 6
cooking pace or arrice can state of constraints and arrives constraints of different stress		zz	Farthen ware	Zam until done	a color	Sunday	4 4
big cooking pats		z	Water pump	7 am until done	>	Sunday	about 23
big cooking pats		z	Z	7am until done	>	Set, and Sunday	2
small cooking pots + lids	z	z	z	7 am until done	>	Sunday	5
smaller cooking pots, casseroles, louches, passoires, moulin a grain, etc.		z	Plastic container, outside	7 am until done	>	Sunday	5
cooking pots of different sizes, casseroles, couscoussiers, mortiers, etc.		z	z	7 am until done	c-		m
cooking pots of different sizes, passoires, louches, moules a gateaux		z	Plastic container, outside	7 am until done	>	Sunday	4
cooking pots of different sizes	z :	z :	Barrel	7 am until done	> :	Sunday	7
cooking pots, casseroles, mortiers		z 2	Plastic container	7am until done	> 3	Sunday	2
cooking pots, lids		z 2	2		> 3	Sunday	at L
cooking pois, ids, casseroies, mortiers, moutes a galeties.	z z ≻ z	z >	Naming water or plastic container of	r r ram until done	-	Sunday	n c
buckets, water cans, and fourneaux		z	005	8am-5/6pm	>	Sunday	1 m
buckets, water cans, fourneaux, fovers ameliores, fovers economiques, poeles, basins, louches,		>	no?	7/8am-6pm	z	*	about 13
buckets and water cans mostly (saw only 1 basin)		z	Plastic container	ė.	٤		9
Buckets, fourneaux, foyers ameliores, bottes des mendiants, burins (and dabas?)	z	z	z	7/8 am -5/6pm	>	Sunday except for the boss	9
Fourneaux of 2-3 sorts (toyers economiques mostly)		z	Z	7ат-брт	z	Sunday - but not all	6 (or 5?)
buckets, fourneaux, foyers ameliores, etageres pour frigo		z	Z:	2	٠ ٠	Sunday?	2
repair of oil lamps, basins, and buckets and making small furnels to put gas or oil in it In others and discloses and federa shallows	z z	Z Z	2 2	7 / Nam-Spm	z z		- 0
buckets, gradientes, and minge sherves. hunkets chicken feeder moules a category a small shaff to put in a fridine some flat hoves (use unknown).		zz	z z	78m-5:30nm	2 >	Suppley - but not all	י ע
2	z z	z		8:30am-5-6pm	- z		2 2
buckets		z	Z	8am-5/6pm	z		5
seaux, fourneaux, jantes, remorque, moulin, cantines		z	z	7am-6pm	z		2
fourneaux, foyers		z	Z	8am-5pm approx.	>	Sunday	2
buckets only	z	z	Z	6-7am - 6-7pm	>	Friday	-
centines only + soudure + quincaillerie		>	z	7am-6pm	>	Sunday	8
cartines only but sell other tinsmiths goods (fourneaux, uckets, pigeon houses, poeles, etc.)		z :	z	8am-1pm, 3-6pm	> 2	Sunday	9 (
Duckets, fourneaux, Toyers a tools + shoe repair hard-te audier cons acholete		z 2	Z 2	7 am until done	2 0		א ני
bococces, water carries, governors thankets and water carries		zz	2 2	Zam-Snm	. z		about 10
fourneauxonly		z	z	7am-5pm	: >-	Sunday	-
buckets, gobelets, tirelires	. Z	z	Z	7am until done	z		· m
buckets, fourneaux, foyers, etageres		z	Plastic container	7am until?	۲.		2
buckets, etageres, mangeoires a poules		z	z	7am until 5:30pm max		Sunday	2
foyers a bois, fourneaux, boxes, dustpans, peanut grinder, frying pans, cake oven, Yamaha seat		z	z	7 am until done	>	Sunday	
buckets, fourneaux, furnels		z	z	7 am until done	٥.		2
mostly foyers economiques, buckets		z	z	7 am until done		Sunday?	45
tire sandals, pulsettes, elastiques		z	Z	7/8am-5pm	z		
tire sandals, joints, courroles			z	7am-5/8pm	z		-
the sandals, joints, courroles	z		z	7am-5/6pm			n
joints, betts of different sizes			z	6/7/8am-5/6pm			-
joints, belts of different sizes		Y (cell)	z	7am-5/8pm	>	Sunday	n
joints, bets of different sizes	z	Y (cell)	z	7am-5/6pm	>	Sunday	n
				7am-5/6pm		â	n
				7am-5/6pm			
				7am-5/6pm			e .
	z z			7am-5/6pm			- 1
				7am-5/6nm			, -
				7am-5/8pm			1
				7am-5/8pm			-
				7am-5/6pm			n
puisettes, elastiques	z :	;	Z	Market hours	> :	Sunday (for Simbou) but not for all	about 10
puisettes, colliers d'ane	z	z	Z	Market hours	>-	Sunday	9

firming to infinite commendation and the commendation of	# of years owning their business	# or years or the boss apprenticesing	# OI years III allo detivity
3 Apprentice 1: 1 month, Apprentice 2: 1 year, Apprentice 3: 7 years	16 years	7 years	
oril 2002; Apprentice	3: 2 months since october 1995 (7 years)	almost 5 years (since January 1991)	
2 Apprentice 1: 1 year, Apprentice 2: 6 months	3 years	6 years	
	6 months	since when he was 13 years old	
3 10 years	19 years	6 years	
about 19	since 1986 = 16 years	1976 - 1986	
6 between 1992 and 1998	12 years	12 years	
4 between 4 years and a few months.		20 years, started when he was about 7 years old	
4 Apprentice 1: 3 years; Apprentice 2: 1 year		about 7 years, started in 1987 with his father	15
	since about 1975		
2 1year and 3 years		started in 1979 until 1998 with his 'older brother'	nis
6 2 to 15 years	25 years	2 years	
6 between 1 and 4 years	19 years	10 years	23
2 4 months, 1 year	since 1993 - 10 years	3 years	
4 1 year (all of them)	9 years	25 years	
1 less than a year			
2	10 workshop has existed for 23 years		23+ years
c. {	more than 20 years		20+
d d unany Options	cooling of the coolin		Construction (CC)
A 4 years and 10 years	anert CC worth and an		20 years
o about 5 years ago	more trian 20 years		707
0	1 year in current location but 30 years all together	since 1959	27 years, near the Great Mosque
d	9 years	2 years	
n	since 1992-93	2 years (started in 1990)	
0	6 years		9
0	1 year 4 months	1 years	2 years and 4 mont
	1 5 years (since 1997)	2 years	
0	8 months in Kalgondin, almost 3 years in Ouaga, was in NaPamBum Raaga before	6 years	since about 9-10 years old (maybe 10-15 years
0 1	1 year	1 years	
			Since he is 6-9 years old
5 4, 6, 8 months; 2, 4 years	-	2 years in Baskouy, then worked for his current boss	-
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2 - 1 - C	about 23 years	2000	
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no boss	none ×	hildren of his younger brother

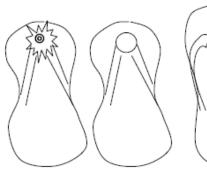
If yes, which ones?	Membership in association (Y/N)	Boss' father's activity Place of residence	Place of residence	
	> :	farmer + cattler raiser	Other neighborhood	Bicyle
bike repair	z	farmer	Other neighborhood	Moped
	z	farmer	Other neighborhood	Moped
vendor of plastic cups	z	aluminum smetter	Same neighborhood	Bicyle
Farmer	z	cultivator and jeweler	Same neighborhood	Bicyle
	>		same neighborhood	
	z	farmer	Same neighborhood	Yamaha motorcycle
	>	farmer	Same neighborhood	Bicvle
	Y but doesn't work	aluminum smetter	Same neighborhood	Bicyle
	Y but doesn't an	aluminum smetter	Other neighborhood	Bicyle
Cuttivating rice near Boho-Digulasso	2	cutivator	Other neighborhood	Dickle Dickle
Rectory worker in the Long Coest (median plants)	: >	2 History	Othor neighborhood	9000
detect y worker in the really codes (making piantes)	- >	CONT. ACC.	Other neighborhood	0.000
30 Care	- >	1000000 W	Other neighborhood	Dicyle
	- □	Collivator	Orner neignborrood	moped
Dronze-maker and aluminum-smeller in the Ivory Coast	>	bronze-maker	Other neighborhood	mopedia
	>		Same neighborhood	none (but has a moped)
			Other neighborhood	Bicyle
	doesn't go anymore		Other neighborhood	Car, mopeds and bikes
	300 2000		Other neighborhood	Bicyle (and moped?)
			Same neighborhood	Bicyle
			Same neighborhood	Bicyle
				Ç.
Truck driver for 16 years			Same neighborhood	Bicyle
vendor at the Central Market for 11 years			Other neighborhood	moped
	Y doesn't work		Other neighborhood	on foot
aundry worker	>		Other neighborhood	Bicyle
vendor of millet and peanuts			Other neighborhood	Bicyle
			Other neighborhood	Bicyle
bazin' dver			Other neighborhood	Bicyle
Farmer			Other neighborhood	Bicyle
			Other neighborhood?	
			Other neighborhood	
tailoring + shoe repair			Same neighborhood	on foot/bicycle
Farmer			Same neighborhood	Bicyle
Farmer	doesn't know its name		Other neighborhood	bikes or mopeds
Shepherd			Same neighborhood	On foot
Farmer			Other neighborhood	motorbike
Farmer			Same neighborhood	Bicyle
Farmer			Other neighborhood	moped
sales employee in a shop in the Ivory Coast			Other neighborhood	Bicyle
			Other neighborhood	On foot
	GFFK		Other neighborhood	Bicycle and moped?
soldier			Other neighborhood	Bicyle
	Mutuelle Te Taaba Federation		Other neighborhood	Bicyle?
			Same neighborhood	bicycle, moped
Mechanic	tortine association among 13 people			
Farmer			Other neighborhood	Bicycles, mopeds
Vendor of spare parts			Other neighborhood	Moped

Appendix C

Various models of tire-sandals







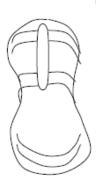


a) "Kito"

b) "Nasara" model (model for the White man)

c) "Nüed zalgha" (simple model) made with inner-tube straps and without any decoration, except uppers of various designs ('flower,' 'circle,' or 'triangle').







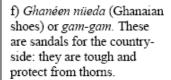


d) "Rastaman shoes" or "nu-pieds" (barefoot): the "real," "traditional" shoes, according to Rasta people.

e) "Tapettes" (flip-flops) with decorated soles made of liner or tread, decorated straps made of liner, and uppers of various shapes. Left: Rasmane's main model.

Right: Boureima's main model.







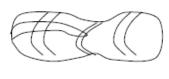
g) More recent model of straps made with tough inner-tube and nails. This model is said to last 3 or 4 years.



h) Special model: thick sole made from tire tread + 3 "flowers" one on top of the other + 3 pins in the 'heart.'



 Rasmane's newest model: sole made from the tread + decorated straps.



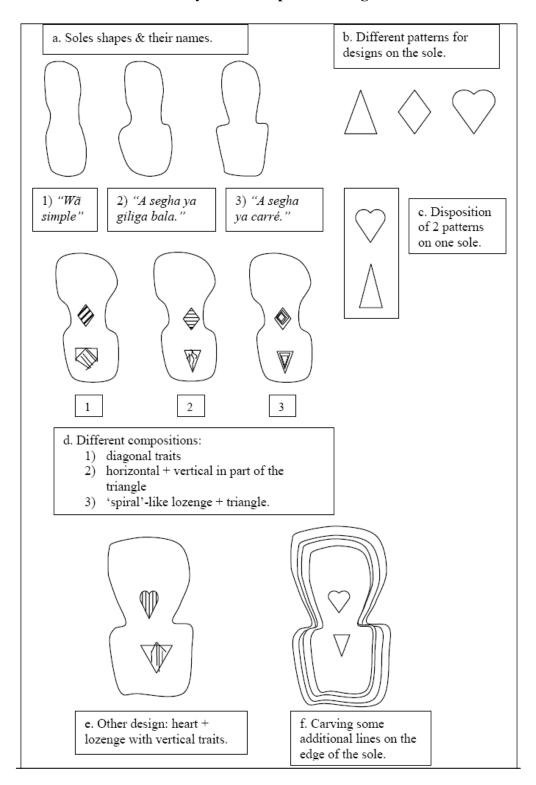
j) Another model not produced by Rasmane or Boureima.



 k) Thick sole made from tire tread and cone-shape design.

Appendix D

Variety of sole shapes and designs



 ${\bf Appendix} \ {\bf E}$ ${\bf Manufactured} \ {\bf sandals} \ {\bf and} \ {\bf its} \ {\bf tire-counterpart}$





Photo 143 and 144. Young *weda* vendor in Cité An II market wearing 'tire-like' manufactured sandals.

