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„Today-Job“ – Temporalities, Futures and Social Ties along the Charcoal Value Chain in Ghana

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1. Introduction

My thesis is about temporalities. In anthropological writing temporalities have always existed per se. However, as an object of study, acknowledging the multiplicity of temporalities and their mutual interference is a field in anthropology that needs to be studied more intensely (Wallman 1992; Persoon & van Est 2000; Pels 2015).

Anthropologists commonly generalize to cyclical time perspectives or linear time perspectives (Persoon & van Est 2000). In this context, time refers to concepts of time. Concepts as well as perspectives are subjective. Temporality will be used as a synonym to subjective time reckoning in this thesis. Moreover, I will use temporalities to express timeframes with diverging periods or lengths of time, particularly concerning the timeframes of visions or images of the future. In this context, the intervals will be categorized into short-termed or long-termed visions of the future. Visions or images of the future are numerous for each individual. Hence, to make sense to the study, the researcher must focus on the vision of the future followed by his informants directly linked to an activity and/or a material object of study. My material object of study is charcoal. The activities linked to the material object are merchant practices with charcoal and charcoal production. In other words, temporalities or temporal frameworks of the image of the future of actors along the charcoal value chain affiliated with charcoal business and production is the theory of analysis. Moreover, working with temporalities in my field, social ties as well as funerals become relevant. Relations exist in time and individuals engage with one another following an image of the future. Funerals become of interest analyzing transforming relations over time. In any case, putting together charcoal as a material object and temporalities as the theoretical object the study takes me to the following research question:

What kinds of human temporalities can be detected amongst actors along the charcoal value chain and what can temporalities tell us about their social ties?

In Ghana, deforestation is rapidly taking place. 35 % of its forest have been turned to ashes or milled for the timber industry in the past two decades (Obiri et. al 2014). Until the 1960s, in Ghana, trees were cut manually (ibid.). Only after the late 1960s, the chainsaw was introduced and gradually proliferated until the 1980s (ibid.). The nationwide economic decline of the 1980s weakened the formal milling industry and informal chainsaw milling spread (ibid.). As a consequence, the official registration at the District Assembly became mandatory by law with the scope of nationwide control of deforestation (ibid.). However, officials did not manage to regulate and control the sector of deforestation. Instead, informal

chainsaw milling increased in the country in the 1990s and was therefore, banned in 1998 (ibid.). At present, however, the law has generally no enforcement.

Today 2.2 million households are dependent on charcoal to heat and cook. Other 98.000 people make their livelihood from charcoal (Mafro 2010). In total, charcoal has become an important part of the national economy, satisfying employment and consumption demands. The production areas are in the rural regions, whereby the mainly rural Brong-Ahafo Region produces 40 % of the national charcoal (UNDP 2010). Meanwhile, the urban centers are the main consumption areas. The cities of Accra and Kumasi, alone, demand 80 % of the charcoal produced (Obiri et al. 2014).

Deforestation through charcoal production is an issue of global relevance. Alone on the African continent 30.000 km², an area equal to the surface of Belgium, are deforested annually (Sousa 2017). According to the United Nation's Environmental Program, the need for charcoal as a resource for fuel is likely to double until 2050. The release of greenhouse gases, which are stored in trees and bushes, widens the issue beyond the borders of the states.

In Dawa Dawa No. 2, in the Brong-Ahafo Region of Ghana, the inhabitants use the money made with charcoal production for basic needs. They send their children to school and buy food as well as seeds for the farming season. The necessity to buy seeds is a recent development. Charcoal producers are originally farmers. Since 2013, inconsistent rains have driven the inhabitants of the region to change their main source of income from farming to charcoal production. This implies a paradox: Charcoal production secures the farmers' livelihood in the short term, but creates insecurity in the long term. The insecurity derives from the fact that forests are diminishing, which threatens the livelihood of charcoal production as well as farming due to inconsistent rainfalls in a long term. The paradox is to be kept in mind. It follows the hypothesis, that long term visions of the future lose relevance, if short term futures are not secure.

My research question can be defined more precisely as follows: How do the actors along the charcoal value chain react to this paradox? What are the consequences of this paradox for their vision of the future? And how does the relevance of this paradox correlate with the necessity of producing charcoal?

Considering my research question and the latter, this thesis follows three objectives. The first objective is to point to the multiplicity of human temporalities which I was confronted with along the charcoal value chain in Ghana. This goal confronts generalizations by anthropologist in respect to time concepts, as cyclical or linear timeframes, criticized by

Persoon & van Est (2000). The second target is to delineate the diverging temporalities or timeframes of the images of the future of actors participating in charcoal business and production in Ghana. In this context, Persoon & van Est (2000) stress that the distinction of rather long-term and short-term 'future' helps the scientist to scrutinize their subjects' behavior in the present (ibid.).[1] The third objective is to identify how social ties along the charcoal value chain are secured through debt relations and gift exchanges. Social ties solely exist in time, whereby credits as well as gifts are used to build relations, since they intrinsically bond two persons into a relation over time (Guyer 2014). In the meantime, but less continuous, funerals will be discussed. Diverging timeframes affiliated with the burial procedure acting parallel to one another for each individual adds to the argument to acknowledge multiple temporalities. Moreover, donations for funerals are a reason for farmers to engage in charcoal production. Looking beyond the monetary value of donations stretches the actual worth of donations to the social dimension (Bloch & Parry 1989).

In total, my thesis aims to investigate the relationship between diverging timeframes and visions of the future and their dependencies on the situation and position of the individuals along the charcoal value chain in Ghana. Thereby, I will differentiate charcoal producers and people doing business with charcoal.

In the following part of my paper I will illustrate the conceptual framework of my thesis. It delineates the anthropologically relevant theoretical background of my thesis. In the first place, the conceptual framework includes theoretical concepts of time and the future in anthropological writings. Moreover, I will theorize the social ties in relation to gifts and credit as well as funerals and their transforming relations over time in anthropology. Hence, relations and different positions along the charcoal value chain as well funerals will be specific situations in which I will analyze the concept of temporality empirically.

[1] In the context of development projects, the neglect of diverging temporalities is an obstacle to comprehend the reasons for people's action in the present (Adams 1998; Persoon & van Est 2000). As the goals of the involved sides directly reflect on their actions in the present, putting these different objectives into context may bring to light a more thorough understanding of one another and, hence, foster a better communication (ibid.). Meanwhile, 'First World countries`' efforts to halt deforestation in 'developing countries' have been accused of ignoring people's needs to make a living (Brosius 1999).

2. Conceptual Framework

2.1. Time and the Future in Anthropology

'The classic' publication in anthropology concerning time is Evans Pritchard's "Nuer Time-Reckoning" (1939). Pritchard detected time as a cultural construction and emphasized the influence of the environmental conditions on people's reckoning of time. Hence, he contributed acknowledging diverging timeframes in anthropological writing (Persoon & van Est 2000).

The multiplicity of timeframes and concepts of time for each individual, however, has not come under scrutiny (Wallman 1992; Persoon & van Est 2000; Pels 2015). Individual multiplicity of timeframes and concepts of time means that individuals conceive time differently depending on the activity or position they have in the local context. Anthropologist, instead, tend to make generalizations, referring most commonly to a cyclical or reproductive timeframe and a linear timeframe accounting for whole 'culture's' conception of time (Persoon & van Est 2000). Thereby, the cyclical timeframe is portrayed as a sequential conception of the world, in which, for instance, the world is constructed along the annual cycle of agriculture (ibid.). The linear timeframe, instead, is identified as making clear distinctions of the past, present and future (ibid.). Consequently, `future orientated´ conceptions of the world are opposed to apparently `future absent´ constructions (ibid.). `Future absent´ refers to the cyclical timeframe in which people's understanding of time is comprehended to be caught in a repetitive cycle, whereby their image of the future does not go beyond (ibid.). `Future orientated´ 'cultures', instead, are associated to strive for development (ibid.). Attached to this dualistic notion — cyclical or `future absent´ versus linear or `future orientated´ — comes a hierarchical divide, which Fabian (1983) refers to as the process of 'othering'; 'us' vs. 'them", 'modern' vs. 'traditional'.[2] Building up on Fabian's criticism, anthropologists argue the teleological notion of modernity (development, progress, etc.) has narrowed the cultural anthropologist understanding of his field (Ferguson 1999, Pels 2015, Tsing 2015). Thereby, the reflection on multiple temporalities has been obscured by the universal perception of a linear, one-way future for all (Ferguson 1999, Pels 2015, Tsing 2015). Moreover, the existence of diverging timeframes of subjects' visions of the futures has not found recognition in anthropology. Hence, the neglection of multiple temporalities and the tendency of generalizations have been obstacles to take the future as an object of investigation

[2] Fabian's criticism must be understood as part of the `reflexive turn´ in anthropology. The reflexive turn itself must be comprehended as a consequence of movements beyond anthropology including student movements concerning, for instance, the Vietnam War (Bunzel: xvii). In social science, most relevant publications in line with Fabian (1983) are Foucault (1961); Said (1978); Escobar (1991).

(Wallman 1992; Pels 2015). In order to scrutinize the future as an object of study, the first task of my thesis is to point out diverging temporal frameworks depending on the actors' position and/or activity of investigation. Recognizing these frameworks is a basis for an anthropology of the future, an anthropology that takes on the future as an object of study (Pels 2015).

Anthropology and the future have an ambiguous relationship. On one side, the future has always been central to anthropology (Persoon & van Est 2000; Pels 2015). For instance, early anthropologists such as Adolf Bastian feared the physical disappearance of peoples and their cultures, which meant that a few years would be decisive whether cultural heritage will be lost forever or be collected and formalized for scientific existence (Chevron 2007). The "outlook" in anthropological writings often provides the reader with what the ethnographers believe their subjects' situation will likely be in the future. Moreover, anthropologists engage in development projects and discussions concerning the future (Pels 2015) such as, for instance, the climate change debate. On the other side, "futures" as an object of study have been neglected by anthropologist (Guyer 2007; Pels 2015; Persoon & van Est 2000). High investments in advertisements, however, show the value and relevance of the future as a topic in other disciplines and realms of society. In anthropology this worth seems to be less concrete/tangible.

The future is part of 'our' linear concept of time. Thereby, anthropologists engaging with time as a topic of interest find common ground on the relevance of imagination (Gell 1992; Guyer 2007; Appadurai 2013). Imagination is mostly driven towards the future. For Appadurai (2013) imaginations are characterized by emotions, wherefore "the sensations it produces" becomes crucial in the study of the future (ibid. 285). These sensations, which are projected to the future, however, are created through experiences in the past.

Persoon and van Est (2000) discuss the inevitable linkage of the past, present, and future by referring to Wallman (1992), who questions what influence the future may have in present (ibid. 2). Hence, it is not the future itself that is of interest in – or central to the study of – the future, but its consequences on the present (Persoon & van Est 2000; Wallman 1992). In other words, Wallman (1992) combines the most commonly, separately perceived future and present and inquires their mutual interconnectedness. Introducing the model of "backcasting", Persoon and van Est (2000) take her thought a step further. "Backcasting" reconciles the past, present and future by questioning how the image of the future, which is constructed by experiences of the past, reflects on the present (ibid. 22).

Persoon & van Est (ibid.) stress this point: whether we are confronted with rather a

long-term or a short-term ‘future’ helps the scientists to scrutinize their subjects’ behavior in the present (ibid.). I will investigate diverging temporalities of images of the future along the charcoal value chain in Ghana. The contrast of the temporal interval of charcoal merchants’ and charcoal producers’ vision of the future will be put in focus.

2.2. Gifts, Debt and Social Ties

Considering that anthropology is the science of the human, it is not surprising that classic, groundbreaking anthropological works explore what ties humans together. Humans are social beings. Mauss’s essay “The Gift” (2000) discusses this topic including Boas’ research on potlatch and Malinowski’s study on the Kula circuit. Human mechanisms of bonding have ever since been of interest in anthropological work (Guyer 2014).

Also in the recent history of anthropological studies, anthropologists examine the question of how bonding and relations of humans occur. “Gifts” (Hyland 2011) is a comparative and historical study of the correlation of law and gifts. “Debts. The First Five Thousand years” (Graeber 2013), in contrast, deals with credits and debts in human history. The timespan covered in these two works combined with the number of examples from different contexts around the globe illustrates the omnipresence of how gifts and debts build social ties and the relevance for anthropology as a discipline (Guyer 2014). But what exactly brings gifts and debts or credits together?

Theoretically, the common ground of debts and gifts is explicitly discussed by Guyer (2014). She points to the communal social feature that ties humans and resonates in both performances: obligation (ibid.). Her work is an attempt to find a terminology that explicates how relation building through gift giving or debt relations functions. In terms of etymology, to her, ‘obligation’ is the most suitable term (ibid.). Deriving from Latin “ligare” - “to bind” - obligations unites “gift” and “debt”, acknowledging the intrinsic temporality implied in the two vocabularies. In their temporal dimension, both gifts and debts or credits oblige one-self as well as the receiver to a reaction and, thereby, create a relation or a social tie (ibid.). In other words, the commonality of the two words is the immanent feature of bonding between two subjects’ experience through the enactment of exchange. What brings gifts and debts together, then, is the temporal lapse between A (handing out the credit or gift) and C

(compensating the credit or returning the gift).[3] Within this temporality, the 'obligation' of a reaction unites the two subjects.

Mauss equally reasons on obligation as the driving force for social tying. His explanation, however, is founded on a different explanation. For him, it is not the temporal lapse and the immanent obligation towards others in time, but the subjects' "obligation through objects that plays" (Mauss 2000: 67). In other words, Mauss understands the obligation linked to the material object of exchange. His essay has been criticized to disregard the relevance of temporality in his analysis (see e.g. Bourdieu 1972). The process of exchange appears definite in his account, whereby the receiver of a gift or debt will inevitably fulfil the transaction. Hence, the neglect of the temporality in the act undermines the actor's strategy (ibid.). As Bourdieu points out, "To substitute rule for strategy is to reintroduce time, with its rhythm, its orientation, its irreversibility" (ibdi. 9). When the underlying strategy of the actors is investigated through time, it provides the scientist with a clearer understanding of his field. Hereby, context and position of the individuals come into play.

To Guérin (2014), the local context and the individual position of the actors involved are indispensable to comprehend the value of the transaction beyond the monetary sense. Within the local context, the subject follows a certain aim. Hence, the debt or gift has a social function that can only be comprehended by acknowledging time. When one subject gives out a loan to another subject, their hierarchical positioning is practiced and their bondage in the future is secured (ibid.). When viewed in terms of time, debts and gifts unite the past, present, and future. The individual's position is a result of the past. Experiences form a certain aim in the future which is envisioned through the transaction. The transaction itself is performed in the present.

2.3. Funerals and Transforming Relation over Time

Analyzing anthropological writings, Metclaf & Huntington (1991) conclude that there is no universal symbolism and ritual concerning death. However, what makes funerals a universal is that they tie people together. On a similar quest as Mauss, equally coming from a structuralist perspective, Hertz (2004) was looking for explanations to the question of what makes social ties to a macrophenomena. In his classic "A Contribution to the Study of the Collective Representation of Death" (ibid.), he detects a long term social bonding attached to funerals. His work became criticized for delineating death as a linear process (Metclaf &

[3] Taking into account the three steps that are part of reciprocity, a) giving a gift b) accepting the gift and c) redistribution of the gift (Bourdieu 1972), "b)" I have left out.

Huntington 1991) as well as neglecting departing timeframes, which appear in most societies' burial procedures (Bloch & Parry 1989), such as long term futures attached to the spiritual world and short termed futures affiliated to the physical world. In their line of argumentation, Bloch & Parry (1989) introduce the dichotomic notion of social vs. individual. They argue individuals act and think in a long timeframe linked to cosmic and social order on one side and in an individual order with a shorter timeframe, which is related to competition, on the other (ibid.). While this theory has been criticized for being closely associated to former Eurocentric dichotomies, their work is of great relevance, in terms of detecting diverging timeframes acting parallel to one another. Considering that monetary donation are generally given at funerals, Bloch & Parry (ibid.) expose the idea that money has a symbolic and social value and can therefore not be detached from the social sphere. As Guérin (2014) argues concerning debt relations, the value of money must be understood beyond numbers. Only then, the pressure for farmers to produce charcoal and spend their earnings on donation for funerals can be comprehended adequately.

Applying these concepts to my research data and, hence, my thesis, I will point to different timeframes that actors have depending on their activity and/or their position in the local context. I will expose two diverging 'futures' along the charcoal value chain. The two diverging futures are the timeframes affiliated to the vision of the future of people doing business with charcoal and charcoal producers; in both cases their visions are affiliated with their work with charcoal. Meanwhile, to expose the multiplicity of timeframes of one individual depending on the activity, I will include the charcoal producers' future affiliated with the farming.

Concerning the relevance of the individual's social positioning in the local context as the motivation for debt relations beyond the monetary sense, I will investigate debt relations, particularly between women. Further, I will delineate how social ties are created and strengthened through gifts and debts. As debt relations, funerals give reasons to the value of money beyond the monetary sense. Moreover, I will expose diverging timeframes of futures affiliated to funerals.

3. 'Welcome' – An introduction to my Field and Research Experience - Communicative Context, Methodology, Ethics

3.1. Where? – Dawa Dawa No. 2! – A Place in a World in a Precarious State

Dawa Dawa No 2, my rural field site, may not be the 'center of attention'; however, it shares an inseparable history with the world (Wolf 1982). This relationship becomes clear when looking at the colonial history and missionaries further in the past or weekly football matches closer to the present. In my rural field site, Dawa Dawa No. 2, football was watched almost daily. To my inquiry about why the 'football-hut' was always packed when FC Chelsea was playing, I was told it is the club in which most Ghanaians received the 'Gold Card', which is a metaphor for a visa to Europe. Hereby, the relation between Europe and Dawa Dawa No.2, as perceived by informant, is hierarchical. The informant is denied going where the researcher, in this case, I, come from. Moreover, the metaphor of 'Gold Card' infers a linear notion of the future, which is reproduced in a weekly cyclical manner.[4] However, the crucial point is, the world is full of connections, whereby common history as well as present interpretations of 'the other' have a constant influence on the way individuals perceive reality. Gupta and Ferguson stress to break-off the "assumed isomorphism of space, place and culture" (1992: 7), which is a common failure of classical anthropological work (ibid. 9). This means the researcher must think beyond fixed, imagined boundaries. To let go of the 'naturalism' of the parity of space, place, and culture means to reflect historically and socio-politically on the interconnectedness of the focal field of study to the 'outer-world' (ibid. 17). While the hierarchy between researcher and researched may exist, Dawa Dawa No. 2 is as much part of the same world as any town in the Netherlands, China, or Paraguay.

The world in general, however, is not in the shape of stability as numbers may portray it. Instead, it is in a state of precarity (Tsing 2015). A common failure of our perception of the world is to see precarity as an exception (ibid.). In a world that becomes more and more monetized, where school fees, electricity bills, or medical care need to be paid, "everyone depends on capitalism, but no one has what we used to call a `regular job´" (Tsing 2015: 3). Capitalism has failed its promise. Linear temporal frameworks of growth and time ignore other livelihoods that are more driven to the present; foragers, thieves, gamblers, artisans, street musicians and generally people who experience a world with no stable future. These people "rather look around than ahead" (ibid. 22). Dawa Dawa No. 2 is part of this world.

[4] 'Gold-Card' derives from the existing 'Green-Card',which is the United States' permanent resident card. 'Green' is, hereby, substituted with 'gold', which itself a precious metal, is a metaphor for a rich life, so my informants.

People engage, if they have the possibility, in all kinds of activities to earn money and make a livelihood.

In the following part of my thesis I will illustrate how I gathered my data and later point to ethical issues that I was confronted with. Anthropologists are obliged to reflect on the context of their research and expose it to the reader. As Berreman (2007) stresses, for a researcher it sums up as the following: to reveal one's own circumstances and experience in the field are as important as the data gathered and conclusions made. The data gathered by the researcher finds validation if the context of his research is exposed (ibid.). Intersubjectivity plays a crucial role. As social scientists, we are forced to conduct research in the 'real' world (Fabian 1971). We are unable to create conditions of objectivity or neutrality (Fabian 1971; Pels 2014). Thereby, the researcher and the researched continuously react, manipulate and learn from one another (Fabian 1971). Hence, in the following part of my thesis I will expose how and where I collected my data and constructed my field.

3.1.1. Localizing my Research

My research took place in a three-month period, from January to March 2017. As part of the field school of Leiden University, we spent the first twenty days getting to know the country, exercising small assignments, and internalizing small hints given by our three professors on board: Jan Jansen (lecturer at our institute and coordinator of the field school), Peter Pels (Scientific Director of our institute), and Samuel Ntewusu (professor at the Institute for African Studies at the University of Legon, Ghana, and staff member of the field-school). During this time, I still had not decided yet where to do my research. Jan Jansen gave me the hint that during our trip there would be a stretch along the road where an abundance of charcoal sacks can be located in each little town or village. There we were, leaving Kintampo, which is referred to, due to its geographical position, as "the center of Ghana", on a stretch of about 100 Kilometers. About 10 towns seemed to condense firewood to charcoal for all Ghana. This may be exaggerated, but an abundance of charcoal bag mountains, each accounting several hundred sacks, were placed in every town, ready to be picked up.

Each village consisted of a mixture of clay and cement houses, individual churches and mosques, and a rather big school ground at the beginning or end of each set up. While I passed through the villages, my emotions went up and down, imagining myself living for the next couple of months in one of these villages. My daydream got interrupted by Ntewusu, who pointed out one specific town: Dawa Dawa No. 2. He was aware of the political situation of local elites. Jansen, who is an experienced fieldworker, added that the size of the town was

suitable for my research. However, after the field school, as the town of Kintampo as my base, my plan was to approach 4-5 villages, that I had noted in my notebook. With Ntewusu's hint in mind, I choose the first one to go: Dawa Dawa No. 2. Jansen pointed out during the field-school that it might be a smart idea to approach the school due to the institute's and teacher's respected position in the community. A few minutes before the school day started I arrived in a shared cab in front of the school. While the car was taking off I found out sitting next to me was the headteacher of the school. I told him about my plan to conduct research in this community and asked him if he thought that it might be possible. He said to come along and presented me to several teachers. One of them was Richmond, who listened carefully to what I had to say. He fully understood and saw relevance in my concern to find comprehension why people produce charcoal. He skipped school, and presented me to all kinds of important people in the village. For the next two hours, he took me around on a motorbike and gave me a fantastic overview of the charcoal production process: he introduced me to two road side sellers and stopped at several farmers who were engaged in charcoal production. Moreover, he already stressed issues that drove people into charcoal production. When he mentioned he should get back to school, my decision was taken. I felt Dawa Dawa No. 2 was the ideal rural research site to conduct my research. I asked him whether I could come back the following day.

He did not mind that I came back. He welcomed me. So, I came back the following day, but this time with a towel and toothbrush. Richmond offered me to sleep on his couch, introduced me to his landlord as well as his neighbors, Hannah and Stephen. Richmond, Hannah, and Stephen became the three most important people for my research, so let me briefly introduce them to you. Hannah is a Road Side Seller with two big mountains of charcoal bags in front of her house and one behind, each one amounting to over 300 bags. While she always kept busy, cooking, washing, doing business, she was proud of her hard work and always ready for a laughter. Her English was as minimal as my Twi (the most commonly spoken local language), but we managed to communicate with hands and feet. Stephen is her husband, charismatic like her, a farmer, and, more importantly, 'Cutkis' of the modest Presbyterian church in the village (hereafter I will refer to him as Cutkis and not Stephen). His spiritual position reflects in frequent visits by villagers whose concerns he responds to with patience and advice. Richmond is a dedicated young teacher of the local school. In 2013, when he was first sent by the government to Dawa Dawa No. 2 to teach, he went from house to house to collect data from the villagers to report to the government for them to receive electricity connection. Cutkis liked his attitude and Richmond moved close

by. Richmond's dedication did not let go and in 2016 he installed a water pump that pumps water from a nearby river about two kilometers away to the village's center. A teacher from Richmond's hometown had helped his home community in the past, which inspired him to do the same. In other words, Richmond projected his past experience on an image of the future, which inspired his action of bringing change to Dawa Dawa No. 2.

Investigating the historical construction of an image of the future assists us to get a better understanding of the present actions (Persoon & van Est 2000). Richmond's expectation of the future is teleological. For him, Dawa Dawa No. 2 is underdeveloped, however, will inevitably reach development, at some point. The pathway is set and it is a matter of time, necessary means and attitude. The amount of times he used 'traditional' as a synonym for something 'outdated' in our daily conversations were numerous. He avoided funerals and saw expenses for donations or sacrifices as something unnecessary. He believed that anything considered 'modern', instead, is something positive with a reason to strive and work for. His dedication for the community is grounded in his optimism to change Dawa Dawa No. 2 to become more "modern". Richmond is an example of the embracement of the overarching notion of modernity. In this context, Ferguson (1999) identifies modernity as a myth. According to his believe, this myth, however, is not merely a false assumption, but is internalized by people and, thereby, creates a reality, which is shaped through categorizations and classifications constituted through discourse (ibid.). This twofold definition of myth contrasts classical anthropological understanding of the vocabulary, as for instance portrayed by Malinowski (1954), to be an uninfluential dimension of thought related to the past, having no effect on the present (Pels 2015).[5] Richmond's attitude to bring change to Dawa Dawa No. 2 to become "modern" shows, that the myth indeed has influence on the people's perception of the world, which reflects in their behaviour.
Richmond embraces 'modernity'. However, he interprets the notion in his own way. Richmond is a proud 'African'. Each Friday he wears what he calls his 'African wear': locally tailored clothes, which he hopes, by wearing them, helps him set an example for his students. While he was proud about 'African customs', [6] he was fed up with corruption, which, in his opinion, is the greatest obstacle to 'development'. Richmond believes overcoming corruption would lead to a 'modern' Ghana in which work is available, expenses for funerals

[5] Malinowski contradicts himself delineating "a mass of evidence in the preceding 50 pages for Trobriand engagement with destiny, the afterlife, rejuvenation, the denial of fatality, or his own thesis that magic reduces anxiety about the future efficacy of technology" (Pels 2015: 781).
[6] Ferguson (2006) stresses the diversity of 'Afrika'. Since in my example this generalization derives from my informant himself, I do not discuss this more in detail.

meaningless, and ‘African clothes’ celebrated. This example exemplifies the diversity of the teleological notion of modernity. As Ferguson (1999) stresses in the context of the mineworkers of the Zambian Copperbelt, “urban workers’ conceptions of town and country (…) are not simply compatible with the modernist metanarratives of social science; they were a local version of them” (Ferguson 1999: 84). Richmond, than, has a clear idea of what it means to become modern. His idea, however, is his own interpretation and may mean something different for anyone else.

In any case, I slept in one house, and spent most of the time at my neighbors’. The circumstances were ideal. Richmond, Cutkis, Hannah, their son, Wisdom, and I ate daily two to three times together, communicated for several hours, and hung around.[7] I got comfortable with my field and could observe many things happening. Hannah always cooked for several plates on top of ours, for other villagers and friends who were in some way affiliated with them, and for some reason would come by. Richmond and Hannah sold charcoal sacks for charcoal producers and, less frequently, charcoal traders from the cities would try to negotiate a charcoal price with Hannah. More regularly, farmers would drop by to equally discuss charcoal prices, not to buy, but to sell. In other words, the house was a ‘center stage’ of my object of study: human temporalities entangled in charcoal. Meanwhile, Cutkis and Richmond were ideal gatekeepers. Cutkis had an extended network within the village and Richmond’s position of a relative outsider in the community was preferable, for instance, when I needed assistance for interviews. In this sense, Sluka (2007) stresses the importance of the “strong bonds of friendship with particular individuals who often become both key informants and research assistants” (ibid. 121). Cutkis and Richmond became my friends and were key informants as well as research assistants during my fieldwork experience. They helped me construct my field and provided me with the necessary to get access to it.

It has relevance if the gatekeepers or main informants understand the research (McFayden & Rankin 2016). It motivates them to assist (ibid.). To get such good access to the field, it was crucial that, in the first place, Richmond, but also Cutkis, was aware of the paradox concerning charcoal production.They knew that charcoal production is harming the environment in the long term, but they were equally aware of the importance charcoal production has for the individuals of the community in the short term. With this awareness combined with Richmond’s his dedication to ‘work for the good’, they were the perfect gatekeepers to welcome me to conduct my research on my matter of interest.

[7] To ‘hang around’ may be perceived as unscientific by the reader, but is a widely accepted method in anthropology (Russell Bernard 2006: 368).

In the following, first, I will take a closer look at my focal field site, Dawa Dawa No. 2, and its history of charcoal production. Thereafter, I will expose my methodology. While my informants' positioning in their social local context is relevant for my analysis concerning debt relations, funerals, charcoal production, and business per se, it is likewise relevant for my data collection. In other words, in the following, in respect to the social position of my main informants in their local setting, I will reflect how this resonated on my data collection. The next step will be that I explain how I built trust and friendship with my informants, since it was an important methodological step to receive and get access to intimate and historical data. Lastly, I will discuss two ethical issues I was confronted with.

3.1.2. Dawa Dawa No 2

Dawa Dawa No. 2 is located on the national route 10 in Ghana. The route connects the northern part of Ghana with the south, terminating at the commercially vibrant cities of Kumasi (south) and Tamale (north). Kintampo is the nearest town of circa 60.000 habitants and is located about 40 kilometers south of Dawa Dawa. From Kintampo to 100 kilometers northwards, the vegetation changes, and the spectator notices that the savanna gets drier. About 10 communities can be located on this stretch, one of them Dawa Dawa No. 2. The earth is relatively soft and rains during the dry season stay absent. During the rainy season (April-November), rains are heavy, wherefore people moved to the area. In the past, rice was the main source of income. Dawa Dawa No. 2 was a migrating town with its first settlers, when the N 10 was being built by the British Colonial Empire. Now, settlers come from different areas from the north, which they call 'home', keeping their ties to their families. In Ghana, there are officially 46 ethnic groups, of which at least 12 are present with at least one individual. As the reader might guess, nearby is the 'father community' Dawa Dawa (No. 1), which is mainly inhabited by the Akan tribe. The Akan also hold the position of the chief, which is the highest authority for both Dawa Dawas.

3.1.3. History of Charcoal Production in Dawa Dawa No. 2

To gain knowledge about the history of charcoal in Dawa Dawa No. 2, meeting Kuame Sizzala was of relevance. Kuame refers to 'Saturday-born', and Sizzala to his tribe. The Sizzala tribe has its roots in the Upper West Region of Ghana. Originally, the Sizzala tribe were blacksmiths. Blacksmiths need charcoal to heat metal. For that reason, Sizzala are experts in making charcoal. In 1978, 46 Sizzala tribesmen migrated to Dawa Dawa No. 2. The environmental conditions and the circumstance in which farmers were already living in the community were crucial to move to the area. Farmers leave dead wood behind which they fell

to clear the land for their field. Dead trees, ready to be transformed into charcoal, were abundant. The land was soft; softer than compared to the Upper West Region. If the ground is relatively stiff, the construction of artisanal ovens demands more time and harder physical work. Hence, the Sizzala chief approached the former chief of Dawa Dawa and negotiated their settlement.

I met Kuame Sizzala for the first time when my bike needed to be fixed. Kuame fixed and constructed about every tool needed to farm or produce charcoal: hoes, spades, machetes, bicycles, even arches. He fixed my bike and I was ready to go to the 'bush' to start the charcoal production process the following day. The next morning, however, my excitement to begin got disturbed, but only preliminary. Cutkis announced there was a meeting and he would take me to the bush later and I agreed. "Advance", an NGO financed by "US-Aid", organized a meeting for farmers to discuss difficulties they face trading individually with merchants. While the merchants have options to trade with a variety of farmers, the farmers are pressured to sell their crops to gain their income. The possibility of the merchants to simply buy the crops from other farmers, combined with the farmers' temporal pressure to sell their goods, endow the merchants with the hierarchical position to beat down the price. Hence, "Advance" tries to create unions among the farmers to set market prices in the region. If the farmers can coordinate prices in communion, the pressure to sell for a low price would be eliminated and the hierarchical position would balance out.

In any case, I mention the meeting at this point because it took place at Kuame Sizzala's domicile and Kuame himself pointed out an important difference in charcoal production between the past and the present, in regards to my research experience. Kuame did not participate, but did react after the meeting to my questions concerning the factors that drive farmers into charcoal production. However, only through interviews with other farmers I found out about Kuame's relevance to my research. At present, Kuame is the only Sizzala left in Dawa Dawa. His fellow tribesmen left because dead wood was getting scars and possibilities to move to more fertile lands came about. Kuame continued to live in Dawa Dawa to help the catholic priest to build a church. In any case, the Sizzala tribe introduced charcoal production to Dawa Dawa No. 2 and their mindset towards the work had a different temporal framework.

Concerning diverging temporal frameworks of the future affiliated with charcoal production, there is an important distinction between charcoal production at the time when it was first introduced in Dawa Dawa No. 2 in the 1970s and charcoal production during the time of my research period. The difference exposed in the following serves as a first example

to the reader of one of the objectives of study: delineating actors' diverging timeframes of the future for activities entangled in charcoal along the charcoal value chain in Ghana. This topic will be discussed more in detail and in other instances or comparisons in chapter 3 in this thesis.

In the past, there was a different perception of the activity of charcoal production. The perception differs in terms of temporality of the future attached to charcoal production. In the past, charcoal producers were instructed by their chiefs, in the first place, to only transform dead wood into charcoal. In the meantime, the chiefs fostered replantation of trees. Replanting implies a cyclical perception of the activity. Moreover, it means that there is long-term planning involved in the activity. People saw charcoal production as their work. As trees grow relatively slowly, the 'cutting – replanting – growing – cutting cycle' takes 10 to 15 years. This means charcoal producers used to have a long-term future involved in the activity with a cyclical temporal framework of at least 10 to 15 years. Only by acknowledging charcoal production as a long term income, I argue, it opens the 'space' to bring relevance to the replantation of trees. Today, instead, Kuame pointed out the difference is that charcoal production is not portrayed as a long-time livelihood experience; it has become a necessity.

While charcoal production is a necessity, the temporal interval of 10-15 years stays 'out of reach'. What I mean by this is that the future affiliated with the activity is short-termed, resolving necessary needs. For that matter, the production cycle of trees accounting 10-15 years seems irrelevant, since the necessities need to be solved today or within a month or two. Once the problems are solved, the farmer hopes to solely live off his farming activity or get through the dry season with charcoal production. The point is that a charcoal producer will more likely be willing to replant trees if he portrays and visions charcoal production as his work for the following 10-15 years. Only if this is the case, the trees' reproduction cycle of 10-15 years is 'in reach' and the plantation of trees will become relevant. Instead, during the time of my research, most charcoal producers saw themselves as farmers. Charcoal production was perceived as a 'problem solver'. In other words, it helped farmers in threatening situations, but was not portrayed as a lifelong livelihood experience. Hence, charcoal production, for farmers, has a short-term future affiliated with it, reaching three months of the dry season or until necessities and problems are solved.

I will get back to this issue at a later stage of my thesis. However, for now it's important to remember the Sizzala did see charcoal production as their work. Hence, the temporal framework attached to the activity of charcoal production was long-termed compared to the farmers' future affiliated with charcoal production during the time of my

research. The difference exposed is an example of how the future can bring more clarity to behavior in the present, as stressed by Persoon & van Est (2000). In this case, the temporal framework affiliated with the activity gives reason to why deforestation is rapidly taking place in Ghana without an initiative of replantation of the charcoal producers. Moreover, taking the future in this context into account implies that charcoal production, being a 'short termed necessity', diminishes the relevance of the paradox exposed above: charcoal production secures the farmers' livelihood in the short term, but creates insecurity in the long term.

Meanwhile, the temporality of charcoal production in terms of knowing how to produce charcoal outlived the initial attitude when charcoal was introduced in the first place. The knowledge of the activity was transferred over generations, whereby its former attribute of replanting to make the livelihood maintainable for the future was left behind when it became a necessity. There is a change of attitude, but the production is constant or spreading. In terms of tempos, the temporality of knowledge of how to produce charcoal is still ongoing, but the knowledge and priority of replantation has stopped. This is one part of the explanation of why forests are diminishing.

3.2. Methodology

3.2.1. Doing Research - The Relevance of Authority and Building Rapport in my Field

The authority of my main informants was important for my research. Increasing their social status, my informants enjoyed hosting me, as well.

Hannah, Richmond and Cutkis are respected people in Dawa Dawa, which was helpful to keep my authority as a researcher. Richmond is a teacher from a different part of the country and dedicates his energy into the community. While he is the only teacher living in the community (the rest reside in the nearby town of Kintampo), he stays away from social community events such as funerals. Cutkis has a respected religious position in the community and is invited to important discussions of the elders. Hannah is a thriving Road Side Seller, therefore in continuous relation with many farmers, and is hard-working. I am a stranger, 'white', and a researcher from a distant University from somewhere in Europe. As much as it helped me in the field to be introduced mainly by Richmond and Cutkis to further informants, the three enjoyed being openly able to care for a stranger, later a friend and part of the family, from a faraway, 'rich' place as Europe.

The authority that I received through my main informants was important for my position and identity in the field. Thereby, informants had a respectful distance towards me, which is important to receive reliable information. I realized that my position was determined

by the person to whom I was attributed to in the field in the starting days of my fieldwork. Thereby, I accompanied Lale, my fourth main informant, through the village. Lale is Hannah's senior brother and a farmer whom I worked with intensely in the charcoal production process. Anyhow, I accompanied him to concretize the start of a production process with an 'operator', who is in charge of cutting the trees that Lale and I were to produce charcoal from. In front of the 'operator's' house a group of people were hanging out. They were surprised by my presence and started making jokes about me. Nothing offensive, but it reminded me that my position is shaky and I must be aware of not becoming a 'fool' in my field. Lale is a 'common' farmer in the field and does not enjoy much of an authoritative position as the other three. I am quite certain that the group would have perceived me differently if I was accompanied by Richmond or Cutkis in that moment. As Beer (2003) stresses, the identity of a researcher is unstable and one must be aware that the researcher himself becomes a research object under constant surveillance. Since my main informants were respected people, I became affiliated to them and gained authority.

However, while it was central to keep my authority in the field as a researcher, it was equally important to build rapport and friendship. More specifically, I secured authority within my field by living among and building rapport with authoritative people. According to Sluka, "the success of ethnographic fieldwork is in large measure determined by the ability to establish good rapport and develop meaningful relations with research participants" (Sluka 2007: 121). I succeeded well in this context because I managed to live, eat, and communicate with the household I participated in, whereby eating 'Fufu', 'Banku', and 'TZ' made my hosts especially happy. I was constantly asked by people in the community whether I eat the local food prepared in the household. Moreover, I participated in daily activities such as fetching water when the aforementioned water-pump was broken, or helping in small chores, in order to break down distances that are affiliated with white strangers, who are most commonly known at distance through church activities or development projects. However, I felt I was able to achieve a 'breakthrough' through my chosen method of participant observation. Getting back from my first participatory day producing charcoal with Lale, I was completely exhausted. Hannah bursted out laughing when I finally returned (and almost collapsed during the last few meters) on my bike. She loved the image that I physically participated in charcoal production and called out neighboring people to tell them that I just came from the 'bush'. Their expressions were likewise joyful and their reactions did not change in the following days of my return from the 'bush'. What changed, however, was my rapport with my informants and their perceptions of me. I only realized this in the course of time: jokes and

conversations became more intimate and my position changed from a stranger to a friend, until, finally, Hannah was referred to as my 'mama'. Here, I can claim to have been 'adopted' by the household I participated in, which is "the classic image of successful rapport and good fieldwork relations in cultural anthropology" (Sluka 2007: 122). In this process, I was told several times, that 'they' were not aware that 'whites' could work as physically as 'Africans'; 'whites' are known to think, read and write (as the bible was brought by Europeans), while 'Africans' work. While saying this, I admit my hand was often taken, turned around, and commented on: "Look, but you have baby skin" (I did, compared to theirs). In any case, breaking off such images of distance, I believe, is one of the most relevant side effects of participant observation in rural areas of 'remote' places.[8]

Participant observation supported me to cross cut assumingly natural or socialized disparities. This helped me to build rapport with different individuals as well as the community as a whole. It helped me to gain access to intimate information from my main informants and diminish disparities within my wider field, which was important for the second part of my research, in which I had to expand my field. People talked about me and questioned the reason of my presence in Dawa Dawa. In the meantime, however, I was working with Lale day in and day out for about three weeks, from Monday to Thursday, as well as Saturdays. On Fridays and Sundays people usually rest. The closest rapport, during this time, I certainly built with Lale; we became friends. Each day we spent around ten hours together. In the mornings, he picked me up with his bike and it took us about 40 minutes to get to the right 'bush', which still had trees with the right density left that would sell on the market. On a day off, I brought him a bread from a nearby town, he gave me a local drink, I brought him some fruit, he brought me a chicken. We got along well, as I was impressed with how hard he worked and he was impressed that I could work. I did take breaks, though. The sun was hot and the wood heavy. Every half an hour or so I took out my notebook and wrote down what I had learned observing, participating, and chatting, and took a sip of water.

Temporalities are the theoretical object of my study. Charcoal production and distribution serve as the material background. Charcoal is my material object of study. Theoretically, I want to investigate human temporalities entangled in this object. Moreover, I want to explore how the temporalities of charcoal reflect on the actors, in detail on the actors' images of the future attached to it. Meanwhile, charcoal must be seen in a broader context of a

[8] To add at this point, as part of the field-school, my professor Sabine Luning from Leiden University visited Dawa Dawa No. 2 in the first weeks of my research. During her day-visit she met my main informants. This fostered closer rapport between my informants and me. I was frequently asked how my 'mama' is doing.

capitalist world economy, which forced me to include interconnections of the commodity and value chain of charcoal (Wallerstein 1991: 4). Moreover, Marcus (1995) stresses 'following the thing' "is clearly a blueprint appropriate for multi-sited research" (Marcus 1995: 107). To achieve such matter, I went with Cutkis on a 16-hour trip to Ghana's capital, Accra. We went on a charcoal truck to Accra accompanying Hannah's charcoal load to her customers. The decision to focus and build strong bonds in one household helped me to achieve this. In other words, my methodology showed success to get a thorough understanding of one charcoal network, which was my goal to get an understanding of diverging temporalities of the futures of actors engaging along the charcoal value chain. In the capital, within two days, I met seven present or past business partners or customers of Hannah. This experience brought my ideas further for my research and helped me gain a better understanding of my field.

Considering the limited time of research, I had no choice but to demarcate my field on one 'charcoal-network' along the value chain, to get a valid understanding of my object of study. Only in the second part of my research, this could give me the authority of having understood my field in an adequate manner, to be able to generalize my findings by stretching my field. In the following I will portray how I operationalized this second stage of my research and which difficulties I was confronted with.

3.2.2. Extending my Field - Validation of my Data

Charcoal is produced in various places in Ghana. This means I had to demarcate my field to a scope that made sense and was possible to take on an investigation in the timespan of nine weeks (excluding 3 weeks of field school). Before I got into the field my aim was to live, work, and experience intensely what it means to work with charcoal and do business with it. The best, if not the only, way possible I could do so was by focusing on one charcoal network. Not to forget, I did so in order to comprehend not only each actor in their position per se, but also their relations to one another. For me, this was the only way I could tease out, as best as possible, in my research period, what cultural anthropology most distinguishes itself from other social sciences: qualitative (and extended) research, and in my case, to get a thorough understanding of human temporalities related to charcoal. From what I had informed myself beforehand and experienced during our field school, I narrowed my starting point down to a strip of 100 kilometers encompassing about 10 communities, in which charcoal production seemed to be the most concentrated. As a starting point I chose Kintampo: "the center of Ghana". Still, I was confronted with a field that included far too many networks that I would be able to study. My aim was one network and missing key element: access. I decided

(I did not have many options) to ‘go with the flow’, to be open to people’s advice, and be flexible if things did not turn out as I had imagined. As portrayed above, I got lucky. I was able, with the help of my main informants, to get a thorough understanding of my object of study in a matter of the first half of my research period. After the finishing the first weeks, I was tired, but satisfied with what I have achieved, so far. It was time to take a deep breath and change perspective. To be able to generalize my findings I needed to stretch my field. In other words, the hierarchy of my informants had to change. From this point onwards, not my focal network was under investigation but the surrounding ones were, to comprehend whether the conclusions I had made from the information I have gathered, so far, had validation to be called and be portrayed as a *big issue.*

During this period two elements are of relevance for my research experience and, therefore, worth to be delineated in more detail: ‘snowball sampling’ as the method and the language barrier I was confronted with. While snowball sampling helped me to receive trustworthy information, the language barrier, at times, I experienced to be quite frustrating. I will explain why and how I worked myself around this obstacle. After touching upon these two matters, I, thereafter will delineate how I further operationalized my ‘validation in process’.

Snowball Sampling

To begin with, using the ‘snowball sampling’ as a method turned out to be a success. In Dawa Dawa almost everyone was involved in charcoal production during dry season. While women mostly went to the bush in groups of three or four, men usually worked individually. Children may have helped on the weekends and whoever else not directly engaged in charcoal, cooked food and repaired and produced tools or bicycles for charcoal producers, buyers, and sellers. Taking this into account, I think it is suitable to portray Dawa Dawa No. 2 as a charcoal based economy, in which, somehow, all inhabitants are potential informants for my research. So, who to choose?

The snowball sampling helped me to receive honest informants for, and trustworthy answers to, my inquiry. Three of my main informants were well respected people in Dawa Dawa and especially Cutkis’ extended network played into my hands. In most cases, my main informants introduced me to further informants and explained my concern. Hence, I was affiliated with them and received honest answers. Hereby, I want to relate back to the importance of authority in the field and the importance to who I, as a researcher, was affiliated with. The few times I tried investigating ‘on my own’, I often felt disappointed,

because I was not sure whether the information I received was reliable. In one case, I was "emotionally seduced" (Sluka 2007: 125) by a young charcoal producer. I only met him by chance while he was unloading a load of charcoal bags. He told me he had to stop schooling because his father fell sick. I conducted three follow-up interviews with him. Only at the last interview I found out that his story was not entirely true; his father owns dozens of cattle and could have easily sold one of them to pay off his medical care (one of my main informants helped me realize this). However, the informant who much tragedized his story admitted that he changed his story in the hope of gaining something. This experience was proof to me that snowball sampling was the right sampling method in my field, in which my position as a "stranger" had many different meanings Therefore my introduction to further informants by the 'right' people was of great importance.

Language Barrier

While the snowball sampling turned out to be a successful method, the language barrier limited the progress I made in this stage of my research and, furthermore, restricted my initial intention and possibility to experience language itself as "a production of meaning" instead of a simple expression of meaning (Fabian 1971: 33). During the self-reflective turn, social scientists were especially focused on deconstructing terminology and language. Fabian (1971), thereby, identified language "as a production of meaning". To give an example, when I conversed with one of my informants about 'white', homeless people in Berlin, our conversation changed my informant's meaning of what it means to be 'white'. 'White' did not anymore solely mean a businessman in a suit, working in his office; the connotation of 'white' in his mind possibly changed, or at least widened, to a person, by chance still in a suit, but perhaps living in the street. In this case, the meaning of the word 'white' changes, or, at least, expands. Hence, in the first place, the language barrier restricted me to analyze information in this way.

———Secondly, however, I was restricted to a few people to help me translate during my interviews. Only an insufficient amount of people spoke English well enough to do vis-á-vis interviews. This entailed two problems. First, my possible translators were already my informants, which resonates in possibly biased translation and extension of field for validation. Second, I was dependent on their spare time and willingness to conduct interviews. Concerning the first issue, I was aware of the problems, but I simply did not see another option. Richmond, however, was usually positioned well to work as my translator. The fact that he is not from Dawa Dawa No. 2 is important. It means that his position was a relative

outsider that has a certain distance towards inhabitants in the village. From my view, this helped to get less biased information during interviews.

I dismissed the impossible comprehension of meaning of my informants and I did the best I could do with the translating bias of my main informants as translators. The remaining obstacle raised by the language barrier was time. I was not aware and did not think about the fact that translators as well as informants were ‘busy men at work’ or that my main informants could even get tired of my questions. Richmond was teaching in the mornings, managing his water project in the afternoon, and engaging in other small businesses in the meantime. Cutkis usually went to farm or was busy with church affiliated activities. Now, as I write this, the fact that my information had other obligations seems obvious to me, but during my fieldwork experience, it was the most frustrating experience; it slowed down the process. Time pressured and my imagined goals were dependent on others. I had to become creative to reach my goals and was lucky in other instances. This I will delineate in the following.

First, I approached everyone I knew who spoke decent English. There were only a few, and it went alright, but soon I felt pressure again, also because it felt biased to only interview people who experienced secondary education. One of them, however, became an important informant of mine. Jacob first approached me while I was helping the ‘loading boys’ to upload Hannah’s charcoal to ‘our’ truck that brought me and Cutkis to Accra. I greeted him because it was not the first time he stopped by the house. He greeted back and told me that he is stronger than me. I disagreed and we started talking about his motorbike that he was sitting on. He told me that he used to be a ‘loading boy’ but is a Road Side Seller today. This is how he could afford his bike. His young age and gender made him an ‘unusual suspect’. Most Road Side Sellers are female and in their 40s. His exception however, gave me a better understanding of the ‘usual’ Road Side Seller and their temporalities concerning charcoal business. I got lucky with him. Due to schooling, usually he visits Dawa Dawa No. 2 every second weekend. Because of a study period, during the last two weeks of my research, he stayed constantly in Dawa Dawa No. 2 and I was able to spend a lot of time with him conducting several follow ups. In another instance, I got lucky as well. It was extremely hard to conduct interviews with women. Until this point I had not met one English speaking woman. Moreover, I noticed some women would not like to speak without the presence and/or permission of their husbands. Women were, however, equally important to my research as men. Women produce charcoal, and mostly occupy the position of a Road Side Seller as well as business and market women. In any case, in my ‘lucky-instance’, I cycled down to the nearby river. The river is the water source of the inhabitants of Dawa Dawa No. 2

during dry season. Despite the installed water pump, some women and children go down to the river to fetch water and wash clothes. It is a very calm, harmonious place, in which one time I was fortunate to spot a caiman. In any case, I went there on my bike and was as usually greeted kindly by people I passed and was asked with a turning hand sign where I was going. I kindly, as usual, responded and increased my speed again until I realized something was different. I came to a full stop, turned around, and speeded back. Gnaba was the first and only woman I met who spoke quite good English. She told me she finished secondary school and that she knows the people where I am living. So, I asked her for her name and if it was okay to conduct interviews with her. These little but important instances helped me widen my field and generalize my data. In the meantime, however, I had to get my main informants on my side to work as translators. I realized making appointments with them for interviews seemed to be too much of an obstacle. I had to take the chances how they came about. So, I did so in different circumstances. Fridays were days off. Farmers did not go to the 'bush' to produce charcoal. Instead, farmers came to the house to discuss their work with their buyer of charcoal and Road Side Seller – Hannah. Already agreed with Richmond or Cutkis beforehand, when the farmers finished discussing with Hannah and Cutkis, I asked the farmers if they had time for some inquiries. A problem with these informants was that most of them lived in the 'bush' and I was not able to conduct follow up interviews with them. To get access to more independent informants that were not directly affiliated with Hannah as a Road Side Seller, I took advantage of the fact that Hannah and Richmond were selling charcoal sacks to farmers. The farmers usually came by in the morning or after dinner, which suited the times Cutkis and Richmond were present. Another circumstance, where I was able to take advantage of the situation, were funerals. I participated in two funerals. These funerals were long and visitors sat around moaning, chatting, and dancing. While I did not intend to conduct interviews out of respect for the circumstance, my main informants presented me to possible informants, pointing out that it was a good occasion to sit down together to discuss my concerns.

Working alongside the schedule of my main informants and being open for 'lucky instances' were how I validated my information that I received and concluded from in my first stage of my research. In the following I will delineate two ethical issues that I was confronted with during my research.

3.3. Ethics

Conducting research inevitably included numerous ethical issues I was confronted with. Among others, this includes, for instance, giving informed consent. However,

concerning my research topic and my field, I specifically want to point out two ethical issues. The first deals with reciprocity and power in a field in which a hierarchical divide inescapably exists between informants and researchers. This is due to a joint history of the world which is represented in the present. My argument stresses that the risks, but also the positive effects, of monetary support of the researcher in his field, are not dealt with enough in anthropological discourse, while the financial disparity often exists, especially on the African continent. The second ethical issue concerns the ambiguous subject of charcoal production/deforestation.

In the second stage of my research I mentioned frustration that I felt. My feeling arose from my expectancy that my main informants would be there for me whenever I needed them, whereby I did not fully appreciate their generosity. It became 'normal' to have their assistance. Moreover, under pressure, my investigation became more important to me than the gratitude I felt for my hosts in the first place. At this short stage I did not appreciate the close rapport and friendship we had built. In this sense, it is not morally acceptable to see one's informants as "mere objects of scientific gaze" (Robben & Sluka 2007: 18).

So, what was it that I could give in return? Was the friendship and intrinsic value of my research enough? Did or should my research have value for my informants or was it, on closer inspection, rather for my personal career step? Lastly, but most importantly for the following part of my paper, how far can an anthropologist go with his gratitude and where should he stop?

The reflexive turn of the 1970s and 1980s included the responsibility of a researcher to act reciprocally. It became an "ethical requirement of fieldwork" (ibid. 9) to give in return and not to see your informants as a data resource (ibid.). This process of "reinvention" (Hymes 1969) and "decolonization" (Harrison 1991) of anthropological fieldwork stresses the hierarchical dimensions of fieldwork and its correlations to colonialism, putting the fieldworkers experience at its center (Robben & Sluka 2007: 18).

Especially in the Latin American context, it is well discussed that the anthropologist should take a position for marginalized people he studies (see Hale 2000; Bourgois 1991). Nash (1976) agrees, but argues, that "impersonal objectivity" may only exist when there is a cultural distance, as in her case researching witchcraft among the Mayan. In the African context, however, the anthropologist is confronted less frequently with political marginalization, but rather with economical. Ferguson (1999) stresses the anthropologist's "responsibility in the aftermath of modernism" (ibid: 252ff). However, these discussions rather stress the researchers overall political position during, and motivation for, his research. None of these discussions address the practical, economical, and hierarchical disparities a

researcher is confronted with in the field, especially present on the African continent. Ferguson (1999) expresses how he is confronted with the issue (see, e.g. letters of his informants), but nevertheless does not depict this conflict any further. Seymour-Smith advocates “to perform some useful or valued service in return for the collaboration he or she requires” (1986: 117). This, however, is a vague formulation leaving much space for interpretation. How should an anthropologist react if one of his main informants is in economic distress or, even worse, in worsening health condition, and neither him nor his family can afford medical care? Is the researcher obliged to economically interfere in his field? I believe if we are talking about life and death, there is not much room for discussion. Cases where it becomes more difficult, however, are if it comes to the question of financially supporting one of your main informant’s projects during the research period. Let us imagine the researcher’s reciprocal behavior is taking place through physical ‘collaboration’ in a project, wherefore the rapport is growing well. Is what is needed, however, plain monetary funds, and, therefore, support? Is the anthropologist in a position to `step in´? The image of financial disparity between researcher (even as a student) and informants not only exists and but is reality. Although the disparity is sometimes exaggerated, everyone is aware of it. None of my informants in Dawa Dawa No. 2 have left the continent, gone on a plane, or let alone thought of the possibility of doing research in a faraway place. So, would financial support deepen disparities or build closer rapport? What needs to be mentioned is that the researcher risks ruining his research, if he chooses to provide financial support for his informants. Suddenly, everyone in his field wants to be an informant in the hope of getting support. In some cases it took me a while to convey the fact that I was not a development agent, but a researcher. On the other side, I believe there are instances in which it is too easy, yet ethically unacceptable, to say that one should not interfere in his field during research period to keep possible risks for investigation out of the way. I am mentioning this highly ethical and sensitive issue because for about a week I had ‘sleepless nights’ after being confronted with this dilemma. In conclusion, I would like to stress that no clear solution can be given, but that each case, individually, must be carefully reflected upon. The researcher’s ‘individual freedom of choice’ concerning monetary decisions may be a reason why the researcher avoids this issue. It may also just be too awkward or too much of a sensitive issue, which some anthropologists would rather dodge in their writings. Neither the AAA-Codes of Ethics (2009) nor Robbin & Sluka’s (2007) extensive reader of “Ethnographic Fieldwork” discusses this issue. From my experience, however, I strongly suggest, that the general negative as well as

positive effects of financial support should be highlighted more, for anthropologist to be more prepared to take such decisions in his field.

To get to my second point regarding ethics, the information published with my paper could be used by third parties against my informants. Analyzing different ‘futures’ in my field highlights that charcoal production is a necessity and not an option for its producers. My paper, however, will include personal information about my informants as well as information about the charcoal production process that can be useful to people with different aims. Charcoal production is a sensitive topic since it clearly changes the environment. Considering sustainability and climate change debate and neglecting the charcoal producer’s short-term future, one may see charcoal production as an ‘evil practice’. Civil servants from the Forestry Department are dreaded people and have previously threatened with a prohibition of charcoal production. I managed to have an interview with the Forestry Department’s district manager of the Kintampo District. He surprised me because he was well aware of whole production process and the crucial role charcoal production has for its producers in the short term, which contrasts to many outsiders who are concerned with its consequences in the long term (see Brosius 1999). Anyhow, at present, chiefs, district, and the Forestry Department are gaining through charcoal production. It would become a problem when pressure ‘from above’, the government, other states, or international organizations is put onto the Forestry Department to take measures to stop deforestation. As stressed in the AAA-Ethics-Code (2009), it is my obligation to discuss with my informants possible unintended uses of my findings by third parties . However, none of my informants wants to be anonymous. The decision to publicize personal data will depend on my assessment on how dangerous the publication of certain data is.

4. Temporalities and Futures of Actors along the Charcoal Value Chain

The following chapter (3.1.) is the first of two chapters in which I deal with temporalities along the charcoal value chain in Ghana. Thereby, I start with actors doing business with charcoal. The chapter to follow (3.2.) will deal with temporalities and futures of charcoal producers. I divide the presentation into these two chapters because I specifically want to contrast their diverging temporal range concerning their image of the future in correlation with charcoal. In other words, I argue that the reach of the vision of the future can be categorized in correlation with the positions within the value chain. Moreover, I will expose that the way people make bonds through gifts and credits reflects on the individual positioning, experiences, and the physical distance between the actors. Uniting these contexts and comprehending the individual aim of the future for the actors involved in the relation will clarify the reason for the actor's action in the present.

4.1. Charcoal Business seen through the Lens of Temporalities

I will start this section by exploring the value chain. Then, I will expose the relevance of network. Lastly, I will exemplify how these networks are ensured through social ties. The value chain includes the charcoal producer, an 'operator', a Road Side Seller, a merchant, a tractor driver, a 'loading boy', a truck driver, the chief, the Forestry Commission and District Assembly, two types of charcoal sellers, and, finally, the consumer. Thereafter, I will expose the actors' relations to one another while looking through a lens of temporalities. The role of informality, insecurity, and precarity throughout the value chain will be discussed in their correlation with relationship building. Thereby, debts and gifts are used to build or strengthen social ties which ensure a continuation of the relationship of actors along the value chain. Moreover, I will demonstrate the aims and goals which the actors pursue while engaging with charcoal. I will point to the temporal framework of their vision of the future. Opportunity plays a key role, and my argument states that due to merchant's stability of income, the temporality of their future reaches a couple of years. This means people doing business with charcoal have experienced a stable income over the past years. They mirror this security on the future and think about investments that could create a similar stability for times in which trees would become too scarce.

Delineating the value chain backwards, I will start with the consumers and work my way down to the Road Side Sellers. The two remaining actors are the charcoal producer and the tractor driver. I will address them in the second section of this analysis.

4.1.1. The Charcoal Value Chain

Let me start with the charcoal consumers and consumption practices. Charcoal is the main fuel source in Ghana and is used mainly for cooking. 90% of Ghanaian households use charcoal to prepare their daily meals. Among the most common Ghanaian's dishes are Fufu, Banku, TZ, and Kenke, all of which require different cooking procedures. Kumasi's inhabitants are known to prepare Kenke, which requires smaller, short lasting charcoal, while in Accra, harder charcoal is in demand because the common dish Banku needs to be cooked for several hours. A family of five consumes an average of 2 kg of charcoal daily (UNDP 2010). Urban areas are the main charcoal consumption areas. Due to the current urbanization, 14 of the 28 million Ghanaian population live in cities and consume 80% of the charcoal produced (UNDP 2010). As compared to firewood as a fuel source, charcoal has many advantages. It is lighter, burns longer, gives off more heat, and can be kept in storage. Charcoal cooking utensils can be produced locally. Moreover, charcoal does not emit much smoke, which makes it health-wise a better option. Cooking indoors with firewood is a danger that affects especially women and children (UNDP 2010). While some people prefer gas for it heats more quickly, charcoal, compared to gas, is less expensive. Gas prices, as well as oil prices, are fluctuating (Kunateh 2017). Moreover, people fear gas. There is fear of misuse by children and I have been told stories of explosion. In this context, outdated gear imported from Europe plays its role. Due to charcoal's many advantages, the Ghanaian population puts value on charcoal, which spreads among the different actors of the value chain. The demand is there and still growing positively in its population (UNDP 2010).

Charcoal is sold on the street mostly by women. Women dominate merchant practices in Ghana, which is clearly notable in all stages of the value chain and other supply chains as well. Most of the women selling and buying charcoal today were involved in businesses with other products beforehand. Charcoal sells well, which means the product moves fast and continuously. Around the suburbs of towns and cities it is hard to miss a charcoal seller. There are two types of sellers: one buying large quantities from the merchants or Road Side Sellers, usually between 300 and 1000 bags. The other buying smaller quantities from this charcoal seller. The one buying buying from the other, or sometimes both, pack smaller quantities in plastic bags. These are sold to consumers for 1 Ghana Cedi (GC) and last for one to two cooking sessions, depending on the food cooked.[9] The larger bags can also be bought by normal consumers. There exist several types of bag sizes. The most common are size 4

[9] 1 € = ~4.8 Ghana Cedi or 1$ = ~4.3 Ghana Cedi (http://freecurrencyrates.com/de/convert-EUR-GHS; access 01.06.17)

(around 25 kg) and size 5 (up to 50 kg) (UNDP 2010). Usually the bags are stored in storage rooms or simply on the compound of domiciles. The bags are put there by the loading boys. Loading boys are young, fit men that need to make some quick money. The work is sporadic, unreliable, and hard, but the wages in terms of 'time vs. money' are relatively good. [10] For each bag the loading boys receive one to one-fifty GC, which are distributed equally among the participants. Only the loading boss takes slightly more. He is the contact person of the new charcoal owner. The work is organized by the market women by phone. The loading boys appear once the charcoal truck arrives. The unloading process goes relatively quickly. Two 'boys' on the truck pass the bags down to the remaining 'loading boys', which are queueing next to it. The bags are carried on the head, either horizontal or upright, depending on the technique of the carrier. Let me slow down at this point. Until now I have mentioned the consumers, two types of charcoal sellers, the loading boys and the truck driver. For now, the remaining questions are where the charcoal comes from and by whom it is sent. Again, there are two options. The charcoal is either sent directly by the Road Side Seller, or bought off a Road Side Seller by merchants who send or accompany the charcoal to the charcoal seller in consuming sites. The business people, mostly, live in the consuming areas and travel to the production areas when their given credit is collected and the demand for more charcoal by their customers (charcoal sellers) is getting closer. Credits, as part of a debt relation, by definition have a temporality.[11] The temporality is cyclical, since the creditor is reimbursed by the debtor in the future. However, it is also linear in the sense that social ties are created. The buying process takes usually a couple of days, sometimes weeks. Thereby, the merchant rents a room or stays at a relative's home in a producing village to receive an overview of the market price; from Road Side Seller to Road Side Seller, from village to village the price is negotiated. Once the merchant and the Road Side Seller find common ground and a deal is fixed, the merchant is invited for food. Social ties are established and the merchant is obliged to gratitude. In any case, when the number of bags needed is collected, the merchant organizes a truck driver. To pass the next district border, a fee needs to be payed for the Forestry Department and the District Assembly.

In any case, besides the two taxation rates to the District Assembly and Forestry Commission the value chain is completely informal. 80% of people earning money in Ghana

[10] 'Loading boy', in the city, is one income among others. One cannot make a livelihood from loading. 'Citylife' is comparatively expensive and the trucks arriving in one neighborhood too infrequent.

[11] Credit derives from the Latin word `credere´ – to believe, trust (Oxford dictionary. https://en.oxforddictionaries.com/definition/credit; access 15.06.2017) Generally the belief or trust is linked to the debtor's capability to pay back in the future. In other cases, either party may be interested in a longer term hierarchical relationship.

are employed in the informal sector (Osei-Boateng & Ampratwum 2011). Informality comes equal with other ways of making contracts and dealing with the present as well as the future. Moreover, informal economies and sectors differentiate themselves from formal economies in employment characteristics (ibid.). Among others, these include predominance of self-employment work, an absence of official protection and recognition, and little or no job security (ibid.). These are signs of a precarious world. In any case, these characteristics are not just absent, but are compensated by others. A few of these I will delineate in the following.

Therefore, I will take the reader back, again, along the value chain from the Road Side Seller to the consumer –this time, however, with me, as I experienced it, going alongside the charcoal. Thereby, I will point out things that stood out.

4.1.2. Importance of Network and Place

We were waiting already a couple of days. The driver who was supposed to pick up Hannah's load was sent to Ivory Coast, instead. I knew him. He had stopped for lunch about a week earlier, before he kept on going on his journey. He is one of Hannah's customers' (charcoal seller's) husbands and his participation would have made a better deal for everyone involved. The drivers are usually only contracted for a one-way load by their companies. On the opposing way, going southwards, they often try to fetch a load of charcoal, to make some extra income. Depending on the driver's relation with their company, this practice is sometimes in accord, sometimes not. If things go well, their phone number is noted by the Road Side Seller or the merchant.

In any case, our trip got postponed and I kept on going with Lale to the 'bush' and I took my phone with me, in case a truck was ready to leave. By that time, about three weeks into my research, Lale and I almost finished the whole charcoal production process. Only a few steps were missing and I could catch up on those when I was getting back.

On a Thursday morning, then, at six o'clock the loading boys were already uploading. Hannah, Cutkis, and I patched broken bags, while the 'boys' did their job. Stacking the sacks is a matter of technique. The most respected is 'Sizzala-technique'. Thereby, the loading boys pile the sacks in a way that an open load has no need of any brackets, sticking together several hundred bags. Only experts can do it. After lunch, at around 2 pm we were ready. Like the charcoal bags squeezed in the back, the four of us — the driver, his assistant, Cutkis, and I — squeezed in the driver's cab. I cautiously questioned how long our journey may take, and the response was, "Only god knows". I soon found out why. After only a few kilometers we slowed down and the driver's assistant was ready to slide a tip into the officer's hand. During

the trip, these stops became a constant reminder of the officers' existing hierarchical positions.[12] The number of police barriers was so numerous that I almost became unaware of them. After 16 hours, however, we made it. We unloaded the load at two different customers, each buying 250 bags. The second was Amalia, the wife of the truck driver who was initially planned to deliver the load of charcoal. Cutkis and I showered at her house since we were covered in charcoal. We helped the loading boys who insisted to give me a share of their earnings. We chatted a while with Amalia before we left. Amalia is a successful charcoal seller with three children. In about a two months' cycle she buys charcoal from Hannah. The success was clearly noticeable and their earnings were reinvested. Tiles were piled, ready to be installed in the kitchen that was in the process of being renovated. The rest of the house was inviting and comfortable.

Let me briefly imbed this into the objective of my thesis. Hannah and her husband have a linear vision of the future that is attached to the notion of modernity. They moved from the Northern Region to the capital and sent their children to a private school. Their aim of becoming 'modern' was noticeable not only from the materials in which Amalia and her husband invested but also from how the topics of our conversation dealt with sending their daughter to a University in Europe. Concretely dealing with such ideas implies a certain stability in the present and the future that lies between the now and the idea to be fulfilled. Hence, Amalia and her husband have a rather long-term timeframe attached to their engagement with charcoal. In any case, Amalia, especially her cheeky but cautious and friendly character, resembles what charcoal business is about. I will continue explaining why.

To begin with, successful charcoal business is about network and place. Place is important to sell charcoal in quantities. Amalia is in a good position. In her proximity, she is the only person selling charcoal and, therefore, sells off relatively fast. Network is indispensable because charcoal business is an informal business. Without a network, there is no business. These networks are not easy to find and a charcoal seller does not think about giving her contact number to somebody in her neighborhood. In times of precarity, having no social security, these networks ensure stability. I realized how difficult these networks are to find when we unloaded the first load. Leaving the first customer to get to Amalia's house, the truck driver had to move very slowly around the first corner. The earthy road, marked with

[12] In the middle of the night we accidentely missed a police barrier. The officer soon overtook and stopped us on his motorbike. It took us about two hours of negotiation to onward our journey. We disrespected the officer's position, which could only be compensated by stressing his authority and raising the 'tip' by 6000 %. For many Ghanaians in my field the 'tip' is a way of ensuring protection in the future. Thereby, seen through temporality and taking into account Guérin's (2010) argument through of debt relations, the act has two consequences. It re-emphasizes hierarchical positions and, second, obliges the officer to protect in times of distress in the future.

deep holes, cramped between cement houses, only permitted a slow exit going back and forth: “beep, beep, beep…”. Next to the loading boys and Cutkiss, I was sitting on the open platform of the truck, when a young adult, my age, in a bright green shirt tried to start a conversation with me. The conversation got interrupted each time the truck backed up too far. I was in doubt of my initial idea that he wanted to make a comment on a white young adult covered in charcoal when I noticed he would not dare to get around the corner. Irritated by his consistency, the others around me became attentive and we realized he wanted a contact. He was referring to me because he assumed the ‘white’ would be the boss. By the time Cutkis realized this, we backed up a last time and made it around the corner. The guy in the bright green shirt followed us running for a few hundred meters, while we were shouting at the driver to stop, but the engine was too noisy. The young man missed his opportunity to get a new contact and the possibility to join a network. However, he made me realize how important these networks are. I mentioned Amalia’s cheeky character because charcoal business is about taking opportunities. Individuals need to be attentive for any possibilities to make new alliances with people who are part of such networks. Amalia and her husband entered the business when Hannah was looking for a driver to send the charcoal to her customers. Ever since, they stayed in contact and, at some point, Amalia and her husband decided to buy a load themselves. Amalia stays mostly in the house caring for the children and therefore has time to do the charcoal business on the side. Taking up on these occasions is crucial for actors participating in the value chain to build networks, which make livelihoods and secure stability in the future. In a monetized world, the informality of the value chain implies precarity. There are no written contracts ensuring a stability of income and collaboration in the future. However, there are different ways of ensuring stability.

The following section will illustrate how charcoal networks along the value chain are ensured through social ties. Gifts and debt relation create social bonds through what Guyer (2014) finds in ‘obligation’: an intrinsic motivation that ties people together in time through acts of giving gifts and credits. Debt relations imply an obligation and responsibility to react to the act in the future (Guyer 2014). Trust and reciprocity will be dealt with, which are part of this ‘mechanism’ to secure a livelihood in the future. Trust is thereby interpreted as a gift as well as a foundation of these relations. Reciprocity explains the process of the social tie in toto. First I will illustrate how I experienced this during my ‘business meetings’ in Accra and give two further examples in the following section. These will illustrate how merchants and Road Side Sellers have helped each other out in crucial life situations. To make my points, I will continue further along the value chain. I stopped while we were leaving Amilia’s house.

4.1.3. `Not a matter of business´ - Reciprocity and Trust in an Informal Economy

Freshened up, Cutkis and I continued our journey. We had several meetings scheduled with Hannah's customers. Striking during these meetings was that they dealt with everything but charcoal. Each time I tried to interfere with questions about their business, the customers were inclined to change subjects right after answering my inquiry fairly quickly. I soon realized that the 'business meetings' were not directly about the business itself. Instead, they were about strengthening ties between the two partners to stabilize their uncertain income in the future. Our meetings dealt with family members, health conditions, and other personal affairs. One lady handed over her newborn baby to Cutkis before we were able to greet each other. In other words, friendships were being cultivated. For that reason, it was not the time to talk about business.

Cutkis and I enjoyed several soft drinks and food, making up for skipping dinner and breakfast during our trip on the truck the day before. We laughed about not being able to handle so much sugar and food, but the crucial point was that there was not the option of refusal. The risk of misinterpretation by the gift giver for a denial of the plate or drink was too great. Cutkis' act of acceptance meant that soon another credit based load of charcoal will follow. He was given a gift because his customers were dependent on him (or in this case Hannah).

Reciprocity or gift exchange is characterized by three steps. a) giving a gift, b) accepting a gift, and c) redistribution of a gift (Bourdieu 1972). If the redistribution is equal to the gift it is responding to, the relation is cut. Cutting relations is a common the practice of exchange. When I go buy beans at a shop, I directly compensate the product with money; thus, the relation between the buyer and seller ends. By putting a monetary value on a product, the value is comprehended as the exact compensation. This annihilates any obligation of a continuation of the relation in the future between the 'buyer' and 'seller' based on the exchange of the two "products" (Graeber 2013). The same accounts for a loan. Once the loan is reimbursed, the two parties involved are even and can go separate ways (Bourdieu 1972). To avoid such a circumstance in the future, gifts are exchanged beyond the credit along the charcoal value chain. The informality of the monetary transaction already implies more than a solely monetary relation, in which the relation terminates once the loan is repaid. The added 'value' here is trust. The role of trust is crucial in a debt relation (Guyer 2014). Taking into account that untrustworthy people are denied a credit, trust itself must be seen as an immaterial 'gift', which creates gratitude in the receiver. The gift is accepted by selling the

charcoal and repaying the loan. A symbolic gift redistribution took place while we attended the meeting. Next to the cultivation of friendship this is the second point that stood out during our 'business meetings'. Hence, trust and friendship are the basis for an ongoing business relation in the future.

Most informal economies are based on small credits (Osei-Boateng & Ampratwum 2011), in other words, debt relations (Guérin 2014). Generally, in the past decades, microfinance debt has been perceived as an instrument to alleviate the poor from their precarious situation (ibid.). Thereby, analysis has focused on the monetary transaction, looking at numbers; profit or losses (ibid.). For both the debtor and creditor, the transaction can turn out positively or negatively, depending on the question if a profit could be gained and whether the money could be reimbursed in the time agreed on (ibid.). Thereby, the linear parameters of growth and development drive us to think in scalable numbers (Tsing 2015). These teleological notions obscure what exists beyond the numerical (ibid.). Hart (1973) stresses the complexity of informal economies, which are often misleadingly analyzed by categorizations from formal economies. To comprehend the value beyond the economical spectrum, identifying the context of the subjects involved in a debt relation is crucial (Guérin 2014).

The following is another example that elucidates the relevance of trust and reciprocity in the charcoal value chain. I mentioned Jacob in chapter 2.2.. Jacob is a young male Road Side Seller in Dawa Dawa No 2. He used to be a loading boy and a producer, then worked his way up the chain to become a Road Side Seller. He did so by cultivating trust with his former merchant, who used to buy charcoal from him while he was producing. In other words, she trusted him and decided to ask him whether he would like to buy the charcoal for her and send it to Accra where she sells the charcoal to further charcoal sellers. Due to his trustworthiness, she turned him into a Road Side Seller. In this case, the gift exchange beyond the business is different, compared to the example I gave before. This is due to the different situation. Hereby, the merchant from Accra feels gratitude in their relation because Jacob is making her livelihood more comfortable. Surely he gets compensated for that, but to ensure the relation's future, she sends him further gifts. By now, Jacob could do without her. He is selling loads of charcoal to other merchants because he was able to make enough profit. To ensure the relation, however, his main business partner sends him oil, maize and cloth from which he can make his own shirts to size. Wearing the shirts means accepting the gift. Jacob in return sends her the charcoal for a fixed price when she needs it. In this case, again, the charcoal seller in Accra offers gifts to the Road Side Seller to ensure their tie in the future.

Ensuring ties in the informal value chain of charcoal goes further. ‘Friends’ along the charcoal value chain help each other out in difficult life situations that have nothing to do with the business. Jacob was present in Dawa Dawa No 2 for the last two weeks of my research because he was studying for exams. Due to a governmental change during my research period, exam fees could not be paid in installments as accepted during the former legislation period. Jacob was not prepared for this and had given out all his loans to farmers to produce charcoal. He was quite desperate until his charcoal buyer was willing to give him a loan to write his exams as planned. Hereby, positive emotions within the debt relation create further gratitude, which strengthens the tie between the two. Shipton (2007) and Villarreal (2009) point to the creation of feelings and emotions resulting from the achievements that were made possible through the debt.

I just explored the importance of trust and reciprocity in the informal economy of charcoal. After all, contrary to the title of this section, strengthening ties is a `matter of business´. By firming relations through reciprocity and trust, individuals ensure their future livelihood through the future of these social ties. In any case, beforehand, I have emphasized the importance of network and place to engage in successful charcoal business. In the following I will deal with the reasons for people to engage in the business. Thereby, I will delineate the temporal frameworks of the images of the futures, how they were created and formed through experiences, and how they reflect on the present.

4.1.4. Charcoal Creates Opportunities – Temporalities of Futures of Actors engaging in Charcoal Business

In the following I present two examples or cases of people engaging in charcoal business. I will delineate the temporality of the future of two Road Side Sellers, which is representative for the temporality of the future that is correlated with the business practice of charcoal. In both cases, I will explain these images of the future historically. The aim for stability will be central here. Moreover, I will briefly discuss an act of reciprocity that, explained through a long temporality, must be differentiated from the examples above.

The reader may have wondered how the Road Side Sellers make their contacts with merchants in the consumption areas where they send their charcoal to. In most cases the merchant comes up to the area and stays there for a couple of days or weeks. She rents out a room, and once a deal is negotiated, she is invited for food by the Road Side Seller. If the deal goes well, she will call the Road Side Seller when her clients are in demand for more charcoal. The Road Side Seller rejects or accepts, depending on the availability of charcoal,

giving priority to *her* main clients and the merchant's trustworthiness that she resonated during the first business practice. As mentioned above, most deals are made through credit, meaning that, generally, the merchant pays the Road Side Seller when she collects the money from her customers. Some Road Side Sellers as well as merchants decline deals with credit. Obviously, one must have a certain spectrum of clients and money that allows such a practice. The practice of declining, however, simply derives from bad experiences in the past, in which clients either completely deceived the Road Side Seller or made up stories about how there were bags with bad charcoal in the load. The decision of what is 'bad' or 'good' charcoal is judged by the receiver of the loan.

Case one

By 2006 Hannah and Cutkis were married for about ten years, parents of two children, and their third child, Wisdom, was on the way. They were farming year round, making around 60 sacks of rice and several of maize. Moreover, in the dry season, they were producing charcoal for an extra income. They guarded their charcoal until they had enough to send it to Ashame, Accra, where their main buyer came from. Their merchant came every few weeks and bought whatever charcoal they had. This year, however, things in Dawa Dawa No 2 did not take their usual path. From the farmer's perspective, cattle, herded by the 'Fulani people', was disturbing extraordinary. The cattle were jeopardizing their livelihood, which escalated into a fight the farmers and the Fulani. The fight became physical and, one day, three farmers were killed. The farmers sought revenge and, on the following day, 15 Fulani were shot dead. The military came into the area, seized weapons, and put 46 people under custody, Cutkis among them. While one of his brothers was among the three dead farmers, he was released after only a day due to his religious position. Meanwhile the former chief of the community asked him to move elsewhere until things calmed down. Cutkis and Hannah felt annoyed with the situation, but soon Hannah's and Cutkis' charcoal merchant came to Dawa Dawa No. 2 and was told the news. She proposed them to move to Ashame, Accra, where she was from. So they did, they packed their stuff, took their children and moved to the distant and unknown capital. They kept their ties to Dawa Dawa No. 2 and started working as merchants. Their children went to private schools, which are the only ones available in the district. To keep his religious position, however, Cutkis was send back to Dawa Dawa No. 2 after three years. Hannah stayed in Ashame to follow business. This how and when Hannah could step up to the position she is in today; from a charcoal producer to a Road Sides Seller. As a team Hannah and Cutkis took in various positions in the value chain. Cutkis produced, Hannah worked as a merchant as well as a charcoal seller. Her merchant practice included the delivery to other

women that approached her during that time to become a charcoal seller as well. Four of these women are, today, the customers of priority, to which she delivers frequently. Only the leftovers are sold to unfamiliar merchants, usually slightly above the market price. Today, she is in the position to do so. Their experience of the conflict drove them to keep living apart, until their independency on farming was reached. Hannah's and Cutkis' aim was to reach stability.

What does this story tell? Through unusual circumstances Hannah could build a network along the charcoal value chain. This network ensures her a stable income through charcoal. Her stable income, as I will prove in the following two examples is, gives her the possibility to engage in a future that has a temporality of at least a few years.

Hannah plans to build a shop and *invest* into a tractor. Due to the diminishing number of trees in the proximity of Dawa Dawa No. 2 Hannah wants to secure a stable income. Moreover, the Forestry Department is threatening to enforce laws that may prohibit charcoal production in the area. Therefore, she engages in two ideas. Her priority is to build a shop. In this shop, she wants to sell basic products; beverages, bread, toothpaste etc. She is saving for it and planning to build it in the next couple of years. The investment in the shop will secure her a stable income in the future, as the charcoal is doing for her in the present. A similar idea hides behind the tractor. Tractors are not only always needed for the farming season, but also in the dry season to carry goods, which will provide her with an income. The aim for stability is founded in her experience of her past.

Moreover, Hannah and Cutkis send their children to a private boarding school. Their aim is to provide their children with a good education, which will give them the possibility to work in different occupations than farming. This goal has gained high priority since the incident with the Fulani. It is a way of getting their children out of a possible situation of danger.[13] Similarly, influential for this decision is that Cutkis had to stop schooling a year before graduation, because his senior brother fell sick. He enjoyed school and, therefore, wants to provide his children with the possibility that he missed. Lastly, the relatively good conditions in the private schools in Accra added on the latter two. Today, they exactly calculated, that their daughter's schooling costs 3 CD a day and their son's 4 CD. Next year it will be 4 CD for both, because the daughter will join him in secondary school. Such planning is made possible by the relatively stable income Hannah makes through charcoal business. In

[13] Another incident that reinforced this idea, is that Hannah, Cutkis and their youngest son were shot a year ago driving by a neighboring community. The assault was not meant to hit them. In this community are fights about Chieftaincy. In the time of my research this fight escalated again.

any case, before illustrating a second case, I will make a small detour concerning another example of reciprocity seen through the lens of temporality.

Day in day out, Hannah cooked several plates on top of what is eaten for the household. Each day, different people ate with us. This is an open reciprocal act which is entirely motivated by the past to avoid a possible crisis in the future. Cutkis explicitly pointed out that this act is devoted to the experience Fulani conflict in 2006. If such crisis will ever reappear, they would have many homes to go. Cutkis adds, that if he managed to save money, his first act would be to build a house for visitors. After all, this was a highly emotional experience in which, as the reader may remember, Cutkis' brother died. These emotions shape their vision of the future (Appadurai 2013). The strength of this experience resonates in the daily practice.

Due to its long temporality I would categorize this reciprocal act differently to the reciprocity I have discussed earlier. The long temporality is explicitly motivated by one event or experience, whereby the weight of this event must be considered to allow such long temporality, if ever to happen, until the expected reciprocity is expected to be put into practice. In short, the emotionally loaded vision of a future created through a specific event in the past drives Hannah and Cutkis to strengthen social ties on a daily basis in the present. Taking into account the local context it must be added that Cutkis and Hannah fortify their respected position in the community; Hannah as a successful Road Side Seller and Cutkis as a spiritual leader and cutkis of the Prespatarian church.

Case two

To get back to the case of Jacob. Jacob invests in his education. His aim is likewise, to gain stability for himself and his family. None of his family members have a secure income that would ensure a calm and stable future. He has experienced the difficulties throughout his live. Therefore, he wants to become a teacher, which would secure him a lifelong governmental contract. He finished his education to become a primary teacher by producing charcoal. Thereby, however, the earnings were just enough to get by and he decided to go back to Dawa Dawa No. 2 to live at home and help his family through charcoal production. During this time, he got to know his business partner, which helped him to become a Road Side Seller. Thereby, he is profiting well and the possibility opened up to keep going to school for education to become a governmental teacher. He can support the household of his family, schooling and housing for his girlfriend as well as for himself. His aim is to continue schooling to reach a level of education which would allow him to receive a permanent

governmental contract. In other words, he is using the charcoal business to reach another 'level' of stability for himself and his family. More important however, for my argumentation, is that Jacob's stable income gives him the possibility to engage in a future that has, again, a timeframe of a couple of years.

To sum up, I gave two examples of Road Side Sellers' futures to expose a temporality in their future which is devoted to ensuring stability in their livelihood. Beforehand, I gave a third example of a charcoal seller: Amalia. The temporality of their vision of the future is relatively far reaching. The image of the future is, thereby, limited to themselves, their families and investments for alternative livelihood options that possibly could secure similar stability in the future. The images of the future I am dealing with, are a combination of their experiences of the past, opportunities that come about, which reflect in the activity of the present: charcoal business.

Before I start with the following chapter I will explore the role of charcoal business for women, again engaging with temporalities and opportunities.

4.1.5. Charcoal Business a Women's Business

In my field the positions of a Road Side Seller, a charcoal merchant as well as a charcoal seller were generally carried out by women. These women were either dealing with other products beforehand or were farmers. Hannah and Abna, another major Road Side Seller in Dawa Dawa No. 2, farm in the rainy season, but their main income clearly derives from the selling activity. For most merchants, charcoal is not more profitable per se, but simply has a shorter production as well as selling cycle. People who buy charcoal consume it comparatively quickly and demand more. Similarly, the production cycle of charcoal takes up to a month. Hence, dealing with charcoal is more profitable. Particularly, two merchants coming from Accra eating lunch with us, pointed out the slow selling cycle of maize, which they were dealing in the past. Thereby, it can take weeks, if not months, until the credit is collected to engage in the next commercial activity. This includes several discussions with their customers, which is, likewise, often perceived as frustrating. Charcoal, instead, sells off quicker, the credit is retreated quicker and within a month the merchant can prepare for a next commercial activity. Hence, it is mainly due to the comparatively quick credit cycle that more and more people enter the charcoal business. It is more profitable. The profit that was generally reinvested within a few months, can now be recollected within one month or a few weeks. In any case, other merchants deal mainly with other products as fish, cassava or pepper and see charcoal as another option, whose demand continuously exists. In the centers

of consumption, the number of charcoal sellers is growing. The women see its profitability and continuity in sales. One of the women having lunch with us, for instance, prepared for a new customer in Takoradi. While sending one load to her old customer, she would leave with another truck to see whether a new long-term business partnership could be established.

In any case, about one third of Ghanaians above the age of 14 have not enjoyed any education, whereby women in general have received lower education than men (GSS 2008).[14] Based on the level of spoken English, the educational difference was clearly noticeable in my field. The informal sector is characterized by self-employment (Osei-Boateng, & Ampratwum 2011). This means, for the informal charcoal sector, there is no company employment that may revise one's educational background. Women, however, employ each other. Thereby, Road Side Sellers give loans to women to buy charcoal from farmers. They sell the charcoal to the Road Side Seller who initially gave her the loan. It is not the case that these loans make the Road Side Sellers' merchant practices more profitable. In contrary, the Road Side Seller loses about 2 CD for each bag, finally, sitting on the same number of bags as if she had done the direct transaction from the farmer to her house. What happens is that looking up to her, women approach the Road Side Seller and ask if she can help them; and so, they do. Abna is a Road Side Seller employing over forty farmers through loans. During one interview with her she was sitting in the middle of her compound washing dishes, as women in my field generally kept busy doing chores. Richmond and I sat in chairs with a few meters distance. The moment we got into the matter of the women's role and its empowerment through charcoal business, she put the dishes down, put herself in an upright position and looked as earnest as confident deeply into my eyes. Acknowledging the fact that I was engaging on this matter, she did not stop while Richmond was translating.

In her extensive fieldwork on local microfinance systems in Tamil Nadu, India, Guérin (2014) stresses that "microcredit is both shaped by and constitutive of women's frameworks of calculation, which in turn reflect varied and sometimes conflicting regimes of value" (ibid. 41). Through debt relations women tie themselves in social relations and reposition themselves within the local setting (ibid.). This gives reason to debt relations between women in Dawa Dawa No. 2 in two aspects that seem incomprehensible from a monetary perspective. In the first place, Hannah and Abna give out loans to women making a negative balance after all. Since they could buy it directly from the farmers, they practically lose 2 CD for each charcoal bag they buy from their debtor. Without the loan, the debtor

[14](Ghana Statistics Center: http://www.statsghana.gov.gh/docfiles/Gender/FAO_GHANA_COUNTRY_PROFILE_FINAL2012.pdf; access: 27.06.17)

would not have been able to buy the charcoal bag in the first place. However, taking Guérin's (2014) argument into account, it comes to light that Hannah and Abna do fortify their respected position in the local setting. In the meantime, Abna pointed out that some debtors pay back the loan, but never reinvest more with the profit they have made. Theoretically, over time they could make enough profit to become a Road Side Seller themselves, but they do not. They, only sporadically ask for another loan. This only makes sense if we understand this debt relation to reassure the social ties between the two. "Dependency and social hierarchy are also constantly negotiated and challenged, and the ways microcredit is appropriated and combined with other debt ties are illustrative of this" (ibid. 41). Hannah and Abna fortify their hierarchical position and the debtors secure their ties to them.

In any case, decisions must generally be taken in accordance with the men in my field. The husband is perceived as the head of the family. This does not mean that separate accounts do not exist. The most successful Road Side Sellers work with their partner in accord as a team. While incomes and balances are kept separate, the husband helps the women to take notes due to common illiteracy. However, a change of hierarchy is noticeable. The most obvious case I was confronted with was that Hannah gave her husband, Cutkis, and another close friend of him a loan to buy two generators to pump water on their field to grow watermelons during dry season. The contract states that if the crop fails, Cutkis and his partner must pay back the full amount to their debtor.

Women can also perform purchases more independently due to their business practices with charcoal. Passing merchants frequently sold products to Hannah, which she contributed to the household. In other words, the success in charcoal business empowers women; it gives them the space to be directly involved in decision making processes.

Why women specifically engage in charcoal and men not, does not seem to have a clear answer. On one side, however, it seems that men did not see charcoal business as a profitable one, at first. Growing engagement of men in the past years indicates for such reasoning. On the other side, concerning Road Side Sellers, characteristics generally affiliated to women may play a role. It was pointed out by Jacob, who is one of the few male practitioners taking up such role, that giving loans demands patience, insightfulness and remission.

In the first part I gave an overview of the value chain. Due to charcoal business' informality, ensuring a network is essential to secure a stable future. Actors along the charcoal value chain build social ties through debt relations and gift. Trust and friendship builds the foundation of this reciprocal engagement. Thereby, I stressed that trust itself must be

interpreted as a gift. In part 3.1.4. I exposed the temporality of the image of the future of actors involved in charcoal business. I delineated what I would call relatively long-term future of people doing business with charcoal. Their image of the future, which is a construction of experiences of the past combined with existing opportunities or chances, implies a temporality of a few years, securing a livelihood through the business and possible chances to invest in other business that would secure their livelihood instead for a time in which the number of trees in their proximity would diminish for no more charcoal to be produced. Their image of the future is mainly preoccupied with their own stability to make a livelihood for themselves or of their children and family members. In any case, lastly, I explored the relevance of charcoal business for women. Thereby, I picked out the example of how women help each other out in a merchant practice, which on one side emphasizes their positioning and on the other secures social ties. Looking at the women's practices from a monetary perspective leaves gaps.

Now I will make a bridge to the second, chapter; the temporality of the futures of charcoal producers. I will do so by making the link between Road Side Sellers and charcoal producers and briefly explain their relationship.

Road Side Sellers business relation to charcoal producers can be constructed in two ways. Either Road Side Sellers buy the charcoal off the producers or they give out loans that are repaid through charcoal. Charcoal producers usually do not have the contacts to send charcoal to consumption areas, but more importantly, not the time to wait until a fair deal with a merchant is negotiated. Time, in this case, is money. As far as the permanent customers are supplied, the Road Side Seller can ‘sit’ on her charcoal, until the market price is high. In any case, if the charcoal producer works independently, he is in a better position to negotiate and makes more profit. He has the option negotiate with different Road Side Sellers or merchants, but usually sticks to one Road Side Seller. That is due to a possible debt engagement in the future that most farmers have generally experienced at least once in my field. Loans are informal and only given out bit by bit. Thereby, each small loan is noted in the Road Side Seller’s notebook with the producer’s reason for taking out the loan. Once the charcoal is ready, producer and Road Side Seller sit together and take balance. Trust, again, plays a crucial role. The Road Side Seller has no obligation to give out loans to anyone. If somebody is not trustworthy, he is told that money is not available. The reason for neglecting a collaboration is due to bad reputation and/or corresponding unreliable business relation in the past. Reciprocity or gift exchanges are not commonly observable, because their network or relation is more secure. The geographical distance is much closer and if a business partner

goes ‘out of business’, other options are there. Trust is sufficient to secure the relation in the future. However, charcoal producers often referred to ‘their’ Road Side Seller as ‘friend’. The beginning of their friendship becomes a synonym to the begin of their business relation.

In the following I will delineate different temporalities that charcoal producers engage with. I will point to the temporality of the future correlated to charcoal production. I will distinguish and compare this future with the charcoal producer’s future affiliated to farming. Furthermore, I will give another example of the importance of reciprocity and collaboration, in circumstances, in which precarity is present, seen through the lens of temporality. Gender and the role of charcoal production for women will make the last section of this chapter.

I will start the chapter with the charcoal production process to complete the value chain. Thereafter, I will point out to the relevance and future, farming has in the charcoal producer’s livelihood to point out to difficulties that drive people into charcoal production. Then I will engage with the short-term future of charcoal production and continue with the relevance of reciprocity and collaborative networks in times of uncertainty.

4.2. ‘Not charcoal producers – Farmers!’ - Short term futures of charcoal producers

Charcoal producers are farmers. Their main occupation around the year is farming. They farm during the rainy season from around April to December. Due to the dry season and no means to water fields, from January to March the farmers engage in charcoal production. Crucial, however, is that the farmer’s main source of income has shifted from farming to charcoal production in the past years, which corresponds to a proliferation of charcoal production and deforestation. This part of my thesis should contest the question why deforestation is taking place and delineate a temporal difference in the farmers’ image of their future affiliated with the farming and charcoal production. The main argument is, that the charcoal producers’ temporality of the future affiliated with charcoal production reaches about one month.

4.2.1. `Not easy´ - Charcoal Production Process

The charcoal production process takes about a month. This relatively short cycle has relevance for people’s engagement with charcoal, which I will discuss later. The production process itself includes several steps, whereby two to three production processes can be practiced in parallel. As demarcated by the farmers, I will describe the charcoal production process in the following steps: cutting trees, piling wood, covering the pile, monitoring the mountain, uncovering the mountain, packing sacks, and delivering to the roadside. I experienced a whole production cycle, doing participant observation with Lale within three

and a half weeks. In the first weeks of my research, sponsoring Lale, Hannah kicked off a charcoal production process. During our production process, Lale started two more processes. In the morning, usually around six or seven a.m., Lale picked me up, and we cycled about 40 minutes to 'his bush' on a sandy path through the savannah, not too far from where he farms during the rainy season.

Cutting Trees

The farmer initiates the production process. If he is working for a loan, the Road Side Seller invests. An operator is contacted who is paid 90-100 CD. The operator buys one gallon of gasoline and oil, which is used to operate the chainsaw. The operator accompanies the farmer to a chosen location in the 'bush'. The trees of interest are already marked with a light cut of the farmer's machete and consequently brought down with the chainsaw. The selection of trees depends on a variety of aspects. There is a legal prohibition to some species of trees. As mentioned above, chainsaw milling has been illegal since 1998. However, the law enforcement is only put into practice if economically relevant trees are lodgged. One of these is the shea tree, which has economic relevance for the northern regions of Ghana. Other trees, which are considered to be cut only by "wicked people", are further species of trees that bear fruits to eat or that can be used as a medicine. Moreover, the nearby proximity of the tree is considered. If a grown tree is surrounded by younger trees, these will grow ones the old one is cut, so my informants. In any case, ten to fifteen trees are cut in a proximity of about fifty meters and then individually cut into pieces of about one and a half meters. Small branches are cut off with the chainsaw. This ensures that the farmer can carry the wood together in the second step of the production process. In toto, the operator cuts thirty to fifty trees with a gallon of gasoline, which enables the farmer to build three ovens.

Piling Wood

The building of the "mountain" of wood has a specific procedure. In toto, the process reminds of a 'Tetris game' in which each piece of wood is carefully put to its place. The final pile reminds of a spaceship pointed in front and flat at the end. The whole pile is about three meters long, two meters wide, and one and half meters high.

First, however, a space is located. The ground must be flat, not too hard, and ideally surrounded by suitable grass, which will be needed to cover the mountain. The farmer tests the ground with his machete to feel its hardness. The surrounding earth is used to cover the mountain to transform it into an oven so that the wood does not turn to ashes. A hard ground increases the physical energy needed to cover the mountain. In any case, the thickest and

straightest pieces of wood are carried together to make a start. Each piece is lifted on the shoulder, preferably by a helping hand, on which it is balanced until the selected space is reached. Three lines are put in parallel to one another, making the foundation of the pile. On top, in a 90 degree angle, thinner, straight pieces are piled, again making three lines. Now, 'Tetris' starts. Commencing with thicker pieces in the middle, parallel to the first layer, but positing on the second, the wood is piled. From the start, the shape of a 'spaceship' is noticeable, curving together at one end. Piece by piece, smaller fragments fit the holes, while curved pieces are used for the sides to make a peak; each limb has its place. To carry the smaller branches, the farmer squats down in a 'typical African fashion': heels and toes on the ground and bottom also touching the heels. The pieces are balanced and added in a way that it exceeds the reach of his arm. Again, balance is key. Finally, the pieces are entangled in such way that the mountain can hold several people.

Building an Oven

The oven has two layers: grass and earth. First the grass needs to be cut. Bushfires may have thinned some grass. Therefore, the ground is investigated for traces of fire. The grass is cut with the machete and bundled together. The bundles are laid on top of the mountain in a cylindric manner, lying on top of each other in the center and sticking out on the sides. One may imagine an Asian conical hat, more commonly known as 'rice hat', covering the pile of wood, in this case, being the head. In any case, about 30 centimeters from the ground are left free, which is important for the circulation of heat. Now, the outer layer of the oven is built. For a start, at the peak of the 'spaceship' two small Y-shaped pieces of wood and a third holding them together form a small gate. This is where the oven will be lit. Starting on one side of the gate, blocks of earth are hoed to build a wall.[15] Almost like bricks to build a fortress wall, each chunk of earth is put on top another until reaching the height of the grass. The earth is taken from the immediate proximity and the 'wall' pulled up all around. The grass that stuck out to the sides is now hidden between earth and the wood. Now, earth is thrown with a hoe on top of the grass. Some of the soil stays on top the rest, sliding down on top of the wall, thereby slowly closing the mountain with a full layer of earth. To stabilize the earth, the farmer jumps on his furnace and stamps with his feet. If there are holes, the wood will burn into ashes. Now it only needs to be lit. A small fire is made in front of the

[15]As mentioned above the process of covering the mountain takes three times as long if the land is dry. In other words, if the land is dry, the farmer is able to cover one mountain a day, if the land is soft the farmer can cover three.

oven's mouth. Once the oven burns, the gate burns down and two pieces of earth lying on top of the gate close it once the wood is burned. By then, the farmer has already left the site.

Monitoring the Mountain

The carbonization of the wood takes normally 10-14 days, during which the mountain is frequently checked. The farmer takes a long stick of wood and rams it into the burning mountain. The layer is hot and the earth stiff. The farmer uses shoes recycled from old tires, which can stand the heat; 'normal' shoes would melt. Smoke rises from holes and parts of the mountain, which has readily burned charcoal collapses. Thereby, one hole is always kept open, which forms into a crater like a small volcano. The rest of the layer is carefully closed by stamping with the feet or pounds with the hoe. Again, if too much air enters the oven, the timber would burn to ashes.

Uncovering the Mountain, Putting Charcoal into Sacks, and Delivering to the Road Side

When the charcoal is ready, the mountain will have lost about 50 centimeters of its height. The farmer checks the mountain all around, simply by feeling its heat or using a stick of wood. He has to get up early or works at night. Without the sun burning, the slightest charcoal can be detected immediately and the fire would not spread. If water is available, it can be used, but the charcoal would lose quality; it breaks. The charcoal needs to be separated from the earth. The oven is opened with the hoe, and the charcoal dragged with the hoe through the open legs and spread in the proximity. Further, a spade is used to separate. The farmer is concentrated; the splayed charcoal is observed carefully. With his palm, he slights the plain. Suddenly, every now and then, he covers glowing charcoal with earth. Pieces of unburned charcoal are put aside to build a 'miniature oven' that burns for the day. Once the charcoal has cooled down, sacks are ready to be packed: size four, about 25 kilograms. One bag is made of about one thin, grown tree. Once the sack is packed, it is sewed up and ready to be picked up. Then, a "Moto-King" driver or a tractor driver needs to be organized.

'Salvage' Economy

I will briefly illustrate the charcoal economy as, what Tsing (2015: 62ff) calls, a "salvage" introduction of value into the capitalistic system. It is relevant for my thesis because it portrays the farmer's action, as in producing money from their environment, as 'normal *progress*' in a capitalistic economy. Being part and interconnected in the capitalistic system, everyday necessities become monetarized, which forces individuals to produce value.

Capitalism functions and proliferates through the accumulation of wealth, which is

reinvested to accumulate more wealth (ibid.). Thereby, the investor generates profit by paying the workers less than the value that his product generates in its creation (ibid.).

The accumulation of wealth, however, goes beyond. And this is where it becomes "salvage" in different aspects. The unscaled 'resource' is introduced into the capitalistic system when it is scaled (Tsing 2015). Resources, whether timber, crude oil, gas, but also fruits or vegetables, are valued because there is demand on the market. These products themselves, however, were not created within the capitalistic system, but 'naturally' in ecological processes (ibid.). To translate this to charcoal, the profit a charcoal producer gains is "salvage". He generates profit 'out of the blue'. The value attributed to charcoal becomes part of capitalistic system.

The same 'salvage' wealth accumulation is generated through knowledge that is gained outside the capitalistic value system (ibid.). Charcoal producer, for instance, learn how to make charcoal by observing their family members or others. This way of gaining knowledge is not part of the capitalistic system, per se. It is, however, a perquisite to produce valuable charcoal. Lastly, the physical work, the labor, equally generates value from 'nowhere'. It is the ecologically produced life that is 'savagely' introduced into the capitalistic system.

This is not a way of accusing the charcoal producers of doing wrong. On the contrary, I want to justify their actions. Being encapsulated into a capitalistic system, farmers are forced to do so. "Salvage is not an ornament on ordinary capitalist processes; it is a feature of how capitalism works" (Tsing 2015: 63). The farmers produce their crops as well as charcoal savagely. They need either to make a livelihood and survive. However, their attitude towards the work is different. In this case, the different attitude towards the work in the present clarifies looking at the temporalities of the visions of the futures involved in the activities. The following part investigates the farmers' relation to farming.

4.2.2. Cyclical Farming and its Long-Term Future

I exposed the production process descriptively. The reader may have imagined that the production process is 'not easy'. Generally reaching 38 degrees at its peak, the weather drains. Albeit covering myself from head to toe in light clothes, I experienced a sunstroke after my second day of work. The farmers work impressively hard and consistently. However, when I asked about charcoal work in the future, they lament about it, simply because it is hard work. In most cases I was retorted with, "I fall sick doing charcoal", "I die five years earlier doing charcoal", "If I had the possibility to solely farm, I would stop charcoal work tomorrow". In

other words, charcoal work is perceived as a burden.[16] Their relation to farming, however, is different. Compared to charcoal, farming is perceived as easy work. If crops are well, it also brings more profit. If the seeds are kept, it neither requests much investment. And for food, there is no need to worry.

Generally, in my field, farmers seed and harvest rice, maize, beans, groundnut, cassava, and yam. These are their main crops they have been taught to farm by their parents and forefathers. Farming implies planning: preparing the land, seeding, harvesting. Meanwhile different crops nourish from different nutrients in the soil. For instance, cassava and yam are 'deep rooted' crops, while beans, rice, maize, and groundnut are 'shallow rooted', meaning that these do not compete with one another for nutrients in the soil. The farmers work with their knowledge and plan, at least, in a one year cycle; cassava, in the meantime, can take up to two years. The farmers keep a certain amount of seeds, which they want to harvest for the coming season. Moreover, they save a certain amount of the harvest for their own consumption and sell the rest. The profit is relatively high, whereby it must be considered that basic food is secured, which adds to the profit, due to minimal expenses on this matter.

I think the point here is clear and I can keep this quite briefly to give more space to other findings. Not only keeping their title of 'farmers', although the farmers' main income derives from charcoal, indicates a longer temporality in their self-image of being a farmer in the future. Moreover, the activity of farming intrinsically implies, at least, an annual, cyclical one year future that must be affiliated with its planning activity. More precisely, the farmer's temporal framework affiliated with farming must be identified as annual, with a subcycle of charcoal production in the dry season from December to March.

In the following part I will give reason to the question why farmers are forced to engage in a different livelihood, while farming is where they like to see themselves in the future. The following part of my thesis will point to the difficulties farmers experience in farming.

4.2.3. Obstacles in Farming

There are two main obstacles in farming, which I will separate into 'a)' and 'b)'.

[16] A similar attitude of farmers towards their work in the dry season is investigated by Jansen (2010) among the Malinke farmers in Mali. "[P]eople working in search of gold did so in order to 'transfer' themselves to the next rainy season..." (Jansen 2010: 98). In this case, gold mining is an activity to get through the dry season, until the next production cycle of farming starts. However, the situation in my field is different. The farmers *are* in a situation of distress. Hence, the importance to make profit becomes crucial.

a) `Four years and nothing´ – Weather

Due to an inconsistency of rainfall, every farmer I confronted had difficulties in farming the past four years. The main crop in Dawa Dawa No 2 is rice. Most inhabitants are rice farmers and rice requires constant water supply. There are only a few farmers who could sustain their livelihood by farming throughout these years. To be more precise, these people had some other source of income. The 'policeman', for instance, took use of a generator that pumps water from the river to his field. He farms all year around and Cutkis and Richmond took me to his field, where two employees were watering his pepper plants with a long tube. Here, Cutkis got his inspiration to take a loan from Hannah and seed his own field with watermelon. In this case, without his 'special position' of having Hannah as his wife, he would not have been able to receive a loan to engage in farming. In any case, another farmer employed around a dozen workers. He experienced a decline in crops, but his large cultivation area kept him from getting into distress. Moreover, he owns around 200 cattle, which is comparable to a backup insurance of a crop failure.

A 'normal' farmer, usually harvesting 60 sacks annually and working about 9 acres, made in the past four years 0-10 bags per annum. It is impossible to make ends meet with this amount. Lale, for instance, had harvested only two bags of rice the previous year. To be able to feed his children and have enough seeds for the coming year, he had to take credits that were paid in charcoal. I collected numerous accounts with similar outcomes of the past four years.

In any case, weather is not the only threat to farmers' losing their crops.

b) "They chopped everything" - Cattle

Another insecurity of farming is cattle. A few times I went with Cutkis and "Farmer Jacob" to their farm. On one hand, I was curious. I wanted to learn the difference between farming and charcoal production: is it really easier compared to charcoal? I wanted to learn what it means to acre a field with one's own hands and wanted to learn what my informant's "normal" livelihood is about. On the other hand, Cutkis and Jacob enjoyed having me around, not only because I was another helping hand: "Lale - you have helped him enough… will you come to farm today?" Cutkis' field is located well. A small river almost circulates his farm, which needs to be entered by going over an old branch of wood. So, one day we were watering the plants and joking around, and suddenly, about 50 meters behind us, we see a cow in the middle of his field, curiously looking towards us. Cutkis and I leave Jacob behind with the water flushing tube. Knowing that something is up in the air, the cow takes off. There is

only a limited boarder of his acre that is accessible without crossing the river. However, the cow has made it through. I encountered numerous accounts of farmers accusing cattle for their engagement in charcoal production. Kojo, my neighbor, for instance, was barely present in his house during my research period because he completed five charcoal production processes to make up for his cassava loss due to cattle: “They almost chopped everything”. Not only does he sleep at his farm to guard his crops, which, in his case, does not always seem to work, because they came when he was asleep, but he also works more intensely for charcoal to make up for his loss. With the extra income he makes from the charcoal, he wants to join Cutkis on his farm. They invest in fertilizers, which they know make their land and themselves dependent on the product. The product costs money. Hence, the farmers’ lives become more monetized. Once the product is used, crops will fail, if the fertilizer is not used in the following season. Their crop failures in the past, however, drive them to take this action. Other farmers stay away from fertilizers because they have experienced its negative effects. The environmental condition in which the fertilizer ‘bears fruits’ is more limited than without; the crop becomes even more fragile to inconsistent environmental conditions. In any case, back to the cattle. Identified as a problem are not the Fulani per se, and neither their cattle in a herd. The Fulani know where the farms are and keep away to stay out of trouble. It is rather the uncontrollability of single cows that is pointed out as a problem. The cow that appeared on Cutkis’ field was clearly identified as a ‘she’. Pregnant cows, I was told, stay away from the herd in the period before they give birth. Thereby, it is often not only the problem of “chopping” the crops, but also crushing the growing plants. Cutkis and I inspected this field and looked at the number of imprints; it did appear she came there not for the first time. Identifying the owner by following the cow to negotiate compensations, the reader can imagine, only succeeds in the rarest occasions. Mojo, in this sense, was ‘lucky in disguise’. Two years back, during farming season he visited his rice-farm and realized that it had unbidden visitors that had eaten his crop. He came back the next day with Cutkis and his older brother to make case of the disgrace and there she, or possibly another cow, was, feeding again. To detect the owner, the three tracked her until she came close to her herd. Only this is how reimbursement can be negotiated. The negotiation stays informal since a trial at court implies costs that the farmer cannot afford. Mojo pointed out several times that he received a compensation for the matter because of his older age.

To sum up, charcoal becomes an opportunity for people to make an income that makes up for the losses in farming due to inconsistencies in rainfall and/or cattle crushing or eating their crops. These dangers put the farmers into a precarious situation of distress. In other

words, the farmers live a life of a constant crisis. As Tsing (2015) detects, they are part of a world that lives in a state of precarity. In such a state, the prioritized future, which reflects in actions in the present, follows an aim, which, in its temporality, is inevitably narrowed to the present (ibid.). In the following I will portray that the temporality of the future affiliated with charcoal production reaches the realm of about a month. In other words, the achievements realized through charcoal production are 'short termed'.

I will start the following chapter with a memory from the 'bush'. The memory points to the temporal framework affiliated with the future of charcoal production.

4.2.4. Charcoal as `Today Job´– Expenses on Charcoal Production

> *"Come sit over here." I am standing, looking for shade, my notebook in my hand, sweating. Brown-green leaves are sanded and the sun already striking. We have not started work, yet. Lale gets up and looks for something in the tree. I observe him. With two concise hits, he forks a branch and tears it off. He starts working it with his machete. I sit down. I am eager to write. Our daily 40 min bike ride appeared quickly today. We had intense discussions on the bike ride. Lale seems emotionally loaded today. The day started well. Our tea is boiling and our charcoal mountain is ready to be covered.*
> *While I am writing Lale kneels down next to me, puts hand on my notebook. "What do I get when you finish your diploma?" "What do you mean", pretending not to know what he is referring to, feeling unprepared for this question. "What do I get when you finish?" He turns to takes the tea of the fire, prepares two cups. "Lale, how much are you paying me for the past two weeks of work?" He looks up, surprised. His smile promptly turns sober and he retorts: "No, no, no. Charcoal is `today job'. You can't make money of it. It's to chop, to buy meat!"*

Charcoal production is a monthly affair. If there is not a short-term goal to it, charcoal production becomes too draining. Jacob, Cutkis' farming partner, was probably the most astonished by my presence and my engagement in charcoal production. He and Cutkis have engaged in charcoal together in the past, before Cutkis came up with the idea of working together on the farm. He was astonished because he did not comprehend the necessity of doing participant observation for my research. If there is not a direct imperative of making a livelihood to meet one's or his family's needs, it does not make sense to him to produce charcoal; it is too hard of work. Cutkis and Jacob took the first possibility to engage in an alternative. This, however, only came up through the inspiration of the 'Police Man' and Cutkis' uncommon opportunity to receive a loan from his wife.

Loans by Road Side Sellers are generally only given for charcoal. Charcoal is secure and its temporality short. For farming, loans are not issued. The risk is too high that the debtor will fail to pay back and its temporality of the return is too long. The experience of failing

crops is ubiquitous in the past several years. For charcoal, instead, the trees are available, the demand for charcoal exists, and it comes down to the farmer's honesty and health condition, whether the load will be brought and thereby its debts repaid.

For the aforementioned reasons, farmers easily fall into a debt relation. Once you are in, it is difficult to get out. The wages are too low. Hereby, charcoal production easily becomes a daily affair. Loans are not given out in great amounts, rather bit by bit. Lale often came by to Hannah's house without joining into conversation, but waiting around to see when she was free to talk. Sometimes he left and came back later. What he needed was money, to buy food, tea, bread – simple and basic necessities.

Road Side Sellers prefer to give out small amounts; it keeps the farmers 'at leash'. This evokes their borrower to engage in the production process. To one farmer, Road Side Seller Jacob gave a loan of 500 Cedi. This was seven months back. He does not know whether he sold it for a better price to a merchant or whether the farmer has never started the process. He lives far out the village and Jacob leaves him to it.

Jacob had no issues in showing me his debt book in which he notifies the amount of loan given to whom and for which specific reason. The book is a simple Din A4 drawing booklet with a comic cover. Debts that are being reimbursed through charcoal are enumerated out load in the farmer's presence and crossed out once both agree that the distribution took place. He gave me his booklet to study briefly. The reasons for debts could easily be categorized: food, school fees, sacrifices and funerals, medical care, and "other necessities" under which reparation of a bike or a cutlass may fall.

During the month school fees are due, charcoal production proliferates. Debts are taken to send their children to school. These debts must be repaid and the contract is based on charcoal.

My point here is not to fully push the reason of charcoal production on this informal microfinance system. It helped me clarify and expose the necessities. Instead, crucial at this point is that, albeit whether the farmer works with a loan or not, charcoal production meets the temporal framework to reach the goal that is inevitably necessary for the farmer to continue his livelihood.[17] In other words, charcoal production, itself being a secure and short termed, is a way for farmers to get out of their precarious situation, at least preliminarily. In

[17] Jansen (2010) points to the meaning of gold mining for the Malinke farmers in Mali. While it is monetarily unprofitable in the present, it assures ties in possible situations of distress in the future. In this case gold mining is an activity to get through the dry season, until the next production cycle of farming starts. The situation in my field is different. The farmers *are* in a situation of distress. Hence, the importance to make profit becomes crucial.

the most common cases, charcoal production makes up for the loss experienced through crop failure. The three months' time of the dry season, moreover, gives the farmer enough space to make an extra profit, which then is used to invest in farming. Crop failure implies not only to buy food, but also to buy seeds for the next farming season. Lale, for instance, not including school fees, food expenses, and donations for funerals, has invested every profit he has made from charcoal production the past four years into farming. Everything he owns are his bicycle, his working tools, and his clay house. His continuous reinvestments in farming are an example of the statement, provided by Tsing (2015), which portrays a world in a constant crisis. The following shall give a better understanding of a farmer's situation that engages in charcoal production:

> *I came back from a weekend out of town and expected Lale to come by at daytime. It was night by now and the moon illuminated the sand. I bought Lale some bread and decided to go over. He was sitting outside, in front of his house, leaning against a shaky wooden pile, his head aiming towards the moon. He was glad to see me and made space for me to sit next to him. I asked him what he was thinking about: there is pressure and decisions to make. His best friend passed away, leaving three children behind. His yam was finished and the sack of maize coming to an end. The farming season was starting soon, implying other costs. We calculated making balances how many charcoal bags we could expect. Not enough. Buying food for his family, giving an adequate donation to his best friends' family, and investing in a future that has let him down the past four years. He thinks out loud: "I don't know if I do farming this year" (to be continued).*

After all, he did decide to farm again and until now (two months into the rainy season) rain has fallen well, again. Crucial to this conversation, however, is that it condenses into what charcoal production is really about: meeting goals that are necessary to pursue a dignified and healthy life, which itself becomes more and more monetized. This includes sending one's children to school, being able to put food on the table, pursuing one's livelihood – in this case, farming. Due to the aforementioned difficulties, farmers live in state of constant crisis. In times of precarity and crisis the temporality inevitably shifts closer towards the present (Tsing 2015: 2). And it only makes sense, since the following week can only be reached if this one is secured. More precisely, what changes is not the future, per se, but the priority of futures that reflects on the activity executed in the present.

> *Lale and I are stuck in our conversation; a clear decision could not be made today. To lighten things up, I ask him why his English is so well. He gets up, enters his modest, two room, clay house. His children and wife are already asleep. He comes out with a white paper, clearly kept in a safe place. His graduation paper: "Welding in Fabrication, Tamale Polytechnic, Emmanuel Laabarik Jarick. 1998." "One day I will continue", he said to me, "but first my children" and smiled.*

What does that mean? Well, in the first place it means that Lale, as many farmers, has dreams about learning, going to University, getting to know the world. Furthermore, it may mean that my presence may have re-emphasized some dreams of his, which he had put aside, however, in a safe place (the paper looked as if it had been printed yesterday). Lale had to stop his education in 1998 because he had to begin securing a livelihood because his senior brother fell sick. In any case, most importantly for my point, the story shows that some futures lose relevance in the present and others become more relevant, depending on the circumstance one finds himself in. A perquisite of shifting futures is that multiple futures exist. This, one may think, makes the usage of futures as an instrument in social science an undefinable or confusing one. Only, however, if we do not define and take use of a certain object of study, as stressed by Bourdieu (1972). The research subjects' entanglement with the object of study, which makes him of interest for the researcher in the first place, means that he aims for an explicit future through his action. This temporality of the future that is trying to be reached is of interest. Combining the aims with the circumstance and considerations, the decision for such actions are taken and lead us to a more thorough understanding of the present (Persoon & van Est 2000).

In spite of, or rather because of the aforementioned, in the following I will engage with funerals. Funerals are not directly my object of study, but the farmers' expenses on funerals turn funerals into a direct entanglement. In the context of funerals, in the following section I am going to point out different futures in their corresponding temporality or temporal framework. Thereby, the relevance of collaboration through reciprocity in times of precarity will be elucidated, similar to section 3.1.2. concerning the insurance of network stability in the future in the informal economy of charcoal. The following will give reason to the question why funerals and their corresponding donations are essential for farmers in the present. As Bloch & Parry (1998) point out, money has a social value and cannot be clearly separated from the social sphere. In my experience at the funerals, money becomes symbolic in the sense of support for the family of the dead. Moreover, relationships to people in the physical world as well as spiritual world are held in balance through donations. Hereby we are confronted with two different temporal frames as pointed by Bloch & Parry (1998). The short termed is understood as the competitive 'transactional order' of his positioning within the local setting (ibid.). The second is the long term 'transactional order', which instead is concerned with the balance with the spiritual world (ibid.).

In any case, stressing on the importance of the, assumingly, 'traditional practice' via futures, will, in the meantime, be an example of the relevance of identifying diverging

temporal frameworks in anthropological work. The hierarchical notion, as stressed by Fabian (1983), that is affiliated with the temporal categorization of 'traditional' funerals, which may even include sacrifices, will be dismissed. Discussions with my gatekeeper Richmond, who perceives funerals as something 'outdated', motivated me to engage in this matter. In the meantime, however, the funeral I participated in was a strong experience that accompanied me throughout my research.

I first heard about Jacob's sickness when I was out in the 'bush' with Lale, closing a charcoal mountain. A Fulani passed by with his herd, whom we regularly met and had small conversations with. As usual, I curiously asked Lale what their conversation was about and, this time, he told me that his friend fell sick a few months ago and they were about to take him to Kintampo to the nearby hospital. About a week after, just before we left on the charcoal truck to Accra, Cutkis and I went to Jacob's house to make a prayer. This day, the family awaited the results from the doctor. Two days later, in the moment of our return to Dawa Dawa No 2, Cutkis received a call with the notice of Jacob's death. Only now I found out that Jacob not only was Lale's best friend, but used to be his co-worker in charcoal production. In other words, I had taken his position working alongside with Lale.

The following days, households representing different tribes and lineage, gathered, greeted, and moaned with the family of the dead. Big speakers were set up in front of their house and people danced, drank, and greeted in 'traditional' procedure. This went on for three days. Food was brought and a number of people spent the night over sleeping, danced, and supported the family that had just lost their only son. Family members were kept under constant distraction to keep them away from negative thoughts that possibly could end in further fatal actions. On the third day, the elders decided on a date for a second funeral to send Jacob off to the spiritual world, which was scheduled for the last weekend of my research period. [18] Until this date, food was prepared for Jacob, who needed to be taken care of in the physical world, until he was sent to the spiritual world. By the time of the second funeral, women prepared food in 'Miraculix like' cauldrons while visitors from distant villages came together to show their support. While the visitors danced, drank, and greeted, old ties were strengthened and celebrated. In the meantime, donations were noted and announced through the speakers in between every few songs. The funeral ended after three days, leaving the

[18] Due to Cutkis position I was present at this discussion. The date of the funeral depends on the possibility of the community to have the means to welcome visitors. In general funerals are only scheduled in the dry season to not interfere with farming activities. A third funeral also takes place. The dead is brought to the community from which his elders derive. In cases of an early death, as Jacobs, sacrifices are made to find out the reason for the death.

family with a feeling of support. On the last day the eldest of the family, Jacob's father, changed his body language from a moaning position in a low stool to sitting upright in a chair, and in a conversation with Cuktis, I caught the widow smiling again. However, the relevance of the funeral went beyond the family of the dead. The funeral strengthened ties to relatives and friends and reminded people of the support they, and especially their family, receives when it is time for them to pass away.

The intrinsic expectation of reciprocity, the support given through the presence and donations at funerals, is where funerals gain the relevance they have in the farmer's life. The ties of collaboration become crucial in times of the farmer's survival.

Taking this into consideration, I want to stress that we are confronted with three (there are more but not necessarily relevant for my point) temporal frameworks of diverging futures that the farmer engages with in correlation with funerals, and therefore, relevant for the farmer's engagement in charcoal production. First, it is the long-term future of the afterlife in spiritual world. The dead is send back to the spiritual world during the second funeral. This means that life and death must be comprehended as cyclical concept. Metcla & Huntington (1991) dismissed Hertz's (2004) linear concept of people's conceptions of death. In my field, I agree with their point. The spirit enters the physical world and once he dies he returns to the spiritual world. In any case, the second future, in this context, is the semi-long-term future of his own death, leaving his wife and children behind. Since we are all going to die, the future of death is certain. The third future is a short-term future that ensures the first and second to turn out positively. The farmer gives donations, which must be earned, to the family and he is present at the funeral. Comparing this to Bloch's & Parry's (1998) individual 'transactional order', this meant Lale had to present himself at the funeral. As the best friend of the dead, he felt responsible and in the position to take the most relevant role in the ceremony as a non-family member. Lale was dressed in his best clothes, always busy serving guests and supporting the family of the dead. By doing that, two things happen that are closely related to one another. Lale gains respect in the social context by taking the position of the closest non-family member at the funeral. Meanwhile he puts responsibility on himself. Jacob was the only son of the family with several sisters. Losing the son is dramatic since he is the one that brings plain 'cash' into the household that is needed on one side to simply get by, send their children to school, etc., and, moreover, to give symbolic gifts as in the case of the funeral they received from members of their community and beyond. In other words, Lale gains respect in the social context through his role at the funeral, while it widens his responsibility from his own household to Jacob's.

Meanwhile, in his expectation of reciprocity, his enactment at the funeral gives security for his resumption in the spiritual world as well as support to his family at his time of death in the physical world, which is certain, at some point in the future. In other words, thinking in reciprocal terms, two temporal frameworks are also touched. One, however, lies between the Bloch's & Parry's (1998) dualistic temporal frameworks. In his state of precarity, to the farmer, especially the second, semi-long-term future of his death becomes increasingly relevant. To him, it becomes gradually important to be present at funerals and give donations to the family. In the moment that he passes away, recognizing the expectancy of return will ensure his family similar circumstances in his future. If he gives support to the family of the dead, he expects that his family will be cared for when he is not present anymore. Hence, I agree with criticism (see Clark 1992) on Bloch's & Parry's dualistic framework, in terms of neglecting further temporal frameworks acting in the realm of a funeral.

The point I want to make here is that acknowledging multiple temporalities in the context of funerals makes sense to the fact that expenses on donations are most relevant to the farmers. Thereby, the hierarchical notion that is attached to the assumingly 'traditional', which in this context, may even imply sacrifices, is dismissed. As exposed in the relations of Road Side Sellers to their customers, in a world that is in a state of precarity, these ways of building security through reciprocal acts become more *present* than ever before. Funerals and corresponding sacrifices and donations become equally important to school fees and expenses for farming, especially in times of precarity. More so, the value of the money given is symbolic and therefore social value. While the future of the child is invested to have a prosperous life, funerals must be interpreted as an act of changing 'transactional orders' in different temporal frameworks and thereby ensuring support for the farmer's family at his point of death and his own resumption into the spiritual world.

4.2.6. Charcoal Production for Women – Introducing `Negative Backcasting´

Women usually *go* out to produce charcoal in groups of three or four. I put emphasis on *go* because on the rarest occasions I saw women using any kind of vehicle. Daily, Lale and I passed a handful of groups or single women that were either producing charcoal or carrying home full bags on their head, back to the village. We can interpret this as a clear sign of hierarchy within the family structure. And I do believe it is. However, acknowledging multiple futures may lead us on a further track.

Gender focused investigation was difficult. Women acted shy towards me, not only because their English was as minimal as my Twi. Any personal investigation was often

hindered by reference to the husband. There appeared to be a positive correlation between oppression of women and successful households. In this context, the difference arises that some couples keep a separate balance sheet and others in which the husband abuses his position of power. In any case, charcoal is produced by women.

What is evident is that most women produce charcoal by hand and not with an operator. This means that women go out in the bush, by themselves or in a group, and produce two to three bags of charcoal within two days. These sacks they sell on the Road Side or to a Road Side Seller. With the extra income, the woman's own pocket is lined to buy spices on the market, contribute to the household, or their children's, or, rarely, their own, education. Whether the woman's activity empowers herself is dependent on the relation between her and her husband. Meanwhile, however, as the men, the women could equally engage an operator through a Road Side Seller, but they rarely do. One explanation is that the ground is too hard. Men have more physical power and can therefore work the earth more easily. The women produce smaller amounts bit by bit, not taking the risk to fall into a relation they may not be able to repay. The latter is the point I want to touch upon. Women seem more unlikely to enter a debt relation because the experience of the dependency on their husband makes them more cautious in this aspect. Discussions with Hannah and Abna, via Richmond, brought me to this point, as well as interviews with Moi Bom. Hereby I would like to introduce the term of `negative backcasting´. Moi Bom would refuse any kind of loan in the future, if not inevitably necessary. In her case, it was not because she lived the experience of a dominant husband. She and her husband were part of a group loan from the Rural Development Bank, which they were not able to repay in 2014. She is still struggling with it. Therefore, this difficulty of repaying the formal loan of the Development Bank stops her from taking any further loan. In terms of futures in anthropological work, this means that not only the future that actively reflects on the present via actions, but that futures that reject certain actions must, equally, be considered. Due to my limited Twi and the circumstance that dominated women, not being as open as others leaves my conclusions to be questionable. Moi Bom's example of taking a loan in the past may even be counterproductive for my argumentation, but it helped me introduce 'negative backcasting'. However, Hannah's and Abna's interpretations that women are in fact more careful with dependency relations because of experiences in their dependency with their husband put weight on this interpretation and leave space for more research on this matter. To add at this point, as described by Shipton (2007) and Villareal (2009), debt relations in general are filled with emotions. When experienced in the past, these

sensations are projected to the future (Appadurai 2013). It is more than likely, however, that feelings of other experiences become translated to the future of the debt relation.

In any case, let me summarize this chapter before continuing with the last chapter of my analysis concerning long term futures. In the first part of this chapter I described the charcoal production process. On one side, this completed the value chain; on the other it helped me to clarify the strain that is affiliated with charcoal production. Thereafter, to put into comparison, I delineated the farmer's long-term future towards farming, leading me to the difficulties and obstacles that farmers are confronted with, following their 'normal' livelihood strategy in the present. As a consequence of these difficulties, farmers are driven to engage more in charcoal production to make their living. Their main income has shifted from farming to charcoal production. Their future that reflects on the action of charcoal production in the present is, thereby, constrained to a daily future of putting food on the table, sometimes, to a weekly future of giving donations to a funeral, and/or to a monthly future of making investments for the coming farming season. Each of these futures is a necessary step to engage in futures that allow a longer temporality. To emphasize the existence of multiple futures beyond charcoal production and farming, I pointed to Lale's long term future of going to University. On one side, this illustrates that long term futures lose relevance if the short-term future is not secured. On the other, it stresses the importance of engaging with an object of study, as suggested by Bourdieu (1972), not only in anthropological practice, per se, but especially in the work with futures. Thereafter, I explored funerals in their relevance to futures and their individual temporalities. Doing this helped me to stress the relevance 'traditional' funerals have to the farmer, especially in precarious times. Lastly, I engaged with the women's more independent involvement in charcoal production, introducing 'negative backcasting', which, I suggest, must be introduced in anthropological work with futures, stressing the recognition of not only a future that is actively represented in the present via an action, but also a future that actively rejects a certain action.

5. Conclusion

Investigating human temporalities along the charcoal value chain in Ghana was my object of study. Multiple temporalities is a field that has needed to be studied more intensely (Wallman 1992; Persoon & van Est 2000; Pels 2015). Thereby, my thesis was not only a project to investigate human temporalities, but equally an attempt to encounter spaces that opened up while looking through the lens of temporalities. These were the multiplicity of temporalities per se, diverging timeframes of the individual's image of their future and social tying, which occurred through credits and gifts. Moreover, funerals became relevant in terms of ensuring stability in times of precarity. The social importance of funerals stretch the value of money spend for donations beyond the monetary value.

5.1. Social Ties

Investigating temporalities along the charcoal value chain brought me to the topic of social tying. It exposed how relations are secured between the actors. It became clear that credits and gifts are used along the charcoal value chain to tie one another into relations. These relations secure the actor's livelihood in the future.

Debt relations occur between Road Side Sellers and farmers, Road Side Sellers and merchants, and Road Side Sellers and charcoal sellers. The relation of the latter differs, since gifts are commonly added. Charcoal sellers are dependent on the social tie to the Road Side Seller to make their livelihood. 'Charcoal networks' are difficult to establish. To strengthen their relations charcoal sellers not only give gifts to their Road Side Seller but also help their business partners out in crucial life situations. When this occurs, positive emotions fortify the bond.

The material gifts given by charcoal sellers are part of a reciprocal interaction between the two whereby their gift is a reaction to the trust given through credit. Hence, trust must be interpreted as a gift within their exchange. I exposed another reciprocal act, which I suggest needs to be categorized differently. This was the example in which Hannah and Cutkis gave out food for friends and further acquaintances. While this act fortified their relatively high social position within the community, this reciprocal act was devoted to a crisis they had gone through during a conflict with the Fulani in 2006. It is the an 'open' reciprocal act that stems from one emotional experience in the past and is practiced in a daily basis to reduce the consequences of a possible crisis in the future. To encounter the possible crisis in the future, like the other reciprocal act, the daily practice of giving out food, equally creates social bonds and secures 'many homes to go', if a crisis may appear.

My thesis stressed that the actual value of a credit can only be comprehended in the social context. Road Side Sellers giving out loans for other women, for instance, fortifies their hierarchical position whereby the recipient of the loan strengthens her social tie to the Road Side Seller. From a purely monetary perspective the value of these loans cannot be explained. Instead, the value is social worth and positional, meaning the real motivation of the credit or debt relation can only be comprehended by looking at the local context.

Secondly, I demonstrated that within my field, along the charcoal value chain in Ghana, diverging timeframes were present. Each actor was encapsulated in different timeframes depending on the activity, position, and/or topic of investigation. When my informant thinks about his children's future of going to school or university, it implies a linear concept of time, contrasting to the temporality affiliated to the cyclical farming or charcoal activity. Amalia's livelihood is, likewise, conducted in a cyclical manner, which helps her realize her linear vision of the future that is closely attached to the notion of modernity. Identifying these diverging temporalities of my informants dismisses typological generalizations of temporal frameworks misleadingly ascribed to 'cultures' by anthropologists, as pointed out by Persoon & van Est (2000).

5.3. Diverging Timeframes of the Future

I exposed a timeframe of people doing business with charcoal and that of farmers. Thereby, business people's range of the future in relation to their business reaches at least a couple of years. I provided the example of Amalia, Jacob, and Hannah. The timeframe clarifies with Hannah's planned investments in a shop and a tractor. Jacob, instead, is able to realize his vision of his future to become a governmental teacher to secure his livelihood in the future. In contrast, the farmers' timeframe related to charcoal production is relatively short termed. Farmers pay school fees, pay donations for funerals, and invest their money for farming and food. Hence, their timeframe as related to charcoal production reaches from a day to a couple of months, while their timeframe concerning farming activity is longer. Hereby, we are confronted with an annual cycle, which included a subcycle of charcoal production in the dry season. Moreover, I exposed a different temporal framework of the future comparing charcoal production during the time of my research and charcoal production at its introduction in the late 1970s. The difference was that at the time of introduction people perceived charcoal production as their work. Acknowledging charcoal production as a long-term livelihood 'allowed' the replantation of trees to be relevant. Instead during the time of my research, charcoal production was perceived as a 'problem solver' and the temporal

framework affiliated to the production reached until enough money for seeds could be put aside or debts for other necessary investments repaid.

Last but not least, I exposed further diverging timeframes of visions of the future along the topic of funerals. These were a long-term ‘future’ attached to the cosmic transitional order of the spiritual world and a short term ‘future’ affiliated with the individual transitional order, as proposed by Bloch & Parry (1989). Moreover, I detected a further temporal framework, a ‘semi-long-term future’, attached to reciprocity and one's own family at times of the physical death of an individual. In the expectation of reciprocity an individual secures support in the future for his family by attending the funeral and giving donations and/or physical support during the event.

5.4. Confronting the Paradox

In the introduction of my thesis I explained a paradox occurring in my field: “Charcoal production secures the farmers’ livelihood in the short term, but creates insecurity in the long term”. In the following I am going to summarize how the different actors of the value chain react to this paradox and what temporal frameworks of the future can tell us about the paradox.

Following the paradox, I argue, that the problems that are further in the future, as scarcity of trees or inconsistencies of rainfalls, lose relevance if the short-term problems or futures are not secured. In other words, if seeds for the coming season need to be bought, donations for funerals need to be given or food is needed to be put on the plate, the thought of other problems and investments to solve these problems exists, but lose priority.

In my rural field site, everyone above a certain age is aware of the changing environmental conditions due to charcoal production independent of which livelihood the individual is following. Where there was forest, now there is bush. Farmers, for instance, who once only had to walk five minutes to find trees now must cycle for 45 minutes.

I often talked with Lale, my informant and friend, about the environmental situation around the community. He sees the danger of not being able to make a livelihood in the future from charcoal production. However, when I directly asked him what the situation would be like if there are no rains and no trees left, he shook his head, laughed, and said that god would not allow such instance. In the meantime, Lale’s ideas to make a livelihood are plenty. He wants to become a cab driver to take people and goods from ‘A to B’. A motorbike would also do fine. He wants to work in fabrication and welding, what he learned at school. The

existing welder in Dawa Dawa has no education. Once, I asked Lale about his conversation with a passing Fulani and he told me he asked about the price of a calf as an investment for the future. Lale wants to go to Italy because Italy is a farmer's nation. He is a farmer and could work a plot of land. He thinks Germany would also be good because there is industry, but Italy is better for farming. While I was taking pictures of Lale during the production process, he questioned me: "So my pictures can go to all over Germany, all over, but I, why can I not go to Germany? I want to work in a company!"

The point I want to make is that Lale is aware of his precarious situation and thinks about all kinds of different livelihoods to make an income. In his situation as a farmer who is driven to make a livelihood from charcoal production, realizing both of his livelihoods are in danger, he fears the future and is looking for different options. His multiple and changing ideas to make a different livelihood, to step aside the paradox, shows that none of his ideas are within his reach.

I argue that the temporal frameworks of the future are a tool to clarify and back this statement. As Persoon and van Est (2000) emphasize, the future helps us to get a better understanding of the present. Taking into account the temporal frameworks of my analysis shows that the farmer priorities are to secure the basic necessities. He works for it and spends his earnings on them. It comes clear through the goals that he follows, which reflect on the present. The temporal frameworks put light to the fact that the farmer's opportunities are restricted and attached to his livelihood option.

As farmers, Road Side Sellers are equally aware of the changing environmental conditions. Hence, they plan to invest in other livelihoods in the future. Their plans are concrete. Jacob finances his education and Hannah plans to build a shop. Moreover, Hannah gives Cutkis a loan to invest for a generator to farm watermelons.

The two parties are equal in the sense that they aim to dodge the aforementioned paradox (that charcoal production secures the farmer's livelihood in the short term, but creates insecurity in the long term). The clear difference is that one has the opportunity, which, for the other, is out of reach.

Analysing temporal frameworks of the future clarifies the situation and gives the researcher means to concretize the actors' situations in the present. The temporal frameworks of the future I have analyzed are directly linked to the actors' livelihood activity. Although they are in the same situation, although they are confronted with the same paradox, the

farmers' opportunities are different, which can be seen through different temporal frameworks of their visions of the future.

In my field it sums that differing temporal frameworks of the future indicate whether or not the actors of different economic and social positions along the charcoal value chain in Ghana have the possibility to avoid the paradox.

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