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in Mali

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Persistence and practice of trading networks A case study of the cereal trade in Mali

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Abstract

In sub-Saharan Africa, access to food is importantly mediated by traders' networks. Yet, traders' networks are largely invisible in interventions and policies that set out to organise linkages between agricultural producers and food markets. In the absence of clear analyses of the functioning of traders' networks many interventions and policies tend to substitute them, for example via publicly managed commodity exchanges, shortened retail-led agri-food chains or induced forms of collective marketing. This case study examines the properties of a trading network in Mali as an entry point to explain their persisting role in food trade. By use of a practice-oriented approach it identifies skills, know-how, techniques and tools used to trade. Subsequently it analyses how involved actors develop rules, procedures and organisational structures to coordinate food trade. Our case study showed that for understanding how people organise it is first and foremost important to understand the practice they aim to perform.

Key words: food security, rural food markets, trade, practice, West-Africa

Persistence and practice of trading networks

A case study of the cereal trade in Mali

1 Introduction

In West Africa, networks of traders have consistently played an important role in connecting farmers to urban and rural food markets (Walther, 2014). These networks buy produce from a large number of agricultural producers, organise trade over impressive distances and cover vast rural areas. Moreover, the trading networks operate under conditions characterised by unpredictable and harsh climatological circumstances, weak infrastructure and absence of formalised markets.

Notwithstanding their pivotal role in food provision, development- policies often neglect or even malign traders. This is reflected in the interventions of NGO's and governments that tend to replace established practices and networks of food traders by inducing novel organisational models, for example publicly managed commodity exchanges, shortened retail-led agri-food chains or collective marketing (Devaux et al., 2009; Fischer and Qaim, 2012; IFAD, 2012; Lemeilleur and Cordon, 2011; Markelova et al., 2009;). Several countries in Sub-Saharan Africa distrust the private sector as a whole. Scholars have observed a renewed participation of the government in food trading, for example through marketing boards and price setting agencies (Abbink et al., 2011; Ellis and Manda, 2012; Jayne et al., 2010; Tschirley and Jayne, 2010; Mason and Myers, 2013).

Nevertheless such a discouraging policy context and difficult environmental circumstances, trading networks persist and achieve to collect, aggregate, transport and sell food. The work of Sitko and Jayne (2014) shows that alternative organisational models providing farmers with market access are not always successful: nowhere have they fully replaced the traders. On the contrary, despite potential unequal trade relations and information asymmetries, for many small scale farmers the trading networks remain the sole gateway to the market (Abebe et al., 2016; Mahmoud, 2008; Mtimet et al., 2014; Roba et al., 2017).

Hence, an enhanced understanding of how traders' networks work, may provide development practitioners and policymakers leads for how to facilitate market access for smallholders.

The aim of this paper is to come to a better understanding of trading in a smallholder context in West-Africa, more specific in Mali. Rather than focussing on collective action models, we aim to elucidate the properties that explain the persistence of trading networks. Our guiding research question was: What enables trading network to perform and persist?

Literature on trading networks tends to explain the persistence of trading networks by conditions external to the network. New Institutional Economy perspectives present trading networks as an outcome of imperfect markets and see collaboration and coordination between traders as a response to high transactions costs inherent to the uncertain conditions in African food markets (Fafchamps and Minten, 1999; 2001; Gabre-Madhin, 2001; Shiferaw et al., 2009; Minten et al. 2017). Building relations and maintaining networks makes sense in the West-African context, where physical and cultural distances between business partners can be long. Relations facilitate information, goods exchange and credit transactions (Fafchamps, 2004; Meagher, 2006; Nadvi and Halder, 2005). Studies adopting a New Economic Sociology perspective explain trading networks as manifestations of an existing social fabric (Granovetter, 1983; Lyon, 2000; Mariola, 2012; Turgo, 2016; Walther, 2012). These accounts show how social relations like kinship, religion and ethnicity support economic relations such as credit, trading and market information relations (Grégoire and Labazée, 1993; Varman and Costa, 2009; Meagher, 2006; Ufford, 1999). Such studies highlight the role that trust reciprocity, power, loyalty and caste play in trading (Clough, 1985).

Both perspectives emphasize economic, social and agro-ecological conditions to rationalise why trading networks are a common organisational form for food provisioning in African contexts. However, they do not allow us to understand how the networks function and what internal factors explain its persistence. It is unlikely that the prevalence of an organisational form can be explained solely by external conditions.

This paper aims to advance the Institutional Economic and Economic Sociology perspective by conceptualising trading as a socioeconomic practice, meaning in the words of Jones and Murphy (2010) “a set of, routinized, or improvised social actions that constitute and reproduce economic space, and through and within which diverse actors and communities organize materials, produce, consume, and/or derive meaning from the economic world.”

Practice scholars believe that for understanding economic and social outcomes it is necessary to first closely observe and understand the micro-social activities carried out and performed by people living, laboring, and creating in the everyday economy.

A practice-oriented perspective, following Jones and Murphy (2010), provides an analytical 'object' whose study can demonstrate how trading networks, as a higher-order phenomenon, are: 'enacted, reproduced and/or transformed through the everyday actions embedded within them' (Jones and Murphy, 2010). Practices are rarely the central objects of analysis and are often viewed as outcomes of rational choices or social structures. In contrast, in a practice approach practices are the analytical base to research how the everyday actions of people constitute, reproduce, or transform organization. In this perspective micro trading activities provide an entry point for investigating the persistence of trading networks. Therefore we regard a trading network not solely as a group of interconnected people, but also as a set of interconnected practices.

Accordingly in this paper we focus on the how the members of the network in the case study organise bulking, finance and market access. This means that we shift attention from a focus on external conditions that explain the existence of trading networks to one that concentrates on organisational features emerging from these situated practices (Suchman, 1978). The paper aims to come to a contextualised understanding of in the organisation of trading.

The paper presents a case study of a purposefully selected trading network in the municipality of N'golobougo, Mali. The network resembles the organisation features of trading networks in West Africa. It has what Saul (1987) calls a dendritic structure: a hierarchical setup with a small group of wealthy traders on top. These wealthy traders have accumulated financial capital, a network of buyers, transporters and regional and local suppliers, respect and experience. Usually they are based in one of the bigger trading hubs and source from traders in regional or local markets. These regional or local market traders on their turn source from assemblers and farmers in the villages. The case study describes the everyday actions of the network members bulking produce, handling finances and ensuring market access under the specific spatial and temporal circumstances of South-Mali.

The paper first contextualises the persistence of trading networks in a brief history of the food trade in West Africa and particularly in Mali and it elaborates our methodological choice to

focus on how trading practices constitute and reproduce these persistent trading networks. The research area and methods selected for analysing the trading network are introduced in section three. Section four presents the case study of the trading network operating in N'golobougo, Mali, and describes how trading is situated in time and space, how the trading network coordinates distributed practices, and how the network is governed. In the final section, we identify organisational properties intrinsic to the trading network that explain why and how it succeeds to stay intact and conclude about the value of a practice-oriented approach to understanding institutionally persistent features of the food trade in sub-Saharan Africa.

2 Researching persistence and practice

As demonstrated in historical studies, trading networks have always played an important role in food provisioning in West Africa (Baier, 1980; Lovejoy, 1980; Walther, 2014). Already since the 14th and 15th centuries, trading networks benefitted from the comparative advantage of the agro-ecological zone of either the desert zone, the savannah or the coastal forest zones (Arhin, 1979; 1976; Hopkins, 1973; Lovejoy, 1980). During the 16th and 17th century, long-distance trade intensified. The networks internally specialised and some members based themselves in the emerging trading hubs, often at the borders between agro-ecological zones from where some they would serve as brokers for their traveling kin traders (Adamu, 1978; Lovejoy, 1980). With the expansion of trade at the end of the 19th century new merchants entered the trade. Consequently, emphasis shifted from ethnicity to other characteristics that would indicate that someone was a trustful trading partner, such as his network, his experience and his style of dress (Curtin, 1984; Evers and Schrader, 1994). Hence, some features of the trading networks changed over time; however, organising trade through this particular organisational form persisted.

In the 20th century, trading networks encountered pressures, particularly from public interferences. Traders in West Africa endured fierce opposition from governments that aimed to eliminate them. The French colonial government prohibited trading and forced farmers to deliver their produce directly to state agencies (Fals Borda and Apthorpe, 1976). After West-African countries gained independence in the 1960s, new national governments continued this state centred economy model. The first government of independent Mali (1960–1968) was inspired by socialism, it established state agencies and prohibited private trading of food crops. Nevertheless, trading networks persisted and even traded to neighboring countries (Steffen,

1990). Liberalisation and market reforms in the 1980's contributed again to an increase in both the number of grain traders as well as their scale of operation (Barrett, 1997; Staatz et al., 1989). More recently increased produce and a growing demand from the cities (OECD, 2007), the introduction of mobile telephones (Overa, 2006), and improvements in transportation infrastructure and the banking system encouraged the expansion of trading networks. Hence, this brief history shows that the trading networks were able to adjust and respond to external dynamics, while staying intact as a stabilised organisational phenomenon.

Historical accounts show how the networks have adjusted and responded to changing circumstances (Baier, 1980; Lovejoy, 1980; Walther, 2014). In their analysis of cross-border trade between Nigeria and Niger, Grégoire and Labazée (1993) portray how flexible networks can be: a change in import taxes incentivised traders to shift to other products. This makes it important to analyse how trading networks navigate context-specific conditions while largely sustaining their organisational form in a way recognised by people outside the network.

In a practice-oriented approach, it is crucial to analyse how an organisation emerges from and responds to not only its economic or social context but also to its material environment (Schatzki, 2005). Action is always situated (Suchman, 1987) and involves improvisation and the capacity to solve unanticipated problems, for example caused by the need to cross long distances or to handle scarcity and seasonal fluctuations. In the results section we detect the organisational consequences of the everyday trading practices specifically in the rural context of Mali.

Outcomes are not merely guaranteed by the virtue of organisational structure. According to practice scholars practices provide a source of coherence in a community (Wenger, 1998; Amin and Roberts, 2008; Hall, 2006) and serve as repositories of tacit knowledge. Oftentimes this knowledge is only realized in the 'doing' of business (Nicolini, 2011; 2012). A practice perspective considers organisations as a confederation of diverse tasks that require specific competences (Nicolini, 2012) Section 4.2 investigates how distributed practices enable people to act together and achieve a certain degree of coordination. Organisations are often complex and few people have the overall picture of how the objective is reached in a situation where tasks are distributed over space and time (Hutchins, 1995). In section 4.3 we study the rules and routines that have emerged from organising and reproducing trading

3 Material and methods

Practice-oriented studies have been criticized for being too descriptive and incapable of rigorously linking macro-scale effects to micro-scale causes (Scott, 2004). The micro-to-macro validity argument is based on the premise that meaningful statements about larger-scale phenomena should be made through conceptual or methodological approaches that rely on a strict cause-effect relationship between individual behavior and socioeconomic outcome. However, practice-thinking stems partly from dissatisfaction with explanations built on rational and functionalist conceptualizations of economic phenomena. Although the findings of practice-oriented research cannot be easily integrated into more formalistic kinds of analysis, its internal validity and consistency usually is strong. Practice-oriented research is meant to be qualitatively rich, contextually specific, and capable of demonstrating how 'economic meaning' is derived from a wide range of actions and a diversity of social situations and spaces.

3.1 Case study

For an outsider in search of data in a West-African village it is important to get introduced by an institution or person that is recognised by the village leaders as trustful. In our case a Dutch NGO one of the authors was working with, provided a suitable entry point. This NGO had a long standing track-record in implementing programs aimed at improving market-access for smallholders. Its' programs were based on the idea that collective action helps small scale farmers to stand up against bigger market players such as traders and processors. However, of the 56 cereal marketing cooperatives created in one of its programs, *Développement Économique Rural de la région de Koulikoro*, implemented between 1999 and 2002, the majority had gone bankrupt after only a few years (Wennink et al., 2011). Reasons listed were distrust between members, side-selling and lack of capacity to organize trading. Most of the farmers had continued to sell their produce to traders (Interview NGO program manager). This corresponds with a countrywide trend. In 2001 the government introduced a cooperative law in line with the international standard on cooperatives as promoted by the ILO. From this year on the government strongly supported the development and establishment of cooperatives. For many farmers cooperatives provide the only means of access to formal finance and public development programs, as a consequence many cooperatives were established with the sole objective of accessing finance. In terms of collective marketing and trading they proved less successful, rarely were they able to outcompete trading networks (Diawara and Ouatarra

,2008).The NGO was interested in better understanding why the cooperatives failed whereas trading networks were able to consistently supply the market and purchase from farmers in vast areas. It was upon suggestion of the NGO program manager that we selected the municipality of N'golobougou as research area.

Being a vibrant cereal producing and trading zone the municipality of N'golobougou provided an interesting area to research the practices and persistence of a trading network. All of the twelve cooperatives supported by the NGO had gone bankrupt by the time of this research, whereas trading activities had only increased (interview village elders).

The municipality N'golobougou comprises 23 villages and many more hamlets, and covers an area of 213 km². According to the latest census in 2009, there were around 21,848 inhabitants (City population index). Livelihoods in N'golobougou importantly rely on cotton for cash income, which are rotated with maize, sorghum and millet for food provisioning. Cereals surpluses are traded; in case of urgent need for cash, portions of the family's own stock are sold. The central village of the municipality, also called N'golobougou, is a central hub when it comes to cereal trading and marketing. Farmers and collectors of the region and traders meet, trade, aggregate cereals, negotiate prices and exchange information at this market

The study focuses on the everyday activities in trading such as the procurement of at farmer level, transport of produce, the gathering of information, securing financing to realise these activities.

All people involved in one of the above listed activities, with regard to cereals, were identified as part of the cereal trading network of N'golobougou. However identifying clearly defined roles turned out to be complicated because many people engaged more than one task (see also Saul, 1987 and Warm's, 1994 for similar observations in other West-African cities). We labelled the members according to their major task: trading, purchasing produce at village level, and handling and transporting produce. We distinguished the following roles:

First the traders. We defined a 'trader' as a person, in our case study, a man, aggregating cereals in N'golobougou market, as manifested by his ownership of a market stand or a scalar. His profession was acknowledged by other market actors and the N'golobougou administration. Traders were responsible for arranging working capital to buy produce. The

N'golobougou market accommodated roughly 300 traders of which about thirty engaged in cereals trading.

Second, is the *pisteur*. *Pisteurs* are men that were responsible for purchasing cereals at village level. They procured cereals in their neighborhoods, smaller markets in hamlets and farms on their way to the N'golobougou market *Pisteurs* were often pre-financed by traders. The N'golobougou market is where *pisteurs* hand over the cereals to their traders .

Third, the cereal trading network in N'golobougou involved at least 250 men active in collection, transport and sale. Most traders had one or two assistants that help him weigh and store the bought bags. *Pous-pous* are men that brought the bags from the traders' storage to the trucks that leave for Bamako. The *convoyeurs* and the *locateurs* were responsible for filling the trucks. *Convoyeurs* are salaried men employed by the owner of the truck and mostly his confidants. *Locateurs* are men that hired a truck individually or in a group. The trucks were charged by 'chargers', young men that offered their services at the different village markets in the community. Two local shop owners were important for credit provision to traders in scarcity and transport of cereals, they both owned a number of trucks.

3.2 Data collection

Trade practices were observed during 10 subsequent market days. In-depth interviews were carried out with the traders who managed their operations all year round , a total of 24 traders (during a 5-months period from October 2012 to February 2013). The starting point of our study was the variety of activities they performed. Questions focused on how they procured cereals, and how they organised finance and transport. Interviews and observations were used to map the traders' relations with others in the network, in particular the people procuring cereals for them at village level. From the network of each trader two *pisteurs* were sampled and contacted, 37 out of the 48 *pisteurs* were available for a semi-structured interviews were conducted with. The questions aimed to capture the characteristics of their tasks and their role in the network. Also their relations with the traders, other *pisteurs* and the farmers from which they procured were mapped. Two big traders based at the cereal market in Bamako, which is the destiny for cereals from N'golobougou, were interviewed. Both traders had their roots in N'golobougou and continued to play an important role in cereal trading. A total of ten assistants, chargers, pouspous, convoyeurs and locateurs were interviewed on their

responsibilities, connections and ambitions. In addition, observations of cereal trading were made in a number of smaller markets within a radius of 50 km.

4 Results and discussion

4.1 Trading practices situated in time and space

Trade in West Africa is characterized by long distances between producers and final buyers, and the capricious conjuncture in supply and demand over time (van Ufford and Zaal, 2004). In this section we detail both the temporal and spatial dimensions of the practices constituting the trading network of N'golobougou.

4.1.1 The temporality of trading

Trading in N'golobougou followed the agricultural calendar and adapted to fluctuation in supply and demand over the season. All members of the trading network coordinated their trading activities in line with their agricultural activities. . The interviews revealed that only five of the 24 traders worked full time. Different from the other traders these five full time traders were based in Bamako. Two of them were brought up in trading, their fathers were full-time traders. Three left farming because their trading activities has been so remunerative that they could fully provide for their household through the trading business and because they had brothers who could maintain the family farm. The three still helped with the harvest or, in cases when they could not, contributed to the farm by sponsoring agricultural inputs. In the first years of their trading career they had engaged in trading only part time. The other 19 traders and all *pisteurs* (assemblers) combined trading with farming. In the harvest season they spent less time in procuring and collecting cereals as compared to the rest of the year. A number of traders and *pisteurs* expressed the desire to dedicate more time to trading but felt constrained by agricultural work. The time a person would spend in agriculture depended on the labour force available in his family and his position in the family, in the research area the head of the household was regarded as responsible for the family farm. One *pisteur* spoke about the interdependency between agriculture and trade:

“As I am the only son of my mother in the extended family and as I do not want the family to break-up because of me, I am tied to agricultural work and can spend little time in trading.” (Interview)

In N’golobougou trading was most intense from November to February, starting a month after the sorghum, maize and millet harvests. Interviews revealed how the network as a whole adapted to the seasonal changes. During the off-farm season traders travelled up to 3 times per week to Bamako, either to bring cereals to their regular buyers in exchange for new pre-financing or to sell cereals directly at the Bamako market. The high frequency of transactions assured a continuous circulation of money in the network and the ability to buy any time farmers wanted to sell.

Another proof of this quick adaptability was the fact that the distribution of cereals worked both ways. When prices in the rural markets were higher compared to those in Bamako, the chain of ‘collecting and selling’ would work in the other direction. In such situation traders would bring cereals from Bamako to sell in N’golobougou to their *pisteurs* or to farmers. During the fieldwork period a nearby market village, Banco, suffered inundations and a disappointing cereal harvest. Traders brought cereals from N’golobougou or elsewhere to sell or to exchange for bananas produced in Banco. It happened that traders also bought and sold at the same day in N’golobougou. Hence, *pisteurs* managed to collect cereals while at the same time there were also farmers in the municipality in need for food. The trading network also benefitted from seasonal products. In December the network also engaged in cassava and yam trading. In January a number of traders ordered their *pisteurs* to procure tamarind. The surveys showed that the financially stronger traders also procured the relatively expensive Shea butter when available.

The activities of the network were aligned with the agricultural calendar, both in terms of product availability, as well as in terms of manpower. This coordination ensured that the network could respond well to seasonal changes and environmental shocks.

4.1.2 The spatiality of trading

Trading in N’golobougou was not confined to the N’golobougou market. Many traders and *pisteurs*, and even some pouspous of the N’golobougou network were also working at other

markets in the district. Three other towns in the district also hosted big markets, these were Dioila, Massigui (both 40 km from N'golobougou) and Banco (25 km from N'golobougou) And also hamlets in the district hosted markets, often referred to by the interviewees as 'women's markets' because the products traded were mainly vegetables and herbs and smaller amounts of cereals for home consumption. The interviewees identified three factors that determined their activity radius: financial capital, distance to the market from home village, and the share of trading in total livelihood. Transport from N'golobougou to Bamako costed between 8,000 and 10,000 CFA per tonne. From Massigui the costs ranged from 10,000 to 12,000 CFA per tonne. Eight traders and 16 *pisteurs* visited the women's markets to purchase cereals. A number of the traders mentioned that they would like to visit the bigger markets but that they were confined to the N'golobougou market, due to lack of money or time constraints because of agricultural responsibilities. Bigger traders (11) focused on the big markets. Those who had stopped visiting the hamlet markets mentioned reasons like: age, financial capability to visit the regional markets, or younger brothers or cousins who procured for them on the markets in the hamlets.

The organisation of the transport of cereals and the distribution of money reflects the influence of geography. In 29 cases, transaction of cereals between trader and *pisteur* happened at the market of N'golobougou. In case the *pisteur* and trader lived in the same village the transaction could also take place at the house of one of the two (seven). *Pisteurs* were responsible for transport to the market or place of transaction. Ten *pisteurs* transported produce by bicycle or motorbike. The majority used their own carts, often provided by a family member (17) who was compensated. Others paid someone else with a cart (nine) or a minibus (two). For areas that were difficult to reach, transaction costs were higher (5.5 CFA instead of 5 CFA). Some *pisteurs* lived in areas that were not accessible by cart during the rainy season. They either temporarily stopped their trading activity or collected the cereals by bicycle and stored them at a friends' place in a neighbouring village with better access. The means of transport depended on the distance, the condition of the road and the quantity collected. The cereals collected by the traders at the Banco market on Thursday were transported to Bamako together with the goods bought on the following Monday at the N'golobougou market.

The frequency of the money transactions from trader to *pisteur* was higher than the frequency of cereal transactions. At least 6 *pisteurs* received pre-financing twice or even three times a week. The *pisteur* and the trader met at each other's house, at another market or they arranged

the transfer with acquaintances or their children. Moreover, 31 of the *pisteurs* and seven traders had a nearby contact from which they could borrow money. The majority of *pisteurs* borrowed money from relatives or other villagers. These could be store owners, bicycle repairmen, livestock breeders or women who sell shea butter. Traders mostly borrowed from other traders at the market. Also, two local store owners in N'golobougou were often approached for credit.

Also the structure of the N'golobougou market itself influenced collaboration within the network. Traders stocked their surplus in the storage facilities of neighbouring traders (ten), and less affluent traders borrow the scales of a nearby trader (ten). With a storage facility close to the truck loading area, trader Diakité often helped traders who lived far from N'golobougou and aimed to travel home before the dark to send their produce to Bamako when the trucks would arrive late. As shown, collaboration was strongly influenced by the spatiality and temporality of trading. The collaboration between *pisteurs*, traders and other network actors was strongly influenced by the socio-economic and material context of each individual.

4.2 Coordinating distributed practices

Trading encompasses several tasks that are performed by different people at different locations. This section describes the processes of coordination and collaboration observed in the trading network of N'golobougou.

The majority of the interviewed cereals traders (24) resided in the municipality, in villages up to 20 km from N'golobougou village. Three traders had established a business in the bigger trading hubs of the capital Bamako or the provincial capital Dioila and moved there. They still visited the N'golobougou market each week to maintain their trading relations in the municipality. Two traders came from neighbouring communities but had been trading at the N'golobougou market for a long time. Table 1 shows the residence of the 24 traders.

Table 1: Residence of traders interviewed (N=24)

Residence	Traders
N'golobougou municipality	17
Born in N'golobougou municipality but living elsewhere	3
From a nearby municipality	4

Source: Fieldwork, 2012-2013

Traders pre-financed *pisteurs* to collect the cereals at farm level, on average, each trader had five *pisteurs* (the range is 2 to 12). The distinction between the role of trader and *pisteur* was not always clear. Interviews revealed that four big traders also bought from other traders and called them their *pisteurs*. In addition, four *pisteurs* mentioned that they distributed the pre-financing they received to younger brothers or friends who made the collections on their behalf, i.e. their own network of *pisteurs*. Four *pisteurs* mentioned that they bought from farmers who accumulated cereals from other farmers in order to aggregate larger volumes.

Our survey data revealed that relations between traders and *pisteurs* were well established; an average six to seven years of ongoing collaboration between the 24 traders and 37 *pisteurs* interviewed was reported.. In N'golobougou *pisteur*–trader relations could go back one or two generations; one *pisteur* mentioned that his buyer collaborated with his grandfather twenty years ago.

Pisteurs used different strategies, often in combination, for collecting at the farm level. Thirteen *pisteurs* visited different farms in the vicinity every week; twenty had a place at the market or the road to the market where farmers could find them. Twelve made use of what they call a '*logeur*': a friend in another village where they spent one day a week to buy cereals from neighbouring farmers. Twenty *pisteurs* had a reputation for being *pisteur* and neighbours sold them their cereals whenever they wanted to sell.

Pisteurs were responsible for the transport of the cereals to the place of transaction. At the market, the trader's assistants would weigh and store the bags brought by the *pisteur*. These assistants could be *pisteurs* who accompanied the trader during the market day, but more often were family members or friends of the trader interested in earning extra income. All traders kept a notebook to record how much credit the *pisteur* had received or vice versa. Besides working with *pisteurs* to procure, we observed that traders also bought directly from farmers who brought their cereals to the market.

At the end of the day, the bags of cereals were marked with the personal code of the trader. A *pous-pous* would transport the bags to a truck. Three types of *pous-pous* were identified: those who owned a cart and rented their services, those who hired a cart and rented their services and those who were employed by one of the traders. Each *pous-pous* worked on average for four

traders. The *pous-pous* received 500 CFA for each 100 kg. The *pous-pous* interviewed transported on average three tonnes of products per market day. The N'golobougou market counted about 25 *pous-pous*. Only one of them lived in N'golobougou village; the others came from all over the municipality and stored their carts with acquaintances in N'golobougou. Next the goods needed to be moved to Bamako. The *convoyeurs* and the *locateurs* were responsible for transport. A *convoyeur* described his role as follows.

“A *convoyeur* is a person that is trusted by the truck owner. The owner has entrusted me a truck because he doesn't have time to manage the logistics himself. It is also because of the friendship and the family link that is between us (Interview)”.

Locateurs are men that hire a truck, either individually or as a group, for 200,000 CFA per day excluding payment of the driver. *Locateurs* in N'golobougou could be traders as well as other financially strong villagers. Both the *convoyeurs* and *locateurs* worked with a number of regular traders. In case space was left in the truck they filled it with goods from traders. ‘Chargers’ loaded the trucks. Bags of individual traders were kept together. Either the truck brought its own chargers or the *locateur* or *convoyeur* hired a local charger group, which was usually made up of 4 to 5 young men offering their service at the different village markets in the community. A group of chargers earned about 20,000 CFA per truckload. On an average market day, they loaded one truck.

In addition, there were a number of actors not directly involved in trade but still playing a key role in the network as a whole. The local shop owner, for example, was a key actor for credit provision and transport of cereals, as he owned three big trucks (30 tonnes) and several smaller ones (10 tonnes). Interviews revealed that at least six traders received credit from him on a weekly basis. Moreover, his brother in Bamako was an important cereal buyer for at least five resident traders.

This leads us to conclude that a trading network is not only a collaboration between people based in different locations, it is also a network of interdependent tasks. *Pisteurs*, traders and other network roles are recognised to be skilful. The trading network is the site wherein skills and know-how essential for trading are transmitted and reproduced.

4.3 Trading as regulated practice

In this section we depict the rules and routines that govern membership and internal collaboration of the network.

The N'golobougou network had a hierarchical setup with a small group of wealthy traders on top. Survey data indicate that this hierarchy related to one's ability to manage finances and his experience in the trade profession. Everyone knew which traders were financially well off. The interviewees named different indicators. For example, when a trader was able to buy without having sold his stock, i.e. storing cereals for speculation and continuing to trade this was seen as proof that a trader had cash savings (interview). Indicators used for experience were the number of years one engaged in trade, the number of *pisteurs* a trader employed and the number of markets visited. Traders mentioned that someone is regarded a 'real' trader when after years of hard work the trader is able to extend business to and own stores in Bamako. Five out of the 30 traders present on N'golobougou market had storage facilities in Bamako. Two others had brothers based in the capital full time. The five Bamako traders had a stronger financial position compared to other traders in N'golobougou. They all owned at least three stores and three scalars. Three of them owned a truck and two hired one to transport cereals from the local markets to Bamako.

Becoming a 'real trader' is in principle attainable for anyone; however, only a few reached this position. Survey data showed that the big traders had taken a long time – at least 20 years – to build up their capital and network. Perseverance and continuous time and capital investment were named as key. Half of the traders interviewed acquired the skills for trading in their years of working for another trader. Weighing and handling money were mentioned as skills that one had to learn before engaging in trading. Table 2 shows that most N'golobougou traders started as an apprentice of a member of his wider kinship network who was already engaged in trading. Working for a 'brother' or family member refers to people sharing food from the same cereal storage, whether cousins, nephews or other kin.

Three of the five big traders based in Bamako inherited their business from their father or brother and started well equipped. However, even these traders had spent years assisting their fathers in collecting cereals at hamlet markets, organising transport or other activities. In the municipality of N'golobougou the majority of men between 18 and 24 had travelled to Ivory Coast in the dry season to work for a few months as plantation labourer, driver or any other

temporary job. In his analysis of trader career paths in Mali's southern city Sikasso, Warm (1994) noted that most traders had worked as migrant labourers and that this action in itself was regarded as a sign of being courageous and able to endure hardship. A number of traders indicated that they started trading because a friend or family member decided that he was getting too old for migrant labour. It was time for him to establish a family and to 'find' money within the municipality.

Table 2: How traders interviewed started in trading.

First position in trading network	Traders
As <i>pisteur</i> for a trader in the market	2
As <i>pisteur</i> for a family member in trading	11
In other business	4
With own money (plantation work in Ivory Coast, working in Bamako)	7

Source: Fieldwork, 2012-2013

Interviews revealed mutual respect between the traders. For example, at the end of the marketday the traders would together with loaded trucks towards Bamako. As they arrived in Bamako during the night, all of them slept over at a store of their Bamako trader. One Bamako trader was particularly known for his hospitality. Per week, 12 resident traders slept, ate and showered at his house in Bamako (Interview). Being part of the trading network also offered a safety net to buffer personal shocks. Two traders reported to be robbed when travelling from Bamako to N'golobougou. Befriended traders borrowed them money to be able to continue their business (Interview).

Traders selected their *pisteurs* carefully. Eighteen *pisteurs* had started their activities with pre-finance from a family member or a trader they knew from the village. Many traders had encouraged others they regarded as capable to engage in trading activities. This 'being regarded as capable' was based on observed action, for example, the person was already engaged in other trading practices, like selling cigarettes or breeding chicken. In other cases it was a try-out. Three traders mentioned that they had engaged someone to procure cereals for them because they noticed that the person was 'bored' and had nothing else to do. However, if the encouraged person did not perform well the trader would not continue working with him. One trader was asked by his sister to 'keep her son busy'. As it turned out '*il n'est pas prudent*' (he

is not careful); he pre-financed the boy with only a minimal amount to procure cereals at village level (Interview trader).

However, there were also 11 cases where the trader and *pisteur* had not know each other before they started collaborating. In these cases *Pisteurs* had approached the trader at his home or at the market place for work, or the *pisteur* was presented to the trader by a friend or relative who already knew the trader. This could be a *pisteur* already working for the trader or a friend or family member of the trader. The person would function as a ‘guarantor’ of the new *pisteur*. The trader pre-financed a small sum, between 10,000 and 25,000 CFA. If the *pisteur* succeeded in trading a quantity that surpassed the pre-financed amount, the trader was guaranteed that the *pisteur* was a ‘trusted’ person who could borrow money from his fellows. Moreover, it showed that the *pisteur* was willing to work hard. Three of the *pisteurs* used their own funds to purchase cereals. Independent of pre-finance they could stock their produce and sell to their trader when prices were advantageous. We also encountered a number of cases where the trader had a debt with the *pisteur*. The following two examples illustrate the trust basis between trader and *pisteur*:

“I am working with him because of his courage and his way of working, we are all natives from here.” (Interview Trader)

“They gained my trust by working step-by-step till the moment of knowing each *pisteur*.” (Interview Trader)

Traders judged *pisteur* as well performing when the *pisteur* brought more produce than what he received pre-financing for, when the *pisteur* would request another pre-financing in one week, and when he would collect year-round without interruptions.

This is in line with Warms (1994) observations; he finds that in order to be accepted by an established trader community, young merchants first need to respect the rules. According to Warms, commerce is an open system which one can accede through hard work, luck and skills in building reputation and relationships. In any case, a newcomer needs the aid and endorsement of an established trader.

Non-reimbursement of pre-financing without due explanation, was mentioned as a reason for a buyer to break the relation with his *pisteur*. However, from the interviews it became clear that in reality traders rarely reprimanded a *pisteur* with whom they had a long-standing work relation for not repaying. The majority of the traders had experienced financial losses with *pisteurs* and all of them regarded this as the risk of the business:

“I know who is capable and who is not, because we know each other from the village. I tolerate risks in work because they can happen any moment. You have to be prepared for losses.” (Interview)

Pisteurs called the trader they sold *patron* (boss). Thirty *pisteurs* sold to only one trader, while seven sold to a second and a third. However, also these seven maintained a strong relation with their first buyer: ‘It is he who helped me’ (interview *pisteur*). The reasons they sold to a second buyer was because the first did not having enough means to buy all the procured produce or because one of the buyers was specialised in a product the other would not buy, for exampleshea butter or tamarind). *Pisteurs* who did not continue working with their first patron mentioned the following reasons: he stopped trading (6) or there was a conflict (2).

Warms (1994) in his case study on a Malian merchant community in another city in South Mali found that a key characteristic of merchants was that they were considered sincere and earnest by other community members. Also in our interviews *pisteurs* mentioned that they approached a particular trader because of his reputation of being ‘*serieuse*’ (serious) and ‘*Il garde son mot*’ (stays true to his words). Almost all *pisteurs* felt that in case of a personal problem they could count on help from their trader. Traders who stopped working had indeed asked befriended traders to take over their *pisteurs*.

Pisteurs sought to avoid competition among each other. For example, in villages with more than one *pisteur*, each had his own ‘clients’, farmers who always sold to him. Also, *pisteurs* worked together ; if one of them did not have money to pay his supplying farmer, he would either borrow money from one of the other *pisteurs* or ask the farmer to go to one of the other *pisteurs*. The relations between *pisteurs* and clients were strong. *Pisteurs* mentioned that there were farmers from whom they could buy on credit, and one *pisteur* stated that he had clients who continued selling to him even though their own sons had become *pisteurs* (interview).

Observations and interviews indicated that all members of the trading network knew both the code of conduct and the unwritten rules that came with each specific role in the network. This was proven by the fact that the costs and prices of each service in cereal collection were known to all. Everyone named the same price for transport, assistance in weighing, use of scalar of a non-befriended trader and *pous-pous* transport. Participatory observation showed that no one violated this price.

Selection of skilful members appeared to be vital for performance and sustenance of the network. Membership offers opportunities to develop in the profession, albeit membership also implies being subject to rules and routines constituting the code of conduct associated with the trade

5 Discussion and conclusions

This paper set out to identify the organisational properties emerging in everyday trading practices that explain the persistence of trading network in food provision in Mali. A practice oriented approach perceived organisation, such as trading networks, as an emerging outcome of coordination and regulation of everyday practices. The case study showed how a traders' network was formed, adjusted and reproduced in the daily practices of trade. Our analysis highlighted how the network represented a configuration of interdependent and distributed practices. It also exposed how orchestration of these interdependent practices was embedded in continuous problem-solving and situated actions.

One of the prominent features of cereal trading was that cash and produce flows are managed in a layered organisational structure that had a wide spatial coverage. Being present in the community via the *pisteurs* was a prerequisite for being informed on cereal availability and for arranging collection from isolated places. The geographical distribution of actors supplying cereals enabled continuous communication, which allowed the network to attune to sudden changes in market prices, weather circumstances and produce availability. The fact that the majority of traders were also farmers was helpful for synchronising activities of the trading network to the seasonal cycles affecting farm livelihoods. Embedding the network in a wide range of rural communities was part of skilful management of the relations between fields and markets.

A second important property of the network was the orchestration of distributed tasks and responsibilities. Trading in N'golobougou was organised in a number of task-oriented groups, each composed of a trader, a number of *pisteurs*, a *pous-pous* and a *convoyeur* or *locateur* based in the N'golobougou market and a bigger trader in Bamako. The demarcation between the different roles was blurred, and network members could have multiple roles. As each role performed part of the tasks necessary to perform trading, there was strong interdependency between the different roles. The network as such was a confederation of competent people who unite and coordinate a variety of aligned tasks.

Thirdly, the network guaranteed its own continuity by opening space for personal skills development of its members. Only people proven to be capable to perform one of the tasks were accepted as member. The art of trading was taught and learned in practice; new entrants take time to master the skills belonging to a role. Over time, people could acquire new skills and change roles. The network was organised as such that members could move to other positions. To progress to the role of trader required time to build relations, capital, and skills, and to learn the code of conduct prevalent in a trading network. The pyramid structure of the network indicated that only the people with proven capacities to trade, maintain networks, manage financial risks and aggregate produce and obtain respect are the ones that may climb to the top.

Finally, the governance structure of the trading network featured a strict hierarchy, codes of conduct and unwritten norms and conventions. The network of traders resembles a guild wherein membership was based on the assessment of the skills of new entrants and demonstrated behaviour. Unspoken rules of reimbursing credit and helping each other in emergency cases were fundamental for the collective performance of the network. Dedication and respect to the behaviour norms were a necessary requirement for remaining in the network and eventually progressing to higher positions in the network. The behaviour etiquette was role-based and task-oriented, which enabled the network to persist even after members left or new ones entered.

A practice-oriented perspective enabled us to capture why people in trading organise the way they do. The emphasis on external conditions brought forth by Economic Sociology and Institutional Economy didn't enable us to grasp how trading networks in Mali performed and persisted in circumstances that were far from conducive. Our case study showed that for

understanding how people organise it is first and foremost important to understand the practice they aim to perform. A practice oriented perspective encourages the researcher to study organisation as an emerging phenomenon that is situated in a particular context.

Our findings demonstrated how the context-specific and functional properties are difficult to design a-priori. The organisation of trading does not merely follow a plan and its 'sustainability is importantly influenced by how networks respond to contextual influences and unanticipated problems.

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