The State of Extraction

A Short History of Space and Extractive Industries in Tanzania, 1885 – 2019.

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1. Oktober 2019

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Zusammenfassung

Kapitalistische Produktionsweisen dominieren die industrielle Ressourcenförderung weltweit. Trotz immenser Produktionsmengen und teils langjährigen Bergbauaktivitäten haben nur wenige Staaten des globalen Südens von der Rohstoffausbeutung profitiert. Hoffnungen auf höhere Einnahmen durch die steigenden Rohstoffpreise nach der Weltwirtschaftskrise 2007/08 wurden jedoch weitgehend enttäuscht. Der Anstieg von Ressourcennationalismus in Produzentenländern in Lateinamerika, Asien und Afrika war die Folge. In Tansania ist seit 2017 eine deutliche Intensivierung dieser Tendenzen zu beobachten.

Diese Dissertation geht anhand des Fallbeispiels Tansania der Frage nach, wie sich Prozesse und Strukturen durch kapitalistische Expansion im Kontext des Bergbaus historisch entwickelt und beständig globalwirtschaftlichen Einfluss entfaltet haben. Sie zielt dabei darauf ab, grundlegende Mechanismen zu identifizieren und deren historischen Wandel nachzuvollziehen.

Am Beispiel der Geschichte des mechanisierten und industriellen Bergbaus in Tansania, beginnend mit der deutschen Kolonialisierung um 1885, werden dominante Verräumlichungsprozesse und -Praktiken sowie deren Manifestationen nachgezeichnet. Dabei steht der Einfluss unterschiedlicher politischer Regime und ökonomischer Konstellationen auf jene Dynamiken im Zentrum der Betrachtung. Die Analyse der Geschichte des Bergbaus in Tansania, als eine Geschichte der Extraversion, unterteilt sich in vier Perioden: die deutsche Kolonialzeit und britische Mandatsverwaltung (1885-1961), Sozialismus (1961-1985), Liberalisierung (1985-2015), sowie intensiviertem Ressourcennationalismus und staatlicher Interventionen unter Präsident Magufuli (seit 2015). Somit nimmt sich diese Arbeit bestehender Forschungslücken im kolonialen Bergbau sowie aktueller Entwicklungen in Tansania an. Sie proklamiert gleichzeitig die historische Existenz und Belegbarkeit extraktiver Enklaven als Kernbestandteil kapitalistischer Rohstoffförderung bis heute und die Übertragbarkeit fundamentaler Verräumlichungsprozesse über das Fallbeispiel Tansania hinaus, die zu einem erneuerten Verständnis extraktiver Raumformate und Raumordnungen beitragen.

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1. Introduction

Capitalist modes of production have fundamentally shaped the world we live in, its (inter)dependencies, hierarchies and dynamics. The structures and mechanisms established in effect of a global capitalist economy have displayed strong resilience to challenges. This becomes particularly striking in the case of resource exploitation in the global south where such attempts have oftentimes achieved only little or no success. Looking at such efforts nevertheless does help to reveal the struggle of states and other actors in coping with the global condition, global capitalisms and their spatial implications. Based on the case of Tanzania, will look at the development of capitalist modes of extraction and their spatial organization, their establishment as well as their transition over time.

On June 12 2017, the Tanzanian President John Pombe Magufuli declared 'economic war'. The adversary targeted in this war was, however, not another state, although trade wars at this point in time are nothing unusual, but a London-based mining company that was operating in the country for almost two decades. By resorting to accusations of exploitation and betrayal, misconduct and tax evasion, the government tried to achieve what the reforms in the mining sector, passed in the aftermath of the economic crisis of 2007/08, had failed to due to sluggish and insufficient implementation. This quest to increase government revenue from the mining sector was accompanied by a populist and nationalist rhetoric.

The consequences of the economic crisis, namely rising prices for minerals and agricultural products attracted the attention of the financial markets and the governments of some resource producing countries alike. Africa, bearing enormous reserves of crude oil, diamonds, copper and gold as well as technologically relevant and scarce materials such as bauxite wolframite and lithium, once again came to the focus of capital investment. The so called 'new scramble for Africa' or 'the great African land grab' was covered by a plethora of academic work (Carmody, 2011; Lee, 2006; Moyo et al., 2012; Southall and Melber, 2009).

The governments, and in some cases civil society organizations and the population as well, looked for ways to increase the profits from resource production, which are reflected in the rise of various forms of national responses or resource nationalism in many mineral producing countries in Central Asia, Latin America and sub-Saharan Africa (Bremmer and Johnston, 2009). While resource nationalism has been a long standing narrative e.g. in Bolivia (Young, 2017) or Mexico, and partially entangled with the neo-extractivist development model (Brand et al., 2016; Dietz, 2013; Gudynas, 2011), it has intensified across the African continent during the last decade, often based on post-independence legacies of nationalism.

Lately, South Africa, Zambia and Tanzania, starting in the mid-2000s, are instances of strong resource nationalism. South Africa, however, differs from the other two, since the discourses about resource ownership and the mining economy are dealing with the long shadow of apartheid and attempts to reorganize the sector's structures in favour of 'historically disadvantaged groups' (Butler, 2013, p. 17). In Zambia (Saunders and Caramento, 2018) and Tanzania (Jacob and Pedersen, 2018; Kinyondo and Huggins, 2019; Lange and Kinyondo, 2016; Roder, 2019, 2017), the intensification of resource nationalism is basically informed by the desire to generate more revenue from large-scale mining for the state and to increase government control over minerals and their production.

Although export-oriented industrial mining is not a new phenomenon in Africa, since it was practiced by colonial powers and in the post-colonial era promoted by the World Bank's liberalization policies, the intensification brought about by the financial crisis and increasing raw material prices marks a significant peak. However, the renewed surge in globalised, large-scale mining has led to widespread disillusionment in many countries as expected benefits in terms of economic contributions, job creation, development and the like held off when revenues were repatriated or disappeared along the way. In consequence, resistance against large-scale mining operations by multinational companies grew on grassroots and political levels across Africa and the globe. Narratives of Africa rising quickly crossed over to ones of continued dependence, exploitation and inability to profit from the continent's resources.

The overall aim of this study is twofold. On one hand it will provide an historical overview of large-scale mechanized and industrial mining in Tanzania and thereby discuss the consequences of the asymmetrical connections between Africa(ns) and external actors, practices of resistance, submergence and control (Cooper 2014, pp. 32-34) and how they translate into processes of spatialization in different historical periods and political regimes. Hence, the second aim is to utilize empirical material in order to contribute to more conceptual discussions about the efficacy of certain spatial formats[1], e.g. enclaves or the nation state, at certain points in time and contexts of extractive economies under the global condition.

By taking an historical perspective and employing a spatial lens to the analysis, this study seeks to discuss the history of mechanised and industrial mining in Tanzania since the colonial era and the development of its spatial organization. A central question of this study is consequently, how and what kind of practices and processes have shaped the development of Tanzania's mining industry historically and how they translate to a more general history of capitalist, industrial mining in Africa and beyond, as well as its spatial organization. The historical outline focusses on larger, relevant lines of development and does not go into every detail. However, at the same time, it shall comprehensively describe the processes and practices entangled with the historical narrative. Beyond the Tanzanian case, a better understanding of the fundamental spatial practices and processes shaping and shaped by the globalised, capitalist mining economy is aspired.

In the case study, two major shortcomings that prevail in the literature so far will be addressed. Firstly, current dynamics in resource politics in Tanzania since 2017 are contextualized, which have only seen little sound analysis apart from few publications due to their topicality (Jacob and Pedersen, 2018; Kinyondo and Huggins, 2019; Roder, 2019). Since the dynamics in question unfolded during the fieldwork periods conducted in spring 2017 and 2018, the analysis provided here is based on first-hand experiences and data collected immediately at the time. Secondly, the emergence and development of mechanized and industrial mining in the country receives particular attention by the use of contemporary and historical material. In order to fill prevalent gaps, the German colonial period receives special attention and thereby contributes to an understanding of the state of the mining sector during that time that goes beyond references in footnotes, since the years between 1885 and 1916 have been omitted continuously. In consequence, a longue durée-perspective is achieved that provides for a contingent account and enables the identification of junctures and continuities.

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[1] The theoretical framework of this study will be discussed in chapter two.

The arguments of this thesis are based upon two main assumptions that have developed during the fieldwork for this study, data analysis and literature review. For one, extractive enclaves are an integral part of capitalist modes of extraction under the global condition that need to be analysed historically, in their circumstances of emergence and in relation to other spatial formats. Furthermore, it is only through contextualization with the historical development of the extractive sector that the current dynamics in Tanzanian resource politics can be thoroughly understood. In that way, continuities, parallels and differences between diverse regimes of resource governance and the spatial orders at play can be carved out.

By moving chronologically from the colonial period to the present, processes of spatialization leading to the emergence and contestation of enclaves at different points in time as well as the resource politics connected with these processes are discussed. In doing so, I will also outline that the extractive sector has been constantly (re-)produced in the interplay of multiple state and non-state actors and their varying motivations. I will furthermore argue that spatial processes and practices related to extraction in the colonial period have resulted in longstanding and durable spatial formats and spatial orders (Middell, 2019). These formats and orders, despite being constantly (re-) produced, challenged and (re-)interpreted, are still in effect in their core mechanisms and largely unchanged today.

For the purpose of analysis, the timespan in question is divided in four distinct periods, the colonial era (1885-1961), the socialist, post-independence era (1961-1985), the liberalization period (1985 – 2015) and the recent dynamics under President Magufuli (since 2015). In the end, bringing the results of the different eras together, I will elaborate on the historical continuities, challenges and disruptions in the production of space in Tanzania's mining sector. It has to be made clear though that the accounts of the mining activities and political circumstances given in the chapter cannot be discussed in all detail and are thus reduced to the most vital aspects.

Overall, this study will thus contribute to the literature corpus of mining studies focussing on Tanzania, the historical expansion of (mining) capitalism in Africa and draw on, respectively speak to, multiple disciplines and interdisciplinary fields including economic anthropology, economic African history and global history, political economy, geography, development sociology and global studies.

However, since this is a case study of Tanzania, the danger of falling into a territorial trap (Agnew 1994, p. 59) is given. It has to be clear, though, that despite its specificities, the case of Tanzania cannot be treated in isolation since there are crucial entanglements and influences beyond Tanzanian national territory. Hence, talking about mining and extractive industries in Tanzania is only possible while acknowledging its embeddedness in larger geographical, economic, historical, political context.

State of the art

The ever-increasing demand for land and mineral resources in the aftermath of the financial crisis of 2007 was widely discussed and fuelled academic interest in related topics during the last decade, worldwide, and particularly focussing on Africa. Accordingly, there has been a considerable amount of publications concerned with questions of land, agriculture and resource extraction. Resource extraction has become a highly diversified and interdisciplinary field including approaches and foci from anthropology, geography, political science, environmental and development studies, (global) history, sociology, economics and their intersections. The following sections will thus look at ongoing debates in the diverse transdisciplinary field of mining studies, and with a focus on Tanzania.

Concerning mineral resources, oil and gold appear to be the most prominently featured instances in recent literature, while other technologically relevant minerals such as bauxite and lithium (Narins, 2017) increasingly attract academic interest. 'Crude Domination. An Anthropology of Oil', edited by Behrends et al. (2013), features ethnographic accounts about the impacts of oil production in Nigeria, Chad and Congo, among others. Michael Watts (2009, 2018) has extensively written about oil extraction in the Niger Delta, while other authors have contributed to discourses about oil other parts of the continent, such as Uganda (Tegera and Doevenspeck, 2015; van Alstine et al., 2014; Vokes, 2012) or the new hopes sparked by oil in Tanzania (Bofin and Pedersen, 2017). Numerous case studies on the impacts of large-scale oil projects nurture the discussion (Adusah-Karikari, 2015; Anderson and Browne, 2011; Ayelazuno, 2014; Obi, 2010), while others are concerned with the spatial organization of oil production in the African context (Ackah-Baidoo, 2012; Appel, 2012; Enns and Bersaglio, 2015).

The literature on (gold) mining on the other hand is basically divided into two major strands, artisanal and small-scale mining (ASM) and large-scale industrial mining (LSM), with the former clearly outnumbering the latter as far as publications go. Both are discussed in a multitude of disciplines and interdisciplinary contexts. The term artisanal mining includes an enormous variety of practices and captures short-term activities using simple tools as well as more intensive, permanent mining operations utilizing machinery. Studies on artisanal mining cover a wide range of topics from accounts of recent histories of artisanal mining (Hilson and McQuilken, 2014; Werthmann, 2017, 2012) to the organization of ASM (Grätz, 2013; Werthmann, 2003), its socio-economic transformative effects (Bryceson and Fisher, 2014; Bryceson and Jønsson, 2014; Hilson and Gatsinzi, 2014; Pijpers, 2016; Verbrugge, 2016), gender related issues (Bryceson et al., 2014, 2013; Werthmann, 2009), cosmological and ontological connections (Bryceson et al., 2010) the urbanization and infrastructure (Bryceson and MacKinnon, 2012; Kamete, 2012; Maconachie, 2012; Werthmann, 2009), ASM and its significance for local livelihoods (Banchirigah and Hilson, 2010) formalization (Fold et al., 2014) and the issue of fair trade minerals (Childs, 2014; Hilson, 2008).

Literature dealing with multinational corporations (MNCs) engaged in large-scale industrial mining tends to have a rather activist character that likes to picture mining companies as the embodiment of locust-capitalism. Thus, the trade-offs of LSM are often central to the discussions and narratives of the so-called resource curse replicated. The resource curse or paradox of plenty as well as strategies to overcome it have been discussed at length in the past (Auty, 2002; Badeeb et al., 2016; Corrigan, 2014; Frankel, 2015; Obeng-Odoom, 2013; Rosser, 2006; Sarraf and Jiwanji, 2001; Watts, 2004). It suggests that countries of the global south in many cases remain poor despite or actually because of their large endowments with natural and mineral resources and their often insufficiently diversified economies focussing on the export-oriented production of raw materials.

Violence and conflict in relation to mining have also received plenty of attention in the past. This relationship becomes particularly visible in the case of so-called conflict minerals that are considered to be extracted in circumstances of (civil) war and similar scenarios (Doevenspeck, 2012). However, conflict is common in the day-to-day practice of mining, e.g. when companies encounter artisanal miners and vice versa, as well as other competing groups, which is reflected in respective case studies (Aubynn, 2009; Berry, 2018; Calvano, 2008; Engels, 2016; Franks, 2009; Hilson and Yakovleva, 2007; Luning, 2014; Okoh, 2014). Violence in mining settings can also be prevalent in other forms, such as slow violence or sexual violence (Holterman, 2014; Rustad et al., 2016). Closely connected to conflict and violence are studies regarding companies' corporate social responsibility programmes (CSR) and company-community relations that have increasingly come into the focus of scholars in the recent past. Transformations due to this proclaimed ethical turn in capitalism (Dolan and Rajak, 2016; Rajak, 2011) and the role of CSR agents are of particular interest to researchers (Campbell, 2012; Luning, 2012).

Large-scale mining is also often studied in rather macroeconomic perspectives and the question of how LSM can be turned to be more beneficial for the host countries. Here, the divide between empirical approaches from the social sciences and geography (Appiah and Buaben, 2012; Bebbington et al. 2008; Dansereau, 2020; Gamu et al., 2015; Obeng-Odoom, 2013), and economically influenced approaches (Bloch and Owusu, 2012; Buur et al., 2017; Foster and Bills, 2002; Hansen, 2014; Lundstøl et al., 2015; Robbins, 2013) becomes most evident.

However, despite the at times separated discussions of LSM and ASM, there are approaches and perspectives bringing those sections together on a regular basis. The realm of resource politics and governance deals with both, large-scale industrial and small-scale artisanal mining in terms of their economic contribution, regulation on multiple scales (Butler, 2004; Elbra, 2017, 2014; Emel and Huber, 2008; Hansen et al., 2016; Lugoe, 2011; Luning and Pijpers, 2017).

Since the extraction of minerals, regardless if mined in small-scale or large-scale practices, are subjected to price fluctuations, cycles of boom and bust and the like, temporal dynamics and temporality have recently become vividly discussed topics in regards to extractivism and the related processes (D'Angelo and Pijpers, 2018; Lanzano, 2018; Oakley, 2018; Wiegink, 2018).

Another topic that has received increasing of attention lately is labour. While manifold aspects of mining labour have been discussed in the past, e.g. by the Manchester School in the Rhodesian Copperbelt or in studies focussing on labour migration to the South

African mines. labour in both ASM and LSM has been widely discussed in the past few years, particularly at conferences (Bryceson and Geenen, 2016; Fisher, 2007).

Due to the fact that most of the research conducted on mining is focussed on fieldwork and present-day practices, it is unsurprising that only few authors approach mining activities from an historical angle. There are, however, some recent publications dealing with colonial or even pre-colonial mining (Dumett, 2012; Mark-Thiesen, 2018; Werthmann, 2007) . Apart from more general histories of mining in Africa, some authors focus on labour during the colonial era (Alexander, 2008; Dumett, 1998; Jeeves, 1985; Lemelle, 1986). Rubbers (2019) has provided an attempt to historically trace the development of mining camps on the Congolese Copperbelt and their spatial implications. Mark-Thiesen (2018) on the other hand has explored the role of African intermediaries, as labor agents and recruiters, in the Wassa goldfields of the Gold Coast. However, historical accounts of mining are rather marginal in comparison to contemporary studies.

For Tanzania, there is a plethora of scholarly work on mining since the 1990s, which goes in-line with the liberalisation of the economy. Although LSM has played an important role in the country at that point in time, artisanal mining, which had dominated the decades before, continuously receives significantly more attention. The literature covers a wide range of disciplinary and inter-disciplinary approaches to ASM-related issues such as its impact on urbanization (Bryceson et al., 2012; Bryceson and Jønsson, 2014; Bryceson and Yankson, 2010), democratization processes (Bryceson and Fisher, 2014; Bryceson and Jønsson, 2014), attempts to formalize ASM (Imparato, 2010; Spiegel, 2012), socio-economic transformation and changing livelihoods (Bersaglio and Cleaver, 2018; Bryceson, 2014; Bryceson and Jønsson, 2010; Fisher et al., 2009; Kwai and Hilson, 2010), labour organization(Jønsson and Bryceson, 2009; Jønsson and Fold, 2014, 2009), gender issues (Bryceson et al., 2014, 2013), marginalization (Fisher, 2008, 2007) and ontological relations (Bryceson et al., 2010; Wijsen, 1995).

Nevertheless, LSM-related literature has grown, although to a far smaller degree, and intersects with parts of the ASM literature (Bourgouin, 2014). Similar to the general tenor on literature about LSM, in the Tanzanian context it either remains on a political, economic and fiscal macro-level (Emel et al., 2011; Ibrahim-Shilima and Konishi, 2014; Kweka, 2009; Lundstøl et al., 2015; Magai and Márquez-Velázquez, 2011, 2013;

Muganyizi, 2012; Muhanga, 2016) or engages in case studies on the impacts of LSM on local livelihoods (Kitula, 2006; Maliganya et al., 2013; Newenham-Kahindi, 2011; Nyankweli, 2012). The latter are furthermore often related to conflicts (Helliesen, 2012; Lange and Kolstad, 2012; Lauwo and Otusanya, 2014; Poncian and Kigodi, 2015; Vibe, 2013) and human rights (Holterman, 2014) and gender issues (Lauwo, 2018). The re-emergence of industrial mining in course of the liberalisation of Tanzania and its consequences (Butler, 2004; Chachage, 1993) and its development potential (Curtis and Lissu, 2008; Kulindwa et al., 2003; Moshi, 1992; van Campenhout, 2002) have been discussed in depth. Perspectives of communities living in the vicinity of industrial mines in Tanzania have recently been discussed by Merket and Foubert (2019). In the past few years, Tanzania has also taken centre stage in discussions about looming resource nationalism and a return of the state to the mining sector (Jacob, 2018; Jacob and Pedersen, 2018; Kinyondo and Huggins, 2019; Lange and Kinyondo, 2016; Pedersen and Jacob, 2017; Roder, 2019, 2017).

While Tanzania is endowed with a large variety of resources, most of the recent literature is focussed on gold, oil and gas. Other minerals, that successively gain momentum in the country, such as graphite and uranium, receive much less attention. Only Tanzanite, the unique gemstone only to be found at Mererani, stands out of the crowd and is regularly subject of academic interest and highly politicized due to its status of a national mineral (Helliesen, 2012; Schroeder, 2012, 2010).

The geographical area of present-day Tanzania has a comparatively long history of mining, nevertheless, the lion’s share of academic literature focusses on contemporary aspects of extractive practices, ASM and LSM, and resource politics. Only very little has been written specifically about the history of mining, and if so, not more than a footnote or a few sentences are dedicated to the subject. Precolonial, artisanal mining is mainly referred to as a ‘once upon a time’-contextualization indicating the historicity of mining without actually addressing it. Hence, besides the fact that there was mining of gold and salt in precolonial times and that it was incorporated into the caravan trade, the literature remains predominantly silent about this era. Due to the limited availability of data for the precolonial period, it is very difficult to provide detailed, in-depth accounts. The extensive geological explorations and the beginning of a systematic exploitation of resources during the German occupation are referred to in similar ways. Rarely authors go into more detail about initial mining activities by individual gold-seekers and small or medium scale companies, their contemporary impacts or their relevance for the extractive industries under German rule, which mostly stems not from the lacking availability of material, but from the reluctance to engage in the analysis of hand-written files and contemporary literature in German among those interested in mining as such. In comparison, literature on mining in Tanganyika under British mandate, academic and primary, is almost abundant. It is hence no surprise that this circumstance can culminate in the misleading assumption that before the 1920s there were no mining activities of any relevance in the area.

As a consequence of the decline of registered mining activities and the transition of the country's economy after the Tanganyikan independence, comparatively little attention was paid to the extractive sector. While the government and its multiple embodiments provided some materials to engage with, only towards the end of socialism and retrospectively some authors wrote on mining during the socialist period (Chachage, 1993; Kimambo, 1984; Kulindwa et al., 2003; Moshi, 1992).

Generally speaking, within the last two to three decades, the interest in mining in Tanzania, and ASM in particular, has produced a large canon of academic literature from a wide variety of angles and topics focussing on contemporary practices. The historical development of mining and hence the roots of the extractive sector today have been largely neglected or at best treated stepmotherly.

Methodology

As a result of looking at both, historical and contemporary dynamics of large-scale mining in Tanzania, the study draws on different methodological approaches. It is based on 19 weeks of fieldwork in 2017 and 2018, including three weeks of dedicated archival research in the Bundesarchiv (German Federal Archives) in Berlin and in the Tanzania National Archives in Dar es Salaam during the time spent in Tanzania for fieldwork. While the archival research played a vital role for the historical part of this study, the lion's share of data collection was conducted during fieldwork in Tanzania and by following ongoing discussions in the media.

Between April and June 2017, I spent ten weeks for research in and around Dar es Salaam, and another 6 weeks in April and May 2018 in the area of Arusha, Mwanza and

Dar es Salaam as a follow-up. During that time, 23 interviews were conducted amounting to approximately 19 hours of audio material, numerous informal conversations, observations and a collection of media reports on ongoing events related to large-scale mining. Another three weeks in February and March 2018 were dedicated to on-site archival research at the German Federal Archives in Berlin.

The timing of the fieldwork in Tanzania turned out to be a blessing and a curse at the same time. In May 2017, shortly after I had started to conduct interviews, make appointments and preparations for visiting mining sites, President Magufuli presented the results of a governmental investigation committee accusing Acacia Mining, the largest mining company operating in the country, of unprecedented fraud, betrayal and tax evasion (more on that in chapter five). In consequence, all of the preparations and arrangements for the ongoing research stay had become obsolete as contacted companies did not respond anymore or cancelled which meant that there was no chance for upcoming visits to companies' mining sites or even interviews with employees. Since the ministry of mining and other government bodies were also affected by the report's results, it became increasingly difficult to get access and even more so to collect relevant data. Whereas mining companies and government officials were not cooperating much, civil society organizations, people formerly active the extractive sector as well as individuals from academia familiar with it proved to be highly fruitful interlocutors.

Despite the difficulty of access, the situation of spring 2017 in Tanzania nevertheless offered plenty of opportunities for research. Being able to observe the unfolding conflict between the government and the company while being in Tanzania, collecting related media reports and talking about the situation with people (in spite of the language barrier) provided access to crucial information and different perspectives on the matter first-hand. However, the information collected in Dar es Salaam surely differs from that in the mining areas that were more immediately concerned with the events, such as Mwanza and Mara, nevertheless I consider it as highly relevant for understanding the situation as a whole.

Although the quarrels of the conflict of 2017 had calmed down in 2018, the overall tense political situation impacted on the fieldwork considerably. Critique against the government was not well received in the prior months and repression against the opposition party and those who were openly critical about the course of the government grew. Multiple media outlets had been closed down by the government in the months before (Pekkonen, 2018), the freedom of assembly repealed and several other repressive measures taken, which resulted in growing caution and fear among parts of the population. This is also reflected in the interaction with my interview partners during the follow-up visit in spring 2018. A significant amount of people that had spoken to me the year before without any reservations now told me that under the current situation, they would not dare to openly speak about such a sensitive topic. In consequence, some former interviewees refrained from conversations or insisted to only have them in secure and private environments without the danger of being overheard. The increased presence of security forces in some places, such as Arusha, added towards the tense atmosphere. I was furthermore advised to be cautious concerning with whom I would talk about the research project and not to speak too openly about it. That factor also influenced the sampling of and access to potential interview partners. Overall, the political dynamics at play in Tanzania during 2017 and 2018 strongly impacted on the fieldwork for this study, positively as opportunities were opened up and negatively because just as many potential opportunities were barred. The events taking place during the fieldwork also helped shaping the project and clarifying its aims and interest.

Interviews were conducted as qualitative, open and semi-structured interviews (Rosenthal, 2015) and fluidly transitioned to expert and problem-centred interviews (Hopf, 2013; Witzel, 2000) targeting specific issues. This approach was particularly important for the explorative phase of the project and during the turmoil of 2017. The interviews were furthermore adapted to the respective interviewee, given his/her background in relation to the research topic. As far as consent was given by the interviewees, conversations were recorded, notes and first reflections marked down immediately after the interviews. For the analysis process, the recordings were revisited, important parts transcribed and categorized.

The interviews targeted a selected group of stakeholders. Ballard and Banks (2003, p. 289) suggest a triad stakeholder model consisting of three main groups of actors: Corporations and their affiliates, state actors and communities. Since this study focusses on a macro perspective and not a single site, communities in this case were largely substituted by civil actors and experts. Those in the end also represent the largest share of interviewees for this project. It is vital to be aware that none of the actor groups mentioned are monolithic entities, but that all of them are highly diversified given the particular individual background of every interlocutor. Hence, statements, perspectives and data from within actor groups can differ widely and do not result in a single representative proposition.

Contact to potential interview partners was established via phone calls or in-person. Getting access to large-scale mining companies was particularly difficult and mostly unsuccessful, especially given the tense situation. Members of the government or companies on the other hand were often wary about my interest in the topic and their activities, perceived me as journalist or were unwilling to cooperate due to other reasons. Attempts to alleviate concerns about my interest and the aim of the research were in some cases successful, in others not.

When appointments were successfully made and interviews conducted, I regularly asked the interviewees if they could refer me to somebody else that would be interested in and helpful to my research. This chain or snowball sampling (Patton, 2002, p. 237) was not only very helpful, but also necessary in the circumstances in which access to relevant actors became difficult and cautious procedures vital. Again, this form of sampling has its advantages and disadvantages. While I was able to be referred to people who were familiar with the mining sector, being referred to new contacts also came with the benefit of starting with initial personal trust and interest in the project. In that way potential misinterpretations of my own role as a researcher and of my project could be prevented. However, it is crucial to be aware that snowballing always brings the danger of creating similar data due to shared viewpoints and experiences of the interviewees, which in the worst case and if not addressed properly can lead to a distortion of the analytical outcome.

In summary, interviews have been conducted within all stakeholder groups. Given the difficulties in accessing mining companies as well as government actors to a certain degree, there is a tendency towards members of civil society organizations and experts in the overall interview balance. This slight imbalance could however be compensated by including official company and government statements, media reports and the like. Moreover, the interviews with members of mining companies and government bodies had a particular nuance to them when considering which topics were discussed and which were bypassed or blocked. An interview with an officer of the Ministry of Energy and Minerals (MEM), for example, did not only require me to hand in a questionnaire several days in advance, but further enquiries concerning the ongoing situation (export ban, the conflict with Acacia Mining) were immediately rejected by the interviewees. Hence, it is not only important to consider what has been said during the interviews, but also what has not been said. The perception of my own position by the interviewees, plays an important role here as well, since it determined, what information could be shared and what not.

Observations made during the fieldwork add to the data collected via interviews. Participant observation in a strict anthropological sense as a complete participant or participant observer was neither possible given the difficulties of access in the field, nor necessary for the research focus developing during that period. My role was rather that of a complete observer (Bernard, 2006, p. 347) soaking in of impressions of situations such as waiting in the Ministry of Energy and Minerals before appointments, just at the day after the Minister, Sospeter Muhongo, was fired over the revelations of Acacia Mining's fraud, or the increased security personnel at Acacia's Dar es Salam office during that time, as well as the tense atmosphere in some places during the fieldwork in 2018. Observations and thoughts gathered that way have been noted down afterwards and also successively informed later interviews. Despite not being significantly involved in these situations and hence not influencing them to a notable degree, it is crucial to be aware of the strong subjectivity of these observations.

Whereas interviews and observations are methodological keys for the project, the analysis of contemporary documents and archival material is another important pillar. The research in the archives represents the basis for the colonial chapter of the dissertation, particularly for the time of German rule. Owing to the better availability of sources, literature and their discussion for the British period, I intentionally refrained from adding further research in British archives and instead focussed on the German files and materials that have so far been neglected. The Bundesarchiv proved to be highly fruitful for the study, since it did not only hold a large number of files and documents dealing with the mining sector during the German occupation, but also until the 1940s, including British newspapers and correspondences. Moreover, a remarkable portion of relevant files had been made available offsite in the form of digitalisations via the archive's web-portal, which made them accessible remotely and thus beyond the time spent in presence at the archives. This circumstance was particularly beneficial, since going back to some of the files if necessary was easily possible. Availability was however an issue in the Tanzanian National Archives. Although there was a good number of files to access, many of the listed stock were not obtainable as they could not be found. Another major difficulty to the German files in both archives is the readability of handwritten file that is often worsened by messy handwriting or faded ink. Nevertheless, these are expected difficulties in dealing with materials of that period and have to be addressed accordingly by investing time to decipher unreadable parts if necessary.

The core method used here for analysing archival material was qualitative content analysis (Mayring, 2013) as well as document and file analysis (Wolff, 2013), in order to inductively categorize the data recovered from the archival sources. Working with colonial, archival material requires a particular sensibility as the documents and contents stem from a certain mindset and (re-)produce respective ideas, terminologies, power and hierarchies. Archives are commonly seen as deeply entangled with power and as means thereof. According to Stoler "colonial archives were both sites of the imaginary and institutions that fashioned histories as they concealed, revealed, and reproduced the power of the state." (Stoler, 2002, p. 97). This is also reflected in what is archived and who is involved as well as in who and what is neglected or silenced. Apart from private documents, the majority of documents that are attributed with "archiveability" (Mbembe, 2002, p. 19) are related to the state. Mbembe goes on that "the archive, therefore, is fundamentally a matter of discrimination and of selection, which, in the end, results in the granting of a privileged status to certain written documents, and the refusal of that same status to others, thereby judged 'unarchivable'." (Mbembe, 2002, p. 20). Besides the hierarchies it is furthermore vital to take in to account that archives represent fragments of perceived reality and only traces of what did exist once. There can consequently not be a claim to totality. Drawing on archival material rather is a "putting back together scraps and debris" (Mbembe, 2002, p. 25) and thereby reconstructing historical mosaics.

Since the archival material concerned with mining basically consists of documentation from the German colonial administration, the counterparts in the German Kaiserreich, reports by (geological) government staff and correspondences with private individuals and companies, it only provides the perspectives of these actors and is closely intertwined with powerful processes of silencing and exclusion. The views and activities of Africans are at best included as renarration or hearsay, if at all. It is hence important not to consider these sources as absolute facts or objective data, but in their context of creation, their potential as pools of data and knowledge, but also with all their shortcomings and bias (Bernard, 2006, p. 450).

Similarly, media reports, documents published by the Tanzanian government and mining companies furthermore inform the discussions throughout the remaining chapters and complement the data from interviews and academic literature. As for the archival material it is crucial to be aware of the reproduction of certain perspectives and potential bias in these documents. Press releases of mining companies for example often tend to sugar-coat existing problems and their own activities. Government statements in this case clearly reflect political strategies and positions.

Generally, it is crucial for both, archival material as well as the more recent documents, to be aware of the to be aware of the context, perspectives and aims of the respective authors as well as the subjectivity involved in analysing and utilizing them in the research.

Thesis structure

In order to elaborate on the historical development of Tanzania's mining sector in respect to its spatial formats and order(s) and the arguments I aim to make here, the thesis will be divided into five chapters, followed by a final conclusion.

Owing to the particular angle on the subject, the first chapter will be concerned with the spatial theory this study is built upon and discuss spatial concepts frequently referred to in the context of mining studies, such as the frontier, enclave and territory. Starting from there, I will outline how practices employed by certain (groups of) actors result in processes of spatialization and thus in the consolidation of spatial formats within the context of the mineral economy. These considerations provide the basis for the discussion of continuities and disruptions in the spatial organization of large-scale mechanized and industrial mining in Tanzania at different points in time.

The journey through the historical development of Tanzania's mining sector starts with the second chapter. Here I will argue, that equivalences of extractive enclaves, as they are currently discussed, were an integral part of colonial extractive economies. The narrative focusses on the period of colonial occupation by the German Kaiserreich and Great Britain and the spatial implications produced during that time. Based on archival material and contemporary as well as secondary literature I will discuss the emergence, expansion and development of the mining sector. Due to the aforementioned neglect of the German colonial period in this context the years preceding the First World War will receive special attention. The successive discussion of spatial dynamics is based on spatial practices employed by respective actors (state, parastatal and private) and centred around the concepts of frontiers, territory and enclaves, their production and entanglements, which inform the following periods as well.

Chapter three will revolve around the changes and challenges of the mining sector after the Tanganyikan independence and the implementation of Julius Nyerere's socialist *ujamaa* policies. While at a first glance the politics of nationalisation and self-reliance, the disappearance of mining companies and drastic decline of mineral production suggests a sweeping extractive hiatus, I will argue, that the situation after independence and especially after the Arusha Declaration of 1967 was far more complex. Starting with the continued external economic dependence and contradictions of self-reliance, this chapter outlines the attempts of Nyerere's government to make use of the country's mineral endowments despite limited capabilities and a strong prioritisation of peasant agriculture. Due to the central regulative and participating position of the state in extractive activities during the post-independence period, the analysis of spatial practices in this chapter will focus especially on state and parastatal actors. Hence, spatial strategies used in the interplay of nationalisation and ujamaa, mainly based on state territoriality, will be at the core of the discussion. This does however not mean that private and individual actors will be excluded at all, since they still played an important role in shaping the mining economy of socialist Tanzania. In total, the chapter aims to elaborate on the proclaimed break with capitalist modes of production, the paradoxes of self-reliance and external dependency in the extractive and their manifestation in spatial practices between 1961 and 1985.

The following fourth chapter departs at the crisis of Tanzanian socialism, after Nyerere's resignation and the starting liberalisation of the economy through the implementation of the World Bank's Structural Adjustment Programme (SAP). I will argue, that the crisis and end of socialism resulted in the relapse of the (mining) economy to colonial patterns. This is reflected in the decline of state influence and parastatal organizations, the high influx of external, multi-national companies due to highly beneficial regulations as well as the re-emergence of extractive enclaves. Consequently, I will outline and discuss the consequences of the liberalization policies, the development of large-scale mining and its conflicts during the 1990s and early 2000s, as well as the looming resistance and resource nationalism after 2005 that came with the disillusionment when expected benefits of the liberalized economy did not materialize. Hence, processes of (de- and re-)territorialisation, enclaving and the production of (commodity) frontiers as well as the disruptions regarding the socialist and continuities with the colonial mining economy will play a crucial role in the analysis of the chapter.

Finally, chapter five will provide a closer look at the most recent political dynamics targeting the extractive sector during the presidency of John Magufuli. Based on the analysis of the increased government action since 2017, I will argue, that the present situation in Tanzania is not only the peak of resource nationalist ambitions, but also deeply entangled with and legitimized by the country's socialist legacy. I will furthermore discuss the strategies used by the Magufuli-government and its aspired aims in terms of the resemblances to the Latin-American development model of neo-extractivism, which does provide insights into potential outcomes in the long-run. Throughout the chapter, I will consequently outline the ways in which the Tanzanian government attempts to re-position itself in the extractive economy and as a developmental state at large. These strategies are reflected in a variety of spatial practices aimed at a consolidating state-territory, displaying territorial sovereignty and increasing state control over extractive enclaves. With this chapter I aim to contextualize and make sense of the current dynamics in Tanzania's resource politics and its consequences in regards to the history of mining in the country and its legacies.

Finally, the concluding chapter will provide room to discuss continuities, disruptions and persistence in the spatial organization of mechanized and large-scale mining in Tanzania over time and elaborate on the reinterpretation of spatial practices by different actors related to their respective aims.

2. Extraction and space

2.1 Mining, space and some theoretical considerations

Space is a central dimension of social interaction and social relations as every single action happens in time and space (Middell, 2019a, p. 15). Mining is a fundamentally spatial activity in a double sense. In addition to occurring in time and space, mining activities are confined to particular locations holding minerals which are considered valuable or useful, and physically transform landscapes. The particular intertwinement of mining as a practice and physical as well as social space invites for an analysis of this relationship that helps to grasp the socio-spatial dimension of mining activities and how they have developed under global(ly expanding) capitalist modes of extraction.

Research on mining has often focussed on spatial aspects of mining given that mineral deposits are physically fixed in place. The intricate entanglements of mining and space thus resulted in a growing canon of mining related spatial terminology, the innovation of new concepts and reinterpretation of existing ones. The spatial organization of mining practices thereby received special attention. There are hence multiple spatial concepts and metaphors used in this context.

The enclave and the frontier are probably the most frequently used spatial metaphors in studies on mining during the past decades, both in a plethora of ways. The recent discourse about extractive enclaves has been dominated by James Ferguson's argument that mining has become more like oil extraction (Ferguson, 2005, 378), validation and critique of this approach. Frontiers, however, are discussed more diversely as a dynamic space of transition and possibilities. However, other concepts have been constructed with the aim of capturing the complexity of extractive practices under global capitalism(s). Ey and Sherval (2016) for example have introduced the term minescape for this purpose.

Lately, research has also successively left the classical, more rural sights of mining and turned to newly emerging ones. While the nexus of mining and urbanization has been a constantly discussed topic, urban areas have come in the focus as places of mineral extraction. Urban mining focusses on the collection of mineral resources from local urban and electronic waste coming from the global North, as well as even local infrastructures (Fredricks, 2014; Grant and Oteng-Ababio, 2016; Knapp, 2016). The focus of mining research has not only moved from the rural to the urban, but even from land to the sea, and beyond. Offshore deep-sea mining, for example, has come into the scope of researchers focussing on projects at the Namibian coast and in the Pacific (Childs, 2018).

During fieldwork, the frontier, territory in relation to the nation state as well as private actors, and enclaves have turned out to be highly relevant spatial concepts contributing to the aim of this study and therefore need to be considered more closely. However, before doing so, it is necessary to look at the aspects of spatial theory guiding this research.

2.1.1 The spatial turn and the social production of space

While disciplines such as geography have always dealt with space in manifold ways, there has been an increasing acknowledgement of the social construction of space and its influence on social, cultural and economic phenomena in other disciplines, including anthropology, history, sociology, cultural studies and many more over the last decades (Warf and Arias, 2009, p. 1). With this spatial turn in the humanities, existing questions were evaluated from new perspectives in which space became an increasingly important factor. This can be seen as a consequence of the rising awareness of the social aspects of space in a globalized world (Middell and Naumann, 2010, p. 7).

It is hardly a surprise that the spatial turn in the humanities coincided with a historical situation characterised by transition, growing complexity and uncertainty. The increasing interconnectedness of the world by communication and transport technologies, global production chains or transnational and transregional connections led to a complexity that is difficult to grasp. The term global village, popularised by Marshall McLuhan in the 1960s, describes the condensation of the world, while David Harvey similarly describes this phenomenon as the compression of space and time where not physical distance but only time remains the determining factor (Harvey, 2001, pp. 123-124). The collapse of the Soviet Union, as well, challenged the prevalent world order entirely and caused disorientation as many of the spatial as well as ideological concepts guiding people's lives were heavily challenged. Both situations strongly questioned and continue to challenge prevailing perceptions of the world and led to the emergence of new spatial concepts attempting to navigate the new circumstances. There is consequently a "proliferation of new spatial and metaphorical semantics" (Middell, 2019a, p. 18). Simply put, when the repertoire of spatial concepts employed to navigate the world(s) becomes insufficient, new concepts are established or existing ones altered.

As a result, academic literature dealing with space and new spatial metaphors is mushrooming since the 1990s and contributing to the growing corpus of spatial terminology (Middell, 2019a, p.17; 2019b, p.4). However, this has not led to clarification. Concepts have become increasingly blurry, interchangeable and sometimes even totally meaningless. This does not mean that emerging concepts can be neglected, on the contrary, it is necessary to engage with new and old concepts alike, the ways they challenge and influence one another and identify their relevance. Various strategies to come to terms with this mushrooming of spatial metaphors have been elaborated. Jessop et al. (2008, 2019), for example, attempt to theorize socio-spatial relations in their TPSN framework as a combination of territory, place, scale and network. Middell (2019a,b) on the other hand tries to encounter the quantitative growth of spatial terminology by employing the categories spatial format and spatial order for analysing and relating the outcomes of socio-spatial practices. For both approaches the work of Henri Lefebvre is crucial. Since the latter will play an important role in this study, it is necessary to shortly outline Lefebvre's ideas before discussing spatial formats and spatial orders.

In essence, Lefebvre argues that "(social) space is a (social) product" (Lefebvre, 1991, p. 30). Social space is constituted through actions and everyday practices that feed into processes of spatialization. Social spaces furthermore dominate human live-worlds. Natural spaces, Lefebvre argues, have become overlain by social spaces so that they only exist as fantasies (Lefebvre, 1991, p. 31). Space, thus, is always social.

For Lefebvre, there are three crucial aspects to space: spatial practice, representations of space and representational space. Spatial practices include the dialectical interactions in the (re-)production of space in everyday or even strategic actions, which contribute to the coherence of space. Representations of space are rather abstract conceptualizations of space that verbalize spatial practices (Lefebvre, 1991, pp. 33, 38–

39). Consequently, Lefebvre considers representations of space to be the space of planners and scientists and the most predominant form of space. Lastly, representational space is "the space of 'inhabitants' and 'users'" (Lefebvre, 1991, p. 39) that is entangled with images or symbols, non-verbal and passively experienced. When dealing with space and its social production, it is important to acknowledge, that social and spatial practices are directly lived and acted out before they can be conceptualized (Lefebvre, 1991, p. 34). Lefebvre suggests, that an appropriate approach to the social production of space "analyses not things in space but space itself, with a view to uncovering the social relationships embedded in it." (Lefebvre, 1991, p. 89). Although Lefebvre's use of space might imply the singularity of space as an all-encompassing entity, he clearly points out that there is not only one single social space, but an unlimited number of social spaces (Lefebvre, 1991, p. 86).

2.1.2 Spatial formats and spatial orders

Middell's concepts *spatial format* and *spatial order* represent heuristic tools that shall help to analyse relevant processes of space-making under the global condition in their historical context and to cope with the rising numbers of spatial metaphors (Middell, 2019a, p. 47). Spatial formats describe the outcomes of processes of spatialization or space-making, which are based on social practices in space (Middell, 2019a, p. 19). Those processes and practices must become durable via repetition, routinization and even institutionalisation over time and are performatively and reflexively produced (Middell, 2019b, p. 5-6). Durability is thus only achieved when spatial formats are not challenged, but confirmed or potential challenges are successfully defied. Practices and processes producing spatial formats are considered as formatting. While formatting may be intentional, this is not necessarily the case (Middell, 2019b, p. 7). As Anthony Giddens puts it in the context of structuration theory, "agency refers not to the intentions people have in doing things, but rather to their capability of doing those things in the first place […]." (Giddens, 1984, p. 9). However, Middell (2019a, p. 22) insists that some actions directly and intentionally target spatial dimensions, whereas in other cases, the spatial impact is rather a side product.

Spatial formats are, furthermore, not as such material, but rather patterns or models (Engel, 2018, p. 4). These patterns, while being the result of socio-spatial actions and processes, guide socio-spatial practices and processes of spatialization, and in that way simultaneously contribute to their own reproduction. Spatial formats are also an analytical lens through which abstract and metaphorical spaces become communicable (Engel, 2018, p. 4). Examples are among others the nation state or the empire.

Middell (2019b, p. 10-11) goes on that spatial formats cannot exist isolated from, but only in relation to other spatial formats. Those relations come together in a spatial order. Spatial orders produce hierarchical or non-hierarchical relations between spatial formats within or across scales. Again, there is not only one, but a multiplicity of parallel spatial orders. Although under the global condition spatial orders on local to national levels are integrated into a global spatial order that underpins interdependencies, characterised by different asymmetries, there is no homogenization effect (Middell, 2019b, p. 10-11). Spatial orders are the hierarchical or non-hierarchical relations between spatial formats. These orders as well as the meaning of spatial formats within those are however alterable (Engel, 2018, p. 5). Both are constantly, and at some points in time even more heavily, contested, validated or transformed.

Overall, the concepts spatial format and spatial order are supposed to structure the seemingly overwhelming and rising number of spatial concepts emerging lately. A crucial factor in this endeavour is not to consider every spatial metaphor or concept as a spatial format, but to apply certain factors of relevance such as a durability, repetitiveness in its production, which also translates into a certain historical prevalence, potential institutionalisation. For this study, spatial format and spatial order represent useful tools to identify relevant and recurring spatial practices employed by actors in Tanzania's mining sector, categorise and connect them. The following section will discuss the spatial formats that have turned out to be relevant for this study during fieldwork: Enclave, frontier and territory.

2.2 Spatial formats of extraction?

2.2.1 Enclaves

By definition, an enclave is a territorialized state inside and surrounded by another state. Examples are San Marino or Lesotho. The existence of enclaves can however be a source of conflict and contributes to the perforation of states (Pitzl, 2004, p. 66). Apart from this political definition, enclaves can also be ethnical in the sense of segregated ghettos or city quarters dominated by a particular group with shared ethnical heritage, in the broader sense, such as the recently growing African diasporic enclaves in China (Li et al., 2012). According to Phelps et al. (2015, p. 122), "an economic enclave can be defined as a physically, administratively, or legally bounded territory whose geography or morphology is intimately related to the following economic characteristics: dependence on one or a few large firms; high specialization in one activity; and weak integration into the local economy, which is used primarily to access some local factors of production." In enclave economies, the main export sector is usually dominated by foreign companies (Conning and Robinson, 2009, p. 361). Foreign capital and skilled expatriate workers hence play an important role in the highly specialized and technology reliant mining enclaves (Arias et al., 2013, pp. 73–75; Ghebremusse, 2016, p. 5). Enclaves in extractive economies are furthermore expected not to respond to local advantages and only develop very little to no linkages (Bunker, 1984, p. 1057). Werthmann (2019) provides an overview of the enclave in its variants as space of social segregation, urban ethnic enclave, enclave economy and democracy and extractive enclaves.

In the context of mining, the enclave concept is based on a combination of economic and political approaches. The discourse on the extractive enclave during the past decade was strongly influenced by James Ferguson's take on the matter. He argues, that large-scale mining operations have increasingly adapted modes of production oil companies, characterized by disclosure, isolation from the local context, spatially concentrated production and private securitization (Ferguson, 2006, pp. 201–203, 2005, p. 379). Thus, he implies, that socially thick and paternalistic mining economies, that could be found e.g. in the Zambian Copperbelt until the 1970s have been successively replaced by socially thin, enclave-based extractive economies during liberalization processes (Ferguson, 2006, pp. 197, 201–203, 2005, p. 379). Rubbers (2019, p. 89), however, argues that enclaves did not replace mining towns, but that enclaves represent an adaption of the spatial organization of extractive operations to the conditions of a globalised capitalist mining economy.

Furthermore, enclaves tend to be encouraged by the limited range of governmental authority and the willingness of national political elites to sign agreements for their personal benefit. Accordingly, extractive enclaves occur especially in states that are considered as 'weak states' or 'failed states' such as Angola, Equatorial Guinea, Chad and Sudan (Ferguson, 2006, p. 196, 2005, p. 379). Revenue generated in extractive enclaves usually bypasses the host countries as it does not flow through their territory, but hops from enclave to company headquarter or marketplaces of international finance (Ferguson, 2005, p. 378). He argues, that particularly improved communication and transport systems facilitate that sort of disconnect from the local context (Ferguson, 2006, p. 205). Within the concentrated area of the enclave, companies take over state functions and thus form a micro-state within a state (Ferguson, 2006, p. 205). Bridge on the other hand stresses the punctuation of national territory and sovereignty by extractive enclaves (Bridge, 2015).

All in all, the enclave as a secluded spatial entity of mineral extraction has dominated the recent discourses and was further elaborated by other scholars. According to Hönke extractive enclaves form spaces of private order creating islands of stability in the midst of fragile surroundings (Hönke, 2009a, p. 276), secured by fences, walls, and private armies. Consequently, they largely exist outside of the state legislation and without significant interaction with adjacent communities, forming parastatal territorial entities within their host countries. Bezuidenhout and Buhlungu (2016, p. 529) see the enclave as a socio-spatial formation in the absence of the state that enables mining companies to exploit resources in an isolated manner and regulate the lives of people within the enclave. In connection to Ferguson, Sidaway describes the dialectic of enclaves as exclusive and actively excluding spaces that are established on the edges of existing jurisdictions, which foster intensified processes of uneven development (Sidaway, 2007, pp. 333–336).

However, the isolation of extractive enclaves is often not as strict as it is claimed to be. Hönke points out that the presence of private corporative actors is not necessarily an implication for weak central state authorities being challenged. Those private actors are far from autonomous but highly entangled in local and national political networks (Hönke, 2009a, p. 284, 2009b, p. 14). There is consequently a rising degree of permeability to the fortress of the extractive enclaves. This can be considered as the result of corporate social responsibility (CSR) programs that, under pressure or voluntarily put in place by the MNCs, are supposed to cushion negative impacts of industrial mining activities on the host communities' livelihoods. In that way, the company's governance outreach beyond the mine itself leads to a flexible territory and fluid borders that are not clearly determinable (Hönke, 2009b, pp. 4, 19–20). This is also reflected in the forging of alliances with local authorities, cooperation of company and state security forces (Hönke, 2009a, p. 293). At the same time the approximation of corporations and communities is by no means an act of charity, but a strategy of legitimating, respectively securing, the MNC's presence and actions. Richard Auty (2006, p. 144) nevertheless insists that mining enclaves can have a positive long-term impetus, if the companies adhere to certain standards. Likewise, some have argued that extractive enclaves can be turned to being beneficial for the economies of their host countries. Bloch and Owusu (2012, p. 435) argue, that the Ghanaian mining economy is no enclave economy anymore, but that strong linkages have been developed by integrating local suppliers and services, improved fiscal regimes, and clustering instead of enclaving. Studies of similar directions have been mushrooming recently (Fessehaie and Morris, 2013; Hansen, 2014; Mohan, 2013). Arias et al. (2013, pp. 78–79) outline, that mining clusters with a strong presence of multinational companies, division of labour through specialization, a thick, locally sourced labour market, qualification opportunities and knowledge transfer can indeed lead to positive effects. As chapters four and five will discuss, these hopes are also inherent to the dynamics in Tanzania since the early 2000s.

The essence of this short sketch is that extractive enclaves represent a dominant mode of production for large scale mining in a globally interlinked, capitalist economy. Enclaves comprise a limited, selectively territorialized area in which private companies exercise state-like functions, and thereby produce a state within a state. Enclaves furthermore challenge state sovereignty and territoriality. While extractive enclaves maintain strong ties on a global scale, they often develop very little linkages on a local level. Although enclaves are an important part of the mining economy as such, they are even more prevalent in settings of limited statehood such as the Democratic Republic of Congo, Sudan and so on, where they represent islands of stability for mineral production. Due to discourses about the social license to operate, ethical issues and also government and grassroots or civil society initiatives, the isolated nature of extractive enclaves has been increasingly challenged in some places in the recent past.

2.2.2 Frontiers

When talking about the frontier, it is crucial to distinguish between the different uses and meanings the concept carries depending on the context. Historically, Frederick Jackson Turner's use of the concept has doubtlessly to be considered the most influential one. For Turner, the frontier represents the imaginary line unidirectionally pushed forward in the westward expansion of the United States. It is associated with abundant availability of 'free' land and resources, remote location as well as the sharp contrast between civilization and savagery (Turner, 1893). The frontier hence represents the taming of the uncivilized and wild by the civilized (white) in multiple waves until the final closure of the American frontier when urban centres were established on the Western coast. In that way, the frontier in Turner's sense is not just an ideological child of its time, but also crucial to the nation-building narrative in the US. According to Turner, the frontier furthermore is a space of opportunity and freedom, which is attributed to the intruding settlers, not the natives.

There is not only timely resemblance between the American frontier and the processes of spatialization in the colonization of East Africa, but also parallels in the expansionist narrative. The notions of free, or 'herrenloses", land open to the use and transformation by pioneers and colonizers, as well as the civilized/uncivilized dualism sits at the core of the projects in both cases. However, I consider the frontier in Turner's sense as being inappropriate for a transfer to the context in focus here. Turner's frontier is deeply entangled with the particular local and historical context of the 19th century USA and its nation-building narrative and glorification. Watts furthermore outlines, that Turner neglects the dynamics and priority of processes of (primitive) accumulation in frontier spaces (Watts, 2018, p. 479). This does not mean that Turner's frontier does not at all impact the further conceptualization.

Korf and Schetter (Korf and Schetter, 2012, p. 165) have discussed the frontier in contemporary contexts and in close connection to Turner. For them, the frontier is a space of a prevalent state of exception featuring 'empty spaces' and 'herrenloses land', where natural resources are freely available and civilization is absent. In addition, there is only sporadic state presence and privatised, individualised orders of violence are dominant. Frontiersmen are considered as the main actors shaping these spaces, for example in establishing exploitative economies. However, the frontier for Korf and Schetter is not only a space, but carries an inherent logic of action, that contributes to the consolidation of the state of exception, which thus becomes the norm (Korf and Schetter, 2012, pp. 157–161).

Osterhammel (2011, pp. 465–466) describes the frontier in his history of the 19th century as a mobile border of resource allotment, a space that as the ultimate periphery stands in contrast to the cities in which the conquest of and rule over the frontier is organised. The frontier nevertheless is far from being a passive periphery, but is actively produced. Building upon Turner and others, Osterhammel attempts to provide a more universal definition of the frontier. For him, frontiers are not necessarily physically determinable. It is a process of contact between two collectives of different ethnical origin and cultural background that are confronted, more often than not violently, without the acute presence of a regulating state authority. One collective thereby takes the role of the invader, whose primary interest is the acquisition of land and the exploitation of resources (Osterhammel, 2011, p. 471). Specific frontiers are then the product of an invasion from outside, which can be long lasting, but always fluid processes. Osterhammel insists, that frontiers do not appear within nation states, but only where the state is rudimentary or porous (Osterhammel, 2011, p. 473). Frontiers are rather deeply entangled with the expansion of empires. In that particular context, frontiers mark the edges of the empire, where there are no clear borders and only rudimentary state control (Osterhammel, 2011, p. 473).

In regards to the African context, Kopytoff's take on the frontier is for sure one of the most influential. Kopytoff (1987, p. 7) considers Africa to be a frontier continent, which has been shaped by population movements, urban and industrial expansion in colonial and post-colonial settings, the rearrangement of ethnic compositions and the constant re-emergence of new frontiers. The frontier in his view is basically an area into which the control of metropoles does not reach out completely (Kopytoff, 1987, pp. 28–29). In contrast to the linear expansion of Turner's frontier from East to West of North America, the Kopytoffian frontier can be seen as multi-nuclear, buffer-zones or zones of contested control between multiple centres of power. Frontiers are hence rather permissive as they do not create a determined type of society or culture, but provide something like an institutional vacuum where social processes can unfold (Kopytoff, 1987, p. 14). The frontier hence is perceived by the intruder as 'no man's land' or empty land, that can legitimately be put to use. Nevertheless, the model of metropolitan culture which is carried to the frontier influences the processes going on there. In general, Kopytoff focusses on political and cultural aspects of the frontier rather than its economic relevance.

In the realm of political economy, Michael Watts has quite prominently used the frontier as a social space and in sharp distinction to Turner. Politically, frontiers for Watts are spaces of asymmetrical and fragmented power, where law and order have not yet arrived or have collapsed (Watts, 2018, p. 478). Capital accumulation, too, is a crucial part of frontier process, as capital continuously strives to opening up new resource and commodity frontiers within 'cheap natures' (Watts, 2018, p. 479). Generally, Watts promotes a more abstract take on the frontier, which focusses rather on spatial practices and representation (Watts, 2018, p. 478). Frontier spaces are furthermore considered as fluid, blurry and marginal spaces. While Watts focusses on the frontier in a contemporary scope, he also acknowledges its historicity, which positions the frontier at the periphery of expansionist states and empires (Watts, 2018, p. 480). It is important to note, that the frontier is not a coherent spatial entity. Watts emphasizes the fragmentation of the frontier in the form of archipelagos and the complex and unstable relationship with other spatial concepts, such as borders, hinterlands or enclaves. However, the state as a regulating actor, or its absence, interests and capabilities play a distinctive role in the shaping of the frontier (Watts, 2018, p. 486). This becomes particularly clear in his definition of the frontier as weakly institutionalized spaces, which are not strictly incorporated into the core states.

Werthmann and Grätz (2012, p. 12), as well as others involved in work on artisanal mining, see the frontier as an imaginary space that is fed by ideas about a better life and success, where alternative modes of lifestyles and livelihoods are possible. Here, the frontier becomes a positively connotated space of hope and aspiration. At the same time, those (mining) frontiers are ambiguous spaces of self-realization and self-destruction Here, the frontier is geared towards particular, individual actors and their aspirations for a better life. Luning (2018) nevertheless insists that in the frontier pre-existing livelihoods or modes of production are often excluded from the discussion.

Tsing on the other hand considers frontiers not as a space or process, but as imaginative project influencing both (Tsing, 2003, p. 5101). They are highly unstable, mobile and simultaneously destructive and constructive. Frontiers are also not only produced by human action, but also by non-human agency. More importantly, however, Tsing (2003, p. 5100) defines the frontier as a zone of 'not-yet', not yet mapped, not yet regulated, not yet civilized, not yet exploited, and so on. She furthermore sees the frontier as a globally travelling project, which appears repetitively in different places and is not fixed to a certain area (Tsing, 2003, p. 5003).

In relation to the aforementioned conceptualizations, Rasmussen and Lund (2018, p. 388) deem the frontier to be highly relevant today in the commodification of nature, scrambles for land and resources, related political processes and imaginations. Again, the image of a vacant, ungoverned, pristine and uninhabited terrain is central to the concept. Frontiers are "transitional, liminal spaces in which existing regimes of resource control are suspended."(Rasmussen and Lund, 2018, p. 388), which are furthermore characterised by the influx of foreign actors in pursuit of their own interests, e.g. resources, and sparse administrative authority (Rasmussen and Lund, 2018, p. 392). At the same time, the frontier does not represent a space itself, but rather something that happens in and to space (Rasmussen and Lund, 2018, p. 388). Frontiers are furthermore highly dichotomic. However, Lund and Rasmussen do not refer to the dichotomy of civilized and savage, that among others characterised Turner's frontier concept, but rather that destruction and creation (Rasmussen and Lund, 2018, p. 389). The debris of destruction can as well be reused, reinterpreted and utilized in new processes of creation. Whereas frontiers are often considered as a phenomenon of the periphery, Rasmussen and Lund (2018, p. 391) argue, that frontiers can emerge everywhere where authorities unwillingly or deliberately refrain from exercising power. This conceptualisation heavily builds on Moore's commodity frontier. Moore (2000, pp. 411–412) considers the commodity frontier to be a vital part of capitalist expansion and extraction, which he also calls the frontier mode of expansion. It is important to note here, that Moore insists on the multiplicity of commodity frontiers, their parallel existence and overlapping. Commodity frontiers are a central example of frontiers in the context of mineral extraction. They emerge when new resources are identified, defined, commodified and hence become subject to extraction and production (Rasmussen and Lund, 2018, p. 391).

The various conceptualizations of the frontier outlined above only represent a glimpse, but provide a viable point of entry for its understanding. As Osterhammel, Rasmussen and Lund, and particularly Tsing show, the frontier is not a clearly identifiable, physical space. There are neither clear boundaries, nor stability, but blurriness, constant change and vagueness. Tsing's approach to the frontier as an imaginary that shapes processes and spaces, or consequently processes of spatialization, already brings together very crucial factors. In the frontier, processes of change and transition are at play, here, different worldviews, claims to power and sovereignty, interests and ambitions converge and produce something new in their interplay. It is particularly this aspect of activity, constant change and fluidity, its 'not yet-ness' that makes the frontier so fruitful. Consequently, the frontier is not a physically determinable space, but a process and imagination that is attributed to a terrain under certain circumstances, in which space is socially (re-)produced and (re-)negotiated. As Rasmussen and Lund point out, frontiers are closely intertwined with processes of territorialisation. It is hence necessary, to talk about territory and territorialisation.

2.2.3 Territory and territoriality

While the frontier represents a framework within which socio-economic transitions and spatializations take place, the latter materialize more physically. Those are however not uniform, but fragmented and at the same time are related to one another. In the context in focus here, I identify actions motivated the expansion of capitalism and territoriality as main drives of processes of spatialization.

The particularity of mining frontiers is, however, that their spatial outcomes are at least partially bound to the occurrence of mineral deposits. These sites are also where initial processes of spatialization in relation to extractive practices take place. The discovery of minerals usually results in claim-making, by the discoverer as well as others seeking profit from working the deposit. The claims made by individuals, groups or companies are clearly territorial.

According to Robert Sack (1986, p. 19), territoriality is "the attempt by an individual or group to affect, influence, or control people, phenomena, and relationships, by delimiting and asserting control over a geographic area", a spatial behaviour and strategy. Through these practices, actors produce territory. The distinction between territory and territoriality is a central aspect of the discussion. For Elden (2010, p. 801) territory resembles a political technology and is a geographically and historically dependent mode of socio-spatial organization. He argues, that in order to understand territoriality as a practice producing territory, it first has to be grasped what territory actually is (Elden, 2010, p. 811). Following Bernd Belina (2013, pp. 88-89), it is not territory that should be in focus, but the social practices of territoriality, which constantly (re)produce, (re)negotiate, consolidate and dissolve territory.

When it comes to territory as a concept, one of the pitfalls has often been, that state and territory were discussed inseparably. John Agnew prominently elaborated this issue, especially in the realm of international politics, which he calls the 'territorial trap'. He argues that territory and statehood keep on being treated unseparated due to three assumptions: Modern state sovereignty requires bounded territories; the division between domestic and foreign affairs; the congruence of state and society, respectively the state as container of society (Agnew, 1994, p. 59). State territory consequently tends to be perceived as a given and ahistorical entity, an assumption, which following Agnew, is misleading as the state is seen as a container. Nevertheless, he does not criticize territory as such, but the common equation of state and territory as "politics is not simply bottled up in territorial containers, stat-based or place-based" (Agnew, 2015, p. 47). Politics thus transcend territory. As Agnew (2005) elaborates in his conceptualization on sovereignty regimes, there is not necessarily a correlation between territorial control and state sovereignty.

Although plenty of discussions about territory are closely related to issues of the state, it is vital to acknowledge, that the production of territories, and thus territoriality is not restricted to the state. Calkins and Ille (2014, p. 53) argue that the dominance of the nation state in territorial discourses leads to the neglect of other forms of territory and territoriality. A territory can for example be a habitat, a metaphor for a certain social order (Löw and Sturm, 2005, p. 36) or simply a terrain claimed by an actor, who exercises control over it. Territorializing actors are not only states, but can be humans and non-humans alike, as well as institutions consisting of them (e.g. companies). An individual, a group of people, a territorial animal, be it a crayfish or a lion, are able to engage in territorial practices, although their strategies in doing so may differ widely. Territorial practices are not necessarily physical. Of course, physical territorial practices have been and are common and more easily identifiable. Fences, walls or border patrols represent outcomes of physical territoriality. As I will discuss in the following chapters, territoriality can also be practiced by legal or rhetoric means, visibly and invisibly.

Territories, and this is important, can neither exist on their own, nor do they simply exist once they have been established. The relationality of space as put forward by Lefebvre is central, as a territory can only be maintained via successful territorialisation in regards to other territories, respectively territorial or generally spatial practices. Basically, territory A can only be produced in interdependency with territory B, and vice versa. Moreover, territoriality establishes authority, and not authority territoriality (Rasmussen and Lund, 2018, p. 389). Territory along with authority need to be maintained by constant reproduction and renegotiation via processes of territorialisation.

For the thesis and its argumentation, the focus on territoriality, in various forms and strategies, and the production of territory as a result, as well as certain ideas and ideologies entangled with it, represents a cornerstone. Although I will mostly focus on macro and state-level, the ability of non-state actors to territorialize plays an important part. Consequently, territory represents the result of socio-spatial practices employed by state and non-state, human and non-human actors, that while different in form and expression, can be subsumed under the term territoriality or territorialisation. Territoriality, and hence territory, does not occur isolated, but is always relational.

2.3 A history of space in Tanzania's extractive sector

Although the analysis of spatial practices of actors, political and corporate, contemporarily involved in large-scale mining in Tanzania would already offer insights to the dynamics of processes of spatialization, but with a limited temporal scope. Since it is the aim of this study to trace the development of Tanzania's mining sector in its spatial organization, it is necessary to take a historical, longue-durée perspective that allows to identify junctures, transitions and continuities over time.

According to Lefebvre, history and space are also imminently intertwined. He states that "if space is produced, if there is a productive process then we are dealing with history" (Lefebvre, 1991, p. 46). This means that every spatial practice and process resulting in the production of space is embedded in a historical context. More importantly, Lefebvre calls for a history of space, which he locates somewhere between anthropology and political economy (Lefebvre, 1991, p. 116). According to Lefebvre:

> *"A history of space would explain the development, and hence the temporal conditions, of those realities which some geographers call 'networks' and which are subordinated to the frameworks of politics. The history of space does not have to choose between processes and structures, change and invariability, events and institutions. Its periodizations, moreover, will differ from generally accepted ones. Naturally, the history of space should not be distanced in any way from the history of time. The departure point for this history of space is not to be found in in geographical descriptions of natural space, but rather in the study of natural rhythms, and of the modification of those rhythms in their inscription in space by means of human actions, especially work-related actions. It begins, then, with the spatio-temporal rhythms of nature as transformed by social practice."* (Lefebvre, 1991, p. 116-117).

Accordingly, a history of space makes it possible to reconstruct particular developments over time while paying attention to their historical contexts. It provides for a perspective on processes of spatialization over extended periods of time. By focussing on the when and how of socio-spatial practices, it uncovers their impacts and related transformations and discuss contemporary dynamics in relation to historical ones. Middell (2019a, p. 36) similarly advocates for an historicised approach in examining processes of spatialization in order to detect changes, continuities and critically examine the presumed novelty of current processes. The historical overview of industrial and mechanized mining I want to outline here is consequently not a factual listing of historical data, but a combination of a historical outline and a history of space concerning mining in Tanzania. Consequently, I aim to contextualize historical developments with the respective processes of spatialization and practices at play and carve out potential parallels and junctures, transitions and continuities.

Based on Lefebvre's approach of the social production of space and Middell's concepts of spatial format and spatial order, the thematic chapters will discuss the historical development of Tanzania's mining sector in relation to space. The concepts enclave, frontier and territory, discussed above, have turned out to be vital and recurrent in the in this regard and represent spatial formats. Before engaging with the historical narrative, I will shortly outline the theoretical considerations connecting those spatial formats.

The locations of mineral deposits are strongly entangled with the spatialization of capitalist modes of production. When minerals, e.g. gold or diamonds, are discovered in a location, certain meanings are attributed to it. Through the process of attributing meaning to a site or location, Belina (2013, pp. 108-110) states, places are socially produced. What kind of meaning these are is however dependent on the prevalent ontology, since minerals do not necessarily have material value. Given that the periods discussed here are strongly dominated by a Euro-American, christo-judean ontology, based on a division of human and nature (Descola, 2014; Ingold, 2011) in which humans are considered able to dispose of nature and the commodification of nature has a long-standing history, the meanings attributed to mineral deposits usually are material value, potential economic profits and the like. The attributions can moreover be influenced by factors such as accessibility of the location, quality and size of the deposit or market demands.

Discoveries or the general availability of minerals in a location represents the basis for further processes of spatialization beyond place-making. Gold rushes embody the frontier par excellence. With the discovery of gold in a certain location, people enter come to the place holding minerals, motivated by imaginations of a better life based on the potential wealth from extracting minerals. The motivation is hence purely economical and often short-term.

According to David Harvey (2001, p. 306) primitive accumulation is a vital process at the frontier, which moreover represents the expansion of capitalist modes of production and the encounter of capitalism(s) with non-/pre-capitalist modes of production. This encounter brought about by the increasing presence of (foreign) actors aiming to accumulate and extract leads to transformations in prevalent production and social systems, creates interdependencies and destruction. Destruction and transformation caused by the expansion of capitalism, following Harvey (2001, p. 250), are dependent on the degree of capitalist penetration in the frontier. He goes on that expansion is an inherent characteristic of capitalism(s) and hence new frontiers for resources and commodities are constantly emerging (Harvey 2001, p. 121-122). This is important, because, as Tsing (2003, p. 5100) states, "frontiers are notoriously unstable". Frontiers can thus disappear as quickly as they emerged, when for example deposits are depleted, extraction becomes unviable or other factors contributing to the boom and bust cycle. The destruction happening at the frontier can be considered as creative destruction (Gordillo, 2014, p. 81; Tsing, 2003, p. 5100), since destruction serves the cause of creating an environment for capitalist modes of production. Gordillo (2014, p.83) furthermore points out, that the destructed can be included and reinterpreted in the newly produced.

Consequently, mining frontiers emerging around mineral deposits are dynamic, represent contact zones, zones of primitive accumulation and commodification, creative destruction and liminality. Mining frontiers are not coherent, but fragmented. I moreover do not consider frontiers as physically determinable spaces, but rather as patterns of practices and processes resulting in (temporal) routines. In this way, frontiers can furthermore be seen as framework for additional processes of spatialization. Rasmussen and Lund (2018, p. 396) have already pointed towards the deep entanglements of frontier and territory. In fact, the production of territories is an important part of the frontier.

Sticking with the example of the gold rush makes identifying the relation of frontier and territory relatively easy. Taking territoriality in the sense of Robert Sack, prospectors seek to establish control over a certain terrain, in order to be exclusively able to extract minerals there. These claims can be demarcated physically by signs, wooden posts, fences or whatever appears suitable to the territorializing actor. At the same time territoriality can be underpinned and legitimized by the acquisition of concessions and licenses. The results are mining territories.

While mining claims of individuals or small groups represent territoriality on a small-scale level, the practices and processes at play similarly apply for the production of mining territories on larger scales. Companies for example usually acquire larger concessions within which they territorialize larger stretches of terrain. It is important to acknowledge, that large concessions are not necessarily territorialized completely, but only in locations that are set for extraction. Other parts of the concession can be successively territorialized.

Territorialized mining sites play a critical role in capitalist modes of extraction, since they resemble what David Harvey (2001, p. 333) calls 'spatial fix' of capital. This means, that capital is (temporarily) fixed in one location in order to facilitate the exploitation of labour, natural and mineral resources and thereby to generate more capital. The spatial fix in Harvey's sense is paradox, because it interrupts the proclaimed constant expansion of capital in search of new sources of profit through the fixation in (semi-)permanent structures. However, the spatial fix in e.g. a territorialized mining site can be regarded as partial hibernation of expansion. The temporality of spatial fixes is reflected in their tendency to be destroyed for the sake of mobilizing capital, expansion and accumulation when the profitability of production of the spatial fix decreases.

The territorialisation of mining sites as temporal spatial fixes of capital is hence particularly important, because actors engaging in extractive practices seek to secure exclusive access to resources and maintain profitability as long as possible, which again is provided by minimal necessary capital investment. In some cases, especially when it comes to large-scale extractive projects, territoriality needs to be increased by the respective actors seeking to secure their exclusive access to resources. Intensified territorial control for example becomes necessary in settings of strong competition, danger for extractive practices due to unstable or unpredictable surroundings. The intensification of territoriality can be achieved by actors employing practices and thus processes of enclaving, that contribute to the isolation of the mining site from its surroundings and to the creation of 'islands of stability' (Hönke, 2009a, p. 276). In that way, actors, predominantly medium and large-scale, or even smaller companies, can produce extractive enclaves, which resonate with the concept of the enclave in the sense of Ferguson and others, as outlined above. Hence, a spatial fix – possibly in the context of a commodity frontier – is consolidated by territoriality resulting in territory, and can ultimately turn into an enclave by intensified territoriality.

While the territorialisation of mining claims and processes of enclaving represent two relevant ways in which territory is entangled in processes of spatialization in regards to mining. Nevertheless, territory comes in at another point, in relation to the nation-state, where it is coupled with notions of sovereignty. As implied above, the nation state is then often considered as antagonist to extractive enclaves, which is reflected in competing territorialities.

In short, the discovery or availability of resources, as far as they evoke any kind of desirability of potential profits, leads to the production of a frontier and thus the influx of actors seeking to profit from the extraction of these resources. In order to secure the exclusivity of access to the resources in a particular location, actors (individuals, groups, or corporate entities), exercise territoriality and thus, if successful, produce territories, in which they are able to control extraction and production. These mining territories range from small claims to vast concessions covering multiple square-kilometres. In some cases, given particular circumstances that require intensified territoriality, mining territories can be turned in to enclaves.

Of course, frontiers, territories and enclaves do not exist unaltered once they are initially produced, but they are challenged and iteratively (re-)produced. It is hence crucial to acknowledge that all of these processes of spatialization consist of the spatial practices employed by various actors that are constantly (re-)producing, challenging and transforming spaces linked to extraction and their interrelations.

Although the outline of basic spatial mechanisms related to resource production is a highly simplified and archetypical representation of complex processes of spatialization, that may not grasp every detail and definitely has its shortcomings, it is an attempt to condense the spatial processes at work in the mining economy to the spatial formats of frontier, territory and enclave, which represent core patterns of spatial practices that are constantly reoccurring.

The relation of these spatial formats as sketched above indicates, though rudimentarily, the potential existence of a spatial order of extraction in a globalised capitalist mining economy. Frontiers are the prerequisite fostering the production of mining territories and in circumstances of competition, instability and the like feed in to processes of enclaving and thus the production of extractive enclaves.

Undoubtfully, such a spatial order would entail more than frontiers, territories and enclaves. When speaking of global capitalism(s) in the context of mining, it has to be clear, though, that there is no monolithic capitalist system, but multiple capitalisms and varieties of capitalism that are intrinsically connected parts of a global system (Ebenau et al, 2013, p. 225). This study, with its focus on the Tanzanian case, can thus only account for a fracture of such a global extractive spatial order. However, it can be seen as an attempt and first step in that direction of a spatial order of global capitalist modes of extraction.

In the following chapters I will elaborate on how frontiers, territories and enclaves have been (re-)produced and (re-)interpreted by multiple actors in different political and economic contexts throughout the history of mechanized and industrial mining in Tanzania and how they interrelate throughout different periods. The subsequent chapter represents the point of entry to the histories of space and mining in Tanzania during the colonial period, 1885 to 1961.

3. Capitalist frontiers and extractive enclaves in colonial Tanzania, 1885-1961[2]

In this chapter I will discuss how the spatial organization of Tanzania's mining economy today has its roots in the colonial period. Shaped by frontiers of capitalist expansion, processes of (de- and re-)territorialisation and enclaving, the colonial mining economy provides the basis for later periods of mineral production. Colonial mining in Tanzania did, however, develop differently from the prominent examples of South Africa and Zambia, which were characterized by large labour migration schemes, company towns and often seen as archetypical modes of mineral production in colonial Africa. Consequently, the historical development of the mining industry in Tanzania does not only offer a different way of colonial mineral production, but also implies the continuity in its spatial organization between the colonial period and the decades of economic liberalisation and structural adjustment programmes, as later chapters will show.

In academic literature, the history of mining in the colonial era of today's Tanzania usually starts in the 1920s, after the tides of the First World War had calmed down and the British mandate over Tanganyika was established. In an article published on December 10 1935 and focusing on the significance of Tanganyika for gold mining, a correspondent of the Financial Times claims the real history of the gold-mining industry only started in 1921 ("Significance of Tanganyika's Auriferous Areas: Past and Present Exploitation", 1935). However, mining in the area, even in a mechanized and industrial way, has a much longer history. In order to reconstruct a history of space and extractive industries in what is today Tanzania, it is crucial to consider the precolonial and German colonial period, which were economically less relevant, but still important for the development of mining and processes of spatialization related to it.

For precolonial times, information about the extraction of minerals in the area is rather shallow and does not allow for a detailed account. Nevertheless, minerals have been extracted and processed in the area for long periods of time. Chirikure (2015, p. 17)

[2] Citations from archival sources in German have been translated to English by the author to make them more accessible to readers. In order not to blur the original wording, the German original texts are also provided in these cases. Where the German word is used, a translation in English is given.

shows that gold was produced in the vicinity of Lake Victoria around 800 and 400 B.C. In addition, Koponen (1988, p. 259) reports that salt was produced in saline plants in the western areas with its most notable location in Uvinza, east of Lake Tanganyika. Metallurgy was spread all over the region and predominantly concerned with ironworks for the production of tools and weapons. Like ivory, hides and other goods, the minerals found their way into the dense networks of porter caravans, which integrated the interior of East Africa to the Indian Ocean since the early 19th century (Pallaver, 2012, p. 3; Rockel, 1997, pp. 1–2). Mining activities of Africans in the interior of East Africa have, furthermore, been reported by several travellers. Richard Francis Burton (1860, p. 481), for instance, reports how people dig for iron ore and process it, John Hanning Speke observed avid mining, smelting and use of iron copper among the Wanyamwezi in the northwest of Tanzania (Speke 1864, p. 99).

Although missionaries, travellers and archaeologists provide evidence for a longstanding history of mining in the area in focus and the integration of minerals into trade networks inside and outside the continent, the artisanal practices of the precolonial era represent rather the foundation for processes starting with the intensified expansion of capitalist modes of production during the colonisation of East Africa.

In comparison to other regions of Africa known for vibrant mining economies at the time, the development of mining in German East Africa was economically of little relevance. However, it offers a point of entry for tracing processes of spatialization, such as the expansion of capitalism in commodity frontiers, territorialisation and enclaving, that are highly relevant in the historical (re-)shaping of the sector until today. So far, only few authors have explicitly dealt with mining in German East-Africa at all (Hetzer, 1995; Lemelle, 1986; Tetzlaff, 1970). In order to identify the mentioned processes and the actors driving them, it is necessary to shortly discuss the history of mining in German East Africa as well as in Tanganyika under British mandate.

Before delving into the historical account, it is crucial to acknowledge some shortcomings of the source material it is based on. The sources for the colonial period are mainly files and documents from the colonial administration as well as reports and articles from British and German media of the time. They hence reproduce colonial and imperialist as well as contemporary critical perspectives on the matter and tend to downplay and even completely ignore the agency of Africans in the development of the mining industry in Tanganyika. However, as several scholars have outlined, African agency has played a quite significant role in the development of colonial economies in Tanzania, be it in the presence/absence of labour, resistance to or fostering of colonial economic projects or in other ways (Iliffe, 1979; Koponen, 1984; Sunseri, 1998). Andreas Eckert (2006, p. 249) emphasizes the position of African actors as intermediaries and translators, being not only closely involved in the workings of the colonial state, but also able to shape them to a certain degree. In the same vain, Michael Pesek (2005, p. 300) points out, that integrating Africans into the colonial project and utilizing their agency in a plethora of roles was in fact vital for the establishment and maintenance of colonial rule and economy. Frederick Cooper (2014, p. 21) moreover insists that Africans had significant social resources and agency in dealing with colonizers and unfolding capitalist structures.

The same applies to the mining economy. Cassandra Mark-Thiesen underpins the significance of African agency for the emerging mining economies in colonial Africa. Not only did African workers outnumber Europeans massively – Mark-Thiesen quotes 17,044 recorded Africans and only 611 Europeans in the Wassa gold fields of the Gold Coast in 1904 – but shaped the economy as recruiters and suppliers (Mark-Thiesen, 2018, p. 2). The ratio of Africans and Europeans involved in mining in colonial Tanzania is without question similar to the aforementioned number, alongside a significant number of Indians as a third party, who occupied positions in-between Africans and Europeans in the hierarchies, in the role of traders and managing staff in mines. Africans however were the backbone of the colonial mining economy. As diggers in the mines and as porters in the caravans, African men and women were indispensable for the expansion and the persistence of colonial mining. As Rockel (1997, p. 6) shows, without porters, the undertaking and establishing of economic endeavours in the colonies would have been impossible. Bluntly put, "without porters, nothing would have moved." (Rockel 1997, p. 2).

When Africans are explicitly mentioned in the context of mining in the German Federal Archive and the Tanzanian National Archive, questions of labour are dominant. The availability of the work force, which was constantly scarce due to the low population density and high demand of porters, and distribution by the colonial government to the favoured plantation and construction sectors was frequently mentioned. The issues of labour availability, scarcity and their influence on the mining sector in colonial Tanzania are discussed in detail by Lemelle (1986). Ethnic attributions furthermore were an important factor in the labour sphere. The German colonizers preferred Africans categorized as Wasukuma and Wanyamwezi for the work in the mines because they were considered as hard-working, good porters, and talented for mining work and mechanics. This circumstance also stems from the mining activities conducted by these groups. In turn, ethnic stereotypes have not only been used by the colonizers, but also utilized by Africans in the construction of identities in order to be recruited for wage labour in the mining economy. At the same time, however, claiming other ethnic belonging or intentionally moving away from certain areas were strategies to avoid recruitment. The prevalent "wild recruitment" system (Sunseri, 1998, p. 564) with high numbers of recruiters and generally scarce labour force hence gave way to the creative use of ethnic stereotypes and other strategies. Hence, by staying, leaving and intentionally participating in the expanding mineral economy in the colonial period, the local population significantly influenced the ways in which the development of mining took shape in colonial Tanzania.

The involvement of Africans in the mining sector was not at all times immediately connected with extractive practices, but part of different dynamics and processes. For example, mines were targeted in course of uprisings and raids. Despite the many smaller and larger uprisings against the colonizers, miners in the regions of Mara and Mwanza district reported sporadic attacks of what they identified as bands of Maasai, against whom the miners requested protection from the colonial state (TNA G6/449). Although the Maasai attacks did not specifically target mining camps, but colonial settlements in general, they represent a means of general resistance.

As the above paragraphs indicate, the development of the mining economy was by no means a one-sided process simply grafted onto colonial Tanzania by external actors without obstacles. On the contrary, it was an asymmetrical interplay between local, African actors and foreign, colonial actors and capital that formed the mining economy and its spatial organization as discussed in this chapter. Given the historical source material and the overall focus on the expansion of foreign mining capital in colonial Tanzania, this chapter will only peripherally touch upon the agency of Africans. This should however not be perceived as neglect, but as an illustration of asymmetric processes.

3.1. From 'Platz an der Sonne' to African El Dorado? – The mineral economy in German East Africa

There is little point in retelling the story of the German colonization of East Africa, which has been outlined by many people before (Eckert, 2007; Gwassa, 1969; Iliffe, 1979, 1973; Pesek, 2010, 2005; Tetzlaff, 1970). However, a few pillars in the making of German East Africa have to be clarified in order to provide an adequate basis for the development of the colonial mining economy. As happened in plenty of places before, the colonization of what would become German East Africa was not initially driven by political expansion, but by the desire for profit and adventure of private businessmen, the majority of whom were also members of the colonial military. The aim of colonizing East Africa was thus not primarily political, but to build a monopoly on local markets, resources and goods (Herzog, 1986, p. 37; Iliffe, 1973, pp. 11–12).

In 1884, shortly before the Berlin Africa Conference, Carl Peters, in his function as the head of the German Society for Colonisation, acquired 140,000 square kilometres of land in the hinterland of Bagamoyo in 'contracts' with local authorities (Pesek, 2011, p. 50; Reichard, 1892, pp. 8–11; Tetzlaff, 1970, pp. 25–27). Although Peters' crooked and unauthorized acquisition of land was disapproved of by the German government in the beginning. The company received the protection of the *Kaiserreich* in 1885 and was transformed into a charter company following the example of the British charter companies granting them extensive power (Herzog, 1986, pp. 38–40). Hönke (2009a, p. 274) describes these companies as hybrid entities following private profit interests while having state-like power and functions. In consequence the newly formed German East Africa Company (DOAG) became a political entity administering the territory of German East Africa while at the same time pursuing its predominantly economic interests (Tetzlaff, 1970, p. 25-27). When in 1890 the company faced bankruptcy and was unable to deal with the Abushiri War (1888-89) in the coastal areas by itself, the private, economic imperialism of the DOAG was replaced by state-led imperialism. The German

Kaiserreich took over the territory acquired by the DOAG and turned it into a protectorate (Herzog, 1986, p. 45; Pesek, 2005, p. 11; Tetzlaff, 1970, p. 30-34).

Figure 1: German administrative districts and centres.

(Source: Mascarenhas, 1971, p. 107).

By then, the de facto territory of German East Africa was mostly confined to the coastal areas, with Tanga, Bagamoyo and Dar es Salam being important ports and nodes of traffic and communication with Germany. Pesek (2005, p. 17-18) argues that a cohesive colonial territory only existed on the maps. He claims, that the colonial state was an anti-Westphalian or pre-Westphalian state focussing on core spheres of territoriality and sovereignty (Pesek, 2011, p. 50). From the coast, the German influence spread out into the immediate hinterlands. The highlands stretching from Tanga via the Usambara mountains and Mount Kilimanjaro to Arusha were the prime destination of German settlers and planters due to the mild climate and fertile soils. In addition, the Uluguru mountains around Morogoro attracted plenty of settlers (Kaiserliches Gouvernement von Deutsch-Ostafrika, 1910, p. 7).

All of these areas are situated in rather close distance to the coast. By 1905 the German colonialists had established their control over the coast. The expansion into the more remote areas of the colonial territory however remained very slow. Hence the intensity of control in the coastal areas was not matched elsewhere and the southern and western regions remained mostly neglected, due to lack of personnel, funds, infrastructure and exploitability (Iliffe, 1973, pp. 16-18). Moreover, the limited funds and resources of the colonial government led to a high degree of brutality and symbolic demonstrations of power during the colonial expansion (Pesek, 2005, p. 191). Investment, despite being comparatively small anyway, targeted the already well frequented areas. Although the land law offered incentives to settlers and investors, while preventing land speculation, the colonial government in a brochure for potential German migrants published in 1910 stated “Unoccupied land in German East Africa is still plenty. Generally, all masterless land is crown land and can only be acquired from the government”[3] (Kaiserliches Gouvernement von Deutsch Ostafrika, 1910, p. 5). Critique regarding the purpose of the German colonies, which were wide spread among the public due to the assumption that the overseas endeavours of some people were financed by taxpayers, contributed to the limited number of German migrants coming to German East Africa.

Settlements comparable to those in the coastal areas and the Usambara and Uluguru mountains were not established in the interior of the colony. That part of the colony had seen only little colonial presence, especially in the early years of German rule. Only the few military and trade posts such as Tabora, Mwanza or Ujiji attracted a small number of people looking for business opportunities, a better life or their personal African adventure. Those islands of colonial rule (Pesek, 2005, p. 244) represented nodes in a loose and patchy network of power, communication and trade. The retained degree of effective colonization and economic utilization of large parts of the colony was due to

[3] „Freies Land in Deutsch-Ostafrika ist noch in weitem Umfange zu haben. Im Allgemeinen ist alles herrenlose Land Kronland und kann nur von der Regierung gekauft werden.” (original text).

financial constraints on the one hand, but also due to the lack of quick and reliable means of transport in the German colony. Porter caravans during the German colonial period remained a central means of transportation (Rockel, 1997, p. 2). This circumstance also greatly influenced the pace and extent of geographical expansion of the mining sector in German East Africa,

3.1.1 The genesis of mining in German East Africa

Small-scale artisanal mining (ASM) had been practiced by locals in the precolonial era and during colonial occupation. In the early years of German occupation, the entire colony with few exceptions was considered as (geological) terra incognita. Exploration for minerals received little attention in the beginning, due to the imponderabilia in establishing colonial rule beyond the coastal areas, insufficient personnel and funds, as well as the prioritization of the plantation economy in German East Africa. Only little information about the mineral endowments and geological particularities was readily available especially as local knowledge tended to be ignored. There was initially little interest in the mineral resources of the colony which is also reflected in the fact that until 1898 prospecting and mining in the colony was administered under the Prussian mining law of 1865.

Following mineral discoveries, the first systematic prospecting missions for minerals were conducted in the early 1890s (Kimambo, 1984, pp. 55–56). By 1892, the surveys by government geologists and reports of settlers about mineral finds and local mining activities confirmed the existence of relevant minerals in different parts of the colony. Successively, the colony attracted the attention of German geologists resulting in research trips and publications in the following years (Bornhardt, 1899, 1898; Kossmat, 1897; Lieder, 1892; Stromer von Reichenbach, 1896).

Iron ore was found in the districts of Mwanza, Tabora and Ujiji, lead and salt in Iringa, coal at Lake Nyasa, and more importantly large deposits of mica in the Uluguru mountains in Morogoro district as well as gold in north-eastern and north-western parts of German East Africa (BArch R1001/170, pp. 38-42; R1001/190, pp. 56-77; Hetzer, pp. 1995, 29-31; Tetzlaff 1970, p. 173; TNA G8/436, G8/487). In 1894, large deposits of gold were reported in the vicinity of Lake Victoria (Geological Survey of Tanzania, 2015, p. 27). Karl Futterer in 1895 insisted that the geological circumstances of German East

Africa hinted to large gold deposits, comparable to those known in South Africa. Only a lack of reports would hinder further information (Futterer, 1895, p. 158). The government geologist (*Bergassesor*) of German East Africa, Giani, underpinned these assumptions and reported the discovery of gold deposits close to Lake Victoria with an estimated share of 189 grams of gold per tonne (BArch R2/42462, p. 176; TNA G/462, pp. 6-7). However, only particular scattered deposits could be mined profitably, as in other parts the proportion of gold was too low. Due to the cost of transport and extraction, 10g of gold per tonne marked the limit of mineability for Giani (TNA G8/462, p. 7). He furthermore noted that gold deposits in German East Africa could be found in areas that were more than 100 kilometres apart from each other (TNA G8/462, p. 13), which suggested a fragmentation of deposits over vast stretches of the colony rather than a punctual concentration.

However, the colonial state was not capable of conducting a sound, systematic geological survey of the whole colony. Not only did it lack the capital for such an endeavour, but also the amount of geological staff required for such an enormous mission. The head-geologist of German East Africa was often already occupied with administration tasks and sporadic explorations. The lack of fast transportation within the German colony meant that those tasks resulted in the absence of the geological staff for several months. An upscaling of the state-led geological survey was hence impossible. Nevertheless, the growing awareness of German East Africa's potential called for ways to foster the exploration and extraction of mineral resources without financial engagement of the state. Even though investments by larger mining companies from Europe and South Africa could have been expected, it was only small conglomerates and petty capital that engaged in privately funded exploration. This is unsurprising, since highly capitalized companies usually do not explore, but buy small companies after the have conducted exploration work and proven the viability of mineral exploitation in a certain place. Hence, once deposits were discovered by individual prospectors or small companies, larger companies took over the claims.

The *Verordnung des Kaiserlichen Gouverneurs von Deutsch-Ostafrika betreffend des Schürfens*[4] of 1895 (BArch R1001/200, p. 57) introduced a concession system, which

[4] Ordinance of the imperial governor of German East Africa regarding prospecting.

added to the Prussian legislation of 1865 and contradicted the strong mercantilist policies pursued in Germany itself. Prospecting, exploration and extraction consequently were transferred into private hands under permissions granted by the colonial authorities (Emel et al., 2011, pp.73-74). This decision also marked the adaption of a sovereignty system, in which resources belong to no one until they are discovered and the state only receives resource rents in the form of royalty payments and administration fees (Emel et al., 2011, pp. 73).

According to the amendment, prospecting licenses had to be obtained from the *Bergbehörde*[5] and were valid for six months, and renewable. Those who were not residing in German East Africa had to appoint a representative within the colony. The license enabled the holder to prospect over all the colonial territory and demarcate a circular area with a diameter of two kilometres within the concessionary area. A demarcation sign in the centre of the circle (see Figure 2) was mandatory in order to make the claim official and enable the prospector to exclude others from digging there. Prospecting on public spaces, roads and graveyards was prohibited, mineral discoveries had to be reported immediately to the nearest administration office (BArch R1001/200, p. 57).

Attracting private capital to the emerging mining sector in German East Africa had become a higher priority and the incentives provided with the concession system contributed to a slow but steady growth. Although in 1895 only six prospecting licenses were granted, 28 were given out in the following year. Until 1899 a total of 79 prospecting licenses had been distributed and four prospecting fields were operational. Two of which were operated by individual entrepreneurs (Knochenhauer: Neu Klondyke; Marquardt: Louisenfelde) and two by mining-syndicates (BArch R1001/201, 117). Already in 1896, several mining-syndicates had been established and were mainly focussed on prospecting and extracting gold, e.g. the *Usindja-Gold-Syndikat*, *Iramba-Gold-Syndikat* and *Irangi Gesellschaft* (BArch R1001/201, p. 117; Tetzlaff, 1970, pp. 170). However, for years to come their activities were restricted to exploration work and the extraction of samples. Results of the first exploration efforts were thus relatively meagre and actual mining output was economically insignificant. Prospecting in German East

[5] The Bergbehörde was the government office responsible for mining in German East Africa.

Africa nevertheless produced important discoveries during that period, e.g. the extensive mica deposits in Uluguru, gold in Tabora district or coal deposits at Lake Nyasa in 1898/99. The latter were deemed unviable to mine as long as there was no local market for it since steamers and railways were not yet established in the colony to a reasonable extent (BArch R1001/170, pp. 38-42).

Figure 2: Demarcation sign of a mining field claimed by C. Pfeiffer.

(Source: Koloniales Bildarchiv Frankfurt, 0018-020-6)

At the turn of the century, only a small percentage of the minerals in German East Africa had been explored and documented. The issues with the mere size of the colony, the lack of quick transportation, insufficient personnel and funds were still prevalent, although the interest of private investors was growing, just slowly. The majority of known deposits at that time, Hetzer (1995, p. 6) argues, had only been discovered by chance and the mining sector in German East Africa was far from having any significant impact, especially regarding the global market.

The modest growth of the mining sector in the 1890s and its promising future were important enough for the colonial government to initiate new regulations specifically targeting mining in German East Africa. Finally, in 1898, the *Verordnung zum Bergwesen in Deutsch-Ostafrika*[6] (1898) was passed, replacing the combination of Prussian laws and amendments, which did not sufficiently cover the particularities of the colony sufficiently anymore. For the most part, the new ordinance was based on its predecessor and adjusted to the state of mining in German East Africa at the time. In §1, minerals were excluded from the right of disposal of land holders and divided into two categories, precious and common minerals. The former included gold, silver, platinum and gemstones, while the latter covered all other metals, coal, graphite, mica and semi-precious stones. All activities related to the extraction of these materials were subject to the legislative framework, regardless if for private or public profit. However, the extraction of iron ore, copper and graphite by the indigenous population was not covered by this regulation. It was considered as a traditional practice that did not need to be regulated and was barely incorporated into the colonial economy.

Prospecting in general was promoted in the colony. While officially everybody was entitled to apply for a license, in practice there were plenty of limitations, language and capital being the major ones. Hence, 'everybody' meant white males with sufficient capital. Public officers and affiliates of the military of German East Africa were explicitly excluded from participating in prospecting and mining activities without special approval. However, the majority of Germans in the East Africa at the time were in some way or another connected to the military. Consequently, many were involved in mining activities despite the interdiction. As a prominent example, Lothar von Trotha[7] held shares in several mining companies operating in the colony. Provided that a license had

[6] Mining Ordinance for German East Africa.

[7] Lothar von Trotha (1848-1920) was member of an aristocratic family and the commander of the military forces of German East Africa. He is infamously known for putting down the Wahehe rebellion, among others, and ordering the extermination of the Herero in German South West Africa.

been obtained, the licensee was entitled to dig for minerals all over the colony, except for areas reserved for public endeavours or were liable to special agreements. According to an announcement by the *Bergpolizei*[8], prospecting and mining was forbidden in the coastal areas of Tanga, Pangani, Bagamoyo, Dar es Salam, Kilwa and Lindi as well as areas in the radius of one kilometre starting from the boundaries of larger settlements. Basically, the de jure territory of the colony was open for mineral exploration. As long as consent was given and compensations paid, even land under private title was available for prospecting purposes.

The establishment of a locally bound prospecting field remained consistent with the prior regulations. Fields for precious minerals were limited to the size of 400 by 200 meters, while common mineral fields measured up to 1200 by 600 meters, in which the licensee had the exclusive right to mine. An official survey could then be requested by the licensee from the administration. One prospecting license entitled to the establishment of one prospecting field at a time, in order to open a new prospecting field, the former one had to be closed down. Since the number of licenses obtained per person was not limited and only restricted to the ability to pay for the fees, operating several prospecting fields at a time was nevertheless easy and possible. Each of those fields could be converted into a mining field by application to the *Bergbehörde*[9], which enabled the licensee to start regular mining activities.

Although the regulations in general were promoting prospecting activities by individuals and groups, the fees fixed in the legislation for licenses, prospecting and mining fields and were considered too high and exclusionary. The colonial administration countered this critique by stating that the fees were appropriate and aimed to attract only those serious about participating in the mining business in German East Africa and able to sustain their operations. At the same time, fortune seekers and individuals without sufficient capital, looking for adventure and prone to end up causing problems were actively discouraged through these measures.

With the new legislation in place and the news about mineral discoveries in German East Africa spreading in geological circles and in newspapers, the mining sector experienced an increase in interest at the beginning of the 20th century. In the early 1900s, the

[8] The Bergpolizei was the responsible for observing and policing mining activities in the colony.
[9] The Bergbehörde was the government agency responsible for mining.

German colonial government had received numerous requests regarding information about the mining regulations in effect in German East Africa not only from the German Kaiserreich, but from Kenya, South Africa and Rhodesia, too (TNA G8/438).

Figure 3: Mining pit with African diggers and European overseer.

(Source: Koloniales Bildarchiv Frankfurt, 006-1130-1).

Discoveries of lucrative mica and gold deposits was particularly important for this development. In January 1904, the colonial government reported that within the last year 7.48 kg of gold and 21,000 kg of mica had been produced in German East Africa and 14 prospectors were actively working in the territory. 122 prospecting licenses had been given out, of which 44 had already established prospecting fields. The highest number of new licenses was recorded in the district of Mwanza (45 in total), where promising gold deposits had been reported in prior years. Nevertheless, not all prospecting enterprises were successful or sustainable, thus the administration noted the expiration of 71 licenses (TNA G8/477).

The mica production in Morogoro and the Uluguru mountains was thriving already by the 1890s. Open pit mining, although on a small scale, provided fertile ground for mining enterprises. Doubtlessly the location of Morogoro just roughly two hundred kilometres from Dar es Salaam contributed to this situation as it reduced the cost and time of transportation and increased the profitability of mica mining. The relevance of the mica deposits in German East Africa furthermore is shown in the interest of German industrial companies. Between 1902 and 1907 the colonial government received numerous requests about information regarding production in Morogoro from companies such as the *Siemens-Schuckertwerke*, the *Allgemeine Elektricitäts-Gesellschaft (AEG)* and others involved in the emerging electronics industry in Germany (BArch R1001/211, pp. 48-87). Before, the companies imported the required amounts of mica from elsewhere, mostly British dependencies. Being able to source mica from within Germany and its colonial extensions was hence not only a question of pricing and availability, but also one of patriotic duty.

While the extraction of mica was reasonably productive, gold mining caught up slowly. Although quite remarkable deposits had been discovered earlier, the production often lacked viability and many prospectors had to face financial problems. Still, the temptation to make a good profit from gold mining in German East Africa lured capital into the colony. Several geologists, publicly and privately funded, continued to prospect for gold in the colony. The prospector Götze in 1902 discovered high grade gold deposits suitable for open pit mining close to Ikoma (Hetzer, 1995, p. 29), while Dr. Tornau, at the time the acting *Bergassesor*, in 1904 reported gold in the areas of Ussongo, Iramba and Ikoma, South of Mwanza, Usindja and the Baridi Mountains (BArch R1001/190, pp. 56-77; 96-105). Tornau's accounts of the discoveries in Ussongo, a six day's journeys north of Tabora, and at Ikoma were particularly promising, as he deemed them to be comparable to the highly productive gold areas of the Transvaal and hence desirable to exploit (TNA G8/447, pp. 1-3, 7).

In 1902, the businessmen Ernst von Mandelsloh and Paul Wilken applied for a concession to prospect for alluvial gold in river beds all over German East Africa. According to the granted concession, the company was allowed to occupy stretches of the rivers flowing into Lake Victoria as well as parts of the immediate shore of the lake (BArch R2/42641, p. 17). Additionally, rivers ending in the Indian Ocean, such as the

Rovuma, Rufiji, Pangani and Umbekuru were included in the concession (BArch R2/42641, p. 36). The concession was initially granted for 25 years, open for renewal and allowed for the acquisition of crown land for the purpose of building settlements, agricultural facilities and docks necessary for the enterprise (TNA G8/449). Wilken and Mandelsloh were in return required to start the production using floating dredges within five years and employ several Europeans were to monitor the operations (BArch R1001/167, 56-58; BArch R1001/208, 3-36; TNA G8/449).

In the following years Wilken and Mandelsloh expedited their operations and reported that their prospectors had achieved delectable results that encouraged the intensification of work, several goldfields were established. However, the activities in Mwanza district faced an unexpected delay due to repeated assaults by local groups identified as Maasai (TNA G6/449). Although Wilken's and Mandelsloh's enterprise started with high hopes, it remained a short-lived operation. In 1908, the colonial administration advised the German Colonial Office (*Reichskolonialamt*) to revoke the concession because work in the concessionary areas had been stopped years ago and profitable production was futile. Plus, both Mandelsloh and Wilken did not respond to inquiries by the local authorities (BArch R1001/209, p. 2).

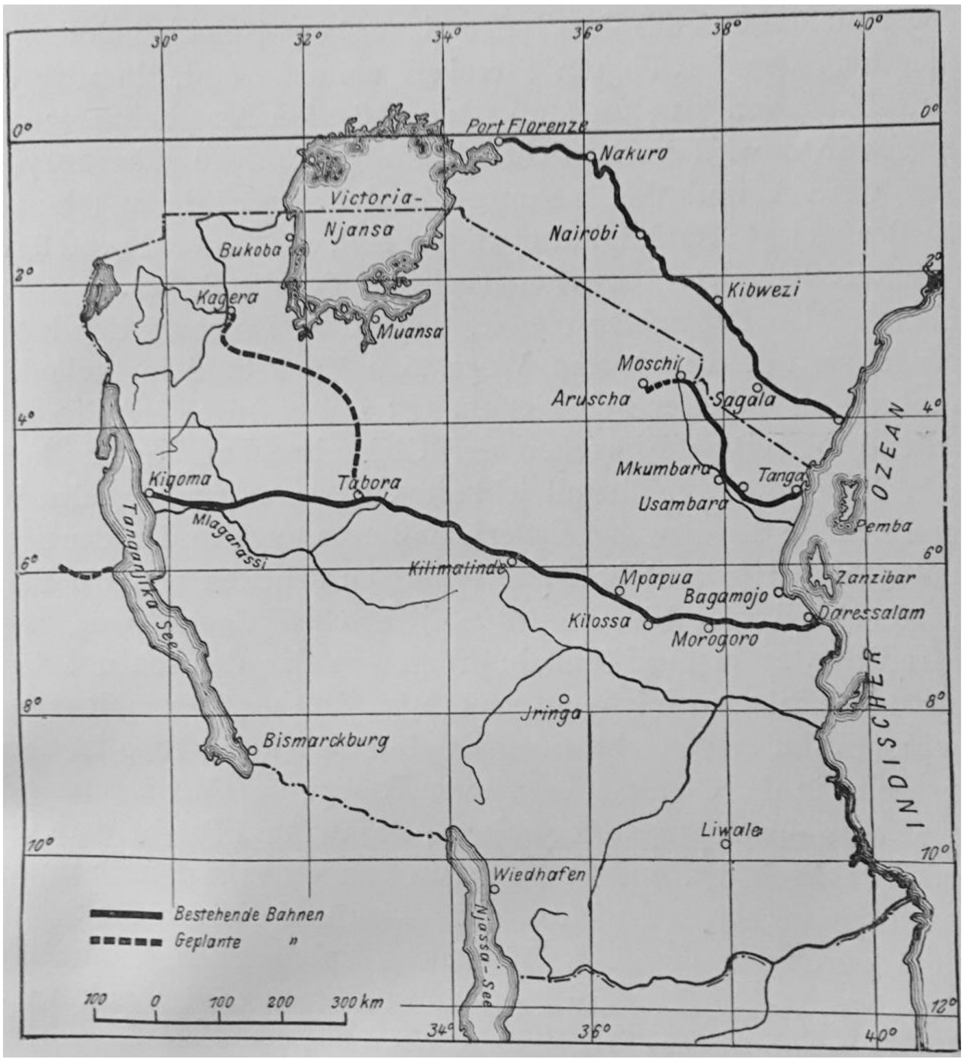
However, it was not only Wilken and Mandelsloh who had to deal with disturbances and financial issues. The facilities of the *Lindi company*, a garnet mining firm, for example, were destroyed during the Maji-Maji rebellion in 1904 and the *Usindja-Syndikat*, one of the first mining companies in the colony was closed down in 1906 due to financial reasons (TNA G8/462). The *Disconto company* found itself in a similar situation as it was not able to sustain the allotment of its concessions, for which it also blamed the absence of infrastructure and the lack of security in German East Africa. As a strategy to cut costs, *Disconto* attempted to open its concessions to private diggers. However, in the end this did not make much of a difference (TNA G8/460, pp. 2-5).

While not a mining company in the first place, the *Deutsche Ostafrikanische Eisenbahngesellschaft* (DOAEG) was granted considerable mining concessions with the contract of building the central railway. Within an area demarcated by imaginary lines in a distance of 100 kilometres on each side of the railway, starting outside of Dar es Salaam, the company was free to take possession of 2000 hectares per kilometre of constructed rails according to their preference, excluding private property and some areas along the route that were reserved for the colonial state. Inside of this 100 kilometre-zone, a total of 115,000 hectares (500 hectare per kilometre) divided in a maximum of ten sections was furthermore available to the DOAEG for the purpose of mineral extraction (BArch R1001/97). The company was however obliged to report all mineral and scientifically relevant findings, especially if they were closer to the railway line, to the administration. In case the state decided to engage in extraction itself, the DOAEG would have received 25 percent of the revenues generated by extractive practices (BArch R1001/167, p. 120). However, the colonial state generally showed little to no intentions to engage in the exploitation of minerals, since that would require them to work the deposits in unfavourable locations with uncertain returns.

Although the concession of the DOAEG did not immediately result in mining enterprises, it underpins the readiness of the colonial government to give resource extraction entirely to private, corporate actors in the mineral exploration and extraction, which on the one hand provided incentives for investors, but on the other hand the lack of state commitment to the sector posed an obstacle to the rapid development of the sector, since crucial infrastructures and support were absent. While the mining sector overall significantly grew in the early years of the new century, it was still not enough to legitimate the existence of a dedicated state agency. In response to the Ministry of Foreign Affairs in 1905, the colonial government in Dar es Salaam insisted that the management of mining affairs would have to remain under the control of local administrations as long as there were still no quick means of transportation and significantly developed mining centres (BArch R1001/202, p. 100).

Indeed, the absence of quick and reliable transport infrastructures in German East Africa hampered the pace of expansion significantly. Prior to the arrival of German colonialists, porter caravans, established at the beginning of the 19th century by Zanzibari merchants (Koponen ,1988, pp. 255-259), were the dominant means of trade and transport. Even under colonialism this laborious means of transportation remained in place due to the lack of other means (Reichard, 1892, p. 297). Although a dense network of porter caravans existed to transport goods from the interior parts of the colony to the coast, the transport of heavy machinery and mineral produce to and from the interior of the colony was a slow, expensive and difficult process.

Figure 4: Railways in German East Africa.



(Source: Baltzer, 1916, p.33).

Hence, plans to construct railways in the colony quickly gained support from the state and representatives of colonial companies, offices and the military. Not only would the economic profitability and outreach of the state increase tremendously –as Baltzer argues, the railway could cover the same distance as a caravan twenty-four times faster while being cheaper and transporting a manifold amount of goods (Baltzer, 1916, pp. 19–20) – but German railways in East Africa had also to compete with the highly successful Uganda railway in British territory.

Plans for railway lines were first underway in 1891, their construction however only started years later (Baltzer, 1916, p. 27,45; Herzog, 1986, p. 60). Until 1914, two major railway lines had been built in German East Africa, the *Usambara-Bahn* and the *Zentral-* or *Mittellandbahn* (see figure 4). The Usambara line in the north connected the fertile and temperate areas, which were highly popular for plantation agriculture, to the port of Tanga. In the years before the first World War, the line was extended to Moshi. Set to serve as the colony's main transport route, the *Zentralbahn* aimed at connecting larger posts between Dar es Salaam and Kigoma Ujiji, and thereby unlocking the economic potentials of adjacent areas and consolidating colonial rule. Moreover, the plans for the *Zentralbahn* aspired to profit from extraction and trade in the Congo (Baltzer, 1916, p. 56). The benefits of the railway just slowly accrued from on the mining economy since the construction only started in 1905, reached Morogoro in 1907, Tabora in 1912 and was completed in 1914 (Baltzer 1916, p. 45; Herzog 1986, p. 60). Hence, the mining economy of German East Africa profited from the availability of improved transport infrastructure for only a short period of time.

3.1.2 Colonial commodity frontiers and mining territories

The early years after the colonization of East Africa by the German Kaiserreich were characterized by frontiers, political as well as economic. While political frontiers can be detected in the efforts of the colonial state to establish and consolidate its rule, economic frontiers are synonymous with the expansion of capitalism and primitive accumulation (Harvey, 2001, p. 306).

In German East Africa, those kinds of frontiers were deeply entangled and often dominated by economic motifs. The immense power charter companies such as the DOAG or the DOAEG enjoyed as hybrid entities (Hönke, 2009a, p. 274) and the state assistance for economic endeavours, e.g. in the form of protection by the military, furthermore, indicated the priorities.

The colonial state, through the provision of legal frameworks of property rights and ownership, a monetary system and so on became the facilitator of capitalist expansion (Harvey, 2001, pp. 272-273). Thus, in processes of spatialization, political practices are often subordinated to economic aspirations. According to Harvey (2001, pp. 121-122) the constant drive of capital to expand geographically, or more specifically the efforts of actors to generate profits from capitalist modes of production, results in the constant production of new frontiers. These frontiers are however not random, but often dedicated to particular commodities, such as agrarian products, minerals or land. According to Moore (2000, pp. 411-412), there are multiple commodity frontiers, differentiated by the respective goods and the constraints of their production. Commodity frontiers represent the framework of socio-spatial transformation by capitalist modes of production.

The emerging mining sector in German East Africa between 1890 and 1906 was dominated by the production of frontiers and the expansion of capitalism. By the precolonial era minerals were already part of the trade networks reaching out to the Indian Ocean and hence of capitalist structures of foreign trade. The colonial situation however represents the increased influence of external actors and a stronger integration to world markets. Overall, the drive for expansion is most notably reflected in individual, corporate and state-induced prospecting missions, although the latter could be considered as state assistance to the expansion of the colonial economy. The search for economic opportunities based on resource discoveries led into terrain that had previously not been subject to such practices motivated by accumulation.

Dumett, referring to the late 19th century Gold Coast, points out that mining frontiers in Africa are particularly characterized by being scattered and forming islands of development (Dumett, 2012, pp. 33-34). This implies, that mining frontiers are not spatially contingent. Even more so, following Anna Tsing (2003, p. 5101), frontiers are not physical in themselves, but imaginations applied to patches of mineral-rich terrain and reproduced in relation to those. Consequently, the discovery or even the rumour about vast mineral deposits can lead to the production of frontiers. During the 1890s, when reports of mineral discoveries gradually reached the colonial metropole and neighbouring colonial territories, hence mining frontiers were produced in different parts of German East Africa, e.g. in the Morogoro area and the south of Lake Victoria. However, the restrictions given by the absence of quick means of transport in German East Africa critically influenced the pace of capitalist expansion and the production of mineral commodity frontiers.

Frontiers, however, also influence other processes and practices of spatialization. The extraction of minerals is, also due to the fact that mineral deposits are spatially bound, confined to physical locations. Consequently, actors seeking to engage in mining are required to establish a physical presence, which Harvey (2001, p. 310) refers to as the spatial fix of capital. This means that capital is temporally bound in a certain location in order to generate profit. This indicates the importance of territoriality to secure profits. In regards to mineral extraction, territoriality, resulting in territory, is already deeply inscribed in the vital actions of setting up claims on a piece of land in order to prospect there and exclude others from doing so. Achieving and consolidating exclusive control over the respective terrain, and hence over the minerals recovered from it, is the core aim of territorial practices applied by prospectors and mining companies in this scenario. The successful implementation of territorial practices in consequence produces territory (Sack, 1986, p. 24). As Belina (2013, pp. 88-89) shows, once established, a territory does not simply persist, but needs to be constantly reproduced by various actors employing territorial practices. He emphasizes, that not the result, territory, as such is important, but the social practices of territoriality. Hence, without territorial practices, the resulting territory would become obsolete. Furthermore, territories and territoriality do cannot be produced in isolated ways, but only in relation to practices and processes employed by other actors. Territoriality is then for example articulated in the negotiation and demarcation of boundaries, regulating access to the territory and controlling the activities within.

While on the ground, territoriality was mostly in the hands of individuals and companies engaging in mining, the colonial state supported these processes by formalizing territorial practices through licensing. The acquisition of prospecting licenses hence represents the prerequisite for any formally legitimised, territorial practice in German East Africa. Mining regulations granted exclusive rights to property and mineral extraction to license holders within territories of fixed sizes, depending on the mode of extraction – artisanal, small-scale or large-scale industrial. The formalization of mining territories furthermore contributes to their durability. It is however crucial to note that both frontier and territories need to be constantly reproduced and, if not, disappear as quickly as they emerged. The number of licenses revoked or cancelled due to economic difficulties until 1905 indicates that necessity.

As Pesek (2005, pp. 17-18) has argued for German East Africa, the effectively controlled colonial territory was rather small and scattered. In a similar manner, mining territories were scattered all over the colony. Mineral deposits were often located far from the core of the colonial state and outside the direct reach of the islands of colonial power.

This resulted in islands and archipelagos of territoriality dedicated to mining, all over the nominal territory of German East Africa. Those small patches and conglomerations of territorial control were subsumed to colonial territoriality while representing territories of their own. According to Cooper, those mining territories also were "enclaves of wage-labour" (Cooper 2014, p. 22) in areas otherwise dominated by household production.

In the case of Mandelsloh and Wilken, who were given extensive powers by the colonial state furthermore serves as an indication for enclave-like forms of extraction, since it shares characteristics with extractive enclaves discussed recently. As corporate islands of colonial rule, these corporate territories are set to ensure undisturbed, isolated and insulated mineral extraction, foster uneven development, are integrated into export-oriented production chains of goods and rather connected to the colonial metropole and places of global capital than their immediate vicinities. Hönke (2009a, p. 276) describes these enclaves, also for the colonial era, as islands of stability against fragile and dangerous surroundings implying the durability of territoriality. Hence, even short-lived enterprises, given the respective state-like functions and intensified territoriality can be considered as enclaves in the colonial setting. Considered bluntly, the colonial situation is not too different from extractive enclaves in present-day weak or failed states. In summary, the emergence of the mining economy in German East Africa in the 1890s was shaped by the expansion of capitalist modes of production in commodity frontiers and spatial fixes of capital by the territorialisation of mineral occurrences. However, as indicated above, those processes only slowly took pace and were highly fragmented.

3.1.3 Reforms and the emergence of industrial mining

As the mining economy in German East Africa was growing very hesitantly, over time, the regulations provided by the ordinance of 1898 did face critique as being partially inappropriate and unclear. The government voiced uncertainties about how to go about applications for mining licenses by Africans and people of colour[10], since no paragraph in the legislation particularly forbade nor allowed them to prospect for minerals.

[10] This group, including mainly Indians and Afro-Europeans, is referred to in the historical material as *Farbige*.

Concerning the Indians in German East Africa the administration stated that it would be unwise to exclude such a business-minded group (BArch R1001/202, pp. 4-5).

In the following years discussions about how to improve the regulatory framework and adapt it to the recent developments in the mining economy occupied officials in German East Africa and the *Kaiserreich*. The German Consul of Zanzibar for example suggested in a letter to the *Reichskanzler* Graf von Bülow that the mining legislation in the colony should be adapted to the one in the British dependencies in East Africa in order to give incentives to well-capitalized miners, Germans as well as British or South Africans, and foster the mining economy in general (TNA G8/438). Nevertheless, the legislation was not adapted to the British ordinances, but included in the overhaul of mining regulations for all German colonies that was enacted in 1906 as the *Kaiserliche Bergverordnung für die afrikanischen und Südseeschutzgebiete mit Ausnahme von Deutsch-Südwestafrika* [11] (1906).

The new mining ordinance once again built upon the prior and provided necessary specifications and additions. Following the discoveries of mineral deposits, bitumen, crude oil and sulphur were added to the list of common minerals under §1. Uncertainties concerning the eligibility of Africans and people of colour to apply for prospecting and mining licenses were clarified in §2 and required the consent of the *Reichskanzler* or the responsible governor. Due to the expansion of mining in the colony and the increasing encroachments into areas under indigenous land titles, §19 required miners also to get legitimation from the local administration for their operations.

Owing to the expected upscaling of mining operations, which were no longer only restricted to small operations on mining fields, regulations regarding larger mining plants were introduced (§51 – 75). Besides the usual paragraphs administering issues of licensing, fees and declaration duties, the laws entitled miners to build facilities necessary for their operations also outside of their concessions, on unappropriated lands. At the same time, miners were required to make for reliable accounting and to establish and start running a mining plant appropriate for the respective deposit within the period of two years, otherwise the *Bergbehörde* was able to seize the license and

[11] Imperial Mining Ordinance for the African and South Seas' Protectorates with exception of German Southwest Africa.

properties. Ensuring productivity and preventing speculation were the main drivers behind this move.

Figure 5: Construction of a crusher at an industrial mine.

(Source: Koloniales Bildarchiv Frankfurt, 032-1132-39).

Generally, the mining ordinance of 1906 strengthened the competences of the *Bergbehörde* in regulating and policing mining operations in German East Africa. In comparison to the prior versions, the focus on sanctions and a detailed outline of rights and responsibilities of administrative agencies was significant. This also turned out to be a major point of contestation and critique. An article published in the *Deutsch Ostafrikanische Zeitung* shortly after the ordinance was published harshly criticized the new regulations as being overcomplex, overregulated and granting the *Bergbehörde* too much power. In addition, demands to lower the license and operating fees in order to make German East Africa an attractive mining destination had not been considered. In the end, the new legislation was perceived as a hinderance to the development of mining in the colony, because its complexity discouraged newcomers from starting a mining business, and also put the rentability of already existing operations at risk (BArch R1001/203, p. 35).

Despite the criticism, the mining economy in German East Africa grew more steadily after 1906. In fact, the intensification in the sector was unprecedented, which was also due to the gradual expansion of transport infrastructure and the implementation of an "enlightened economic imperialism" in the so called Dernburg program (Iliffe, 1973, p. 3). Bernhard Dernburg, Permanent Secretary in the *Reichskolonialamt* since 1907, called for a change in colonial politics promoting the attraction of capital investment to the colonies, the implementation of the latest technologies and scientific findings and renunciation of abusive and exploitative practices prevalent in the colonies. Although the actual impact of Dernburg's Berlin-based policies on the colonies is debatable, it can be seen as a turning point (Iliffe, 1973, p. 4). From 1907 until the outbreak of the World War I, there were no local uprisings and the economic activity in German East Africa as well as its output increased significantly (Herzog, 1986, p. 60; Iliffe, 1973, p. 2).

For the mining sector, these developments are reflected in the amounts of exports and the development of large-scale mining plants. The production of mica, which had already been remarkable before, multiplied. In 1907 the export of mica amounted to 23 tonnes, whereas in 1912 it reached 154 tonnes (Tetzlaff, 1970, p. 173). Within five years, the mines in Morogoro were hence able to raise their production by factor seven. Similar numbers are reported for the gold sector. Until 1908, the output from gold mining operations in German East Africa had been unremarkable. In consequence of intensified mining activities and the establishment of modern, industrial mining facilities, the colony reported an export of 111 kg of gold in 1909, a peak of 450 kg in 1911 and 380 kg in 1913 (Tetzlaff, 1970, p. 171). Although the output fluctuated over the years, it remained on a comparatively high level. Generally, mining in German East Africa was still less developed then in German South-West Africa (TNA G8/436), but remarkable in regards to its limitations.

The lion's share of German East Africa's gold in this period was produced by a single mine, the *Kironda-Goldminen-Gesellschaft*. The *Kironda-Goldminen-Gesellschaft* itself was a subsidiary to the *Central-Afrikanische Bergwerksgesellschaft* (CABG), at the Dernburg reef in Sekenke, at the Iramba Plateau. Discovered in 1906 by prospectors of the CABG, the extraction of gold at the then largest known reef in the colony started in

1909 (Tetzlaff 1970, 170). Since the railways in German East Africa themselves were not yet able to cater for the supplies of the Kironda mine yet, all equipment and machinery was transported via the British territory from Mombasa by the Uganda railway to Lake Victoria, by steamer to Mwanza and finally by porter caravans to Sekenke (Hetzer, 1995, p. 16; Tetzlaff, 1970, p. 170).

Figure 6: Facilities of a mechanised mine, German East Africa.

(Source: Koloniales Bildarchiv Frankfurt, 032-1132-34).

At the beginning of its operations, the Kironda mine employed between 20 and 25 Europeans in leading positions, several Indians in the middle layer and up to 1400 Africans as workers. However, during the mechanization process, the latter were reduced and fluctuated between 700 and 1200 (Hetzer, 1995, pp. 25-26; TNA G8/480). The mine started out with open pit mining and moved towards underground operations later on.

By 1911, Kironda was a highly mechanised state of the art gold mine with its own power plant and represents the beginning of industrial-scale mining in colonial Tanzania. Although the mine in Sekenke has to be considered as the most significant extractive operation in German East Africa, which not only produced for export but also supplied the mint of the colony, it too faced difficulties. Tetzlaff reports, that the company was only able to pay a dividend distribution in one single year of its operation, 1911 (Tetzlaff, 1970, p. 170). The financial problems have to be attributed to the still inadequate transport infrastructures and the consequently high production costs. In addition, the Kironda mine had to cope with production cuts due to insufficient availability of workforce and in 1912 complained to the *Bergbehörde* about this circumstance, demanding that it should intervene in the migration of labour to other parts of the colony (TNA G6/480).

Although, retrospectively the Kironda Mine at Sekenke was the only gold mine in German East Africa operating on a large-scale, industrial level (Dale, 1935) the number of individual and small to medium-scale mining enterprises in German East Africa rose after 1906 too. Especially in the years before the war, the influx of prospectors and miners to certain areas was so high that the colonial government asked the *Reichskolonialamt* for the provision of land surveyors in order to settle disputes over conflicting mining claims. In Morogoro alone, according to the government, eighty new prospecting fields had been registered within a single month at the peak in 1912. The districts Mwanza, Tabora, Tanga and Langenburg experienced similar situations (BArch R1001/167, pp. 139-140). Due to the high numbers of often unexperienced miners and prospectors the frequency of accidents, mostly including local workers in the mines, increased (TNA G8/436). Those who had already gained experience in mines elsewhere stated that the circumstances in most of the mines in German East Africa would not have been tolerated in Europe (TNA G8/500).

During 1912, Tanga experienced an enormous gold rush unprecedented in the area. Reports about large amounts of alluvial gold in the Sigi river triggered the influx of diggers from German East Africa -Africans as well as Europeans-, British dependencies and Europe, so that soon there was hardly a place along the riverbed up to the river mouth to the Indian Ocean that was not claimed. However, the gold rush ended when the amounts of alluvial gold procured did not meet the expectations (BArch R1001/99, p. 160; Hetzer, 1995, pp. 30-31; TNA G8/448). In the following year, the focus of diggers and fortune seekers moved to the areas around Lake Victoria causing a multitude of claims within a short period of time (TNA G8/448).

Apart from that, the mining companies prospecting in German East Africa reported several new discoveries in the pre-war years. The *Central-Afrikanische Bergwerksgesellschaft* discovered promising gold veins at Kassama, south of Lake Victoria, which were deemed unprofitable due to high production costs. Other deposits found by the CABG in Nigodi, close to Ikoma were leased to Rhodesian miners in 1913, shortly before the company went bankrupt (TNA G8/478).

At the time, companies and prospectors from British colonies were nothing unusual in German East Africa. Already in the early days of mineral extraction, miners from Rhodesia, South Africa and also Australia had been encouraged to engage in the exploration of the mineral endowments of German East Africa and the government made clear that they were subject to the same rights and regulations as Germans. Only larger companies had to acquire special consent from the authorities (TNA G8/448). Their experience gained from mining in the British colonies in Africa and the South African gold fields over time contributed significantly to the exploration in German East Africa. In 1912, a British company prospecting in Langenburg discovered remarkable gold deposits and shortly after established roughly a hundred claims had been established. Following the company's reports to the administration, the government geologist Dr. Scholz was sent to the area in order to demarcate claims on behalf of the colonial state (BArch R1001/99, p. 160).

Additional pre-war discoveries included deposits of tin at Lake Tanganyika and copper in the Langenburg district (Tetzlaff, 1970, p. 170), titanium (Geological Survey of Tanzania, 2015, p. 27), uranium in the Eastern Uluguru (TNA G8/457, p. 50), as well as high grade surface gold in Musoma by South African prospectors (Hetzer, 1995, pp. 29-30). However, hardly any of the newly found minerals were mined under German rule, only at later points in time. Despite the upswing and expansion after 1905, the mining economy in German East Africa was mostly met with resentment in Germany. In spring 1914, newspapers all over the country complained that the sector had fallen short of expectations. An article in the *Hannoversche Courier*, published on March 24 1914, summarises the problems. The author claims that mining in German East Africa had failed in its potential and the colonial state missed out on adequately supporting the sector's development adequately. Also, the *Bergbehörde* was only collecting rents and fees instead of providing incentives and fostering the expansion and intensification of mining operations. The neglect of this promising sector hence could be seen in the geological mapping of the colony, which in 1914 did not differ too much from the state of 1899 (TNA G8/436).

Overall, the policies of the German colonial state concerning mineral extraction were contradictory to some degree. Although prospecting and exploitation was encouraged by incentives focussing on individual and small-scale operations, the necessary support for a flourishing sector under the difficult conditions in German East Africa was not provided. Nevertheless, the upswing of the mineral economy and the rising interest in mining in German East Africa is reflected in the numerous geological publications in Germany after 1900 dealing with new discoveries and their potentials (Barnitzke, 1913; Gagl, 1909; Koert, 1913; Kuntz, 1909; Macco, 1903; Schmeisser, 1908; Tornau, 1913, 1907).

With the outbreak of the war in the summer of 1914, the mining economy as well faced difficulties. Most of the mine's German staff was called to service in the *Schutztruppe*[12], the management of the Kironda mine however, tried to sustain the operations as far as possible (Hetzer, 1995, p. 28; TNA G8/480). Finally, the conquest of German East Africa by British troops in 1916 resulted in the seizure of mines. Mining plants as well as most German properties were then handled by the British Custodian of Enemy properties until the 1920s. By 1916, the mining sector in German East Africa was of little economic relevance for the German economy, let alone the global markets (Tetzlaff, 1970, pp. 170-171). Gold and mica remained the most important minerals during the German period, while the production of garnet, gemstones and other minerals was less prominent.

The period between 1905 and the outbreak of the war in 1914 represents a continuation of the expansion of the mining sector in the prior years. However, these processes were by no means linear nor without obstacles or disruptions. Plenty of smaller and larger enterprises failed to sustain their businesses. Discoveries of minerals once again led to the production of multiple frontiers. The gold rush in Tanga is a particularly clear example of those frontier dynamics, their fragility and temporality.

[12] Armed forces in the colonies.

Furthermore, the construction of the railways and additional geological explorations fostered the expansion and the increased output of the sector, as well as the production of frontiers and mining territories. While the caravans were flexible and made use of alternating routes, depending on the season, the railways represented a material and spatially fixed means of transport. The ways of transportation were thus consolidated and constantly reproduced and can be regarded as a corridor of colonial control, connecting the various islands with each other, and with the metropole and the global markets.

External factors, such as the growing demand for minerals in German domestic market, e.g. the electronic industries, contributed to these processes. The establishment of large-scale mines, partially autarkic and located outside the islands of immediate colonial control, like Kironda, furthermore point towards the prevalence of extractive enclaves in German East Africa. Despite its meagre economic relevance, the initial expansion of a capitalist mode of mineral extraction during the German occupation paved the way for successive intensification and the development of an export-oriented, enclave-based mining economy in the inter-war years.

3.2. Mining in British Tanganyika

3.2.1 Transition and continuity

In a special supplement focussed on mining in East Africa, published by the Financial Times on December 10 1935, a ‘special mining correspondent’ called Tanganyika the most important gold fields recently found in the world and an important future gold producer (“Significance of Tanganyika’s Auriferous Areas: Past and Present Exploitation,” 1935). However, when Britain took on the administration of the former German colony, the mineral economy was hardly a priority. World War I had disrupted the mining economy in East Africa. Plenty of the transport and extraction infrastructure had been destroyed, German mine owners were expelled, their properties subjected to the Custodian of Enemy Properties and prospecting was initially banned (Frayling, 1934). Under the Treaty of Versailles, which became effective in January 1920, the former German colony, although conquered by British and Belgian-Congolese troops, was to be administered under British and Belgian mandate granted by the League of Nations. Already after the conquest of German East Africa in 1916, British newspapers stated that the seizure of the German colony would open up an immense area with high potential for prospecting (BArch R1001/199, p. 190). However, only in the second half of the 1920s did mining in Tanganyika experience any notable developments.

The Mining Ordinance of 1920 (Department of Mines, 1921), which provided the first framework for mineral extraction under British mandate, largely built upon the preceding German regulations and targeted predominantly small-scale and individual operations (Lemelle, 1986, p. 90). The assimilation to the regulations in other British colonies had not yet been pursued. Since the potential of mining in the area was still questionable at the time, and agricultural production took priority again, there was only little interest on the side of the administration and large-scale companies. Moreover, the mandate status of Tanganyika caused fewer investments than Kenya of Uganda. Hence, Tanganyika, again, largely remained a mineral terra incognita for the following years, unable to attract capital intensive large-scale operations. Until the mid 1930s, mining in Tanganyika was dominated by artisanal and small-scale alluvial mining. Small syndicates and temporary partnerships between prospectors were common in reef mining (Lemelle, 1986, p. 89).

Overall, mineral discoveries in the territory and their mapping in the interwar period just slowly expanded, due to the relatively low priority of and interest in mining. Exploration work was built upon the data produced by geologists, miners and prospectors during the German colonial period. Prospecting was conducted by small-scale, low-capital enterprises or individuals (Geological Survey of Tanzania, 2015, pp. 27-28; Lemelle. 1986, p. 95). During the 1920s, deposits of wolframite and cassiterite were reported in Karangwe district (Geological Survey of Tanzania, 2015, p. 28), diamonds of "exceptional purity" had been found in the Shinyanga and Mwanza regions (BArch R1001/187[13]; R1001/171, p. 8). Furthermore, discoveries of chromium, feldspar, nickel, tin ore and related minerals were recorded during that time (Department of Lands and Mines, 1938). Gold nevertheless remained the economically most important mineral in Tanganyika until World War II. Reefs and other deposits already known were continuously explored and new ones discovered in adjacent areas. By 1948, the Geological Survey Department of Tanganyika listed deposits of gold, diamonds, tin,

[13] The references to the German Federal Archives (BArch) in this section are predominantly British documents and articles stored by German agencies. If possible, the original source will be given instead.

mica, lead, copper, salt, kaolin, coal, iron, gypsum, apatite, graphite, platinum, diatomite, and nickel in larger quantities. Other minerals such as magnesite, chromite, bauxite and uranium were known in smaller, yet economically irrelevant quantities (Stockley, 1948, pp. 22–23).

During the German occupation, the north-western and central districts as well as Morogoro were the main areas for mining, the south experienced an increasing influx of prospectors in the 1920s. In 1922, gold was discovered in the area between Mbeya and Lake Rukwa, which became known as the Lupa goldfields. One year later, 150 prospectors were already actively mining for alluvial gold in the remote area. By 1925, 300 prospectors were counted and until the mid-1930s, the number of miners constantly grew (Lemelle, 1986, pp. 75-80). In fact, it was in the 1930s, after Britain had abandoned the gold-standard and with it a fixed gold price, as well as the aftermath of the great depression, that the Lupa saw a tremendous gold rush. In 1933 over 500 individual diggers, Europeans, Rhodesians, South Africans and locals, were active in the area (Hetzer, 1995, p. 31; Roberts, 1986, p. 556). By 1936, 58 Africans were holding prospecting licenses in the Lupa (Chachage, 1995, p. 49). The rising influx of predominantly male miners to the area lead to the blossoming of prostitution, conflicts, alcoholism and other deprecated behaviours. The gold rush with all its concomitants also lead to an increase in policing and public announcements not to enter the area unprepared. Furthermore, working and living conditions in the area were considered as particularly bad compared to places where mining was conducted by larger companies (Mbogoni, 2013, p. 13).

Overall the Lupa diggers came to be an important group among the settlers in Tanganyika since they opened up the southern highlands and contributed to the subsequent capitalist penetration of the area. Furthermore, they spent most of their profits made from mining locally and thus fostered local economic development, presumably of European businesses and African ones to a lesser degree. The entanglements of local development and mining is partially reflected in the rise and fall of the mining town Chunya.

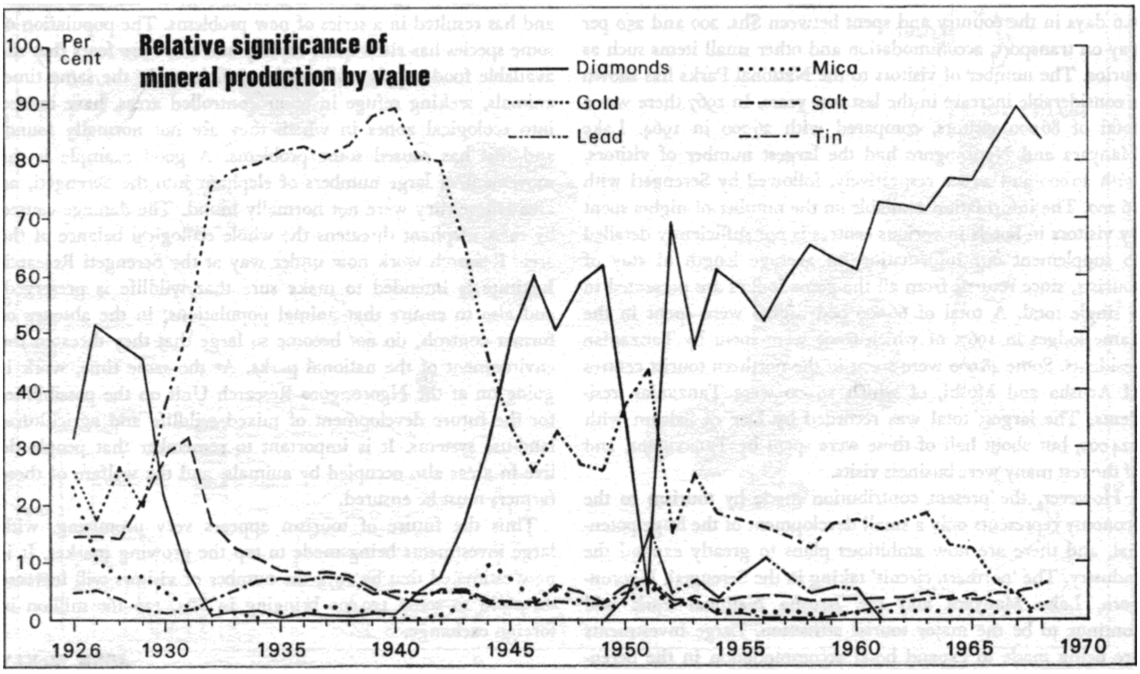
When the former German mining properties were made available for sale in 1923, the interest in medium and large-scale mining enterprises slowly gained pace (Lemelle, 1986, pp. 79-80). However, due to the unfavourable regulations and the fixed gold price at that time the attractiveness of capital-intensive mining in Tanganyika remained low. Nevertheless, some of the German mines were sold to new petty capitalist investors. The Kironda mine at Sekenke, the supposedly only significant large-scale gold mining plant of the German era was acquired by a former South African employee under whose management as Tanganyika Gold Mines, the mine produced roughly 910 kilograms of gold between 1929 and 1934 (Hetzer, 1995, p. 28).

3.2.2 Going for gold in times of crisis

Along with the gradually growing interest, the rising consciousness that mining posed a considerable economic opportunity, and the crash of cash crop prices, the colonial administration realized the necessity to more actively foster mining in Tanganyika more actively. This is reflected in the division of the Department of Land, Survey and Mining into three individual departments with specialized tasks aimed at assisting the development of a mining economy (Lemelle, 1986, pp. 142-143). The reviewed mining ordinance of 1929 (Department of Mines, 1930), furthermore, focussed on capital intensive, large scale operations rather than individual and small-scale, as before. Leases were now given for 21 years and the renewal required the establishment of certain production facilities suitable for large-scale mining. That, and the high fees set by the administration clearly favoured large companies and aimed to exclude speculative capital and low/no-capital prospectors. In consequence, large concessions were granted to mining companies from London and Johannesburg, as well as their subsidiaries (Lemelle, 1986, pp. 170-172). However, attracting large-scale investment while protecting the already existing small-scale mining economy was not an easy task.

The 1930s doubtlessly marked the peak in the development of the mining industry of Tanganyika under British mandate, particularly for gold, as figure 7 shows. Overall the production of gold increased by a factor of ten. Between 1920 and 1929, 1.6 metric tonnes of fine gold were produced in Tanganyika amounting to 1.2 percent of the total domestic exports. In the period between 1930 to 1939, the overall production amounted to 16.7 metric tonnes and export shares of 14 percent by 1939 (Roberts, 1986, p. 548). Generally, there was a steady increase of mineral production and value in the Tanganyikan industry after the financial crisis of 1931 and by 1935, gold was Tanganyika's second most valuable export (Lemelle, 1986, pp. 122-127, 207; Stockley, 1948, p. 20). The development of Tanganyika's mining economy was also felt outside of Britain and its dependencies. Between 1932 and 1934, financial institutes in Germany recorded an unprecedented rise in credit requests by private individuals and companies for the purpose of financing gold prospecting enterprises in the Lupa (BArch R1001/191, pp. 26-84). In 1934, even the still existing German East-Africa Company considered acquiring land in the area in the hope that the development sparked by the gold rush would stabilize in the future, which also was related to German attempts to reclaim the former colonies (BArch R1001/191, p. 87). Coulson (2013, p. 74) notes that by the end of the 1930s, there were more German settlers in Tanganyika than British.

Figure 7: Mineral production value, 1926-1970.



(Source: Temple, 1971, p. 93).

The growth of the mineral sector was only partly due to the Lupa gold rush, but rather to the operations of multiple large-scale companies entering Tanganyika in that period. In contrast to the mostly uncontrolled small investments in the small-scale sector, the new companies cautiously invested in Tanganyika at first, since the size of deposits was still unproven and costs as well as returns hardly calculatable (Lemelle, 1986, pp. 170-171).

The acting commissioner of mines of Tanganyika, Frayling, identified four important areas for gold mining: Mwanza, Musoma, Lupa and Mkalama district. Frayling claimed that the importance of the Mwanza region south of Lake Victoria was only recognized in 1933, although discoveries such as the Bismarck reef had been made and worked on under German rule. Instead of the mainly alluvial workings in the Lupa, reef mining was predominant in Mwanza. The Musoma district on the other hand only held low grade ores that were profitable due to high prices and the vicinity of the Uganda railway. Mkalama, lastly, was dominated by the highly productive gold mine in Sekenke as a successor of the German Kironda mine (Chachage, 1995, p. 51; Frayling, 1934).

Many mining companies were operating not only one, but several mining plants simultaneously. The Tanganyika Diamond and Development Company for example owned a mine in Lupa, and several in the north, in Mara, the Kilima Mines Ltd company as well as the Maji Moto mine, formerly operated by the *Central-Afrikanische Bergwerksgesellschaft* (BArch R1001/207, pp. 3-17). In the Lupa area the East African Goldfields Ltd. was running four mines, the Saza, Luika, North Mawoga and Razorback mines. Other notable companies in the 1930s were Ussungo Diamonds and Kizumbi in Shinyanga, the Mabuki mines in Mwanza district. In 1940, 28 mines were operating in the Tanganyika territory (Stockley, 1948, p. 24).

Although the number of mining companies active in Tanganyika suggests a relatively high variety of capitalist enterprises, it has to be clear that most of the companies were subsidiaries to large, high-capital mining houses based in Johannesburg or London. There were only some medium-sized, independent mining companies, which were considerably more at risk of becoming bankrupt and prone to price fluctuations. The syndicates Tanganyika Concessions and Kentan Gold, among others, were operating additional mines via subsidiaries throughout Tanganyika.

Along with the arrival of large-scale companies came the widespread mechanisation of mining enterprises. While large-scale mines were operating with expensive and modern machinery, smaller mining companies and sometimes even individual miners, to a lesser degree, successively made use of machines, which were often bought second hand from South Africa or Rhodesia (Lemelle, 1986, pp. 182-185).

At the high tide of gold mining in Tanganyika, the Geita Gold Mine, succeeding the London-based Kentan Gold company and Tanganyika Concessions, started production and was considered as the first modern mining plant in the Tanganyika territory. The highly productive mine contributed to a steep increase of the overall gold production. By 1938, it had already overtaken the Kironda mine as the primary producer, expanded the plant at Geita in 1942 and later in 1951, consolidated its leading position (Kimambo, 1984, pp. 80-88; Lemelle, 1986, p. 83, 89).

The expansion of large-scale mining operations in Tanganyika, and especially in remote areas such as the Lupa, was however not only fostered by the surge of mineral prices and the changing policies but also by the development of transport infrastructure (see figure 8). After the war, German railway lines, the British Uganda railway and the steamer lines on Lake Victoria were already providing a basis for quick transport for the northern Tanganyika. The pre-war planned extension of the *Zentralbahn* from Tabora via Shinyanga to Mwanza was completed, as well as a branch line from Kilimantinde to the Sekenke region connecting the gold mines of the area to the railway network.

Further connections were established between the Usambara railway and the Uganda railway close to Moshi. In addition to the new lines, the railways were complemented and extended by the road networks, which especially targeted the southern regions of Tanganyika. The Lupa gold rush, the flourishing mining sector as well as the plantations in the southern highlands legitimised the construction of transport infrastructure, which both catered to the Tanganyikan transport system and reached towards Rhodesia. The railways hence represented the "arteries for the development of the territory" (Maxwell, 1934) As shown on the map of Tanganyika territory, the roads connected the larger settlements in the south, such as Mbeya and Chunya, as well as the centre and the coastal areas, partially paralleling the railways on highly frequented stretches, such as from Kilossa, Morogoro to Dar es Salaam. While roads and motor vehicles primarily improved transportation within Tanganyika, and thus the development of settlement and capitalist penetration, it was the establishment of regular air traffic that more significantly changed the relations between more remote areas and the (colonial) metropole.

Figure 8: Transport infrastructure in Tanganyika, 1934.

(Source: Financial Times, November 26 1934, Supplement No. 125).

Whereas transportation before mainly relied on land transport by road, and rail and shipping from Dar es Salam, Tanga of Mombasa to Europe, which took several weeks or months, London was now reachable in only a four to six-day trip. Johannesburg was reachable in one and a half days (“Significance of Tanganyika’s Auriferous Areas: Past and Present Exploitation”, 1935). According to the Mining Publicity Pamphlet (Department of Lands and Mines, 1938, pp. 11–12) there were tri-weekly flights from London to Tanganyika and bi-weekly flights from Tanganyika to Durban via Johannesburg. Additionally, there were domestic flights between Moshi, Dodoma, Mbeya, Tanga and Dar es Salam. The importance of aerial transport for the mining sector is furthermore underpinned by the existence of the so called ‘Goldfields Service’, an airline exclusively targeting the northern goldfields, between Nairobi and Geita, with stops in Musoma and Mwanza. Due to the development of air transport, the goldfields of East Africa were regarded as the most accessible ones for Britain (Dale, 1935), and the export of mineral produce to Europe became much easier and faster. High quantities of coal and ores were still transported by land and sea. The production of diamonds and processed gold however profited tremendously from the new means of transport. Apart from the physical means of transport, the increased availability of wired and wireless telegraphy, telephone service and radio reception, even in more remote areas, contributed to the rapid development of mining in Tanganyika. Hence the circulation of news, orders for supplies, administration tasks and so on were much more easily communicable.

3.2.3 Tanganyika's mining industry during and after World War II

Despite the outbreak of the war in 1939, the mining industry in the Tanganyika territory was able to carry on its production for a while. In fact, in 1941, the value of the mineral industry's output amounted to 1,400,000 £ Sterling, of which gold alone contributed 1,200,000 £ Sterling (Stockley, 1948, pp. 20). However, after 1941, the war took its toll and led to a drastic decline in mineral production. At the end of the war, gold exports fell to 5 percent of the territory's exports, while in 1940 they had contributed 25 percent (Lemelle, 1986, pp. 207; Roberts, 1986, pp. 560-561).

Two main factors are identified as causes for the breakdown of mining during the war, the lend-lease pact between Britain and the US and the shift of the economy towards war supplies (Roberts, 1986, pp. 560). Regarding Tanganyika, mining was not a prioritized branch of the war economy and was hence denied supplies and workforce that were needed elsewhere. Even prospecting was banned until the end of the war (Roberts, 1986, pp. 560-561). The production of agricultural products relevant for the war, such as sisal, rubber and foodstuffs, on the other hand were regarded as being of strategic importance.

In consequence, not only did small mining enterprises in the territory close down their production, but even large, profitable ones. In 1942 the highly productive Kironda mine for example was forced to close its operations due to lack of mechanic supplies (Stockley, 1948, pp. 24).

After the war agriculture remained the prime economic sector targeted with large-scale policies such as the Groundnut Scheme (Coulson, 2013, pp. 79-81; Iliffe, 1979, p. 437). In addition, Britain aimed to diversify the colonial economy of Tanganyika by embarking on a “modernising imperialism” (Iliffe, 1979, p. 447). By fostering the industrialization of food production and manufacturing, the colonies should be guided towards economic independence within the empire. For Tanganyika, given the mandate-status, the efforts however remained lower than for Kenya or Uganda. This, however, resulted in an even more extraverted, export-oriented economy highly dependent on Britain (Iliffe, 1979, p. 447).

The mining economy did not recover to its pre-war status. Production levels still successively increased and reached approximately half of the peak-production of the pre-war years in 1952 (Roberts, 1986, p. 561). While some mines had closed during the war, new ones were established in the following years. There was hope, that the extraction of lead, copper, silver and gold would become more profitable again when the world had recovered from the war. Generally, however, gold lost its position as primary mineral export in the late 1940s and 1950s in favour of diamonds. The gold mining companies who were still actively producing faced severe financial problems (Chachage, 1995, p. 52, 1993, p. 89). After the decrease of the gold production, diamond mining overtook the former in 1944 and by 1946 contributed 1,000,000 £ Sterling to the total mineral export value of 1,600,000 £ Sterling. The diamond production was concentrated on the Mwadui occurrence, northeast of Shinyanga, which was operated by Williamson Diamonds Ltd. and Almasi Ltd. (Stockley, 1948, p. 20).

During the 1950s, the mining industry in Tanganyika maintained a relatively stable status quo. However, when Tanganyika’s independence came closer and closer, the settler population increasingly started to leave the territory (Kimambo, 1984, pp. 75-76), due to uncertainty and fear regarding future politics in independent Tanganyika. In the same way a large share of the mining companies withdrew from their activities in the area in the face of the looming political turnover.

3.2.4 Intensification, Extractive Enclaves and Space-Time Compression

Since the beginning of the British mandate rule over Tanganyika, the developments of the mining sector can be seen as the continuation of the pre-war period and dominated by the production of frontiers and territories due to new discoveries, e.g. the Lupa goldfields, and the release of the former German properties. At the same time, the mineral economy expanded in areas that had not yet been in the focus of colonial miners before.

An intensification of these processes can be observed in the 1930s, when rising mineral prices after the economic crisis encouraged individual fortune seekers and mining companies to generate profits in the mineral commodity frontiers of Tanganyika. Particularly the rising engagement of large-scale mining companies and subsidiaries of immense mining houses contributed to the production of enclaves that are focussed on local isolation and protection to secure production and the maintenance of durable connections to nodes outside Tanganyika, such as Johannesburg or London.

The infrastructural improvements during the British mandate rule of Tanganyika furthermore impacted on processes of spatialization. Adding to the already existing railways, the extensions, complementary road network and air traffic contributed to the increasing compression of space and time in Tanganyika. David Harvey (2001, pp. 123-124) argues that new technologies reduce spatial barriers and distort the relation of space and time, as time becomes more relevant than space. However, space here is seen in a physical and not in a social way. These means of transportation furthermore represent durable corridors of transport that link mining territories and extractive enclaves to the global markets and the colonial metropole. Infrastructural improvements and enclave-based extraction are furthermore intertwined as the advanced means of transport and communication make the geographical remoteness of the mines less of an obstacle than it used to be. Hence the ties outside the immediate surroundings can decrease, while those to the company headquarters and global markets grow stronger. At the same time, the production of frontiers is accelerated as well by the new means of transport and communication.

In summary, the continuous and intensified production of frontiers, mining territories and extractive enclaves by state and non-state actors, European and African, under British mandate contributed to the expansion of capitalist modes of production and the consolidation of the foreign-dominated, export-oriented spatial order of extraction in colonial Tanzania.

3.3. Conclusion

The colonial era drastically restructured the mineral economy of present-day Tanzania. While minerals were extracted and traded domestically, as well as through foreign trade already in pre-colonial times, the establishment of an export-oriented and successively mechanized, industrializing mining sector challenged prevailing spatial orders and processes of spatialization at play on the ground. The production of frontiers, mining territories, extractive enclaves and even materially fixed and durable corridors of transport were fundamental for the reshaping during the colonial period. These processes of spatialization were, however, not unilateral, but asymmetrical in the interplay of external, colonial and African actors. The dominance of external actors and their agency, thus also capital, additionally was fostered by the gatekeeping colonial state. Simultaneously, the agency and knowledge of Africans in the making of the industrial mining economy should, nevertheless, not be underestimated. As diggers and low-ranked workers they outnumbered foreign actors and were the backbone colonial extractive industries. By 1938, for example, roughly 28.000 African labourers were employed in the Tanganyikan gold mining industry (Chachage, 1995, p. 50).

While mining was initially pursued by individuals and small companies, as geological knowledge and investment incentives were meagre, mechanized and large-scale, industrial mining of gold and diamonds grew slowly but steadily during late German rule and under British mandate. The significance of industrial mining activities in the 1930s surged tremendously in the aftermath of the Wall Street crash of 1929, rising mineral prices and extending geological surveying in Tanganyika. Until independence, the extractive sector remained an important branch of the colonial economy despite not being a priority of the British administration.

Throughout this period, multiple commodity frontiers were produced by miners and prospectors on the basis of mineral discoveries, attributions of value and the motivation to generate capital from extraction. Their dynamics are particularly well portrayed in by the gold rushes in Tanga and the Lupa region. Territorialized prospecting and extraction on concessionary mining fields was the norm for all formally registered mining enterprises, regardless of size. Mining territories in areas remotely located from islands of colonial control, furthermore, tended to form isolated entities, which implicates their enclave character. Along with the production of these enclaves by spatial practices comes the fragmented and selective territorialisation of colonial state and corporate actors, which primarily focussed on controlling areas promising profits and those necessary to ensure the transport of goods and people as well as the spreading of political control. Both the German and British colonial state were not interested in engaging in extraction themselves, but pursued a liberal policy inviting mining companies for the sake of rent payments. The colonial states acted as regulators rather than controllers of the extractive industry giving miners and companies plenty of freedom to operate and generate profits. Hence, the colonial mining economy in Tanzania has to be seen as similar and a direct predecessor to contemporary large-scale mineral extraction pursued by multinational companies in technologically highly sophisticated and securitized enclaves.

This overview of the development of the mining economy in colonial Tanzania has shown how the production of frontiers and mining territories during the expansion of capitalist modes of extraction have led to the emergence of extractive enclaves and the contestation of the pre-colonial spatial order. In that way, the processes in the colonial era not only successively replaced prior modes of production but also provided the foundation for the systematic exploitation of resources during the late colonial period as well as in later decades, which relies on the same fundamental processes of spatialization.

4. To mine or not to mine – The Tanzanian mineral economy after independence and under *ujamaa, 1961-1985*

4.1. Dependence after independence

While until 1967 the extractive sector was characterized by colonial continuities, the following years brought about fundamental changes. The declaration of independence of Tanganyika[14] on December 9 1961, doubtlessly represents a highly significant milestone in the country's history. Not only as it marked the officially end of colonial rule over Tanganyika, but also because the state apparatus was now formally in the hands of Africans, and so too was the control over resources, the economy and overall self-determination. It was not that simple, however, for the new state to free itself from the colonial legacies, which were deeply inscribed in all aspects ranging from politics and administration to the economy and everyday life. Consequently, in the early 1960s, Tanganyika was formally independent, but in practice less so (Havnevik, 2010, p. 29). The transition from a territory governed under mandate to a functioning independent nation state, including processes of nation building and political and economic transformation was an ongoing process even years after independence (Ewald, 2011, p. 99). As Issa Shivji puts it, "the nationalist vision thus called for a revolutionary transformation not only of the economy and society but also of the state" (Shivji, 2009, p. 4). The Arusha Declaration of 1967 can thus be seen as a turning point in contrast to the persistent dependence after 1961. This first period after independence, from 1961 extending into the mid 1970s, represents one of fundamental transition for Tanzania as a whole as well as its economy and had severe effects on the mineral sector and its spatial organisation.

The continued presence of Britain was fostered by the circumstance that the newly founded nation state was still in the process of establishing its sovereignty, reorganizing the administration and reforming the country as a whole. By the 1950s, the Tanganyika

[14] Tanganyika as it is used in this chapter refers to the Republic of Tanganyika before its unification with Zanzibar in April 1964. References to the country after that date are indicated by the use of Tanzania.

African National Union (TANU) under Julius Nyerere had begun to build a popular basis, particularly in the rural areas (Ewald, 2011, p. 97). This culminated in TANU's election victories in 1954 and 1958/59, which paved the way for independence (Burton, 2017, p. 57; Eckert, 2007, p. 116). When, on December 9, 1961, Julius Nyerere finally announced Tanganyika's independence, the country was perceived by many as not yet being prepared for that giant leap (Eckert, 2007, p. 135). The composition of the state apparatus provides ample and paradigmatic evidence. Efforts by the British government during the 1940s and 50s to increase the participation of Africans in the local administration of Tanganyika remained relatively unsuccessful due to the failing system of indirect rule. Parts of the British administration were wary of giving responsibility, and thus power, to Africans (Eckert, 2007, pp. 111-112). As a result, at the time of independence, only a fraction of the administrative personnel, especially in the central government and higher positions, were Africans. Hence the administration was in fact filled with civil servants, British as well as African, who had previously been part of the colonial apparatus. Particularly the African bureaucrats trained under colonial rule carried the attitude of being the only ones able to deal with the problems facing the country as an independent state (Eckert, 2006, p. 264). Moreover, these long-serving civil servants were often quite critical towards the new political paradigms of African socialism that gained traction among leading politicians in Tanganyika (Eckert, 2007, p. 236). This did not make the situation any less difficult.

In an effort to adapt the administrative apparatus the TANU government initiated structural reforms. On the first anniversary of independence, Tanganyika was declared a republic. The existent nine administrative provinces were dissolved and replaced by seventeen new districts leading to a restructuring of the country as a whole. Moreover, during 1963, the chiefs were impeached due to their vital role as native authorities in the British system of indirect rule and in order to establish more direct state-peasant relations (Havnevik. 2010, p. 24; Herzog, 1986, p. 180).

In order to increase the number of Africans in the state apparatus, Rashidi Kawawa, who came in as acting prime minister during 1962, enforced the Africanization of the administration apparatus. Accordingly, the administration was supposed to be successively staffed with Africans to replace the remaining British civil servants. All vacant positions were supposed to be taken by Africans, preferably young graduates from universities in the region, such as Makerere and later the University of Dar es Salam (Herzog, 1986, p. 178). However, Nyerere was uncomfortable with the racial implications of Africanisation policies, especially given the diverse composition of the Tanganyikan people. Consequently, in order to circumvent racial discrimination, he promoted the “localisation” of the civil service meaning that citizenship rather than racial criteria was decisive. After 1964, not only were Africans considered suitable for positions in the administration, but all citizens of Tanganyika (Bjerk, 2017, p. 64; Eckert, 2007, pp. 233–234). These efforts nevertheless were hampered by an inevitable obstacle, the lack of adequately educated and trained locals (Havnevik, 2010, p. 29). This circumstance was largely a consequence of the education system under British rule, which only allowed a limited, controlled number of African children to attend school beyond four years of primary school. The aim was to produce workforce usable in the colonial economy than educated rather than critical, educated Africans who could become potential threats to the system (Eckert, 2007, pp. 154–156; Okoko, 1987, pp. 48–53). Consequently, the number of Africans holding academic degrees and respective positions was extremely low. By 1962, seventy-seven Tanganyikans were employed in low-ranking government positions and only six percent of higher positions in the administration. Reforms in the educational system focussing on capacity building were set out to change this (Herzog, 1986, pp. 176-178). Former African colonial and British administrative personnel hence remained important in the state apparatus in the early years after independence and were only very gradually replaced with a local Tanzanian workforce.

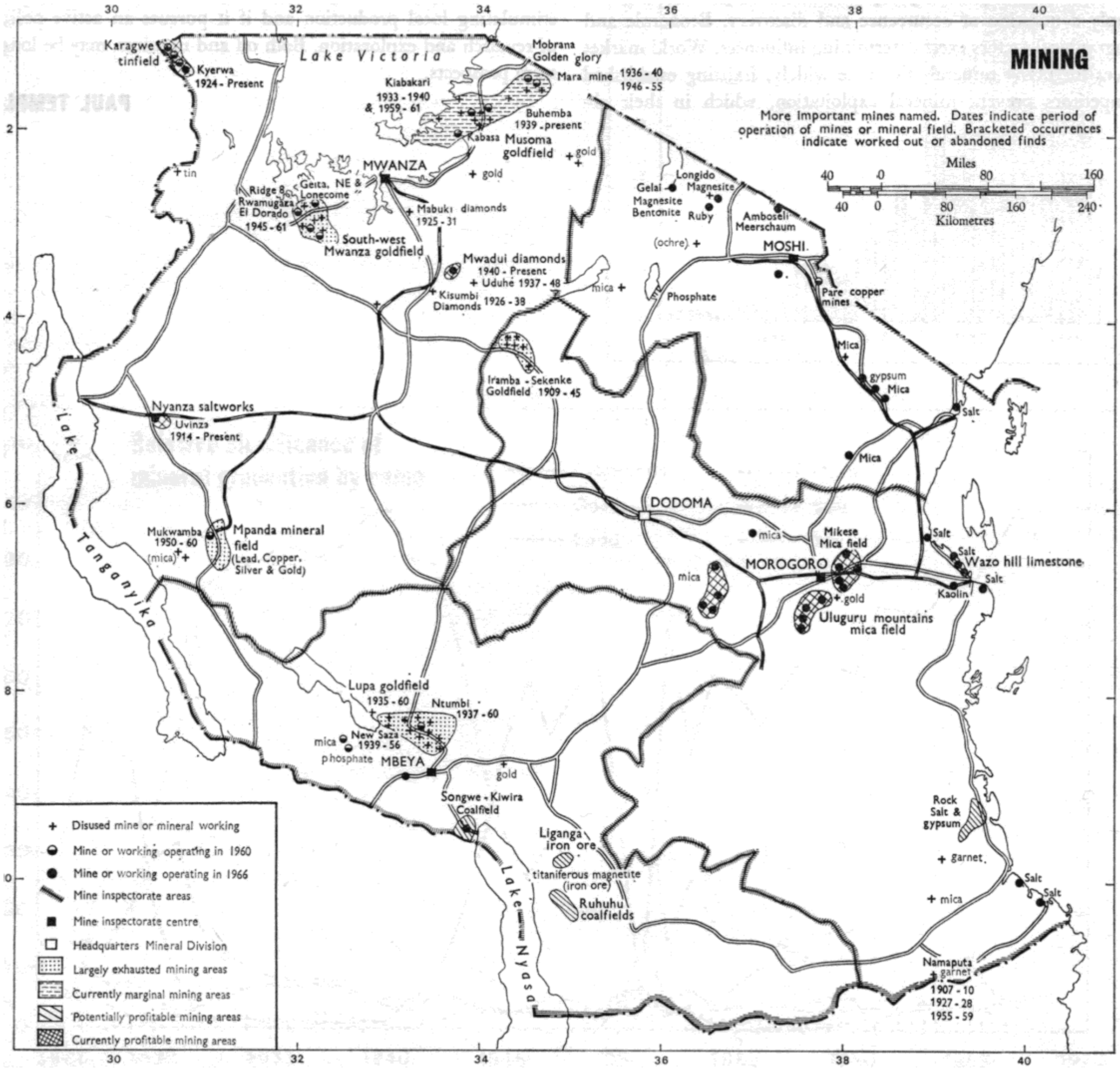
The British presence in early post-independence Tanzania extended beyond the civil service and positions in the government. The police and military forces were practically still under British control until the establishment of the Tanzanian People’s Defence Force in late 1964, after the resentment against British leadership in the middle ranks of the Tanganyikan army had led to a mutiny in earlier in the year (Bjerk, 2017, pp. 65-66; Havnevik, 2010, p. 29). In sum, there was only a small educated African elite in independent Tanzania, even the commercial sector was in foreign hands (Ewald, 2011, p. 97).

Legislations that were in effect during British rule also continued to be in place after independence in various realms. This included the extractive sector that was still regulated under the legislation of 1929 and prioritized foreign large-scale operations and criminalised artisanal mining (Chachage, 1993, p. 95). However, it must be made clear that nationwide transitions like this are not an ad-hoc procedure, but take time to materialise, the implications are important. Large-scale operations, which were exclusively foreign owned, were still preferred by the legislation, while at the same time artisanal mining, pursued predominantly by Tanzanians, remained criminalized and excluded from the formal procedures of licensing and the like. Hence, the colonial structures were largely unchanged for now. Finally, in 1969, an amendment to the legislation was passed that strengthened the position of the minister in controlling and regulating mining activities (Chachage, 1995, p. 61).

Financially, Tanzania relied on British funds and external development aid (Havnevik, 2010, p 29). The formal economy was still largely in the hands of foreigners and oriented towards the interest of foreign capital (Herzog, 1986, p. 198). Retail trade, domestic and foreign, was dominated by Arab and Indian groups, while large-scale operations in agriculture, manufacturing and mining, that were still in the country after 1961, were all run by British, and to a lesser degree by South Africans and Germans. The few industrial and manufacturing facilities and cash-crop schemes such as the groundnut-scheme that were established in the course of the development plans of late colonial rule, resulted in little long-term significance. In comparison to other British colonies like Kenya and Uganda, Tanganyika, as it was governed under mandate, generally received fewer investments and was therefore unable to develop vibrant industries (Burton, 2017, p. 56; Ewald, 2011, p. 96). Consequently, Tanganyika was facing a shortage of investments that would foster economic growth despite efforts to attract foreign capital that would continue the legacy of the colonial economy (Hartmann, 1990, pp. 237–239). Although Nyerere’s government aspired to establish local industries in order to provide domestically produced goods, Tanganyika’s economy after independence has to be considered as a continuity of capitalist modes of production and colonial development patterns. The first development plan (1961 to 1964), which was strongly influenced by external actors and diverged from TANU’s socio-political aims, reflects these tendencies (Herzog ,1986, pp. 198-199).

A similar continuity can be identified in the mining sector. The colonial regulations were still in place and the economic policies not yet been subjected to reforms (Kulindwa et al., 2003, p. 1). Although several mining companies had closed down their operations

Figure 9: Map of mines in Tanzania, 1970.



(Source: Temple, 1971, p. 91)

and left the country in the aftermath of the war, as there was uncertainty due to the approaching independence, the overall production of gold, diamonds and mica, as well as other domestically relevant minerals remained comparatively stable. The large gold mines in Geita, Buhemba and Kiabakari, as well as the mica mines in Morogoro and the Williamson diamond mine at Mwadui were still operating in the early 1960s (Temple, 1971, p. 90).

However, between 1965 and 1967, the gold production dropped dramatically. This went along with the closure of the Geita Gold mine, which was operated by the British company Tanganyika Concessions, and the Kiabakari gold mine (Emel et al., 2011, p. 75; Kimambo, 1984, p. 87; Temple, 1971, p. 90). Those closures were not caused by the depletion of deposits, since Geita is today the largest gold mine in Tanzania, but rather due to the growing insecure political climate. Consequently, the decline in production steadily continued. Altogether, gold production plummeted from three tonnes in 1960 to below ten kilograms in 1971 (Chachage, 1993, p. 94; 1995, p. 54; Geological Survey of Tanzania, 2015, p. 28; Moshi, 1992, p. 68). Industrial gold mining almost ceased completely in the 1970s (Coulson, 2013, p. 9).

As figure 9 shows, by 1970 only the gold mine in Buhemba, Musoma gold field, was operating. All other gold mines had gone out of out of production. The slowdown of gold mining was temporarily absorbed. Particularly the booming diamond production at Mwadui, peaking in 1967, was responsible for a rising income from the sector as it contributed up to ninety percent of the value of total mineral sales. The production of other, domestically relevant minerals, such as salt or tin, remained stable. Overall, however, the total contribution of the mining sector to the Gross domestic product (GDP) remained low at only 1.9 percent in 1968 (Kimambo, 1984, p. 100; Temple, 1971, p. 90).

As in the preceding colonial period, the extractive economy only played a marginal role in the national economy of Tanzania, since once again agriculture, particularly peasant agriculture (Hyden, 1980), was prioritized by the government. The sharp decline of the gold mining nevertheless did put the large and medium-scale mining industry on the verge of collapse. The rentability of operations, the exploitation of more easily accessible deposits elsewhere, and the increasing grasp of the Tanzanian socialist developmental state under Julius Nyerere appear as the key drivers of this development (Kimambo, 1984, p. 112).

The continued capitalist, extractive mode of production as a legacy of the colonial era provided a source of foreign exchange. However, the widespread foreign control over and capitalist organization of the sector and the economy as a whole concerned the government because it fostered socio-economic inequalities and limited the state's influence. With the Arusha Declaration of 1967, the TANU finally aspired to end the external dependency and enforce the restructuring of the country to make Tanzania a self-reliant, socialist country. Nyerere's political agenda and its particular effects on the extractive sector are the subject of the following part of this chapter.

4.2. The Arusha Declaration, the developmental state and mining under socialism

4.2.1 African socialism and development efforts

While TANU under the leadership of Nyerere had already begun to establish its sovereignty and a system of socialism in Tanzania after 1961 despite the continued external dependence, the Arusha Declaration represents a milestone that turned Nyerere's ideas of *ujamaa* from ideological rhetoric into the political agenda of independent Tanzania and a radical break with the status quo (Bjerk, 2017, p. 75; Burton, 2017, p. 58; Havnevik, 2010, p. 31). Andreas Eckert (2007, p. 222) furthermore suggests, that the declaration represents a reaction to the intensified crisis Tanzania was experiencing in relation to donor countries in the mid-1960s, with a focus on internal affairs, after the realization of the country's limited impact on the international stage. This instability in international diplomacy was the result of gradually rising radicalization, to which western donors responded by successively ceasing aid whilst ties to other socialist countries were strengthened (Burton, 2017, p. 70-72; Okoko, 1987, p. 185-87). As one of many varieties of socialism emerging on the continent in the 1950s and 60s, Nyerere insisted that his vision of socialism, *ujamaa,* differed fundamentally from European forms of socialism. While the latter are, in his view, based on the existence of capitalism and the (class)conflicts emerging from this situation, African socialisms are based on traditions and the absence of classes (Nyerere, 1968, pp. 11–12). Thus, *ujamaa* provided an alternative pathway in a world polarized between socialism and capitalism (Bjerk, 2017, p. 75). The romanticized imagination of a classless pre-colonial African society, communality and tradition served as legitimation of socialism as the logical and autochthonous political system for Tanzania (Herzog, 1986, p. 184) and at the same time as a break with the colonial past and as a new beginning.

The Arusha Declaration postulated the equality of all human beings, their right to dignity and respect, the right to freedom of expression, movement, religious belief and association, the right to protection of life and property, the right of every citizen to participate in politics and the right to just returns for labour. Moreover, there should be no exploitation of any person or group by others (Nyerere, 1968, pp. 13-14). Central aims and objectives of the TANU in the Arusha Declaration furthermore included the consolidation and maintenance of the country's independence and freedom of its people, the elimination of poverty, direct government participation in the economic development of the country, active assistance in the formation of cooperatives, as well as the cooperation with other African states to achieve unity and liberation (Nyerere, 1968, pp. 14-15).

For that purpose, the state represents the central actor in Nyerere's political vision. Firstly, the state must have and exercise effective control over the means of production and exchange and administer them on behalf of the people, peasants and workers. This includes land, forests, water, machinery, industries, banks, media, minerals and many more (Nyerere, 1968, p. 16). Secondly, the state is responsible for actively intervening in the economic affairs of the nation and catering for the well-being of all citizens, preventing exploitation as well as accumulation that would challenge the existence of a classless society (Nyerere, 1968, p. 14). Bjerk (2017, pp. 80-81) argues, that Nyerere's vision of the state had been strongly influenced by his visit to China and Mao's vision of a socialist state.

Havnevik (2010, p. 21) identifies a certain development model in the post-independence era which becomes even more pronounced after 1967. In this model, the post-colonial state is the dominant actor. It shapes processes of modernization and development within the framework of the nation state and struggles in efforts to cope with the social, economic and political imbalances inherited from the colonial era. Capital plays a subordinate role, as it is supposed to be controlled by the state and foster modernization and development accordingly. However, due to the dominance of Asian and European, particularly British, capital in the beginning, the colonial legacies remained vital. In order to be less dependent on (foreign) capital, self-reliance represented a core element in the envisioned reforms of the Arusha Declaration.

Self-reliance, according to Nyerere (1968, pp. 97-101), should enable Tanzania to become less dependent on others and at the same time utilize its own strengths and resources. As far as possible, all requirements of the country should be met by materials sourced from and products manufactured in Tanzania at relatively small cost. People rather than money should be the driver of development. Self-reliance was not seen as isolation from the rest of the world, but rather the dependence of Tanzania and its citizens on their own resources and capacities, not on those of others. Since the country had to import certain goods, such as machines, cars and the like, foreign trade was encouraged to earn foreign exchange via the export of certain raw materials, but also processed goods. Accordingly, Tanzania had established trade agreements e.g. with the German Federal Republic, Great Britain, but also mainly socialist countries such as Czechoslovakia, the Polish People's Republic, the German Democratic Republic, the Soviet Union, China and India, among others (Ministry of Information and Tourism United Republic of Tanzania, 1968, pp. 192–193). Although the move towards self-reliance aimed at and implies the reduction of foreign assistance, Nyerere insisted that self-reliance does not fully exclude capital assistance in development projects, provided it was for mutual benefits. Regarding financial aid, however, he made clear that gifts and loans are not acceptable because they would threaten the country's independence (Nyerere, 1968, pp. 21-25). Private investment had a more ambiguous position. It was still encouraged in realms that were not reserved for the Tanzanian state, while at the same time nationalization and the assertion of control over the economy by the government was ongoing (Hartmann, 1990, pp. 240-242). Foreign investments were even legally protected from uncompensated nationalization since 1963 (Ministry of Information and Tourism of the United Republic of Tanzania, 1968, p. 190).

The first step towards achieving self-reliance was education. In fact, Nyerere believed that Africans needed to be re-educated in order to reject capitalism and attitudes established during the colonial period and to regain a mindset based on the community, not the individual (Nyerere, 1968, pp. 6-7) The educational reforms were initiated by the TANU government with the aim of providing education that was accessible for everybody and more importantly that served the purpose of Tanzania. Education was hence a way to convey socialist values and to strengthen the ideology of ujamaa in people, the importance and ways of rural development, as well as knowledge and skills that would make Tanzanians valuable citizens of the socialist state (Nyerere, 1968, p. 74; Okoko, 1987, pp. 58-62).

Economically, the credo of self-reliance resulted in a shift from large-scale to small-scale and urban to rural. The government soon realised that Tanzania was not abundant enough in funds and skilled people to establish industries on its own. Instead of focusing on urban development and large industries that would require loans, the Arusha Declaration envisaged rural development, and particularly small-scale peasant agriculture as the basis for Tanzania's economic development (Nyerere 1968, 26-29, p. 97). Building upon that, further steps to establish processing facilities and industries, funded and supplied by agriculture, could be considered. Hence, the TANU government preferred a bottom-up model of development, starting from the basics that were available in the country, to a top-down induced development in the urban centres with questionable trickle-down effects. The widely discussed ujamaa-villages aimed at the socio-economic restructuring of peasant agriculture in village-based cooperatives (Hyden, 1980; Ibhawoh and Dibua, 2003; Scott, 1998; von Freyhold, 1979) were paradigmatic for the government's efforts to establish a different mode of production in Tanzania. Agriculture represented the backbone of Tanzania's economy, not only because it supplied domestic food demands, but also because it produced cash crops such as sisal and coffee for export. It was thus more immediately integrated into political visions and planning of the government than other sectors. However, there were attempts to establish light industries for food processing, manufacturing and the production of consumer goods that so far had been imported from abroad, which amounted to high costs for the government with few positive outcomes in return (Bjerk, 2017, p. 89-90)

4.2.2 Mining after independence and under socialism

Large and medium-scale companies had mostly disappeared with the decline in the gold mining sector during the 1960s, the diamond production successively slowed down as well in attempts to prolong the lifetime at Mwadui (Kimambo, 1984, p. 100) and the overall contribution to the national economy was rather unspectacular. With the Arusha Declaration, the Tanzanian state initiated the nationalization of foreign enterprises in multiple waves and asserted full control over the mineral resources in the country, on behalf of its citizens. Already with the first wave in 1967 came the nationalisation of forty-five percent of the extractive sector was nationalized (Herzog, 1986, p. 219).

In Tanzania under ujamaa, minerals generally had to serve different purposes in the aspirations to achieve self-reliance. Firstly, the mineral requirements of the national economy had to be met at a reasonable cost. This also implied, based on the credo of self-reliance, that minerals and raw materials for processing, manufacturing, industrial plants as well as building materials should be sourced in Tanzania as far as possible. Consequently, the production of coal, gypsum, iron ore, copper, mica and other minerals should help to contribute to the development and sustainment of other economic branches in the country and supply national demands. As figure 9 shows, the mines in Morogoro (mica), Uvinza (salt) and Songwe (coal) were operating in 1966 and continuously thereafter. The ability to retrieve the resources necessary for the national economy and development projects from local sources represented an important step towards self-reliance.

Gold, diamonds and gemstones on the other hand were considered as luxury minerals. They could obtain high return rates at international markets and hence generate foreign exchange as well as financial resources for the nation-state to be invested in other development projects. Surplus production after local requirements were satisfied in some cases were as well cleared for export (Kimambo, 1984, p. 66). However, the drastic decline in gold production and the successive slowdown of returns from diamond mining hampered the build-up of income from exported minerals. Gemstones, particularly the newly discovered Tanzanite, were considered as additional luxury minerals suitable for export which could compensate for the decrease in gold and diamond output.

With the retreat of the majority of large and medium-scale foreign companies, the extractive sector experienced a fundamental restructuring to which the engagement of the Tanzanian developmental state strongly contributed as well. The aspirations in establishing national sovereignty and territorial control via nationalization by the TANU government jeopardized the means of extraction inherited from the colonial period. Control and state participation in the extractive sector were achieved by the nationalization of the Tanzanian economy after 1967, when the domestic state monopoly was declared (Kulindwa et al., 2003, pp. 2-4). Hence, all mining enterprises were owned by the state on behalf of Tanzanian citizens and supposed to be put to the most beneficial use for the nation. Companies that perceived the changing political paradigms as a threat consequently often shut down their operations in Tanzania as others had in the uncertain years before independence.

Nonetheless, the nationalization of economic key sectors in Tanzania was not tantamount to the complete exclusion of foreign investments or external actors. By 1963, the Foreign Investment (Protection) Act (Chachage, 1995, p. 60; Ministry of Information and Tourism of the United Republic of Tanzania, 1968, p. 190) was enacted to protect enterprises with an approved status under the act from compulsory nationalization without adequate financial compensation. Consequently, foreign investment was continuously able to target economic spheres of external interest, just as before independence (Herzog, 1986, p. 202). Furthermore, foreign companies were granted the right to repatriate shares of their profits. When it came to seizures in the nationalization process, the government, despite its limited financial means, was required to disburse mining companies that were nationalized. The Ministry of Information and Tourism of the United Republic of Tanzania stated (1968, p. 190) that all nationalized companies in 1967 were compensated. In that way, the government was able to acquire controlling shares in mining companies of 51% and thus limit the amount of foreign ownership (Kimambo, 1984, pp. 67-69; Kulindwa, 2003, pp. 2-4). The Williamson diamond mine for instance thus turned into a joint venture (Ministry of Information and Tourism of the United Republic of Tanzania 1968, 168). Since 1971, the Tanzanite mines in Mererani were nationalized and later operated by STAMICO (Schroeder, 2012, p. 98). Foreign companies agreeing to the terms and conditions set by the Tanzanian government, including the controlling share of the government, were encouraged to invest in the country. Income from the mining sector was expected to come from royalties and taxation. Depending on the minerals, minimal royalties on coal and up to 15 percent on diamonds had to be paid, as well as sales tax, company tax, amounting to 45 percent of profits, as well as a 20 percent withholding tax on repatriated dividends (Kimambo, 1984, p. 70). These requirements hardly appealed to foreign companies at the time. However, other socialist countries such as the Soviet Union and China, among others, were signing agreements with the Tanzanian government. The Soviets, apart from being involved in infrastructure projects, were supposed to help with the geological mapping of the country but did not meet the expectations. China on the other hand was eyeing the extraction of coal and iron ore, but finally decided in the 1970s that the projects were economically unviable (Burton, 2017, p. 77).

Overall, the extractive sector faced a series of challenges after the nationalization. Again, as it had been the case for administration and other sectors as well, Tanzania lacked the skilled staff necessary to operate larger mines and develop more difficult deposits, which, for example, had to be operated underground. The relatively small companies that remained in the country were not capable of paying external specialists to support and extend potential operations (Kimambo, 1984, p. 113). For the purpose of self-reliance, the government under Nyerere determined the need to train Tanzanians in the required fields, as geologists, mining engineers, and the like, so that Tanzanians could rely on themselves in extracting the mineral endowments of their nation (Nyerere, 1968, p. 74; Kimambo, 1984, p. 113). Initially this had to be done abroad since the required education was not yet attainable at East African universities. In the meantime, necessary assistance had to be consulted from foreign specialists, which again was supposed to be kept to a minimum. Mineral deposits, whose exploitation excelled the capacities of Tanzanians and consequently required foreign companies to operate extraction, were supposed to be left untouched until the required skills and capacities became available from within the country itself in the future (Emel et al., 2011, p. 75; Lange and Kinyondo, 2016, p. 1097). In this way, the government did not only want to reserve the country’s mineral wealth for future generations, but also to prevent a sell-out of Tanzania’s minerals.

Assistance was oftentimes part of agreements with other socialist countries such as the aforementioned China and Soviet Union, but also the German Democratic Republic, Hungary, Bulgaria as well as other African states. Donor countries such as the Federal Republic of Germany and others were also involved in the provision of assistance (Burton, 2017, pp. 374-377). The experts consulted from abroad were supposed to aid in the development of Tanzania’s economy, the composition and implementation of development plans, as well as certain development projects. Eric Burton (2017, pp. 374-377) outlines the activities of the West-German consultant Döpel, who advised the Tanzanian government and its parastatal institutions in the mining sector in the early 1970s, in particular the National Development Cooperation, regarding the gemstone production and marketing. While the Tanzanian government simultaneously attracted aid from various countries, western countries dominated in the extractive sector. In the middle of the overall slowdown of the mineral economy in Tanzania, the discovery of a new, blue gemstone, which became known as Tanzanite, brought renewed hope to the sector. The gemstone, only to be found in a single place, in Mererani, close to Arusha in the north of the country, was seen as a welcome compensation for the flagging gold and diamond subsectors in earning foreign exchange. In order to achieve that, the Tanzanian government consulted external experts. Döpel was expected to advise the National Development Cooperation concerning the production and marketing of Tanzanite and other gemstones to generate income for Tanzania. However, as Burton elaborates, the collaboration between the National Development Cooperation and the West-German consultant was characterized by divergent goals and aspirations. The heads of the cooperation, through the responsible company, the Tanzania Gemstone Industries, were initiating a contract with the New York-based jewellery company Tiffany while Döpel was looking to come to an agreement with a West-German conglomerate, that was supposedly willing to pay substantially more for the gemstones than Tiffany. Burton (2017, pp. 376) implies that the story evolving around Tanzanite at the time was already an indicator of growing corruption networks in the state apparatus and beyond, including networks of white settlers connecting Tiffany's in New York with Kenya and the Tanzanian parastatals.

Although the consultation of foreign experts was relatively frequent until the 1970s, there was a growing attitude that foreign experts not only cost the Tanzanian state too much money, but that they also posed a threat to the socialist movement as spies and were supposedly involved in acts of sabotage. Consequently, the presence of foreign experts had to be reduced to a necessary minimum and, wherever possible, be replaced with Tanzanians (Burton, 2017, pp. 73-75). The lack of adequately trained Tanzanians, however, remained an enormous problem.

Despite external assistance, the engagement of the state and efforts to train Tanzanians for tasks in the mining sector, the sector remained hindered from becoming a significant contributor to the Tanzanian economy from the late 1960s onwards. Firstly, because attracting foreign investment was not particularly successful. The high degree of government involvement discouraged many foreign companies from seeking profits from mineral production. Even more discouraging, however, were the Tanzanian sanctions against Apartheid South Africa. South Africa, having a strong mineral sector and several large-scale companies and supplier-firms itself, was barred from any forms of interactions with Tanzania, which over time became a training ground for anti-apartheid fighters (Schroeder, 2012, p. 22). The consequences of this embargo for the mining economy in Tanzania were severe. Mining companies from South Africa interested in operating in Tanzania did not receive permissions. Furthermore, supplies and machinery could no longer retrieved from South Africa for a comparatively low cost (Chachage, 1995, p. 53). Consequently, those items had to be shipped from Europe, North America or even Australia causing increased operational costs for companies, but more importantly the initial investments necessary for companies to operate in Tanzania. In effect, mining for large-scale or even mechanized medium-scale companies became largely unappealing and economically unviable. According to this circumstance there were no mentionable new foreign mining operations, and only few established companies in the diamond and gemstone sector had formed partnerships with the Tanzanian state in the nationalization process.

Despite Nyerere's determination to leave minerals in the ground until Tanzanians themselves had the capabilities to self-reliantly extract and process them (Lange and Kinyondo, 2016, p. 1097), the Tanzanian state started to engage more in the mineral sector from the 1970s onwards by establishing several institutions focused on mining. The National Development Cooperation, founded in 1965, was managing the ownership of mineral resources on behalf of the state. Its responsibilities, though, reached far beyond the mining sector, since all companies in which the government had acquired controlling interest, e.g. Tanzania Breweries or British American Tobacco, were managed by the National Development Cooperation (Ministry of Information and Tourism of the United Republic of Tanzania, 1968, pp 171-173). Okoko (1987, p. 135) points to the growing importance of parastatals after the Arusha Declaration in managing the national economy. In 1967, the National Development Cooperation controlled twenty-one enterprises and held majority shares in seventeen others. Only five years later, in 1972, fifty companies as well as their subsidiaries in the realm of banking, insurances, import and export businesses, and factories of various branches were under its control (Okoko, 1987, p. 140). This circumstance also led to critique from hard-line socialists in the country.

The Mining Ordinance Bill as a legislative amendment transferred the ability to issue, renew or refuse mining licenses to the respective ministers (WWF and Tanzania Chamber of Minerals and Energy, 2012, p. 21). The Mineral Resources Division, as a part of the ministry, represented a practically operational branch. Its responsibilities included geographical mapping and exploration, planning future developments of mineral resources. Furthermore, it provided technical services, advice and assistance to the public, mining companies and cooperatives, as well as the administration of mining legislations, statistics and revenue collection (Moshi, 1992, p. 57).

In 1972, the Tanzanian State Mining Cooperation (STAMICO) was founded and became operational the year after. STAMICO's purpose was mainly to conduct feasibility studies as well as the production and marketing of minerals as a commercial extension of the Mineral Resources Division. It was furthermore the institution through which the Tanzanian government entered into contracts and partnerships with foreign companies (Kulindwa, et al. 2003, p. 2; Moshi, 1992, pp. 57-58). In fact, after 1973, all contracts for signing and licenses to be allocated after 1973 had to pass through STAMICO (Interview #7), which hence also represented a controlling institution in the mining sector. On the other hand, all these institutions provided formal employment for some of the Tanzanians being trained in mining related fields. STAMICO was also operating mines itself, as it took over the abandoned Buckreef mine at Geita in the early 1970s in an effort to profit from increasing gold prices (Chachage, 1995, p. 54; Emel et al., 2011, p. 75). However, the government funded operations, which had to be conducted in underground mining, were completely unprofitable due to high costs and low returns. In eight years of production, commencing in 1981, the mine's output amounted to only 800 kilograms of gold (Chachage, 1995, p. 54). The mine was consequently closed when it was finally considered as glaringly unviable (Interview #7; Emel et al., 2011, p. 75; Kulindwa et al., 2003, pp. 2-3).

In addition to the National Development Cooperation, the Minerals Resources Division and STAMICO, the Tanzanian Petroleum Development Cooperation was founded in 1969 as and can retrospectively be seen as a complimentary institution to STAMICO, having similar obligations regarding the extraction of oil in the country. It commenced operations in 1973.

Overall, the emergence of these government agencies concerned with mineral extraction in the period between 1965 and 1972 indicates the government's efforts to engage in, and more importantly control, the extractive sector in the country. The establishment of dedicated government institutions, despite the insignificant contribution to the national GDP from mining, furthermore, shows that the TANU government regarded the sector as relevant for both, domestic development and potential external trade.

The establishment of these government bodies was also part of the restructuring of the Tanzanian economy, as envisioned by the second five-year development plan. Unlike its predecessor, the second development plan was less influenced by external actors. Focusing on the period between 1969 and 1974, the plan envisaged increased efforts to make use of mineral resources. This first and foremost required intensive exploration, mineral surveys and prospecting in order to locate and identify new resource deposits and their potentials. The geological groundwork provided by government agencies was set to encourage mineral extraction and related industries (Moshi, 1992, p- 52). At the time, large-scale operations had disappeared from the Tanzanian mining sector, with a few exceptions. The TANU government, also in the sense of self-reliance, had recognized and included in the Arusha Declaration, that large-scale industries were not the way to go for Tanzania. There were not sufficient funds to establish industries and building them, nonetheless, would indebted the country. Since Nyerere considered the key to development not to be money, but people, small and medium-scale operations were viable solutions (Nyerere, 1968, pp. 26-29). Consequently, the development plan was also supposed to give incentives to local governments, cooperatives and individuals to engage in the extraction of small, often scattered mineral deposits, for gemstones, mica and other minerals (Moshi, 1992, p. 52). As in the agricultural sector, cooperatives were an important organizational form in the mining sector, since they were supposed to provide a communal, state-controlled framework for mineral production. While reasonable on paper, mining cooperatives largely failed in Tanzania. Those focusing on gold in the Lupa area and several gemstone cooperatives were unsuccessful and mica cooperatives in Morogoro faced severe problems due to the low mineral prices and rentability. Only in the production of base minerals such as limestone, coal, gypsum and salt, the cooperatives did become viable (Kimambo, 1984, p. 77). The absence of large-scale mining operations and the low performance of cooperatives does, nevertheless, not mean that there was no significant mineral production in Tanzania during the socialist era. In fact, there was a blossoming, informal mining economy.

Figure 10:

Mineral Sales 1970-1984 (quantities)

Mineral	**Unit**	**1970**	**1971**	**1972**	**1973**	**1974**	**1975**	**19756**	**1977**
Diamonds	‘000 g	139.3	163.0	129.0	115.0	99.6	99.6	87.6	81.5
Salt	‘000 t	42.0	25.1	42.7	33.0	41.7	44.6	57.0	33.0
Gemstones	‘000 g	681.0	240.6	1,928.0	3,909.0	842.5	265.6	3,543.1	713.0
Tin	‘000 t	398.0	163.0	56.0	16.0	68.4	20.5	-	-
Gold	‘000 g	244.4	5.2	6.6	1.1	2.0	2.4	0.3	-
Mica	‘000 t	44.5	36.8	22.9	16.4	9.7	-	-	-
Mineral	**Unit**		**1978**	**1979**	**1980**	**1981**	**18982**	**1983**	**1984**
Diamonds	‘000 g		58.6	64.6	55.5	58.4	55.8	51.7	58.0
Salt	‘000 t		33.0	36.9	33.2	38.1	34.2	27.4	52.0
Gemstone	‘000 g		94.9	1,210.3	3,052.6	444.2	546.7	650.3	5,528.6
Tin	‘000 t		-	-	-	8.5	9.3	3.0	4.0
Gold	‘000 g		-	8.9	7.6	6.7	19.9	17.7	16.8
Mica	‘000 t		-	-	-	-	2.7	4.0	1.3

Mineral Sales 1970-1984 (value)

Mineral	**Unit**	**1970**	**1971**	**1972**	**1973**	**1974**	**1975**	**19756**	**1977**
Diamonds	‘000 g	106.2	128.0	138.9	166.8	154.3	178.0	159.1	151.3
Salt	‘000 t	8.1	8.6	8.2	8.0	9.9	14.3	16.9	15.7
Gemstones	‘000 g	2.8	0.7	1.9	4.8	4.2	1.9	3.7	2.1
Tin	‘000 t	6.4	8.2	1.1	0.3	1.1	0.2	-	-
Gold	‘000 g	2.3	-	0.1	-	0.1	1.0	-	-
Mica	‘000 t	1.2	8.6	0.5	0.4	0.2	-	-	-
Others	‘000 t	2.7	2.5	2.0	2.9	2.9	2.2	4.6	1.7
Mineral	**Unit**		**1978**	**1979**	**1980**	**1981**	**18982**	**1983**	**1984***
Diamonds	‘000 g		169.0	231.4	311.6	240.1	201.4	217.6	373.0
Salt	‘000 t		13.1	22.5	43.4	60.9	52.2	43.9	82.1
Gemstone	‘000 g		1.4	2.9	3.7	1.9	3.5	2.6	22.1
Tin	‘000 t		-	-	-	0.6	0.7	0.3	0.4
Gold	‘000 g		-	0.9	1.0	-	1.4	3.1	3.0
Mica	‘000 t		-	-	-	0.1	0.2	0.3	-
Others	‘000 t		3.9	5.7	6.8	6.9	6.2	5.4	6.3

(Source: Moshi 1992, pp. 68-69).

As figures 10 and 7 (chapter 3) illustrate, the recorded output of minerals for export, namely gold, diamonds and gemstones, decreased or at least fluctuated heavily. The reliability of these numbers can be questioned since mineral smuggling was a booming business during this time. By 1975, there was no recorded gold production, a circumstance from which Tanzania only recovered gradually in later years. The diamond production on the other hand steadily declined, although it still generated solid revenues while the gemstone output resembled a rollercoaster ride.

The closure of large and medium-scale mines in the 1960s and even before, as well as the challenges facing the emergent extractive cooperatives, parastatal companies and potential investors took their toll on the formal mineral sector. At the same time, the situation provided fertile ground for informal, artisanal miners to fill the vacuum left behind by companies. In 1970 it was reported that artisanal miners, rendered illegal according to the legislation in effect, had extracted two-thousand ounces of gold in the country (Kimambo, 1984, pp. 87-88). The former mining fields of Geita gold mine, which closed in 1965, and other abandoned mines, represented the ideal terrain for establishing artisanal mining claims since the existence of deposits was proven in the idle mines. Increasing gold prices in the 1970s furthermore initiated gold rushes in the goldfields south of Lake Victoria or in Lupa (Kimambo, 1984, pp. 87-88). Artisanal mining thus provided additional income to peasants, but also to people pursuing other professions. As Chachage (1993, p. 94) points out, former mine employees turned to artisanal mining in order to sustain their livelihoods after they had been laid off or mines had closed. Given their knowledge in the field, this was an obvious path to pursue.

Over time, as artisanal mining started to become a promising way of generating income, a dynamic informal economy outside of the state's grasp was growing (Burton, 2017, p. 79; Chachage, 1993, p. 95). Attempts of STAMICO to establish itself as a buyer of gold from artisanal miners in the Lake Victoria area failed because only few people sold their produce to the company causing higher the administration costs to be higher than the returns (Kimambo, 1984, p. 88). Artisanal mining thus turned from a means of survival to a means of accumulation which nurtured a blossoming "black market capitalism" (Chachage, 1993, p. 87). However, since small-scale miners had to sell to STAMICO for fairly low prices within the country, smuggling minerals, particularly gold and gemstones, to Kenya and selling those there became a vivid business. This business was often run by Asian, Arab or Greek traders as middlemen (Chachage, 1993, p. 95; Kimambo, 1984, p. 105). The economic crisis, rising resource prices, insufficient income and jobs furthermore contributed to the growth of mineral smuggling and the growing informal, transnational economy (Burton, 2017, p. 79).

From the standpoint of the Tanzanian state the mineral smuggling posed a problem in different ways. The revenues generated in the informal mining economy were not accessible to the government as there were neither production records, nor efficient means to embank smuggling on the side of the state. Economically, the emergence of the mineral trans-border black market furthermore contradicted the aspirations of the government to maintain a classless society, free of private accumulation. However, the increase of smuggling particularly after the collapse of the formal mineral economy and the rise of resource prices during the 1970s lead to the bottom-up emergence of capitalist structures within socialist Tanzania, which, according to Chachage (1993, p. 88), already partially provided the foundation for later developments under liberalization processes. Consequently, the informal mineral smuggling to Kenya can be considered as an indication for the failure of TANU’s politics regarding the extractive sector and its effects in the late 1970s and 1980s.

4.3. The nation-state, territory and the mining economy in post-independence Tanzania

The implementation of a classical sovereignty regime by the postcolonial state under TANU leadership represents the core of this transitory phase. According to Agnew, a classical sovereignty regime is characterised by a high degree of effective central state authority reflected in “despotic and infrastructural power” (Agnew 2005, 445) and the consolidation of state territoriality. This process is generally reflected in the government’s struggle to end dependence on Britain, Africanise or respectively localise the state apparatus, and establish authority on multiple scales, local, national and international. This also includes efforts to achieve effective control over the nation-state territory, such as the restructuring of local administrations, abolition of chiefs and even the implementation of the ujamaa villagization programmes in later years. Tanzania’s path under Nyerere was basically one of state-centrism, state developmentalism as well as growing authoritarianism (Ewald, 2011, p. 103).

For the mining sector, the overall tendency towards the establishment of a consolidated national territory contributed to the dissolution of extractive enclaves. These processes, however, did not just start with the official independence of Tanganyika. As indicated in the preceding chapter and above, already during the 1950s, when TANU was starting to establish a popular basis and independence was slowly approaching, mining companies started to abandon Tanganyika due to uncertain prospects for the period ahead. As more foreign-owned mining companies left the newly independent country, the external dominance of the sector slowly withered away and with it the enclave-based modes of production. Finally, the nationalization of the few remaining mining companies represents a crucial step in the decolonisation of the mineral sector and the positioning of the central, developmental state as the controlling actor. The nationalization furthermore equals the incorporation of companies and extractive enclaves into state territory. The establishment of state-run and parastatal mining agencies in the late 1960s and early 1970s furthermore contributed to controlling and regulating the sector. Consequently, the territoriality of the Tanganyikan, respectively Tanzanian, state after independence challenged the prevailing spatial order of extraction based on enclaves with strong ties outside of the country and even the continent. The production of a spatial order of extraction, based instead on national territory and (para)statal entities as the major actors shaping it, hence allows for a contrasting framework.

Although the post-colonial state still functions as a regulator and gatekeeper, just as the colonial state did, this role is increased insomuch that all contracts, investments and activities had to be channelled through government bodies. The post-colonial Tanzanian state under Nyerere was not only gatekeeper and regulator but also manager of the country's resource assets on behalf of the Tanzanian people. Simultaneously, the fragmented territorialisation of extractive enclaves was replaced with an, what at least proclaimed to be, an all-encompassing state territoriality. Mining in Tanzania in this period formally happened only under the umbrella of the state. Nevertheless, multiple foreign actors, such as consultants, played a crucial role in shaping the mining sector. At the same time, state actors used state capabilities for their purposes.

However, while extractive enclaves were challenged by state territoriality, their dissolution also gave way to frontiers in the sense of Kopytoff (1987). Parastatals as well as artisanal small-scale miners took over abandoned mines. Particularly the informal economy emerging around the artisanal extraction of gold and gemstones in northern Tanzania indicates, that the territorial control of the developmental nation state was not effectively all-encompassing, but left loopholes.

This essentially means, that while there were overall contestations of the spatial order at play during the transitory period from late colonialism to independence, from privately run, enclave-based extraction to the developmental state and nationalized operations, frontiers and territoriality still played a role. Nevertheless, the nation state must be considered as the overarching framework here.

4.4. Crisis, the end of the socialist experiment and the return to old patterns

The nationalization of the economy's key sectors after 1967 had finally put the Tanzanian state in charge of the extractive sector. With STAMICO there was a state-owned mining company, Tanzanite had become the national gemstone and successively the number of Tanzanians trained for skilled labour in the mining sector increased. However, the initial euphoria about Nyerere's vision to reform the country after independence, which resulted in huge financial assistance amounting to contributions to the state's development budget of up to 54 percent in 1974/75 (Burton, 2017, p. 78), was fading away due to the increasing authoritarianism and radicalisation. This circumstance and the global economic crisis in the late 1970s as well contributed to the ebbing of financial aid, leaving Tanzania in a quandary. The crisis, however, hit Tanzania in multiple ways. Longstanding droughts impacted on the harvest of food and cash crops while at the same time the export prices of agricultural products were decreasing. Hence, the main source of income for Tanzania was severely compromised and the its foreign trade balance crumbling. In consequence, also nationalized companies and joint ventures were incurring losses. Since the 1970s, Tanzania was continuously in deficit, the economy stagnant, imports tripled and the country became increasingly indebted

(Chachage, 1995, p. 43). Moreover, the government failed to coordinate the foreign capital invested in the country (Hartmann, 1990, p. 249). Bjerk sums up that ten years after the Arusha declaration, Tanzania had failed at almost all goals set in 1967 (Bjerk 2017, 105-106).

Simultaneously, the prices for crude oil, petroleum products, and necessary industrial imports such as machines, motor vehicles and consumer goods were rising (Bjerk, 2017, p. 117; Hartmann, 1990, pp. 247-249; Herzog ,1986, p. 243-244). The crisis for Tanzania was exacerbated by Idi Amin's invasion of Kagera region in the north-west of the country in October 1978 following the rebellion in Uganda. While Amin was defeated and the war came to an end in June 1979, Tanzania had spent all its foreign exchange in its course. This combined with the already curtailed revenues, meant the state was largely unable to provide for imported goods. The result being the hoarding of products which in turn led to blossoming of informal economies, making the policies of ujamaa unsustainable (Bjerk, 2017, pp. 108, 117–118; Gibbon, 1995, p. 11).

As for the overall economy, the global economic downturn impacted on the mining sector. During the 1970s, gemstone production especially remained stable and peaked both in 1973 and 1976, but was generally of little economic relevance. The diamond output of the Williamson mine slowed down after 1975, however the rising prices for diamonds resulted in higher returns from significantly less produce. Gold had meanwhile become almost totally insignificant (see figure 10). Chachage (1993, pp. 84-85) argues, that several state interventions hindered the Tanzanian mining economy from profiting from the increased mineral prices during the economic crisis and its aftermath in the 1970s and 1980s. Hence, the sector missed out on higher revenues.

Despite the nationalization, the establishment of parastatals, efforts to explore for minerals and train local staff, the extractive sector did not meet the expectations imposed on it by the government. Kimambo (1984, p. 77) suggests, that there were still obstacles hampering the sector from flourishing. Although the number of skilled personnel for the mining sector increased, there were insufficient number of Tanzanians to take up positions in the higher management positions and the general lack of workforce in some areas was even worse. On top of that, the financial resources available posed a limiting factor, as well as the dependence on external markets due to non-existent domestic markets for high priced minerals.

In order to change the course of the mining sector and to at least benefit from the high price level of mineral commodities, the Tanzanian government initiated reforms in the extractive sector, reflected in the Mining Act of 1979 (The United Republic of Tanzania, 1979) and the third development plan on mining, 1978-1981. The development plan called for a stronger emphasis on the mining sector, particularly on the production of domestically relevant materials such as coal, iron, salt and raw materials for fertilizer and building materials. Furthermore, potential linkages between the available minerals and chemical industries were to be pursued. In doing so, the government sought to restructure the extractive sector after the failure of the villagization programme by strengthening ties in the domestic economy and reducing external dependency by once again focussing on local resources. Gold, diamonds and gemstones were supposed to be extracted only from easily and quickly exploitable deposits in order to keep production costs low and raise foreign exchange earnings (Moshi, 1992, p. 52). Hence, the development plan represented a revamped version of the self-reliance policies imposed in the prior decade.

The Mining Act of 1979 finally legalized artisanal small-scale mining, which until then had been illegal and criminalized under the regulations in place since 1929. The 1983 amendments to the new mining law were particularly geared towards small-scale miners (Kulindwa et al., 2003, pp. 3-4). On the other hand, however, the Mining Act departed significantly from the ideas of self-reliance and state control. In fact, the new regulations were aimed at attracting foreign investment in large-scale mining operations. State participation in mining companies was no longer obligatory and the regulations were eased slightly for private investors (Chachage, 1993, pp. 96-97). Generally, the law gave authority to the responsible minister to approve licenses or deny them, whereas the role of companies was to fulfil duties and obligations provided by the legal framework. For example, companies were obliged to account for their plans to employ and train Tanzanians, for infrastructure requirements, as well as the use of goods and services provided in the country (Butler, 2004, pp. 71-76). This strongly resonates with recent debates about local content. The reforms in the new mining regulations can be seen as efforts to open the mineral sector for foreign companies and investment by reducing the direct participation of the state. The reforms created a framework for licensing but at the same time reaffirmed state ownership (Emel et al., 2011, p. 75) According to Paula Butler, the implementation of the 1979 Mining Act turned the Tanzanian state from owner and operator to service provider, regulator and promoter of the extractive sector (Butler, 2004, pp. 73-74). STAMICO again occupied a central function as all contracts were still channelled through it, and it and it was supposed to attract and administer foreign investments.

Shortly after the new regulations came into force, the first junior companies entered the country such as the German-Egyptian Dar Tardine in 1984, which started to revived the colonial mine at Buhemba (Chachage, 1995, p. 56; Emel et al., 2011, p. 75). Small companies and subsidiaries of large mining firms, mostly from Australia, Canada and Europe started prospecting across Tanzania and recovering gold from abandoned mines (Chachage, 1993, p. 98). These companies represented the vanguard of larger companies that would follow once the profitability of extraction in Tanzania under the given circumstances was proven. By permitting exploration and production for foreign companies without the participation of parastatals on behalf of the Tanzanian state, the government produced a frontier, that fundamentally influenced processes of spatialization and the restructuring of the extractive sector in the country during the following years. Hence, external private and corporate actors were enabled to enter Tanzania and produce territories for the purpose of prospecting for and extracting minerals.

Concerning the overall production of minerals, the impact of the law reforms remained relatively small. The changes in the revenues collected from diamond mining were rather due to price fluctuations on global markets than to increased production quantities. The recovery of gold increased slightly but in sum was negligible revenue-wise. The gemstone production however skyrocketed. While in 1978 94.9 kilograms of gemstones were produced in Tanzania, it amounted to 5,528.6 kilograms in 1984. In terms of value this corresponded with an increase by roughly a factor of 16 (Moshi, 1992, pp. 68-69). This extraordinary increase can be attributed to the legalisation and support of small-scale mining and thus to the rise of formally registered gemstone production. In total, however, the reforms neither achieved the aspired goals of increasing foreign exchange earnings nor a greater GDP contribution of the mining sector. In fact, the sector's contribution to the national GDP shrunk from 2.9 percent in 1967 to 0.7 percent in 1980. STAMICO failed to attract more foreign investment and its own operations were highly unprofitable (Chachage, 1993, p. 96; Kulindwa et al., 2003, pp. 3-4).

Tanzania was trapped in economic crisis and its efforts to alleviate the situation had only little to no effect. By 1979, the International Monetary Fund (IMF) demanded the devaluation of the Tanzanian Shilling and other political, as well as other economic reforms fostering austerity politics in line with the Washington Consensus and minimalizing government interventions. All of this in order to be eligible for further credits and financial assistance. Nyerere however resisted the demands of the IMF as they completely contradicted the state-controlled socialist development model that he and the TANU government had implemented in the country (Bjerk, 2017, pp. 118-121; Burton, 2017, pp. 79-80). Economic emergency policies promoting increased production and the like, failed in the following years, the country's financial plight worsened and the government slowly turned towards the IMF's demands (Bjerk, 2017, pp. 122-123; Burton, 2017, p. 79; Chachage, 1995, p. 41). In 1985, Julius Nyerere stepped down as Tanzania's President and admitted the issues of ujamaa and the state-led socialist development model but remained the chairman of the government party until 1990 (Bjerk, 2017, p. 125; Burton, 2017, p. 80). After the elections in 1985, Ali Hassan Mwinyi, favoured candidate of Chama cha Mapinduzi (CCM, Party of the Revolution), which was founded by the merger of TANU and the Afro Shirazi Parry in 1981, became Tanzania's new president (Bjerk, 2017, pp. 124-125; Burton, 2017, pp. 59-60). Although CCM originally sought to consolidate and carry on the spirit of the socialist revolution and spread it across the continent despite the capitalist pressure (Herzog, 1986, p. 242), Mwinyi pushed for change. In contrast to Nyerere, he endorsed liberalization politics and quickly dismissed Nyerere's followers from the cabinet (Bjerk, 2017, p. 125; Gibbon, 1995, p. 12). In 1986, Mwinyi signed a long-term agreement with the IMF that would increase aid dependency and debt tremendously and led to the fundamental restructuring of Tanzania (Burton, 2017, p. 80; Ewald, 2011, p. 108). Bjerk argues that the acceptance of the IMF's conditions and the structural adjustment programme was not only necessarily enforced by external actors only, but was the result of a gradually commencing process among pragmatists in the Tanzanian government (Bjerk, 2017, p. 123).

For the mineral sector the IMF's Structural Adjustment Programme and Economic Recovery Programme meant the promotion of export production, particularly gold, diamonds and industrial minerals and the expansion of the oil and gas subsector in order to alleviate payment issues. This was analogously applied to the agrarian sector. Furthermore, physical infrastructure was supposed to be rehabilitated, the industrial capacities strengthened and utilized more efficiently which meant the allocation of scarce foreign exchange to key economic sectors. Consequently, buying in to these programmes meant a departure from the socialist Tanzanian development strategies, the discarding of socialist aspirations and the acceptance of capitalism to solve the problems that had partially emerged in the confrontation of the Tanzanian solution and global capitalist systems (Moshi, 1992, p. 63). In the end, holding on to the credo of self-reliance paradoxically led Tanzania to increase their dependence and to an export-oriented economy in continuity of colonial patterns (Burton, 2017, p. 78).

Retrospectively Moshi (1992, p. 61) blames the failure of the development plans for the Tanzanian mining sector on the continued engagement of foreign and multinational companies as well as the government's insufficient dedication to solve prevalent shortcomings. In his view, the lack of adequate financial resources, technology and skilled labour was a persistent problem hampering the development of the sector. Accordingly, the information about the national resource endowments remained low despite increased exploration efforts by parastatals. Moreover, he argues, that there was too much emphasis on minerals for export and too little on those utilisable for the country itself. Due to bad marketing practices the revenues generated from minerals also remained relatively low. Likewise, the sector's contribution to the GDP and to socioeconomic development fell short of expectations. As for the multinational companies and consultants, Moshi claims that they actively hindered the development of the state-run mining sector by withholding the geological data they were recovering from explorations in the country. For the extraction of certain minerals or difficult deposits the Tanzanian parastatals were furthermore dependent on foreign companies because only those had the required technology and personnel.

4.5 Conclusion

Tanzania's turn to socialism under Julius Nyerere brought about fundamental social, political and economic changes in relation to the colonial period. The policies of Africanisation, localisation and nationalisation along with the implementation of ujamaa, self-reliance strategies and cooperatives were supposed to make the newly independent country a prosperous state of peasants and workers. However, the political dependency on Britain and the financial dependence on other donor countries continued to affect and confine Tanzania's path after independence.

For the mining sector, the transformation meant the successive departure of foreign companies and the embracing of state control and ownership in the frame of a classical sovereignty regime. Although the Tanzanian government formally controlled and administered the country's minerals on behalf of its citizens, decisions and developments were consistently influenced by external consultants and agencies.

Spatially, this manifested in the challenging of the enclave-based extractive order by increased territoriality of the Tanzanian state and the dissolution, respectively absorption of extractive enclaves. At the same time, the increased state territoriality and dis-enclaving resulted in the production frontiers, which again set the frame for territorialisation on a smaller scale, enabling artisanal, informal mining practices and economies. Nevertheless, the consolidation of national territory and related practices and processes of spatialization can be considered as the central principle ordering extraction after 1967, despite persistent ties to global markets.

Economic hardship, global financial crisis and international pressure by the IMF and donor countries not only forced political change but also a partial retreat of the state from the extractive sector that paved the way for later liberalisation processes. This partial retreat and the increased permissiveness of its mining policies in consequence, contributed to the production of commodity frontiers providing fertile ground for companies to enter Tanzania in search of profits. This circumstance points towards significant parallels with the colonial period. Because processes of liberalisation were only beginning in the 1980s, the parallels become more apparent in later years.

In conclusion, the socialist period of Tanzania between 1961 and 1985 represents an interlude in the spatial order of mineral extraction and the processes of spatialization at play. It represents a significant break with the prior colonial phase, despite certain continuations. How deep-rooted the colonial order of extraction was, and is, became clear as soon as the Tanzanian state was forced to retreat from the extractive sector in order to secure financial assistance. The following chapter will pursue the short history of space and extractive industries in Tanzania during the period of intensified liberalization, since 1986, and thus shed light on the complete relapse to colonial patterns of extraction and their spatial implications

5. "Foreignization", liberalization and renewed commodity frontiers, 1985 to 2015

5.1 Structural adjustment and early liberalisation

5.1.1. Opening the Doors

When Nyerere stepped down from as Tanzania's president in 1985, the liberalisation of the economy was already underway. For the mining sector, the Mining Act of 1979 initiated the processes of liberalisation, privatisation and the gradual withdrawal of the state even before Tanzania officially entered into the World Bank's schemes (Pedersen et al., 2016, p. 15). By 1982/83 the legislation was amended, mineral trading became successively privatised (Kulindwa et al., 2003, p. 4) and by 1984 the first independent, foreign mining companies appeared in Tanzania (Chachage, 1995, p. 54). Despite the fact that government participation in mining enterprises was no longer mandatory and efforts to attract foreign mining companies increased, the state still remained the central controlling and regulating actor, whilst simultaneously attempting to profit from surging artisanal mining practices. Due to discoveries of gold in various parts of the country, for example at Bulyanhulu in Geita district, artisanal mining was booming in the late 1970s and after (Chachage, 1995, p. 57). The establishment of regional mining organizations and associations after 1983 represents additional efforts to formalise the informal mining activities (Chachage, 1995, p. 83) that still took place under Nyerere's presidency.

The change in leadership from Julius Nyerere to Ali Hasan Mwinyi, however, meant the acceptance of the World Bank's and IMF's terms against which Nyerere had resisted, and thus the turn from ujamaa to liberal capitalism. In 1986, Mwinyi approved Tanzania's participation in the Economic Recovery Program (ERP) and Structural Adjustment Program (SAP) after pressure from donors and the IMF via reduced aid were pressing the country (Ewald, 2011, pp. 107-108). In doing so, economic liberalisation became the official policy aim the foreign direct investment accepted as the solution for the weak mining sector (Chachage, 1995, p. 43; Interview #15). Both SAPs and ERPs, aimed at a fundamental restructuring of the Tanzanian economy. The export of cash crops and raw materials was promoted and the allocation of state budget to key economic sectors in order to rehabilitate production infrastructure and thus reduce debts was pivotal (Moshi, 1992, p. 83). Overall, liberalisation via ERPs and SAPs was initially seen as an attempt in debt relief for Tanzania by means of privatization, cutting back the state, the abolition of tariffs and removal of subsidies. In this way, roughly 400 parastatals were sold off to private hands over time (Butler, 2004, p. 67; Chachage, 1993, pp. 82-83; Schroeder, 2012, p. 55). Foreign direct investments (FDI) hence became an integral part of Tanzania's development strategy, which is also reflected in the establishment of the Investment Promotion Centre in 1990 or Tanzania Investment Centre, as it was later called (Chachage, 1995, p. 43; Pedersen et al., 2016, p. 18; WWF and TCME, 2012, p. 21).

The macroeconomic reforms of liberalisation brought fundamental transformations to all economic branches of the country. The adaption of neo-liberal, capitalist ideologies by the African elites did not only contrast with the socialist agendas of the past decades, but led to processes of commodification encroaching on the everyday lives of people (Satgar, 2009, p. 40).

While agriculture and manufacturing were at the core of the reforms from the start, the significance of mining had long been overlooked by the World Bank and only realized in the late 1980s (Chachage,1993, pp. 82-83). Nevertheless, the changes under the gradual opening of the Tanzanian mining sector via the Mining Act of 1979 had resulted in the influx of junior mining companies from Australia, Canada, Europe and Asia, which were testing the waters for large-scale extraction in Tanzania during the 1980s. Instead of prospecting and establishing new mines, those companies were occupied with attempts to revitalize abandoned mines by implementing new technologies or subcontracting mining work to artisanal miners (Chachage, 1993, p. 98; 1995, p. 54, 72).

Between 1989 and 1992, 75 prospecting licenses and 17 mining licenses were issued and by 1992, there were 67 drilling companies registered in Tanzania. Placer Dome at Bulyanhulu, TANEX, a joint venture between Anglo American and DeBeers working the diamond deposits next to Williamson mine at Mwadui, were among the active companies (Chachage, 1995, pp. 54-55; Interview #7, #14).

Towards the end of the 1980s, the Tanzanian government sought to take advantage of the increased ASM activities and engaged in gold buying at world market prices. It furthermore encouraged artisanal mining by allowing miners to freely mine all over the country (Emel et al., 2011, p. 75). In consequence, in 1989, the Bank of Tanzania bought 116 kg of gold from artisanal miners. By 1990, however, 1.65 tonnes of gold were recovered by the bank's gold buying scheme. Between 1989 and 1992, the value of gold production skyrocketed from 1,152,000 US$ to 40,380,000 US$ and with an approximate contribution from ASM of 80% in 1990 (Chachage, 1993, p. 84; 1995, p. 57; Kulindwa et al., 2003, p. 1). These efforts to increase revenues from mining and curb mineral smuggling across the border to Kenya or Uganda were only partially successful. Smuggling remained vivid and the potential of fraud was high since the bank lacked qualified staff to value and identify gold. Consequently, other minerals disguised as gold ore were sold to the bank without being noticed (Interview #21).

In the course of the neoliberal transformation of the mining sector, STAMICO successively lost its purpose as the central coordinating agency for extractive activities in Tanzania and was consequently closed down (Emel et al., 2011, pp. 75-76). While before all mining contracts and licenses had to pass through STAMICO, some companies directly addressed the responsible ministry and often the minister himself. Jakaya Kikwete, who became president in 2005 and the minister at the time, signed the first direct agreement with Sutton Resources over the concession at Bulyanhulu, which strictly speaking was against the law. After 1992, particularly for the gold mining industry, the direct way via the minister became the new normal (Interview #7). This situation led to highly selective investments and encouraged uncontrolled accumulation, an "economy of plunder" (Chachage, 1993, p. 106) and "wild capitalism" (Gibbon, 1995, p. 16).

The increased revenues from mining and the influx of new actors to the sector during the 1980s and early 90s came at a price. Conflicts between the corporate newcomers to Tanzania and artisanal miners emerged across the country and often turned violent or even fatal. Chachage (1995, pp. 37-38) paradigmatically illustrates the case of TOM mines, a Thai company mining rubies and sapphires in Morogoro district in the early 1990s, in which the conflict over access to land and mineral deposits culminated in the violent eviction of artisanal miners, blockades, systematic harassment of locals by the authorities and the killing of one and the injuring of two additional artisanal miners (Chachage 1995, pp. 37-38). Since artisanal miners often did not hold licenses, they could be driven from their mines easily (Interview #14). A peak in the quarrel between foreign companies and artisanal miners was reached in 1996 when a Canadian company allegedly buried fifty artisanal miners alive in the shafts of a gold mine when bulldozing the concession granted by the government. The concession itself, however, had been disputed as the company was accused of having altered the coordinates of the concession in order to have access to more promising deposits (Schroeder, 2012, p. 97; Interview #14). Supposedly the government officials were not even fully aware of the geological data from the colonial era when signing these contracts (Interview #15).

While the growth of the mineral production was significant on paper, the struggles that came along with the transformation of the mineral economy were hard to ignore. The government's preference for foreign capital and companies over local actors, its laissez-faire attitude towards foreign investors, simultaneous harsh action against artisanal miners, limited benefits and growing corruption all resulted in bitterness and disappointment (Schroeder, 2012, p. 54). Despite several rounds of SAPs, the turn from state-capitalism to unregulated capitalism left Tanzania in severe economic crises (Ewald, 2011, p. 109). The devaluation of the Tanzanian Shilling from eight Shilling to one US $ in 1980 to 500 Shilling to one US $ in 1994 furthermore contributed to the crisis (Chachage, 1995, p. 44). Chachage (1995, pp. 47-48) summarises "[w]hat is taking place in Tanzania under the guise of structural adjustment is an intensification of parasitic forms of capitalist accumulation corresponding to the traditional international division of labour, based on the plunder of minerals and natural resources in general (...).". Issa Shivji goes on to argue that liberalisation was designed as a policy for African states and not of African states and means a reversal of liberation ideologies and hence a continuation of imperialism (Shivji, 2009, pp. 11, 56).

5.1.2 Tanzania and the World Bank's Strategy for African Mining

In the view of the World Bank, the reforms initiated by the Tanzanian government with the Mining Act of 1979 and its later amendments and their effects did not come close to meeting the requirements of an investor friendly framework by far. The centrality of the state and its right to acquire shares in companies did not go along well with the planned liberalisation of the sector. The World Bank, however, did have its own plan concerning liberalised mining in Africa, articulated in the 1992 *Strategy for African Mining*. While this agenda for the development of mining in Africa under liberalisation was seen by some as a key development for growth and prosperity (WWF and TCME, 2012, p. 21) critical voices from civil society considered it the root of all problems (Interview #13). The strategy's premise was that African countries had not profited from the rising mineral prices of the 1970s and 1980s. Critique regarding prior state-centred, socialist policies and the promotion of foreign direct investment provided the basis of the World Bank's framework for the extractive sector that was supposed to be adopted by mineral producing countries across the continent (Gibbon, 1995, p. 21). Liberalisation, privatisation and deregulation were the key factors. According to the World Bank, an enabling environment for investors is crucial to successfully reforming Africa's mineral economy. African governments were consequently required to undertake various steps for creating favourable circumstances to attract foreign investment. Firstly, economic adjustments to the mining sector had to be made, including the introduction of market based and non-restrictive trade regimes. Secondly, clear strategies for private ownership and operation of mining enterprises, including the quick privatization of state mining companies. Thirdly, the provision of incentives for mining investors, e.g. regarding taxation, risk reduction, licensing and guarantee of low state interference. Furthermore, a reorganisation of mining institutions for the purpose of promoting investments, regulating and monitoring the sector. Lastly, a separate legislation for artisanal and small-scale mining to improve rural livelihoods as well as appropriate health and environmental standards (World Bank, 1992, pp. XIII–XIV). The national governments were thus expected to act as regulator and promoter of the extractive sector, while the private sector was owner and operator (World Bank, 1992, p. 54).

For Tanzania in particular, the World Bank later identified an underperforming mining sector that since the 1950s had been dominated by one single mine, the Williamson Diamond Mine, which by then was suffering from depleting reserves. Nevertheless, potentials were seen in the mining of nickel in Kabanga, the revitalised (artisanal) gold mining activities, promising deposits of industrial minerals such as graphite and the overall good basis of geological data (World Bank, 1992, p. 64). Meanwhile, several junior mining companies had been active in Tanzania, as outlined above.

Tanzania, by this time on its way of becoming a multi-party democracy in a top-down process and by the emergence of new elites in the country (Ewald, 2011, pp. 111-112), was inclined to follow the World Bank's strategy. After Benjamin Mkapa became president in 1995, efforts to liberalise the mineral economy were intensified as there were claims that liberalisation reforms had not been implemented properly in the beginning, and thus action was required (Ewald, 2011, p. 113). He hence embarked on finalizing the liberalisation and privatisation of the Tanzanian economy (Interview #19; #21). Under pressure of the World Bank new mining legislation was prepared and resulted in the 1997 Mining Policy and 1998 Mining Act (The United Republic of Tanzania, 1998, 1997).

The objectives of the Mining Policy were hence largely in line with the World Bank's demands. However, this was also due to the direct involvement of the World Bank via in the legislation projects via consultants (Butler, 2004, p. 68; Interview #11). Economically, the contribution of the mining sector to the national economy should increase to ten percent GDP contribution by 2025 and thereby generate higher government revenues and foreign exchange earnings (United Republic of Tanzania, 1997, pp. 8, 31). The private sector was expected to take the lead in all activities related to mining. Linkages through the integration of the mining sector into the national economy were supposed to bring additional benefits (United Republic of Tanzania, 1997, pp. 19-20). The government's role focussed on providing a conducive environment for investment, administering licensing processes and legislation, as well as the collection of taxes, royalties and resource rents. On top of that, aspirations to create employment in the mineral sector, particularly in the rural areas were voiced (Geological Survey of Tanzania, 2015, p. 30). However, according to Butler, the World Bank explicitly stated that mining should not be misinterpreted as a means of job creation but primarily as revenue collection (Butler, 2004, p. 68). The requirements for companies to contribute locally were purposefully vague in the policy as it focussed on "encouraging mining companies to contribute to local economic development" (United Republic of Tanzania, 1997, p. 26). The fiscal regime was thoroughly geared towards foreign investment, as it "should recognize the investor's need to recover exploration and development outlays, to achieve a rate of return commensurate with risk, to repatriate dividends and to meet financial obligations with creditors and suppliers." (United Republic of Tanzania, 1997, pp. 9-10).

Those policy aims where consequently incorporated into the following Mining Act, which was supposed to go all in on liberalisation and privatization where the prior legislation was focussed on securing state control. As a consequence, the new legislation reduced the state's role in the extractive sector enormously. Many of the rights reserved for the Tanzanian state, e.g. the ability to acquire shares in companies, were cut without substitution (Pedersen et al., 2016, p. 21). According to an economist involved in the making of the legislation "at that time, it was simply government's hands off" (Interview #11). Rights were transferred to private investors, whereas the state was left with obligations. In the Mineral Policy of 1997, the government is only referred to as regulator, promoter, facilitator and service provider (United Republic of Tanzania. 1997, 27-28). In comparison to the Mining Act of 1979, the state had completely lost its participation and became more of a servant to foreign capital (Butler 2004, 73-74).

The mission of the new legislation was clear: to make Tanzania a prime destination for foreign investment in mining. Therefore, it provided incentives the World Bank considered necessary for an enabling environment for investors. For example, there was no import duty tax on mining equipment and fuel, no profit tax, profits could be repatriated to 100 percent, no local taxation on foreign mining companies and depreciation costs were completely deductible from taxable profits. Furthermore, there was only ten percent withholding tax on dividends and three percent on the salaries of the expatriate workforce. Government revenue thus came mainly from royalties, which were three percent for gold and gemstones and five percent for diamonds (Butler, 2004, pp. 68–69; Society for International Development, 2009, p. 38). In addition, the Investment Protection Act of 1997 protected investments from nationalization (Jacob et al., 2016, p. 10). The transfer of licenses without government approval as well as the acquisition of mineral rights by foreign financial institutions through private license holders was possible, this contributed to the erosion of state sovereignty in regulating the mining sector (Butler, 2004, pp. 71-72).

However, in addition to the broad spectrum of fiscal incentives, companies willing to invest more than 100 million US$ were able to sign agreements directly with the government that did not require the consultation of the parliament of other entities. These Mineral Development Agreements (MDAs) allowed for even more beneficial contracts for the companies, including tax exemptions, fiscal security for the life of the mines and no option for renegotiations (Bourgouin, 2014, pp. 151–153). MDAs as informalization of formal procedures were welcomed by the foreign companies but over time they became a major point of contestation as their contents were concealed from the public eye. Critics have considered the MDAs as “kind of giveaways” (Interview #14). Only recently the government announced to publicly disclose the contracts (Tanzania now set to disclose mining contracts, July 1 2019).

The focus on large-scale operations and foreign investment in the new mining legislation is furthermore reflected in the circumstance that FEMATA as an important organization of artisanal miners was at first completely excluded from the discussions regarding the Mining Policy and Mining Act (Kulindwa et al., 2003, p. 7). Requirements for local content or the inclusion of local enterprises were, however, not given, although the importance of community participation was recognised (Lange and Kinyondo, 2016, p. 1098; Society for International Development, 2009, p. 35).

Nevertheless, the coexistence of LSM and ASM in the country was of concern to the government because although LSM was given a high priority, ASM was still generating high returns (Jønsson and Fold, 2014, pp. 114-115). The extractive sector hence was divided between artisanal miners on primary mining licenses, which can only be acquired by Tanzanian citizens, and mostly foreign companies. Consequently, ASM became the realm of Tanzanians and LSM the playground of foreign companies with only little Tanzanian participation (Butler, 2004, p. 77). In order to avoid conflict, special areas for artisanal miners were supposed to be demarcated under the new legislation (Society for International Development, 2009, pp. 36-37). In addition, the policy aimed at modernising and organising artisanal miners and foster collaborations between ASM and LSM (United Republic of Tanzania, 1997, pp. 15-16) Nevertheless, the government’s dedication was clearly on LSM and thus the implementation of policies supporting ASM was no priority. As the examples from the early 1990s sketched above indicates, conflicts between ASM and LSM posed a continuous problem.

The passing of the new liberal policy and legislation was set in a “period of rediscovery” (Interview #7) between 1990 and 2005. Especially gold mines that had been abandoned during the colonial era were being reactivated and prospecting activities were increasing due to the presence of numerous junior companies entering the country since the 1980s. In addition to the old mines, new gold mines were established at Buzwagi (opened in 2009) and Tulawaka (opened in 2005) in the region of Lake Victoria. The incentives and the overall framework provided by the new Mining Act also increasingly attracted the big players in the business. Canada-based Barrick Gold, one of the world's largest mining companies, entered Tanzania by acquiring the Bulyanhulu mine from Sutton Resources and started production in 1999 (Butler, 2004, p. 79). In addition, Pangea Goldfields, which had discovered the deposits in Tulawaka and Buzwagi was bought out by Barrick in 2000. In the same year, AngloGold and Ashanti commenced the production at the Geita gold mine that had been closed since 1967. In 1999, the Australian company Resolute Mining opened their Golden Pride Gold Mine in Nzega District, Tabora Region, which the company had taken over from BHP and Samax Resources in 1996.

During this period of rediscovery, the end of the apartheid regime in South Africa in 1994 was an additional boost for the emerging mining industry. While before diplomatic ties between Tanzania and South Africa had been cut, trade embargoes established and socialist Tanzania become a vital supporter of the African National Congress and anti-apartheid activists, this all changed after 1994. South African goods, companies and investments successively entered Tanzania and were often met with boycotts and hostile sentiments by the public (Schroeder, 2008, pp. 21–23). President Mkapa called on Tanzanians to welcome South Africans as friends and partners who would benefit the country (Schroeder, 2012, pp. 41-42). Between 1994 and 2008, 150 South African companies had entered Tanzania, trade increased rapidly and South African investors had acquired significant shares in the National Bank, breweries, groceries, telecommunications and tourism industry (Schroeder, 2008, pp. 20, 23-24). The massive and relatively sudden influx of South African capital and people was perceived with ambivalence, welcomed and viewed critically at the same time. As Schroeder concludes, "the net impression left by recent events is that South Africans have taken over everything of value in the Tanzanian economy." (Schroeder, 2008, p. 24). For the mining sector South Africa's way to Tanzania meant the availability of relatively cheap mining equipment and supplies that were under embargo before. This increased the rentability of operations tremendously as those goods need not be imported from North America, Europe or Australia (Interview #7). Furthermore, South African mining companies perceived Tanzania as a good place to invest, resulting in the establishment of company branches, e.g. African Explosives, and the entry of South African mining firms such as AngloGold and smaller ones alike (Schroeder, 2008, pp. 23-24; 2012, p. 51). Hence, South African capital and companies became vital actors in the Tanzanian mining sector within a short period of time.

5.2 Mining frontiers, extractive enclaves and colonial continuities

Economically the period of liberalisation after 1986, including the previous years under Nyerere's late presidency represent the complete renunciation of the socialist ideals of ujamaa. This circumstance is also reflected in the asymmetrical efficacy of spatial practices of Tanzanian state, international institutions like the World Bank and the IMF, and the multinational mining companies. By pressuring for liberalisation and the creation of an enabling environment for investors in Tanzania, the World Bank and ultimately the Tanzanian government under Ali Hasan Mwinyi and later Benjamin Mkapa contributed to the production of mineral resource frontiers. Resource frontiers had been constantly produced under different political regimes and circumstances, as the preceding chapters have shown. The gradual liberalisation of the mining sector since 1979 and particularly during the late 1980s and 1990s, however, goes along with the production of frontiers and extractive enclaves. Emel et al. (2011, p. 77) argue that the Tanzanian state by offering wide-ranging fiscal incentives and its rather careless attitude towards violence, conflicts and evictions had become an abstract landlord of the national territory displaying strong parallels with the colonial situation. This observation also suggests that the processes of spatialization are largely congruent with those in the colonial era.

Although during the socialist era state territoriality employed by the Tanzanian nation state was dominant despite continuous external influences, the era of liberalisation was characterised by a free-for-all attitude resulting in commodity frontiers for minerals as well as agriculture and services. The influx of junior companies engaging in exploration, prospecting and the revitalisation of old mines indicates the production of commodity frontiers. However, the frontiers were not only produced by the companies entering Tanzania but at the same time co-produced by the state providing an enabling environment for foreign investment and companies. This situation becomes even more pronounced with the direct engagement of the World Bank during the 1990s when Tanzania was co-opted into an imperialist sovereignty regime featuring questioned state authority, local insurgencies and failing infrastructure. At the same time, outside actors were exercising significant power in the country (Agnew, 2005, p. 445). Here, the World Bank actively influencing the regulations for the mining sector in Tanzania is a case in point. As a consequence, the territoriality of the nation state was decreasing in favour of frontiers. With the establishment of mining territories and extractive enclaves, the production of frontiers in Tanzania slowed down in the 2000s, along with the emerging resource nationalism.

The withering of the state, or its active disengagement fostered the production of punctured national territory and extractive enclaves. With the regulations and incentives outlined above, companies were easily able to acquire concessions legitimising their territorial claims. The conflicts with ASM, too, hint to the rigidity with which the companies performed their territoriality. Overall, the practices and hence the processes are largely in line with what has been discussed in chapter three. In the context of frontiers, mining territories are produced and turned into enclaves via the intensification of territoriality. Linkages with the local economy were rarely established and the companies' mining sites were seen as islands of their own (Interview #13). The efficacy of extractive enclaves established by multinational companies becomes clear in the power they were able to exercise. In the view of critics, the companies were "just like another government operating in your country. The only thing they don't have is that the don't have their army here." (Interview #11). Mining companies in liberalised Tanzania consequently represent states within a state and thus contest national sovereignty and territoriality. As a result, national territory is punctured and concession holders become sovereigns as well (Bridge, 2015).

In addition to the continuity in the practices and processes of spatialization between the colonial era and the liberalisation period, there is a strong continuity of places. Apart from two mines, all large-scale mines were built upon colonial mining sites that had been abandoned before or shortly after independence. The succession of several mines in one place is not unusual as such, since mineral deposits are fixed in one place. However, the continuity of practices, processes and places underlines the parallels between the colonial a neoliberal mineral economy in Tanzania as observed by Emel et al. in terms of resource governance.

5.3. Late liberalisation, reforms and emerging resource nationalism

5.3.1 Disillusionment and reforms

Tanzania's liberal era of (re)discovery before 2005 attracted approximately two billion US$ of investments in only a decade. While in 1994, 170 prospecting and 22 mining licenses were registered with the government, the count in 2005 was 2.200 prospecting and 200 mining licenses (Schroeder, 2012, pp. 95-96). Although the production of the established large-scale gold mines and other projects had commenced and Tanzania experienced a mining boom with an increase of gold production from two tonnes in 1998 to 50 tonnes in 2005, the country failed to profit from the extractive sector (Curtis and Lissu. 2008, p. 13). Therefore, the already mediocre perception of the by then foreign dominated mineral sector became increasingly negative and public suspicion steadily grew.

People felt betrayed by the promised gains of liberalisation that had not materialised (Interview #15). The main line of argumentation was that the country and its people were not benefiting from the liberalised mining economy and were left with displacement, environmental degradation and hardship (Lange and Kinyondo, 2016, p. 1097; Interview #22). The feeling that the government had sold the country to foreign investors and that Tanzania and Tanzanians were being exploited and ripped off had increasingly become common sense during the early 2000s among the public and parts of the political elite. Companies were seen to enjoy too many incentives while paying little to no taxes, expat workers receiving enormous wages while Tanzanian workers were paid comparatively little (Curtis and Lissu, 2008, pp. 8-10).

In addition, the conflicts between foreign companies and artisanal miners and local communities in places such as North Mara, Bulyanhulu or Geita contributed to the perception of foreign companies as enemies instead of partners (Interview #23). Accusations were often countered by the companies by pointing to their contributions to rural development, e.g. the construction of roads, schools or hospitals. The government of President Mkapa as well continued to speak in favour of the foreign companies (Schroeder, 2012, p. 96).

One of the Tanzanian economists working for the World Bank in the 1990s stated that the government was “giving the country to foreigners, they had almost everything. […] We gave them the licenses, we protected them, and then we allowed them to exploit the resources. […] I can confess, even myself, I didn’t like that one” (Interview #11). The perception that the country had been sold out to foreign investors was furthermore exacerbated by the circumstance that the revenues collected from taxes and royalties were low due to the tax holidays granted to the companies and the overall investor friendly fiscal regime (Lange and Kinyondo 2016, 1097-1098). In short, “we had a lot of money coming in, but also a lot of money exiting” (Interview #15). What remained in the country was only a fraction.

At the same time, the liberalisation of the economy was a lost chance for Tanzanians. As a consequence of the state-owned economy in the prior decades, capital accumulation and the development of capacities to run businesses in a liberal economy were hardly possible. This resulted in the inability of Tanzanians to take over parastatal companies or establish their own businesses quickly enough to compete with foreign capital (Schroeder, 2008, p. 26). When the Tanzanian state started to privatise its enterprises, foreign capital from all over the globe outpaced domestic actors. The decision to privatise the economy was thus too early from the perspective of Tanzanian economic actors. “We didn’t have an indigenous private sector, so, it was not really privatisation, it was foreignization.” (Interview #11). Accordingly, Issa Shivji refers to the neoliberalism in Tanzania as continued plunder and looting (Shivji, 2009, p. 56). Connecting to the arguments of dependency theorists, Vishwas sees neo-liberal states in Africa as “effective prisoner to transnational capital and trade flows” (Satgar, 2009, p. 44).

At large, the strategy of disengagement (Ciuffolini and de La Vega, 2013, p. 436) pursued by the Tanzanian government during the process of liberalisation, and thus its retreat, fostered the expansion of socially thin extraction and mineral enclave economies as discussed by Ferguson (2006, pp. 201-203). The beneficiaries on the Tanzanian side were few. Corruption was blossoming all over the state apparatus and hence also percolated the extractive sector (Curtis and Lissu, 2008, p. 7). As Maia Green asserts, “[d]evelopment in Tanzania may have had limited success in bringing about the extent of change it promised, but the institutions and relations, which promote it are perceived to be a rich source of opportunity for individuals to achieve what they define as development on their own terms.” (Green, 2014, p. 4). The majority of Tanzanians, however, only experienced the downsides of this development.

At the same time, the presence and influence of international organisations and NGOs in the extractive sector, in Tanzania and elsewhere, was became increasingly relevant. This is reflected in the founding of the Extractive Industries Transparency Initiative in 2003, whose Tanzanian branch should follow a few years down the line. In Tanzania, human rights groups like Lawyer’s Environmental Action Team and HakiMadini started advocating against exploitation and for just, fair and transparent mining economy benefitting the people in the late 1990s and were raising their voices in the early 2000s. Over time, the complaints about and disillusionment with the mining sector aggravated despite an amendment to the Mining Act of 1998 in 2004. The government, now under President Jakaya Kikwete, who was elected in 2005, decided to intervene after civil society organizations and activists had repeatedly called for the urgency of government action (Interview #23). The government thus initiated a review process for the mining sector, including all existing extractive contracts (Lange and Kinyondo, 2016, p. 1098). As Jacob and Pedersen (2018, p. 288) argue, the CCM government of Kikwete was particularly motivated to reform the extractive sector as the opposition party CHADEMA became increasingly popular after its criticism of the status quo. It is thus no coincidence that the results of the new policy and legislation were enacted shortly before the presidential elections in 2010.

Prior to this, the Kipokkola Committee in 2004 had provided suggestions for improving the Mining Policy of 1997 and the fiscal regime (Jacob et al., 2016, p. 7). and among other things had also called for increased state participation via STAMICO and the National Development Cooperation, as well as greater local empowerment (United Republic of Tanzania 2008). In addition, the Masha Committee in 2006 demanded the renegotiation of MDAs and particularly the taxation agreed on in the contracts (Jacob et al., 2016, p. 7) In 2008, the Bomani commission published its recommendations to overhaul the national mining legislation and policy (Curtis and Lissu, 2008, p. 28; Jacob et al., 2016, p. 7). At this point in time, six large-scale gold mines were operating in Tanzania: Bulyanhulu, North Mara, Tulawaka and Buzwagi run by Barrick (later its

London-based subsidiary Acacia Mining), Geita Gold Mine by AngloGold Ashanti and Golden Pride Mine by Resolute Mining (Curtis and Lissu, 2008, p. 13; TEITI, 2011, p. 36). Addressing the shortcomings of the mining regulations passed in the 1990s, the Bomani report recommended various changes inspired by the policies of other countries such as South Africa, Botswana, Ghana or Canada. Among other aspects, the need for government participation in the mining sector was emphasized. This included the cooperation of government bodies with investors in the provision of infrastructure to mining areas and efforts to achieve a sustainable mining economy. Moreover, direct engagement of the government in extractive practises was postulated. For that reason, the commission suggested the government to desist from the planned privatisation of STAMICO and instead engage in the extraction and management of strategic minerals, e.g. nickel or uranium that could be utilized to foster industrialisation and power generation. In order to monitor the sector, an overseeing authority with its own budget and the obligation to assist the development of the mineral sector should be established and efforts to achieve higher transparency in the sector was encouraged.

The recommendations of the Bomani commission fed into the review of the mining regulations. As a result, the Mining Policy of 2009 (United Republic of Tanzania, 2009) and the Mining Act of 2010 (United Republic of Tanzania, 2010) were passed by the parliament with the aim of making the extractive sector more beneficial for Tanzania. The vision of the new policy was to foster an "[e]ffective mineral sector, contributing significantly to the acceleration of socio- economic development through sustainable development and utilisation of mineral resources in Tanzania by 2025." (United Republic of Tanzania, 2009, p. 8). A hike in royalties from three to four percent, better integration with other economic sectors and assistance for ASM were seen as first steps towards this goal (Geological Survey of Tanzania, 2015, pp. 30-31; Lange and Kinyondo, 2016, p. 1098). While the provision of a conducive environment for international and local investment posed a vital point in the policy (United Republic of Tanzania, 2009, p. 11), increased government participation in viable mining projects and encouragement of Tanzanians to enter into medium and large-scale operations should create balance in the foreign dominated sector (ibid, pp. 14-15). In order to increase Tanzanian participation in the extractives, the government should furthermore support training of required skills and capacities (ibid, p. 19) and support ASM by providing access to knowledge, markets and technology (ibid, pp. 15-16). Marketing also plays an important role in the aspirations of the policy as the government is supposed to establish local mineral markets, ensure fair pricing and to curb smuggling (ibid, p. 18). At the same time state control over marketed minerals would consequently increase. The policy furthermore addresses one of the major problems of the mining sector of Tanzania, this being the absence of domestic value addition. Thus, the promotion of value addition by establishing mineral processing such as jewellery production or the construction of refineries and smelters in Tanzania was added to the policy (ibid, p. 19). On the local level the benefits of mining should be increased by the mandatory implementation of corporate social responsibility programmes and collaboration in local development projects (ibid, p. 18) and the implementation of local content policies, e.g. by requiring companies to procure local goods and services (ibid, pp. 12-13). The importance of local content policies was more pronounced in the legislation focussing on petroleum and gas than in the Mining Policy of 2009 or the following Mining Act of 2010. However, it called for the training of locals, listing of companies at the stock exchange of Dar es Salaam and the successive replacement of expatriate workforce by Tanzanians (Jacob et al., 2016, p. 16). Gemstone mining became exclusively accessible to Tanzanians (Interview #15). Additionally, instead of remaining a largely inactive regulator, promoter and facilitator in the sector, the policy demands the government to actively engage as an investor. For that purpose, STAMICO was revived in 2009 and entered the sector by establishing joint ventures for mineral exploration (TEITI, 2011, pp. 36). In the same year the Tanzania Mineral Audit Agency (TMAA) was established for monitoring the sector and Tanzania joined the Extractive Industries Transparency Initiative (EITI) and established TEITI, the Tanzanian branch.

While the critical investigation of the Tanzanian mining sector was one pillar of the reforms, inspiration was drawn from the poster childs for successful resource governance. Norway, the Arab Emirates and particularly Botswana were and still are strong points of reference in debates about Tanzania's reform process in the extractive sector. Particularly the central role of the state in regulating and participating in the mineral economy is cited as a key factor. Furthermore, the idea of a strong nation state as the solution to the problems in the sector had lasting effect on the debates in Tanzanian political circles, despite approaches to reform the mining economy in the East

African Community or the African Union, represented by the Africa Mining Vision of 2009. Although the aims of the new Tanzanian legislation were largely in line with the contents of the Africa Mining Vision and it was seen as an important step for the continent, it was at the same time considered as "wishful thinking" (Interview #15) or an "Addis debate" (Interview #10) by Tanzanian actors with only marginal influence on national policies.

The Mining Act of 2010 built upon the Mining Policy of 2009 and provide the detailed regulations set out to reform the mining sector and increase government revenue. Large parts of the legislation, for example licensing and the like, where adopted from the previous legislation. With the Mineral Development Agreements one major point of critique, however, remained part of the new legislation. They were still valid for the duration of the licenses, which often equalled mine lifetime, but now had to be open for review every five years (United Republic of Tanzania, 2010, pp. 17-19). The changes only applied for new MDAs which means that the ones signed in the 1990s remained untouched. Overall though, the new regulations strengthened the position of the Tanzanian state as well as artisanal miners and provided the basis for the establishment of linkages between the large-scale operations and the rest of the economy (Jacob et al., 2016, p. 8). In fact, on paper LSM and ASM were now almost equally important (Interview #15). Indubitably, the efforts the Kikwete government undertook in the legislative reforms were intended to turn the extractive sector into and source of adequate revenue and a pillar of Tanzania's development visions.

5.3.2 Emerging resource nationalism and the rocky road ahead

The reforms initiated under President Kikwete coincided with the global financial crisis in 2007/08 and its immediate aftermath, skyrocketing mineral prices and the upscaling of large-scale mining operations, as well as the growing consciousness in mineral rich countries across Africa and the globe to take on the fight against exploitation and for national benefits from the extractive industries. For Tanzania, these steps marked the cornerstone for the emergence of resource nationalism in the country (Jacob et al., 2016, p. 6, Interview #10, #23).

Resource nationalism is not a new phenomenon by far, countries like Mexico, Bolivia, oil producing countries such as Kuwait or Saudi Arabia, Nigeria and a wide array of countries in the so-called global north have engaged in this kind of politics during the 20th century (Andreasson, 2015, p. 310). Even the nationalization of natural and mineral resources and the economy in socialist Tanzania can be seen as a strong resource nationalist agenda. Resource nationalism basically describes the effort of countries to gain more profit from their resources, which often goes hand in hand with reassertion of national control over resources and limitations on private corporate activity (Andreasson, 2015, p. 313). The ability of countries to retrieve higher revenue shares from resource extraction plays another important role. Resource nationalism, as Young (2017, p. 20) insists, should not be seen as anti-capitalism. It rather posits a way of dealing with capitalist modes of production and global capitalisms.

Bremmer and Johnston distinguish four types of resource nationalism: Revolutionary resource nationalism, economic resource nationalism, legacy resource nationalism and soft resource nationalism (Bremmer and Johnston, 2009, pp. 150–152). Revolutionary resource nationalism is related to wide ranging social and political unrest with high impact on MNCs that even resonates outside of the respective country, as in Bolivia or Russia. Economic resource nationalism, thus, is part of more durable political circumstances, where the increase of fiscal revenues is the key objective. In legacy resource nationalism, the nationalization of resources has a long history and influence on political and cultural identity. In Africa, the Nigerian petrostate, but also many oil-producing countries in the Middle East serve as examples. Lastly, soft resource nationalism is mostly found in OECD countries and refers to a less rigid approach to achieve increased revenues and control over resources.

The resource nationalism emerging during the 2000s in Tanzania, and manifested in the respective policy and mining legislation of 2009 and 2010 strongly builds upon the legacy of Nyerere's nationalisation politics. The return of the state to the mineral sector (Jacob et al., 2016, p. 6; Jacob and Pedersen, 2018, p. 288) and the focus on Tanzanian participation and capacity building represent clear parallels. However, the reforms and interventions proposed by the government where not radical, they were rather gradual attempts to restructure the extractive sector. Andreasson (2015, p. 316) hence categorises Tanzania as a case of economic resource nationalism embarking on rebalancing the extractive sector from private control to state control. Wilson (Wilson, 2015, p. 412) refers to this approach as developmental resource nationalism promoting industrial transformation, expansion of resource production coupled with government interventions.

Indeed, the Tanzanian state displayed its willingness to engage more directly in the extractive sector by entering into joint ventures, the reactivation of STAMICO and the National Development Cooperation (Jacob et al., 2016, p. 29). STAMICO even started to operate its own mines via its subsidiaries, such as the Kiwira coal mine since 2013, and took over Barrick's Tulawaka (now Biharamulo) Gold Mine in 2013. It also acquired shares in Tanzanite One to form a joint venture and with TANZAM 2000 for Buckreef Gold Mine in which STAMICO holds a stake of 45 percent (Jacob et al., 2016, p. 9). Furthermore, STAMICO is involved in reactivating Buhemba Gold Mine that was exploited until the 1970s as a joint venture. The Golden Pride Gold Mine in Nzega, which Resolute Mining had closed in 2013 was taken over by the state and is supposed to be turned into a training centre for miners as well as a military station (Interview #8).

The National Development Cooperation on the other hand entered into a joint venture with Chinese investors to form Tanzania-China International Mineral Resources operating a coal mine with powerplant in Mchuchuma and an iron ore plant in Liganga. TANCOAL, a cooperation of the Australian Intra Energy and the NDC produces and exports coal to neighbouring countries (Jacob et al., 2016, p. 9).

Overall the complaints leading to the reforms slowly deteriorated after the adoption of a resource nationalist approach as the country started to profit more from the mining sector (Interview #19). However, the boom in Tanzania's mining industry seemed to have already calmed down when the first elements of the policy were implemented. During the high tide of LSM, particularly 1998 to 2008, there was a new large-scale mine established every one or two years, since then discoveries have plummeted and only fewer small and medium-scale mines had commenced operation (Interview #10). The extractive sector had thus reached a plateau situation in which the prices for gold and other minerals had already reached its peak and were stagnating or slowly falling again (Interview #7, #10). The actual outcomes of the reforms in the years after their enactment were quite chastening. Although the value of gold exports rose to 94 percent of Tanzania's total mineral exports due to the price hike, the country benefitted little from that development. After all, the GDP contribution of the mining sector was 3.5 percent in 2011 (TEITI, 2011, p. 6) and 3.7 percent in 2014 (Tanzania Invest, n.d.). In

2016, the GDP contribution, including the petroleum sector was 4.8 percent. The informal mining sector at the same time contributed 1.4% to the national GDP (TEITI, 2018, pp. 52–53). The revenues from LSM hence remained far behind the expectations (Lange and Kinyondo, 2016, p. 1097).

One of the main problems was still the lack of corporate tax payments. Some of the mines established between 1999 and 2005 have never paid corporate tax while others only did so after almost a decade of production. Resolute Mining for example supposedly only paid taxes from 2011 until closing their project in 2013 (Lange and Kinyondo 2016, p. 1098; Interview #14). In addition, the implementation of the policy aims took off rather slowly or was in some cases not even initiated. As another step to improve the income from and the control over the mining sector, amendments via the Tanzania Extractive Industries (Transparency and Accountability) Act of 2015 (United Republic of Tanzania, 2015) called for the quicker commencing of operations after licenses were granted, time limits of ten years for MDAs and the option for the High Court to review decisions made by the Minister (Jacob at al., 2016, p. 8).

Despite the efforts and good intentions of President Kikwete and his government to overhaul the regulations and policies in the Tanzania's mining sector, the desired results failed to manifest. Of course, the aspired reforms can hardly be achieved overnight, nevertheless critique among the public and civil society once again increased due to missing benefits, low revenues, plunder, conflicts and corruption. More radical critics saw the reforms as little more than cosmetic changes. For some "it is still the same Mining Act of 1998, they just tinkered here and there" (Interview #14).

5.4 Conclusion

Although liberalisation was supposed to be Tanzania's path to the future, it was more of a backlash to colonial patterns. It has been characterised by a permissive and disengaged state, the production of commodity frontiers and extractive enclaves. Companies from Europe, North America and South Africa were entering the country and capturing the mining economy while locals were mostly restricted to labour intensive, low-paid work or work within ASM. Only a tiny fraction of revenues remained in Tanzania, the impact of mining was restricted to small areas and coercion and conflict were nothing unusual. Bluntly speaking, apart from the implementation of new technologies, the situation in Tanzania between the late 1980s and early 2000s was not very different from the colonial period as the Tanzanian government that again was more or less a prisoner to the will of the World Bank and IMF, was a highly permissive gatekeeper.

The visions of the socialist era were still relevant in the heads of many Tanzanians, but the neoliberal agenda pursued by Ali Hasan Mwinyi’s and Benjamin Mkapa’s governments had quickly turned the tables. What followed was seen as a selling off of the country to investors and the “foreignization” of the Tanzanian economy (Interview #11). The efforts to emancipate the Tanzanian state from the World Bank and IMF dictate under the presidency of Jakaya Kikwete mark an important turning point. By engaging in an agenda of economic resource nationalism, the government tried to achieve a balance between a liberal mining economy and state participation. Inspired by the still relevant socialist legacy of Nyerere and the growing critique, the government aspired to return to a classical sovereignty regime and thus to national territorial control. At the same time this means that the state was trying to reassert control over and increase its influence in the extractive sector, and hence the extractive enclaves in the country. However, the requirements for CSR programs caused companies increasingly to reach out to the surroundings of the enclaves in order to secure their operations and validate their presence (Hönke, 2009b, pp. 19-20).

Regardless of the good intentions and the initial efforts to reform the Tanzanian mining industry, the immediate effects remained minimal. Not only was the implementation of the new policy slow, the multinational companies were mostly able to pursue business as usual. The return of the state to the mining sector under Kikwete was by no means radical. Despite slightly higher revenues and the participation via STAMICO and the NDC, the status quo hasn’t changed significantly. In consequence, the disappointment with the sector’s contribution to the national economy and the lack of benefits for Tanzanians was constantly present. The government, nevertheless, seemed to be satisfied with the outcomes. After the presidential elections in 2015 and the handover from Jakaya Kikwete to John Pombe Magufuli, the mining sector has been debated heavily and given top priority by the president himself, as chapter six will discuss.

6. Tearing down fences, building walls – Tanzania's neo-extractivist turn under Magufuli[15]

6.1 The "Bulldozer" president

When John Pombe Magufuli was elected to be the fifth President of Tanzania on October 25 2015, there were high hopes for the change he would bring to the country. The former Minister for Works under Benjamin Mkapa and Minister of Lands and Human Settlement, Livestock and Fisheries under Jakaya Kikwete set out to curb corruption and whip Tanzania's finances into shape. In the first weeks after his inauguration Magufuli cancelled the ceremony for the national Independence Day reasoning that the money could be spent better elsewhere. Instead called for a national clean-up day on which people, himself included, should go out on the street and collect waste ("Tanzania Scraps Independence Day Revelry", Nov 24 2015). He also took his clean-up campaign to the government apparatus where he paid surprise visits to ministries and government offices to oust underperforming and allegedly corrupt officials. In his quest to save on government budget, he also drastically cut foreign travel for officials. Magufuli's zest for action in fighting corruption and implementing reforms, as well as his pedantic frugality, had earned him high praise from donors and popularity among large parts of the public, also turning Magufuli into a social media phenomenon. Under #whatwouldmagufulido, people created hilarious solutions to everyday questions based on the president's thriftiness. The hopes and expectations vested in Magufuli along with the positivity he received lead to the revival of tanzaphilia first sparked by Nyerere in the 1960s.

However, the initial euphoria about Magufuli's presidency quickly faded away. Allegations over rigged elections and government interference in the election process in Zanzibar had left stains on the president's vest. By pushing through questionable and unpopular decisions, he continuously lost credit with many Tanzanians. The enforcement of taxation on citizens and small businesses, embarking on censorship by

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closing media outlets (Paget, 2017), imposing fees on bloggers (Mumbere, 2018) or barring pregnant school girls and teenage mothers from schools and even imprisoning them (“After getting pregnant, you are done”, 2017) are just some examples.

Figure 11: Magufuli, the “Bulldozer”.

(Source: “Government by Gesture”, Picture by Claudio Munoz, May 26 2016).

Overall, by the time he had served as a Minister of Works, Magufuli’s way of doing politics by quick decisions and often harsh actions through rushed decision-making and brutal action had earned him his nickname ‘the bulldozer’ (see figure 11). His impulsiveness and urge to push his plans through without resistance or advice had become the signature of Magufuli’s presidency. So far, four major trends can be observed: 1) A habit of firing people that act or speak out against the will of the president. 2) Increasing repressiveness by imposing bans or ordering the removal of things and people, e.g. free speech, opposition politicians or journalists. 3) General populism and hijacking of opposition agendas for the government’s purpose. 4) An obsession with large infrastructure projects and visible development.

From his very first days in office, Magufuli fired many, dissolved management boards and institutions over poor performance or aberrations. Once, a hospital had reached full patient capacity so its management was fired because it wasn’t able to provide for more rooms for patients. Over a weekend, up to 15,000 civil servants were ousted by the president over supposedly fake school certificates. However, two years later, roughly 4,000 of those civil servants were reinstalled (Nwamkwahe, 2017; Malanga, 2019a). The head of the Tanzania Electric Supply Company (TANESCO) was fired after a tariff hike that should have facilitated the improvement of energy supply (Magufuli sacks head of power firm, Jan 4 2017). Similarly, the two directors of the Bukoba municipality were sacked after a live television broadcast during which they could not quote the president the exact government budget provided for the construction of road infrastructure in their district ("Democracy under Assault", Mar 15 2018; "Tanzania's Magufuli Sacks Officials", Nov 7 2017). After a ferry capsized on Lake Victoria in September, 2018, causing 220 deaths, the president dissolved the board of the Surface and Marine Transport Regulatory Authority, fired the chairman and ordered the arrest of those being responsible for the accident (Kaijage, 2018). In addition, Magufuli has reshuffled his cabinet multiple times. Ministers from almost all resorts have been replaced on a more or less regular basis. In order to ensure the compliance, the replacements for fired officials are mostly, and unsurprisingly, people close to the president. Magufuli has also shown a tendency to appoint academics from Tanzanian universities to positions in the government. As a consequence, critical standpoints towards the government have almost disappeared in Tanzanian academia as people don't want to forego being appointed to a better paid position in the government (Interview #23).

The deteriorating critique from academia is also part of a larger trend towards the repression of critical and dissenting perspectives. Media freedom and freedom of speech have seriously suffered under Magufuli. Several media outlets and newspapers had been shut down by the government over the last years (George, 2016; Mwakideu, 2016; Paget, 2017; Wanjiru, 2018). Several journalists have been attacked or abducted (Human Rights Watch, n.d.). Moreover, online platforms and social media have increasingly come to the focus. By enacting a new law against cybercrime in 2015, also posting content critical of or insulting the president became a criminal offense that could easily earn people several years in prison (Mwakideu, 2016). Not only online but also in public, people became increasingly nervous that their statements would be overheard by the wrong person at the wrong time, which could quickly result in criminal charges. Bloggers were furthermore required to pay a yearly fee of 900 US$, exceeding the average Tanzanian yearly income and consequently led to the closing of several online presences (Brooks, 2019; Human Rights Watch, n.d.). In another attempt to control the circulation of particular information, it was declared as illegal to use data not approved by the government (Human Rights Watch, n.d.).

Magufuli's handling of dissent became particularly apparent in the wake of planned national protests on April 26 2018, the Tanzanian Union Day, against his politics that were initiated by a Los Angeles based Tanzanian activist. The government silently scrapped the freedom of assembly, allowing the police to easily detain people moving around in groups without further necessary indications. In the days before the protest, heavily armed police forces with assault weapons along with armoured vehicles and water cannons, were deployed in the larger cities and opposition strongholds like Arusha. Several opposition politicians and activists were arrested prior to the planned protests. The police chief of Dodoma openly stated that protesters "will be beaten like stray dogs". Magufuli himself had repeatedly stated, that demonstrations would be met with full force and that protesters would go home crippled (Ng'wanakilala, 2018; Interview #23). Several governments notified their citizens residing in Tanzania during this time to stay away from public places and, if possible, not to leave their homes at all. The government's threats, however, seemed to be effective as the protests didn't really transpire.

Repression against the opposition party Chadema and its members surged as well. Tundu Lissu, one of the prominent opposition leaders and an activist, had repeatedly voiced concerns about Tanzania becoming a dictatorship under Magufuli. On September 7 2017, Lissu was shot sixteen times outside of his house in Dodoma after a parliamentary session. The surviving opposition leader called the attack a politically motivated assassination attempt (Omboki, 2018). After treatment abroad, and two years of absence, he declared his return to Tanzania but was depraved of his parliamentary seat upon stating his intentions of return ("Tundu Lissu Sets September 7 as His Return Date to Tanzania", May 22 2019; "Tundu Lissu Stripped of Singida East Parliamentary Seat", Jun 28 2019). Several other opposition figures have been abducted, attacked or even killed since Magufuli has been in power (Ng'wanakilala, 2019a). In February 2018, two Chadema officials were found dead. One was washed ashore on a public beach in Dar es Salam showing severe wounds caused by a machete, the other just outside his house in Morogoro (Human Rights Watch, n.d.). On a legal basis, the parliament installed a registrar, which has the ability to de-register political parties and thus exclude people from Tanzanian politics (Brooks, 2019).

After media and political rivals, Magufuli's government during June 2019 discussed a bill that critically impacts on civil society organizations. The bill provides the government with the ability to evaluate, suspend and investigate society organizations. In turn, the organizations must apply for the renewal of their contracts every ten years. In that way, the government is in the position to close down religious organizations NGOs and the like without need for reason, this could mean the end for many non-profit organizations (Amnesty International, 2019). Overall, these developments along with Magufuli's style of politics point to rapidly growing authoritarianism in the country and a prevalent climate of fear and resignation among certain parts of the population. Considering with who Magufuli is choosing to intensify Tanzania's political ties with, such as the likes of Rwanda's Kagame, Uganda's Museveni, Turkey's Erdogan, China's Hi Jinping and Russia's Putin, this tendency is unsurprising.

After the initial euphoria, Magufuli's popularity deteriorated. By the time of the presidential elections, the main opposition party, Chadema, with their candidate Edward Lowassa, former Prime Minister and member of the ruling party, had gained ground against the ruling party CCM. As a result, the elections were as closer than ever before and allegedly rigged to keep CCM in power. Multiple questionable decisions, bans, the often all too impulsive way of governing the country and the political path pursued by the government led to growing support for the opposition. The government, in response, engaged in highly populist rhetoric and the hijacking of opposition's agendas.

Nevertheless, populism, as Makulilo (2017, pp. 54–59) shows, does have a place in Tanzanian history. Magufuli too utilized populism from the beginning of his campaigns and during his presidency. It is also important to note that CCM's votes had come particularly from the rural areas, whereas the larger cities and towns were in the hands of the opposition. By cleaning up the country, taking up a stance against corruption and thus targeting mainly the elites of the country, Magufuli "positioned himself as being on the side of ordinary citizens, taking on big business, corruption, and waste and his actions and slogans have captured the public imagination." (Makulilo, 2017, p. 61).

Promising free schooling and favouring small, local enterprises wherever possible furthermore added to his popularity among the masses ("Government by Gesture", May 26 2016). In the same way, Magufuli's action against foreign companies, which were already regarded unfavourably by Tanzanian citizens, such as Acacia Mining and other large-scale mining companies, falls in the same category. As later sections of this chapter will show, even the opposition was pleased by the government's efforts in this situation. As indicated earlier, many of the topics addressed populistically by Magufuli were occupied by the opposition before. By hijacking these, the CCM government managed to attract opposition voters and at the same time steal the basis of their political agenda (Interview #23). Furthermore, Magufuli's position as a strong Nyererist helped initially in building and rebuilding his popularity, as many Tanzanians still identified with the socialist ideology (Makulilo, 2017, p. 62). By discouraging dissent, making the agendas of opponents his own and addressing popular demands, Magufuli thus attempts to increase his own basis while weakening the opposition. Ultimately, these efforts could result in a revival of a one-party state in Tanzania.

Another pillar of Magufuli's politics and populist strategy is his personal obsession with large infrastructure projects (Interview #23). During his presidency, several immense projects have been initiated, pushed through and finished. There is a new Terminal at the Julius Nyerere Airport in Dar es Salam (Mirondo, 2019), contracts for new highspeed railway lines connecting Tanzania, Rwanda, Uganda, Burundi and the DRC have been given to Turkish and Portuguese construction companies (Said and Bahemu, 2018), the highly unprofitable national airline Air Tanzania has been equipped with numerous new planes in an attempt to gain market shares in East Africa and expand outside the region (Said and Bahemu, 2018). At the same time, a foreign budget airline operating in Tanzania lost its license officially due to frequently cancelled flights. Magufuli's government furthermore managed to have the planned oil pipeline from Uganda to the coast built via Tanzania to Tanga instead of via Kenya to Mombasa (Said and Bahemu, 2018). China is backing the construction of a 10 billion US$ project to build a deep-water port and a special economic zone in Bagamoyo, turning the small fishing town into a hub of regional and international trade (Interview #23). The agreement for the port, which was signed by Jakaya Kikwete in 2013, is currently renegotiated under Magufuli's government ("Tanzania's China-backed $10 Billion Port", May 23 2019).

Unlike Kikwete or Mkapa before him, Magufuli frequently launches and inaugurates infrastructure projects, small and large. This task is usually fulfilled by the prime minister or high local authorities, yet the president has seized the opportunity to publicly display his engagement in developing Tanzania. Demonstrating his presence all over the country, even in small villages, must as well to be considered as a populist political strategy. The rationale guiding some infrastructure projects is similarly rather populist than for any developmental purpose. For example, there were infrastructure projects like major bank branches (Kamagi, 2018) and even an airport (Masunguliko, 2018) built in Magufuli's home district Chato, on the western shore of Lake Tanganyika. The latter is supposed to bring tourism and development to the region. Both investments are hardly justifiable on a rational basis.

In addition to these, Magufuli has commenced two projects with a strong socialist legacy as they both were initially planned under Nyerere. One is the transfer of the administrative capital from Dar es Salaam to Dodoma, the other the construction of a massive hydropower plant at Stiegler's Gorge. The transition of the national government to Dodoma under Nyerere was supposed to be a symbolic new start for the country as Dar es Salaam had been the administrative capital during most of the colonial period. Magufuli initiated the process of relocating the government offices and ministries to Dodoma quickly after coming into power. Nevertheless, the move was met with resistance since many civil servants were unwilling to go to Dodoma. More importantly, making Dodoma the de facto capital of Tanzania and not only de jure with all offices situated in Dar es Salaam was a highly symbolic and populist act invoking Magufuli's position as Nyerere's successor in spirit.

The hydropower plant at Stiegler's Gorge was a blueprint of the Nyerere era as well and is being implemented just now. However, Magufuli decided to build the powerplant that would not only produce more electricity than the whole of Tanzania consumes, but also destroys a whole ecosystem at the Selous National Park inhabited by large numbers of elephants and black rhinos. Furthermore, the livelihoods of people living downstream Rufiji river would be affected by the dam, which will be the second largest on the continent (Dalton, 2019; Interview #23). Unsurprisingly, the project provoked plenty of critique from international organisations and activists, as well as domestically. Magufuli, regardless of the critique, insisted that the project would be built, no outsider should interfere in the plans for Tanzania's development, and that the dam will be beneficial for the environment as trees would no longer be gelled for the production of charcoal (Dalton, 2019; Hermann, 2019). On June 25th 2019, Magufuli laid the foundation stone for the hydropower project that is supposed to be finished within three years.

Overall, Magufuli's presidency has so far been characterised by a strong return of the Tanzanian state (Jacob and Pedersen 2018, p. 290). The active engagement the government has displayed in pushing development projects, increased participation in the national economy via parastatal enterprises and the populistically fuelled interventions suggests that Tanzania has turned, once again, into a developmental state. In the extractive sector these circumstances have become particularly explicit in the government's efforts to retrieve higher revenues from gold mining and its position in the emerging conflict with Acacia Mining and other mining companies from 2016 onwards. The following sections will discuss these events in more detail.

6.2 Tanzania's 'economic war' in the mining sector

6.2.1 The build-up

Since the enactment of the Mineral Policy of 2009 and the Mining Act of 2010, the implementation of the suggested reforms was only slowly gaining pace. The tendencies of resource nationalism were, however, constantly growing and the perception that Tanzanians would not benefit enough from the nation's resources, although extractive industries had expanded, was widespread. The mining sector thus provided fertile ground for Magufuli's populist agenda and mission of revenue collection. The outset of Tanzania's 'economic war' ("Magufuli Declares Economic War", Jun 13 2017) in the mining sector can be traced to late 2016.

During a visit to the Lake Zone, he told the Ministry for Energy and Minerals to revoke the license of the prospecting company Pangea Minerals, a subsidiary of Acacia Mining, and give the land back to artisanal miners and thus Tanzanians (Jacob and Pedersen, 2018, pp. 290-291). In doing so, Magufuli not only displayed his aspirations to take on foreign companies, but also to prioritise the interests of Tanzanians. Moreover, the President banned the import of coal to Tanzania because the country should rather use its own endowments and thereby create local benefits (Interview #23).

The policy also envisioned the construction of value addition facilities for minerals, such as gold and copper smelters, in Tanzania. However, by 2016 no smelters had been built and minerals were shipped outside of the country for processing (Roder, 2019, p. 409). In autumn 2016, Magufuli ordered the responsible minister Sospeter Muhongo to conduct a feasibility study for ore smelters in Tanzania. The economic viability was questioned, a fact that did not please Magufuli who was still pushing for the establishment of smelting facilities (Interview #23). While Muhongo seemed to be reluctant to pursue the issue any further, Magufuli decided to resort to different measures. In March 2017, Magufuli ordered an export ban for gold and copper concentrates, which heavily impacted on the country's mineral economy (Jacob and Pedersen 2018, p. 289; Mbashiru, 2017; Roder, 2017, 2019, p. 409; van Wyngaardt, 2017). In consequence, containers full of mineral concentrates ready for shipment to Dubai or elsewhere for processing started piling up in the port of Dar es Salaam. Acacia Mining, the major gold producer in Tanzania complained that the ban would cost the company one million US$ per day at each of its mines and hence demanded the government to lift the ban (Yeomans, 2017). Due to the disruptions caused by the export ban, merger talks between Acacia and Endeavour Mining, a gold mining company active in West Africa, were terminated (Masare, 2017a). The government kept the export ban in place and initiated investigations regarding the contents of the containers and Acacia's business activities in Tanzania.

6.2.2 Escalation

On May 25 2017, the report of the presidential committee led by Professor Mruma, the head of the Tanzania Geological Survey, on the investigation of the 277 containers held in the country by the export ban and filled with mineral concentrates extracted by Acacia Mining was handed over to Magufuli. The report revealed that Acacia had declared less than 10% of the actual contents of the containers. Instead of the declared 3kg of gold, the committee estimated 28 to 47.5kg of gold in the containers. Less discrepant but still significant figures were shown for silver and copper. In total, the estimated value was over ten times the amount of what Acacia had declared for export (Mwangode 2017a). The following 'mining tsunami' ("JPM's Mining Tsunami", May 25 2017) would fundamentally shake up Tanzania's mining sector. Unsurprisingly the findings provoked a tremendous outrage, not only in the political arena, but also publicly. Every single newspaper covered the events during the following days, using fierce rhetoric that contributed to the already high tensions.

Figure 12: Cartoon, Acacia and Magufuli.

(Source: Nipashe, Jun 15 2017, 1).

Political consequences followed without much delay. The President told the Minister for Energy and Minerals, Sospeter Muhongo, who was already deposed from his office in 2015 due to a major corruption scandal, to resign from his office as (Kamndaya, 2017; Peter, 2017). In addition, Magufuli dissolved the Tanzania Mineral Audit Agency (TMAA), which was created to monitor the export of minerals, over collusion with the multi-nationals and thus being a collaborator in a betrayal of the nation (Kolumbia, 2017). Members of parliament as well as actors from civil society organizations demanded that those involved in the fraud be held responsible as quickly as possible.

Acacia Mining, in face of the accusations announced that it had declared all its exports according to regulations (Masare, 2017b). The company's CEO furthermore claimed that "if the amount of gold in our concentrates was in line with the committee findings, then it implies that both Bulyanhulu and Buzwagi would produce more gold than any other mine in the world. Sadly, this is not the case." ("Acacia CEO: We Declare Everything", May 26 2017, p. 2). As implied by the CEO, the findings of the committee were disputed. Even people from civil society organizations fond of Magufuli's step to take on the multinationals admitted that the numbers might by exaggerated (Interview #7, #10, #14, #15, #23). The allegations against Acacia were also identified as a common strategy of governments in developing countries to cope with multinational companies. "You always cook stuff and come up with numbers and say this is what happened." (Interview #23). Acacia therefore postulated a second, independent probe to uncover the wrongdoings of the government committee.

Albeit the refutation of the probe committee's findings, the report caused Acacia's shares to drop by 40% within only two days. The company's already damaged image among Tanzanians finally hit rock bottom. Again, this was underpinned when the regional commissioner of Kahama, located at the Bulyanhulu gold mine, and her police entourage were denied entrance to the mine. Consequently, the mine was surrounded by police to make sure nobody enters or exits the site (Felician, 2017a). The following day a member of Acacia's staff explained that entrance was denied because of a technical issue that only allowed the gates to open at certain times (Felician, 2017b). Given that the companies are required to grant government officials entry to the mining sites by the Mining Act of 2010, this was another violation of the law.

While the events of late May still were widely discussed and remained in the public focus for weeks after, a second wave of revelations was about to fuel the already intense conflict between the government and Acacia. On the 12th of June, the second presidential committee presented its report investigating the past activities of Acacia Mining. How important these findings were, is underlined by the fact that in the Mwanza region, where most of the gold mines are located, the presentation was broadcasted on screens installed in public spaces for locals to follow the event (Saramba, 2017). The results of the report were unsurprisingly in line with the revelations of the Mruma commission. In addition to the previous fraud accusations the committee claimed that the company had been betraying Tanzania for the past two decades and had not paid the applicable royalty payments and taxes ("JPM: Even the Devil Must Be Mocking Us", June 13 2017; "Magufuli Declares Economic War", June 13 2017). The financial loss for Tanzania was estimated to 30 billion US$ (Mirondo, 2017). With that, Magufuli declared "economic war" against Acacia ("Magufuli Declares Economic War", June 13 2017). The company was even accused of operating in the country without a license for almost twenty years, a circumstance that, if true, also backfires on the government. Furthermore, the committee called for an immediate revision of all mining contracts and MDAs to secure national interests. Even investigations concerning the role of politicians involved in the signing of the contracts in the 1990s were proposed and accompanied by the blocking of passports to prevent the suspects from leaving the country (Mwangode, 2017b). Again, the public outrage and disappointment was enormous because "it is only fools who allow things like that, but it happened in Tanzania." (Interview #14).

A few days after, the media reported on the invasion of Acacia's North Mara mine, a mine that had already been in headlines for being a place of violent conflict and the shooting of so-called intruders by private security forces (Vibe, 2013). About 400 locals from surrounding villages in the Tarime district entered the mine run by Acacia Mining and occupied it for days. In the slipstream of the political conflict, they demanded compensation from the company for their land, environmental damage and pollution and insisted they would not leave before they received their payments. In the end, the occupation was dissolved by the police and 66 people were arrested (Shaban, 2017; Topf, 2017). This can also be seen as an example for the struggle of communities for access and control over their vicinity in which large-scale companies are present. Poncian and Kigodi (Poncian and Kigodi, 2015, p. 287) identify this kind of conflict dimension as more directly related to physical space than other often abstract aspects of resource conflicts.

The overall tension following the results of the second presidential committee and the conflict at North Mara was enormous. On the one hand, the prior findings were not only underpinned by the second report, but even reinforced by the historical dimension and allegedly illegal operations of Acacia. At this point, Magufuli said that he would be open to negotiations "on our own terms" to settle the dispute if Acacia cleared its debts ("Magufuli: We'll Negotiate on Our Own Terms", June 13 2017). Nevertheless, he insisted that he would have to make tough decisions for the interest of the country if the company was not willing to cooperate (Mirondo, 2017). By doing so, the president again demonstrated that he believed he held the upper hand in the dispute as Acacia was continuously driven into a corner.

In the face of the immense accusations by the Tanzanian government, Acacia Mining remained relatively sheepish. Just as a few weeks earlier the company articulated repeated refutations, that iteratively claimed the legality of Acacia's business in Tanzania and challenged the findings of the presidential committee as grossly overstated and not in line with the company's collected data from the past 20 years. Furthermore, the call for an independent review of the findings was repeated ("Acacia Wants an Independent Review", Jun 13 2017). Within days after the report presentation, Acacia's mother company Barrick Gold, the world's largest gold producer and holder of 64% of Acacia's shares, joined the increasingly intensifying dispute. While Barrick's prime motivation was to reduce damage done and calm down the conflict by apologizing and making concessions to the Tanzanian government (Mtulya, 2017), the Tanzanian president apparently preferred negotiations with the mother company and thereby bypassed the actual contender in the dispute. Representatives of Barrick and the government consequently agreed to start negotiations whilst Acacia Mining was completely left out of the talks. Instead Barrick built a team of negotiators consisting of former ministers from Canada, Spain and Germany to go into talks with the government.

By the time the negotiations between Barrick and the Tanzanian government were supposed to start, the parliament was already about to fast-track bills following the recommendations made by both of the presidential committees. The Written Laws (Miscellaneous Amendments) Act (United Republic of Tanzania, 2017a) enabled the government to renegotiate and dissolve the inviolable MDAs signed during Mkapa's and Kikwete's presidencies (ibid, p. 14). Moreover, all minerals and products or materials associated with products from mining or mineral processes belong to the government, and is administered by the president for the Tanzanian people (ibid, pp. 9-10). The government is eligible to 16 percent non-dilutable free carried interest shares in any mining company and able to acquire up to 50 percent of shares (ibid, pp. 13-14). In addition, the President is able to declare controlled mining areas (ibid, p. 10), a National Gold and Gemstone Reserve should be created to store royalties paid in refined minerals, confiscated minerals, and the like (ibid, p. 27). The amendment also sets out reforms to the national mining institutions in order to improve resource management in favour of Tanzania and its citizens. However, investment protection significantly dropped, while investment costs increased significantly following the amendments (Kinyondo and Huggins, 2019, p. 184). Moreover, the government enacted the Natural Wealth and Resources (Permanent Sovereignty) Act (United Republic of Tanzania, 2017b). The act again manifests the permanent and unalienable sovereignty, ownership and control of Tanzanians over the natural resources, exercised through the government and thus the president (United Republic of Tanzania, 2017b, p. 6). Returns from extraction to the Tanzanian economy must be guaranteed, and government participation as well as the possibility for Tanzanians to acquire stakes must be given (ibid, pp. 7-8). Revenues from extraction should be stored in banks established in Tanzania and money can only be repatriated in accordance with Tanzanian law (ibid, p. 8). Exploitation is to be prohibited. Any agreements with foreign companies must contribute to the self-reliance of Tanzanians (ibid, p. 7). Here, the connection to the socialist aspirations of self-reliance under ujamaa become particularly obvious. Arbitration was also restricted to Tanzanian institutions. Hence, no international court shall be able to interfere in Tanzanian mining affairs (ibid, pp. 8-9). The Tanzanian government, thus, imposed regulations strongly focussed on national belonging, the strengthening of the nation state in a context of a globally entangled mineral economy, all of which are reminiscent of the socialist past and national development. These clear indications of resource nationalism will be discussed later in this chapter.

The passing of these bills also called another, so far uninvolved, actor to the stage. AngloGold, the other heavyweight in the Tanzanian mining sector, operating the Geita gold mine, decided to take Tanzania to the UN court since the new regulations posed a threat to the existing contracts (Jamasmie, 2017a). While AngloGold was taking direct action, the negotiations between Barrick and the Magufuli government were delayed, which contributed to the President's discontent. Hence, he pressured Barrick and Acacia by threatening to close their mines and give them to back Tanzanians to run should any further delays occur ("Magufuli Says Will Close All Mines", Jul 22 2017). This was largely in line with public demands voiced in the weeks since the Mruma report had been published. Acacia's alleged betrayal was seen as the chance to get rid of multinational companies, or at least to tighten the regulations enormously and overhaul the entire sector (Interview #11, #14). More radical people, however, called for strong government interventions. As a long-time activist put it, "it's an opportunity, it has happened in Latin America, Central America, the Arab states when we talk about oil. We have seen this movie before, many times. So very few countries have been able to take a company's head home, but if you gave good evidence, that enhances your position." (Interview #14).

In addition to the Magufuli's threat, Acacia Mining received a 190 billion US$ tax bill from the Tanzania Revenue Authority, consisting of unpaid taxes of the last two decades and the applicable fines (Jamasmie, 2017b). Not only is that amount approximately 14 times Tanzania's total budget in the financial year 2016/17, it is also without a doubt far above any amount Acacia Mining could ever afford. The amount is thus to be taken rather symbolically. Acacia, in turn, stated that it is not in the position to pay such amounts, also explained that this move will hurt Tanzania since it will scare off potential and even already existing investors ("$190bn Tax Bill on Acacia", Jul 27 2017).

By the end of August, the parliament ordered another probe in the Acacia case. This time the Tulawaka mine, which Acacia had handed over to STAMICO after terminating production there, became the subject of the debate. During the transfer process, Acacia was obliged to pay 750.000 US$ to a fund for mine rehabilitation. According to STAMICO and the responsible offices, the money was not traceable (Sauwa, 2017). Although far less impressive in the mere financial amount, the accusation again was not less significant, since the government agencies once again implied that Acacia would not oblige to any of the regulations given by the authorities. As a consequence of the financial hardship due to the latest government manoeuvres in the mineral dispute, the company announced in early September that it would reduce the production activity at its Bulyanhulu Gold Mine. According to the company the production of concentrates as well as underground mining should be suspended temporarily, and new technologies implemented to make the mine more cost effective. Clearly this translates into the layoff of workforce. In this particular case, 2000 workers were laid off at the mine (Matowo, 2017). Considering the income lapse in regard to the dependent families as well as the local economy and the revenue loss for the local administration, the impact of this move is striking (Mbani, 2017). While the main reason cited was the unstable situation in the country and the lack of export possibilities of gold and copper concentrates, it is hard to ignore the possibility of interpreting this move as a power demonstration displaying Tanzania's dependency on multinational companies at the local level.

Overall, the fight with Acacia led to a lock-down in Tanzania's mining sector. No new prospecting and mining licenses had been issued since the implementation of the export ban (Interview #21). The government's behaviour in the dispute furthermore discouraged potential investors as Tanzania was increasingly perceived as an instable and volatile investment destination (Interview #21). Companies already active in Tanzania started to re-evaluate their projects. What remained were investors from China, Turkey and India (Interview #15, #18).

6.2.3 From negotiations to new beginnings?

By the end of September, the fight between Acacia Mining, respectively Barrick, and the Tanzanian government had been going on for several months. At this point in time, the negotiations between Barrick and the government were in the process but no agreements had been reached apart from minor apologies from the companies and the willingness to pay compensations and obey new regulations in order to appease the Tanzanian government. Nevertheless, both sides seemed determined to stand their ground and avoid unnecessary compromises.

After weeks of relative silence in the stand-off, Barrick and the Tanzanian negotiators announced that they had come to an agreement to resolve the conflict. The solution presented was a model promoting a 50/50 sharing of revenues generated by Acacia between the state and the company. Furthermore, the Tanzanian state should receive a share of 16 percent from the three mines operated by Acacia and all minerals produced besides gold, silver and copper will henceforth belong to the state. In order to facilitate the overhauled setup, a new Tanzanian company has to be created to absorb Acacias operations. To be even more clear about the identity of the company as being Tanzanian, Acacia's headquarters and treasury should be moved from London and Johannesburg/South Africa to Tanzania, preferably to Mwanza (Jamasmie, 2017c; Malanga, 2017). Both negotiating parties stressed, that trust is the essence of the forthcoming partnership. Thornton, Barrick's chairman is quoted saying that the balanced joint venture agreement is "the single most distinctive business model for the

21st century that exists in the world" (Malanga, 2017). Magufuli suddenly was calling Barrick's officials "brothers" at the end of the negotiations (Malanga, 2017).

Acacia's reaction to the agreement, by contrast, was less than thrilled, since the concessions made to the Tanzanian side would significantly affect the way the company does business. Besides that, the pressing US$ 190 billion tax bill was still on the table after the agreement. The government only agreed to an initial payment rate of 300 million US$. The company, however, claimed that it didn't dispose over such financial means (Malanga, 2017; "Govt, Barrick deal takes new twist", Oct 21 2017). Acacia Mining additionally stated that all agreements made between Barrick and the Government of Tanzania will require its approval. Indeed, the negotiation results seemed to be too quick and too beneficial for Tanzania. As a consequence, rumours spread that the government negotiators had modified parts of the agreements without notifying Barrick's negotiators who signed them in good faith (Interview #23). However, rumours being rumours, the results announced by the government were portrayed as the official negotiation result.

Within two weeks after the announcement of the agreement, Acacia's CEO Brad Gordon and chief financial officer Andrew Wray resigned from their positions, officially due to reasons unrelated to the dispute ("Why Top Acacia Officials Resigned", Nov 3 2017). Nevertheless, this move suggests a clear association to the dispute and the future orientation of the company, in the light of the agreements made. Within the Tanzanian government the responsible sections as well experienced a profound restructuring. The ministry, which before was responsible for energy and minerals, was divided into the Ministry of Energy and the Ministry of Minerals, led by one minister for each section in succession of Sospeter Muhongo. It took several more replacements of ministers and commissioners to achieve the desired result, a result that did not finally materialise until 2019. Overall, the argument between Magufuli's government and Barrick, respectively Acacia, led to fundamental changes in Tanzania's mining economy, mainly due to increased involvement of the state, aimed at turning the mining sector into a nationally beneficial economic branch and significant GDP contributor. First steps have been taken already in the legal amendments sketched above.

However, three potential scenarios for the future of mining in the country were circulating among members of civil society organizations at the time. Firstly, the radical solution to achieve total state control over the mining sector, ban foreign companies and operate mines via STAMICO and Tanzanian companies. Secondly, enter into collaborations with large-scale mining companies and establish value addition facilities. Finally, to implement very strict requirements for multinational companies, complete transparency, demand continuous audits and monitoring. The radical solution was largely seen as the worst-case scenario, as neither the state nor Tanzanian mining companies would be in the position to take over the mining sector totally due to lacking capacities, skills and financial means (Interview #11, #15). A combination of the remaining two scenarios, however, appeared to be a viable solution.

Although the peak of the struggle between Acacia and the Tanzanian government was reached in 2017, a final settlement was not reached quickly. The government was, not yet done with bossing Acacia around. Since the struggle had led to a steep crash of Acacia's stock value with little hope for recovery, the company in February 2018 confirmed talks with Chinese investors over a potential buyout (Jamasmie, 2018a). Later that year, as government officials were complaining about Acacia not having paid their fines, Acacia's subsidiaries were targeted by Tanzanian anti-corruption officers (Jamasmie, 2018b). Additionally, the company was accused of causing an environmental hazard at its North Mara mine through toxic spills. The government ordered Acacia to stop the pollution or it would shut down the mine (Jamasmie, 2019a, b). As a consequence of lacking payments, environmental hazards and presumably discontent with the very slow progress of what had been agreed on between Barrick and the Tanzanian state in 2017, Magufuli's government declared Acacia Mining an "unwanted" company and stated that the prior agreements were no longer valid. This announcement furthermore suggests that Acacia and the government will never come to a consensus ("Why Tanzania Wants Acacia to Pack and Go", May 19 2019). Further investigations at Acacia's North Mara mine regarding the validation of permits kept the government's pressure on Acacia steady (Jamasmie, 2019b). Barrick, who is not only the largest shareholder of Acacia but also the negotiating party with the Tanzanian government announced to take over Acacia (Kolumbia, 2019). The buyout furthermore went along with the implementation of large parts of the preliminary agreements of 2017 and hence includes the planned establishment of a Tanzania based company. The payment of 300 million US$ is supposed to be paid within seven years, parts of the payment are done by assigning some of the containers kept in the port of Dar es Salaam to the government. Cash payments are be coupled with the lifting of the export ban. The Tanzanian government is moreover going to hold 16 percent of non-transferable company shares. Any remaining disputes are to be settled by arbitration. However, requirements to construct processing facilities and refineries are not specified. This was conceived as a big step back in the negotiations (Kolumbia, 2019; Materu, 2019).

It appears that the strategy imposed by the Tanzanian government has paid off after two years of accusations, negotiations and pressuring. At the same time, the conflict with Acacia reflects the determination of Magufuli and his government to intervene and initiate development on his terms and understanding. Finally, by the end of 2019, the acquisition of Acacia by Barrick was finalised and a new joint-venture, Twiga Minerals, was founded to replace the company. 16 percent of the new company are held by the Tanzanian government ("Tanzania, Barrick form new joint venture to Replace Acacia", Oct 20 2019; Kimboy, 2019).On January 24th 2020, as both parties signed several regarding their collaboration, the dispute was declared to be over on this "historic day for Africa" (Kimboy, 2020a,b). Thus, after two and a half years of standing up against the multinational mining company Acacia and its mother company Barrick, the Magufuli government managed to enforce its envisioned reforms. However, even before the final agreements and the creation of Twiga Minerals, the approach to the conflict with Acacia Mining proved also to be fruitful in other contexts.

6.2.4 Walls, markets and developmentalist interventions

While Acacia Mining represented the primary target of the Tanzanian government, it expanded its scheme of fraud allegations, confiscation and investigation commissions across the mining sector due to irregularities in the diamond and tanzanite subsector. Petra Diamonds, the operator of Williamson Diamond Mine, was targeted next (Jamasmie, 2017d). Government officials seized diamonds ready for export from an aircraft about to leave Dar es Salaam airport, thus initiating another probe. Tanzanite One as well was addressed by the government following alleged violations and payment deficits (Mohammed, 2018). Both companies were urged to pay fines and outstanding taxes in order to continue their operations.

Besides legal reforms and attacking companies with allegations in order to make them comply with its demands, the government also engaged in concrete interventions in the mining sector. In late 2017, Magufuli ordered the construction of a large wall in Mererani, the location of the Tanzanite mines. After living as little more than a blueprint for a long time, the wall was finally inaugurated by the Magufuli in April 2018 in a large ceremony. The purpose of the wall was preventing theft and the smuggling of Tanzanite, the national gemstone, and at the same time to provide for better monitoring possibilities and thus opportunities for revenue collection. This debate on building a wall surrounding the Tanzanite mines has been going on for over a decade, when Tanzanite was supposedly being used for money laundering by Al Qaida. However, the wall was considered too costly and instead a fence was put up that was quickly covered with holes (Interview #20). Magufuli ordered the construction of the wall by the military to keep the costs down. The wall was finished earlier than expected, the result of it being a concrete wall of 24 kilometres length, topped with barbed wire, that leaves only a single, highly monitored gate for everybody, artisanal miners and members of companies alike, to pass through (Ismail, 2018). However, despite the wall, smuggling continued (Juma, 2018). The actual efficacy of the wall is thus debateable although revenues have reportedly increased though (Onyago, 2018; “The Tanzanite Wall”, Jun 26 2019). Nevertheless, the symbolism of the wall and Magufuli’s insistence to build it has had an immense impact. Artisanal miners in Mererani felt that the government was acting in their favour, at least partially. The President’s move to push through plans that have lain idle for over a decade further contributed to this positive perception. “What Magufuli does, this guy is an implementer. There are a lot of things that have been in the air. What Magufuli does is, what he finds to be important, then he says implement this. When he says implement this, people implement it” (Interview #21). This perception of Magufuli’s hands-on attitude thus indicates that people are highly satisfied with the result after waiting for so long.

In similar efforts to increase state control over artisanal mineral production and curb smuggling, the government ordered the establishment of regional mineral markets in all mining areas. Here miners shall be able to sell their produce at fair prices and the government can better monitor the produce for tax collection. Since large parts of artisanal gold produce are smuggled out of the country and ASM is quite productive, the

Tanzanian government hopes to generate significant revenue from providing formal markets for ASM. The increase in revenues after the amendments of 2017 in the Lake Zone area, according to the responsible government officials, has already exceeded the expectations. The implementation of formal markets is expected to boost government income from mining in the area (Interview #21). For the same reason, Magufuli had ordered the National Bank of Tanzania in January 2019 to start buying Tanzanian gold (Ng'wanakilala, 2019b). Again, this turn to ASM indicates the Tanzanian government's efforts to formalize and therefore support and control national actors. At the same time, the suggestion for local markets came from artisanal miners, who thus increasingly get the feeling that the government is paying attention to their needs (Interview #20).

The long-standing issue of mineral processing plants and refineries was also addressed again after it had been considered unviable by the former minister Muhongo. However, Magufuli's government did not abandon the idea, this is because smelters are viewed as an opportunity of local value addition that could create business with neighbouring mineral producing countries. In July 2019, the current Minster of Minerals Doto Biteko announced that Chinese companies were to receive licenses to construct a mineral smelter and two gold refineries soon (Ng'wanakilala, 2019b). Once again, a project was going to be pushed through regardless of its feasibility.

Since Magufuli came to power, the government's attitude towards mining and particularly foreign companies has changed considerably. Now the Tanzanian attitude in this context is understood to be assertive and demanding one (Interview #18). Direct engagement of and interventions by the Tanzanian state have surged in many sectors recently, ranging from agriculture, infrastructure, extractives and the overall efforts to industrialize the country. As Jacob and Pedersen (2018, p. 289) show, tendencies of state engagement did not begin with Magufuli, but under Kikwete's presidency in late 2000s, when private-public partnerships experienced a revival. The initial steps from full privatisation to the return of the state had thus already been taken (Pedersen and Jacob, 2017, p. 916). However, Magufuli has proven to be less hesitant in scaring off donors or companies by reclaiming a central position for the state in the Tanzanian economy. In reclaiming idle concessions, farms and factories, consolidating and expanding the position of parastatals, like STAMICO, NDC and others, and shifting the provision of services from foreign companies to Tanzanians and encouraging small-scale enterprises to formalise, the government has displayed strict determination for state-led national development. This strategy of direct interventions, territorial control and stronger state presence, along with repressions Ciuffolini and de la Vega (2013, pp. 435-436) consider as ‘anchoring’ and the antagonist of the disengagement that characterised the era of liberalisation. Ghebremusse (2016, p. 16) identifies similar patterns of a “new developmental state” engaging in more drastic interventions across resource rich countries on the continent recently. Although it represents a pursuing of similar developmental aims then early post-colonial governments, this recent form of the developmental state does not rely entirely on nationalization. Instead joint ventures, private-public partnerships, the promotion of productive foreign investments and the acceptance of the state as coordinating and steering entity in the development process, particularly in the extractive sector, are perceived as viable strategies to increase revenues. This entails the re-evaluation of the relationship between the state and private companies, including contract, efforts to improve local participation and fiscal regimes (Ghebremusse, 2016, pp. 12, 17-21). However, the “new developmental state” might also contribute to the crumbling of democracy in African states (Ghebremusse, 2016, pp. 22-23). Looking at Tanzania in the recent past, it is safe to say that it has experienced a return of a “new developmental state”, which focusses heavily on self-reliance, the state as the central actor in the economy and the acquisition of new partners in aid e.g. China or newly emerging players like India or Turkey, and on the private sector in order to foster Tanzania’s development.

6.3 Resource nationalism, neo-extractivism and the nation state in a globalized mining economy

6.3.1 Intensified resource nationalism and African Neo-Extractivism?

Throughout southern and eastern Africa, resource nationalism has been surging in the recent past. Heavily resource dependent countries like Zambia and Zimbabwe have displayed resource nationalism along with developmental state tendencies (Interview #10; Saunders and Caramento, 2017). However, those countries are far more dependent on resource extraction than Tanzania. Albeit this circumstance, Tanzania had been engaging in moderate economic resource nationalism under the presidency of Jakaya

Kikwete, Magufuli's rule is characterised by an intensification of resource nationalism. It is vital to acknowledge, though, that the recent tendencies of increased nationalism, protectionism and government interventions are not a turning point in Tanzanian politics, but a continuation and stepping up of processes that have been underway since the 2000s (Jacob and Pedersen, 2018, p. 289). The economic resource nationalism attested to Tanzania by Andreasson (2015, p. 316), although remaining primarily economic, has gained additional facets such as the rhetoric and ideological link to Tanzania's socialist past and the more radical interventions. Tanzanian resource nationalism hence strongly resembles a mixture of what Wilson (2015, p. 412) calls rentier resource nationalism and developmental resource nationalism. Rentier resource nationalism is shaped by direct government ownership over resource industries in order to control rent distribution. The Tanzanian government has increasingly tried to establish itself as a central, controlling actor in the sector in recent years and aspires to expand that position in the future as the two legal amendments of 2017 indicate. Developmental resource nationalism, in addition, promotes industrial transformation and the expansion of resource production, also by interventionist government policies. All of these factors are at stake in Tanzania. Government interventions in the (mineral) economy are common and industrial transformation is one of the central aims of the developmentalist agenda in Tanzania, which is entangled in the current craze for large-scale infrastructure projects. Despite the government's attacks on mining companies, the expansion of resource production, and its diversification, is prioritised. One pillar of these efforts is the formalisation of ASM via various government initiatives, as outlined above, while the other is the attraction of foreign investment to foster local development in the extractive sector. The government's handling of Acacia is thus rather an example used to deter other companies from not complying with the new regulations. While this may also appear as a crusade against foreign capital, it is not. The Tanzanian government is well aware of the need for foreign investment in order to drive the national economy and its development plans. Consequently, Magufuli and several government officials have repeatedly made clear that foreign investment is welcome to Tanzania as long as it complies with the national regulations and benefits the country (Jacob and Pedersen, 2018, p. 291). This is also reflected in the government's attempt to reach a conciliatory agreement with Barrick after attacking Acacia Mining, the rather quick resolution of the struggles with Petra Diamonds or Tanzanite One and the expansion of other companies that were already active in Tanzania, such as Shanta Gold ("Shanta Gold to expand search in Tanzania", May 18 2018). In addition, junior companies as well as big players like Barrick and Glencore are expanding in the search for Nickel, Graphite and other minerals (Shabalala, 2018; Kasumuni, 2018). Finally, Magufuli in January 2019 called for a relaxation of the fiscal regime for the mining sector in order to encourage small and large investors to mine in Tanzania ("Magufuli Gestures for Relaxation", Jan 23 2019). What appears to be paradoxical in contrast to the harsh anti-foreign capital stance Magufuli had taken against Acacia, clearly underpins the efforts to expand the mineral economy in Tanzania. At the same time, the call for tax relaxation, and thus incentives and investor friendly conditions, are all too familiar. The intensifying resource nationalism in Tanzania, in its developmental-rentier form, and the strategies applied by the government under President Magufuli also point towards the adaption of neo-extractivism in the African context.

Neo-extractivism represents a development model discussed vividly in the Latin American context of resource extraction. It proposes a post-neoliberal approach to resource governance that seeks to (at least partially) break with neoliberal ways of extraction and is mostly imposed by left-wing, populist governments (Brand et al., 2016, p. 130; Dietz, 2013, p. 511; Gudynas, 2011, p. 71). Therefore, it is considered as a departure from neoliberal or classical extractivism. Especially the latter represents a "mechanism of colonial and neo-colonial plunder and appropriation" (Acosta, 2013, p. 63) usually characterized by enclave economies, reliance on commodity exports, disengaged governments and loose regulations. Neo-extractivism in contrast implies a higher level of state agency that extends beyond mere gatekeeping. Dietz (2013, p. 512) for example identifies attempts by governments to increase political control over resources and the revenues generated by their production. Those revenues are ideally used for poverty alleviation and development projects (Dietz, 2013, p. 512). The (partial) nationalization of resources and corporations, as well as the renegotiation of contracts, increased taxes and export fines are additional practices associated with the neo-extractivist paradigm (Brand et al., 2016, p. 128; Dietz, 2013, p. 512). Gudynas, furthermore, emphasises the direct participation of the state while control over resources is not only about ownership, but also processes of extraction and production

(Gudynas, 2011, p. 71). Hence, the state engages more actively in extractive practices by implementing stricter control and regulations as well as engaging in extractive practices and marketing via state-owned entities. According to Gudynas, mining activities in neo-extractivist states do not decrease, they rather expand or at least sustain their status quo (Gudynas, 2011, p. 71). Multinational companies still play an important role, although they are often urged to enter into joint ventures with the state to continue production, a model that is supposed to expand into large-scale agriculture and other sectors beyond extraction (Gudynas, 2011, p. 72). The state engagement in neo-extractivist settings is furthermore legitimised by national-populist and anti-imperialist discourses (Gudynas, 2011, p. 74). All in all, this leads to an at least temporary strengthening of the state, not only in its presence but also in agency (Acosta, 2013, p. 73; Gudynas, 2011, p. 70). However, the strengthening of the state in neo-extractivist settings often goes hand in hand with a turn to authoritarianism (Acosta, 2013, p. 79).

Although, neo-extractivism aims to remodel classical extractivist patterns, it largely fails to do so. The radical change in resource policy supported by anti-capitalist rhetoric and apparently revolutionary acts driving initial interventions often tends to disguise the continuities between classical and neo-extractivism. Acosta even claims that neo-extractivism is just a contemporary version of classical extractivism since genuine transformations fail to appear (Acosta, 2013, p. 73). Neo-extractivism is far from proposing the abandonment of capitalism. The result is a slight rebalancing at best. The focus on the export of raw materials does not change significantly. Instead of restraining foreign investment, neo-extractivist states are rather determined to attract more investment, albeit under stricter regulations. Foreign investment even increases. Brand et al. (2016, p. 142) thus consider neo-extractivism as a process or reprimarization that neglects economic diversification. Although value addition can be established in the course of this process, local production chains often remain short and limited to the initial processing steps of raw materials (Gudynas, 2011, p. 73). The extraction of minerals still tends to take place in enclave economies, the export-oriented production of raw materials remains untouched and so does the weaker position of the respective country in the world market (Acosta, 2013, p. 73). Veltmeyer and Petras even see the reliance on raw material exports rather as a fall-back to predatory forms of capitalism and unsustainable development instead of progressive politics and a sustainable path of development (Veltmeyer and Petras, 2014, pp. 385–386). Consequently, the result of neo-extractivism is often limited to a repositioning of the state in the mineral economy, slightly increased revenues, an expansion of extractive activities and the reproduction of capitalist modes of extraction (Gudynas, 2011, pp. 71-72). The state then occupies an ambivalent position as it needs to attract capital to facilitate production and generate rents, and simultaneously regulate the sector.

Following these characteristics, the recent dynamics in Tanzania suggest strong parallels to the neo-extractivist development model. The way in which the Tanzanian government, respectively President Magufuli, acted during the dispute of 2017 and thereafter complied with neo-extractivist states. State interventions, populism and the utilization of Nyerere's legacy indicate that clearly. Several other characteristics can be traced in Tanzania currently. The revival of the developmental state in Tanzania underpins the current drive in national politics to find alternatives to neoliberalist modes of production that have failed to meet the expectations of national development. Thus, revenue collection and the reassertion of national control over resources displayed by Magufuli have been identified as key strategies to make the extractive sector more beneficial for Tanzania. National control here, however, equals state control. State control rather resembles state capture whereas national control should create equal opportunities for all Tanzanians (Interview #15). As Poncian (2019, p. 332) shows, national resource ownership exercised by the state can lead to a subnational resource curse in case the government does not account for community rights and overpowers local governance.

Again, the insistence on national sovereignty and self-reliance is closely entangled with resource ownership and control, which the legislation passed in 2017 strongly insists on. Efforts to increase control over mineral production are furthermore inherent to the proclaimed establishment of a new Tanzanian company as a joint venture and the setting up of processing plants in the country. National-populist and anti-imperialist rhetoric has increased under Magufuli's rule (Jacob and Pedersen, 2018, p. 291; Makulilo, 2017, p. 60). However, the Tanzanian case and Latin American neo-extractivism differ in their ideological foundation. In most cases, neo-extractivism is based on popular movements that ultimately feed into political action. In Tanzania political action is imposed top-down and utilizes the prevalence of the socialist legacy among large parts of the population (Interview #18). Although even the complete lack of ideology and revenue collection as a dominant motive in the actions of the Tanzanian government is debateable (Interview #23).

Despite development being primarily state-driven, foreign investment remains a vital factor and is continuously encouraged in the extractive sector as Magufuli's plan for a relaxation of the fiscal regime suggests. The government's determination to increase revenues from the extractive sector is characterised by tapping financial flows in ASM via formalization and expanding and diversifying extractive practices is driving current developments. However, at the time of writing it seems that the potential for fundamental change has been stalled in favour of extended rent seeking, continued export-orientation and raw-material production, as well as a strengthening populist and opportunist developmental state in Tanzania. It is yet unclear how the extractive sector will be developing in the long run as it has been a mixed bag of radical interventions and fawning over investors. A more detailed analysis of neo-extractivist countries in comparison to Tanzania could provide a glimpse at potential long-term outcomes.

6.3.2 (Resource) Nationalism as globalization project

Tanzania's embracing of resource nationalism since the early 2000s, its intensification, and thus the neo-extractive turn, are an essential part of coping strategies imposed by the state in order to deal with its position within a globalized world, under the global condition. Nationalist ideologies are on the rise worldwide, resulting in right-wing governments, xenophobia and isolationism. The euphoria about an interconnected world without borders, an ideal that fuelled the founding of the regional organizations, and the positive impacts of globalization has drastically deteriorated and become inverted. Scepticism, distrust and fear have (re)gained momentum. The nation state, which had already been declared to be obsolete by some, has on the contrary become a vital point of reference politically, as well as in terms of belonging and identity.

Tanzania is no exception in this recent wave of populism and nationalism. Tanzanians have even been encouraged to endorse patriotism and nationalism via the campaign “Nchi yangu kwanza”, which translates to “my country first”, in order to promote unity and solidarity for development (Oforo, 2017). President Magufuli, who runs what Acosta (2013, p. 79) calls a hyperpresidentialist government, likes to display himself as an antiliberal fighter in the footsteps of Julius Nyerere. Similar to the period after independence, embracing the nation-state and therefore nationalist ideologies are perceived as means to address historical injustices of colonial exploitation, dependency and the renewed deprived position in global capitalist systems. This strong focus on the Tanzanian nation-state has also resulted in partial isolation from neighbouring countries as well as globally (Interview #23). This also includes the preference of national interests over guidelines or recommendations given out by regional organizations such as the East African Community (EAC), the Southern African Development Community (SADC) or the African Union (AU). At the same time, however, Magufuli has recently pushed for the strengthening of intra-African trade, particularly on a regional level, investment and private sector development, as he was about to become the chairman of SADC in August 2019 (Malanga, 2019b). Consequently, there is potential for the expansion of Magufuli's ambivalent take on nationalism and foreign investment, particularly in countries within SADC that have already shown affinity to developments in the Tanzania's mining sector, such as Zambia.

In the extractive sector, the developments since 2016 have been strongly shaped by the government's reference to the nation-state as the primary spatial format guiding and informing its activities. The nation-state, and thus the developmental state too, is internally perceived as the best solution in Tanzania's quest to consolidate its sovereignty in a classical sovereignty regime, with first attempts under Kikwete. At the same time the insistence on self-reliance not only conveys a strong socialist legacy, but also the hopes to overcome (neo)colonial exploitation regimes as well as the danger of a looming resource curse.

As established in chapter five, the Tanzanian mining industry was, and largely still is, dominated by extractive enclaves operated by multinational companies and reproduced in the interplay of those companies, the Tanzanian state and to a certain degree civil society organizations and local people. However, the extractive industries are globally highly entangled, with a vast network of companies, mother and subsidiaries, market places, processing and so on. The enclaves in Tanzania or elsewhere are only part of a much larger extractive order. Nevertheless, the Tanzanian government has resorted to measures linked to the nation state and national territory in order to respond to the global condition in form of a globalised mining industry.

As Jacob and Pedersen (2018, p. 290) show, taxes and royalties are only one part of the strategy to regain control over the mining sector. The government thus challenged extractive enclaves and the structures of the mineral economy by means of territoriality, expressed physically, rhetorically and in the legislative amendments, which are intertwined and closely connected to the overall resource nationalism. In turn, these territorial practices contribute to the consolidation of state sovereignty.

Physical territoriality has played a vital role in dealing with multinational companies in 2017. By imposing the export ban on mineral concentrates, the government demonstrated its ability to exercise control over its national territory and what leaves and enters the country. In that way it closed the national borders at a site of international trade and a gateway between the national or local and the global (Hönke, 2018, p. 47). Hönke and Cuesta-Fernandez (Hönke and Cuesta-Fernandez, 2017, pp. 1089–1090) argue that the port of Dar es Salaam represents an archipelago of territorialities that transcend traditional boundaries of territorial authority and is scattered among multiple agents including government bureaucrats, international organizations and multinational companies. This circumstance has become particularly pronounced after the partial privatisation of the port in the early 2000s (Hönke 2018, p. 44).

The existence of overlapping or competing sovereignties and territorialities are, nevertheless, nothing new in the context of African states. Hönke (2018, p. 41) shows that it is highly important for states, colonial as well as postcolonial, to control those sites that connect their respective territories to the outside world in order to source revenue. Consequently, the export ban and the following closure of the port for Acacia Mining was a demonstration proving the sovereignty and territoriality of the Tanzanian state against competing practices of the company. The seizure of diamonds ready for export from an aircraft at the airport of Dar es Salaam provides the same implications.

The physical territoriality employed by the Tanzanian state is furthermore reflected in efforts to curb mineral smuggling. Whilst the establishment of local mineral markets are supposed to discourage smuggling outside of the Tanzanian territory by providing viable alternatives within the country, the construction of the 'great wall' around the Tanzanite mines of Mererani is a very clear example of physical territoriality. By setting up the concrete enclosure of the Tanzanite fields the government territorialised and thus asserted more immediate control over the area and, at the same time, sought to protect the mining sites from intruders and exclude unwanted people.

In addition, Magufuli's threat to seize Acacia's mines and give them to Tanzanians clearly communicates the classical notion of territorial sovereignty. Hence, although the mining company claims the mine complex as its own territory demarcated by fences, barbed wire and all sorts of security measures, it is in this perception of sovereignty still subordinate to the state sovereign – the Tanzanian government. The competing territorialities of the government and companies are, thus, for example reflected in the attempt of Acacia Mining to deny local authorities access to the mining site, as discussed above. Together these examples symbolically stand for state efforts to exert control over its respective territory, internally as well as at the fringes, and thereby underpin sovereignty claims. While at other times territorial practices have been less present, under Magufuli, however, those are enforced due to the perceived necessity to territorialize.

Territoriality and sovereignty claims were voiced by legal means as well as rhetorically by government actors in different situations. As mentioned on several occasions, Nyerere's socialist legacy in Tanzania is still strong. Consequently, there is a consciousness that natural and mineral resources within the borders of the Tanzanian state belong to Tanzanians. Tanzanians are also supposed to be the ones to profit from these endowments. The state, administering resources on behalf of its citizens is thus required to ensure their nationally beneficial utilization. The current situation in Tanzania under Magufuli, as well as under the predecessor Kikwete, can consequently be seen as a resumption of the state's duties in resource governance that were suspended under liberalisation. The current return of the state goes along with this. Both, the Written Laws (Miscellaneous Amendments) Act and the Natural Wealth and Resources (Permanent Sovereignty) Act of 2017 repeat the claims of resource ownership and (state) sovereignty to settle over resources and explicitly mention that the state's sovereignty is above all other (foreign) entities. It is thus implied that even though foreign companies are granted concessions and are able to produce more or less isolated extractive enclaves, the state still has the ability to interfere in these corporate territories.

At the same time, the war metaphor frequently used during the conflict with Acacia Mining (Roder, 2017) represents another form of rhetoric territoriality. It invokes the idea of an enemy intruding the national territory without permission, calling to action the national sovereign to restore territorial integrity. Furthermore, Tanzanian's are considered not to have profited from their national resources and hence being exploited by foreign companies and colonisers. Therein the fierce measures taken by the government are legitimised and stylised as serving the cause of the nation and its people.

As part of the new laws as well as the agreement between the Tanzanian government and Barrick, the transfer of company offices and bank accounts, plus the requirements for companies to have money stored in Tanzanian banks and efforts to have companies settle in Tanzania can be interpreted as territorial practices. By insisting on the establishment of company offices, bank accounts and so on within Tanzanian territory, the state tries to create a situation in which it can control mining companies more easily as their assets and operations are places within sphere of control. This territorial anchoring of mining companies thus clearly indicates the relevance of the nation state as the primary spatial format referenced by the Tanzanian in encountering the global condition.

6.4 Conclusion

Tanzania has changed under Magufuli's presidency. The state returned drastically via stronger control, quick and harsh interventions and in an increasingly authoritarian manner. It has become a pivotal actor in pushing development projects against all odds and engaged in serious efforts to revamp the country's mineral economy. Plans and ideas that had remained blueprints or stalled due to financial reasons or lack of determination are suddenly implemented within short periods of time.

By invoking the history of colonial and neoliberal exploitation by foreigners, and the simultaneous glorification of post-independence socialism, populist and (resource) nationalist narratives, President Magufuli took a strong stand against multinational mining companies. Despite these legitimations, revenue collection can be identified as one primary driver of the government's interventions. The 'economic war' against

Acacia Mining with its accusations of fraud, tax evasion, illegal operations as well as political and economic pressure represents a paradigmatic case for the government's strategy of anchoring to increase control, participation and revenue from the extractive sector. The end of Acacia Mining and the new joint-venture Twiga Minerals furthermore underpin the efficacy of those practices. As a result, other companies successively insisted on complying with the government's demands and to adhering to the reforms aspired by Magufuli's administration.

In doing so, the Tanzanian government tried to escape the legacy of an (neo)imperial sovereignty regime brought by liberalisation and to re-establish and consolidate a classical sovereignty regime based on the country's socialist legacy and the nation state as dominant spatial format. The relevance of the nation state in guiding political action and interventions is apparent in the employing of nationalist narratives of belonging, exploitation, the construction of an enemy image based on pre-existing resentments and the use of territorial practices to demonstrate state control and sovereignty. Tanzania, thus, represents a lucid case for the recent dynamics of intensified resource nationalism and government interventions in many resource rich African countries, e.g. Zambia and Zimbabwe.

It is nevertheless debatable how resorting to the nation state in a globalised mineral economy will turn out in the long-run and whether it does end up becoming a territorial trap. Despite the action against foreign capital and multinational companies, the government never stopped trying to attract investment to the extractive sector. This does not only imply that Tanzanian companies and the government are not in the position to drive the aspired expansion of the extractive sector not to mention to take it over entirely. Thus, foreign capital is necessary for these plans, and the government has realized that. Regardless of the persistent focus on investment, the government has managed to consolidate its position in the extractive sector and turned from promoter and regulator to owner and operator again. The continuities between the socialist developmental state under Nyerere and the developmental neo-extractivist state under Magufuli in the extractive sector are striking. Yet, intentions to pursue radical nationalizations policies have been denied repetitively. Consequently, further efforts to rebalance the sector in favour of the Tanzanian state while maintaining investments, e.g. from new actors such as Chinese companies, is to be expected. With the presidential elections ahead in 2020, the recent and potential manoeuvres in the extractive sector are likely to play a prominent role in consolidating the President's position.

7. Conclusion - The state of extraction

The history of the mining industry in Tanzania is one of fundamental transitions and longstanding continuities alike. This study has shown how various state and non-state actors have shaped the extractive sector under colonialism, African socialism, liberalisation and emerging neo-extractivism. It has addressed two substantial research gaps. At no point in time, however, the influences on the extractive sector stopped at the borders of what is now Tanzania. On the contrary, throughout the period in focus of this study, Tanzania and its mineral economy was entangled in a netting of multiple groups of actors, African and non-African, their interests and spatial practices in pursuing those.

Until now, the historical perspectives on mining in Tanzania have, with few exceptions (Hetzer, 1995; Lemelle, 1986; Tetzlaff, 1970), spared the German colonial period. Chapter three has thus provided an overview of the developments in the mineral economy of German East Africa and made clear that, despite little economic significance, this period paved the way for later processes of capitalist expansion, e.g. in terms of geological mapping. Although the account of mining in German East Africa provided here is rather broad-brushed due to the study's objective, the archival material and geological reports have allowed for more detailed, in-depth accounts of mining in Tanzania under German rule. Hence, this is just a first step in the utilization of this data corpus and will encourage additional investigations.

Furthermore, by offering a relatively detailed account of the struggle between the Tanzanian state and Acacia Mining, its aftermath and impact, this study contributes to the literature on the political developments in Tanzania under Magufuli and the intense return of the state in the development and resource sectors (Jacob, 2018; Jacob and Pedersen, 2018; Kinyondo and Huggins, 2019; Poncian, 2019). By discussing these developments as neo-extractivism, I have enabled new perspectives in the discussion on the intensifying tendencies of resource nationalism and return of the developmental state in Africa in relation and comparison to cases in Latin America and Asia. Thus, the focus needs to shift from the particularities of African countries to cross-cutting themes and shared tropes, in order to better understand the overarching dynamics in developing, resource rich countries. Considering the return of the state and the reference to the nation state via territoriality as the dominant spatial format, guiding political practice in this globalisation project offers a viable entry point.

The often temporally limited perspective of studies looking at space in regards to extraction has led to the misconception of novelty of certain processes, practices and their outcomes. Similarly, this circumstance resulted in the proliferation of spatial metaphors in order to grasp the growing complexity of extraction under the global condition. Instead of focussing on a single period in minute detail, I have aimed to explore larger, overarching dynamics in Tanzania's mining sector, that become visible only after taking on a wider historical scope. Consequently, this approach aimed at identifying fundamental spatial formats, as well as continuities and discrepancies shaping extraction over time, and thereby counter the proliferation of spatial metaphors used to describe developments in the extractive sector.

The colonial period was characterised by the slow expansion of capitalist modes of extraction that successively challenged, merged with and built upon precolonial mining and trade. Mineral discoveries, the observation of local practices, advancing geological mapping and its articulation in the colony, the metropole and beyond fuelled imaginations about the wealth of the colony waiting to be tapped, and thus led to the production of commodity frontiers. Fortune seekers, petty capitalists and businessmen hence began to territorialise terrain in the colony looking for gold, mica and other minerals. Those territorial practices resulted in fragmented territories, often scattered outside of the effective colonial territory and limited to sites of extraction and transport corridors. Ultimately, the intensification of territorial practices to secure investments and mineral production led to the production of enclaves representing islands of private territoriality. Overall, the colonial period paved the way for and established an exploitative mode of capitalist extraction, geared towards export and based on enclaves securing the useful fragments of the colony for global commodity markets. Cycles of boom and bust, global economic crises and fluctuating demand have, furthermore, contributed to repeated waves of frontier production, territorialisation and enclaving in the colonies.

After independence, the government under Nyerere sought to challenge this order of extraction by means of nationalization, self-reliance and capacity building, so that in the future, Tanzanians would be able to run the extractive economy to their own benefit. At first glance, the quest for national sovereignty and control over mineral resources and the employment of state interventions have led to the disappearance of extractive enclaves and the dominance of nation state territoriality when most foreign companies left the country in the face of socialism and nationalization policies. Nevertheless, the continued external dependency of Tanganyika, financially as well as in terms of expertise, perpetuated external influence. When the socialist experiment failed in Tanzania and national sovereignty and territoriality was increasingly repelled due to growing pressure from donors and the World Bank, the previous extractive order recurred immediately. Commodity frontiers, mining territories and extractive enclaves dominated by foreign multinational companies shaped the mineral economy once again. Consequently, the enclave-based extractive order of the colonial period was temporarily suppressed by the ideologically and politically supported efficacy of the nation state after independence. The nationalised mining economy during the socialist period accordingly represents rather an interlude in the sector's history in Tanzania.

Although the relapse to colonial patterns of mineral exploitation began during the late rule of Nyerere, it was under his successors Ali Hasan Mwinyi and Benjamin Mkapa that it fully commenced. The influx of foreign companies to Tanzania in the 1980s and 1990s under a highly permissive regime was perceived as a sell-out of the country, as foreignization and contrary to the ideology of ujamaa that had influenced the preceding decades. Generally speaking, the mechanisms and processes at play in this situation were largely congruent with the capitalist expansion in the colonial era, though, at a much higher pace and scale. This was particularly due to the existence of geological data, advanced technologies and improved transport and communication systems that contributed to the space-time compression. Nevertheless, it has to be acknowledged that colonial enclaves and those in the phase of liberalisation have been produced under different circumstances.

At the high tide of liberalisation, the nation state was once again offered as the solution to the disillusionment brought about by privatization and globalisation. Emerging resource nationalism and initial reforms under Kikwete's presidency set out to challenge the enclave economy in the extractive sector and bring the state, and thus national control, back in. However, due to the slow and ineffectual implementation of the reforms given in the legislation of 2009/10, the achievements remained scarce.

More recently, the developments under President Magufuli should be considered as continuation and intensification of prior tendencies. The return of the state has become visible via harsh interventions, repressiveness and the willingness to push through unpopular decisions and projects against all kinds of resistance. The return of the state is particularly clear in the numerous, state-led large-scale infrastructure projects that are underway. In the mining sector, aspired reforms were implemented with no further respite and the 'economic war' with Acacia mining has insinuated to all mining companies actively operating, or interested in Tanzania, that the government is not to be trifled with. All in all, the nation state persists to be the spatial format informing political action in Tanzania under Magufuli. National sovereignty and resource ownership have been repeatedly stressed, so was the integrity of national territory. This underpins the efforts to increase control over extractive enclaves, making them more permeable or influencing their complete dissolution. As off now, the radicality of Magufuli's approach in the mining sector seems to have dampened in the favour of attracting investment, but supposedly on the government's terms. How the recent developments will play out in the future remains highly speculative. Nevertheless, the upcoming presidential elections in 2020 might hold some surprises and potentials for new populist government interventions. Overall, throughout the historical outline it has become evident that the capitalist modes of resource production along with their spatial outcomes have not been simply imposed on Tanzania by outsiders, but are the result of the asymmetrical connections between Africa and the (Cooper, 2014, p. 134).

While the discussion of each of those periods offers insights to particular contexts, development dynamics and spatial practices at play, the longue-durée perspective pursued in the study makes it possible to trace continuities, moments of disruption and repetition. As Lefebvre has called for a history of space in more general terms, this study offers a history of space in Tanzania's extractive sector, or rather of actors and spatial practices they employed to pursue and secure their interests. Hence, this particular history of space is an account of the rhythms of changing efficacy, dominance and constant struggle of spatial practices, and thus of spatial formats and orders.

While the periodisation of the chapters goes along with more commonly accepted historical phases in Tanzania, change regarding processes and practices of spatialization does not concur with these timeframes, as Lefebvre has predicted. There are significant overlaps that indicate transition processes that stretch over longer periods of time. For example, the disappearance of extractive enclaves in the favour of the nation state and national territory started well before the Tanzanian independence and nationalization policies.

Roughly sketched, the frontiers and enclaves produced during the capitalist expansion in the colonial period challenged the pre-colonial order of extraction. With the looming independence and nationalization, the efficacy of enclaves was challenged by the nation state and finally superseded. However, external pressure led to the resurgence of commodity frontiers and extractive enclaves under liberalisation and the disengagement of the nation state. Starting in the early 2000s, the dominance of extractive enclaves in the mining sector of Tanzania was successively challenged by the return of the state and peaked under President John Magufuli. The recent developments are furthermore strongly shaped by the nation state as a framework to deal with the challenges of the global condition. Nevertheless, extractive enclaves will continue to play an important role in the country, as the government does not aspire to turn around the extractive sector, but only to adjust it in order to retrieve higher rents. What appears to be a back and forth between export-oriented capitalism and nation state-based practices, is rather the tenacious persistence of capitalist, enclave-based modes of extraction and politically driven efforts to challenge them. Consequently, the Tanzanian example not only points to the historical prevalence of extractive enclaves in the colonial era, and as a historically traceable and integral part of capitalist expansion and extraction. The enclave-character of mining in colonial Tanzania furthermore represents a counterexample to the socially thick mining economy of colonial Zambia, although even the company towns there could be seen as enclaves with the purpose to control workforce. At the same time the immediate resurgence of enclaves when the state started to withdraw from controlling extraction suggests the continuous persistence and efficacy of capitalist modes extraction despite temporary suppression and resistance. In conclusion, looking at the history of industrial and mechanised mining in Tanzania uncovers core dynamics that have shaped capitalist modes of extraction in the country over time. The latest developments, based on the strong wish for national control and increased benefits for Tanzanians, represent a renewed effort to counter the long-standing foreign exploitation and the perception of limited sovereignty.

Despite the particularities of Tanzania, the application of a spatial lens to the history of mechanised mining in Tanzania has uncovered fundamental mechanisms of resource extraction under global capitalist systems of extraction. Frontiers in the expansion of capitalism, of territories as the spatial fix and its intensification in enclaves are the outcome of spatial practices, intentionally or unintentionally employed in order to generate and secure profits.

The frontier, territory and the enclave demonstrably are spatial formats, and thus patterns, that have informed and guided social and spatial practices and thus processes in the expansion of mining capitalism in Tanzania from the colonial era until today. Those patterns and their interrelation, I argue, are not particular to Tanzania, but applicable to other contexts of capitalist expansion.

The connection between those spatial formats a spatial order. However, the nexus of frontier, territory and extractive enclave only represents a few interconnected pieces in a larger puzzle that can be regarded as a spatial order of extraction. What I have discussed here, thus, covers the realm of the producing country, but not the networks reaching out to global marketplaces, production chains and so on. In order to arrive at a spatial order of extraction, more research in those directions is required.

Nevertheless, within the scope of this study it has become evident that enclave-based extraction, established through frontier processes and territorialities, has been a vital part of capitalist modes of resource production from the early days of capitalist expansion during colonisation and has since then largely withstood contestation. As much as this enclave-based mode of extraction is just one variety among other types of mining, it represents a particular type in the proclaimed spatial order of extraction on a global scale. However, extractive enclaves are an historically integral part of capitalist resource extraction and not a novelty of neoliberalism.

In conclusion, the set of spatial formats identified in the case of Tanzania and their interrelation as a part of a larger spatial order can be seen as tools to look at other histories of extraction or current dynamics in order to identify cross-cutting themes, parallels or differences that are situated at the core of how capitalist modes of extraction are shaped by different actors and their practices and vice versa.

8. Bibliography

8.1 Primary Sources

8.1.1 Archival Sources

Deutsches Bundesarchiv (German Federal Archives), Berlin. Signature BArch.

Tanzania National Archives, Dar es Salaam. Signature TNA.

8.1.2 Media Articles

“$190bn Tax Bill on Acacia `May Hurt Tanzania’", 2017. The Citizen, Jul 27. http://www.thecitizen.co.tz/News/-190bn-tax-bill-on-Acacia–may-hurt-Tanzania-/1840340-4033796-10o0t1a/index.html (accessed 1.8.2017).

“Acacia CEO: We declare Everything of Commercial Value that we produce”, 2017. The Guardian, May 26 ,1–2.

“Acacia Wants an Independent Review on Presidential Committees’ Findings on Mineral Sands Saga”, 2017. The Citizen, Jun 13. http://www.thecitizen.co.tz/News/1840340-3967960-guovljz/index.html (accessed 17.6.2017).

“’After getting Pregnant, You are Done’: No more School for Tanzania’s Mums-to-be”, 2017. The Guardian, Jun 30. https://www.theguardian.com/global-development/2017/jun/30/tanzania-president-ban-pregnant-girls-from-school-john-magufuli (accessed 17.9.2017).

Brooks, A., 2019. Tanzania’s Incredible Transformation from “Beacon of Democracy” to Oppressive State. East Africa Monitor, May 29. https://eastafricamonitor.com/tanzanias-transformation-oppressive-state/ (accessed 24.7.2019).

Dale, C., 1935. Where the Industry Stands Today: Characteristics of Individual Areas and Organisations. Financial Times, Supplement No 138, Dec 10.

Dalton, J., 2019. Tanzania Inaugurates Dam that Will 'Boost Power Supply but Threaten Rhino and Elephants'. The Independent, Jul 27. https://www.independent.co.uk/news/world/africa/tanzania-dam-project-elephant-rhino-selous-game-reserve-a9022966.html (accessed 29.7.2019).

"Democracy under Assault. Tanzania's Rogue President", 2018. The Economist, Mar 15. https://www.economist.com/middle-east-and-africa/2018/03/15/tanzanias-rogue-president (accessed 17.8.2019)

Felician, S., 2017a. Police Surround Bulyanhulu Gold Mine. The Citizen, May 25. http://www.thecitizen.co.tz/News/Police-surround-Bulyamhulu-gold-mine/1840340-3941946-s0ag3uz/index.html (accessed 30.5.2017).

Felician, S., 2017b. Acacia Explains why Shinyanga RC Was Denied Entrance to Bulyanhulu. The Citizen, May 26. http://www.thecitizen.co.tz/News/Acacia-explains-why-Shinyanga-RC/1840340-3942894-ydrr7y/index.html (accessed 30.5.2017).

Frayling, B., 1934. Gold Mining Industry in the Territory: Main Auriferous Areas and Companies Operating in Them. Financial Times, Supplement No 125, Nov 26.

George, S., 2016. Tanzanians Ponder Magufuli's Leadership one Year after He Was Elected, Deutsche Welle, Oct 25. https://www.dw.com/en/tanzanians-ponder-magufulis-leadership-one-year-after-he-was-elected/a-36152570-0 (accessed 25.7.2019).

"Govt, Barrick Deal Takes New Twist", 2017. The Citizen, Oct 21. http://www.thecitizen.co.tz/News/Govt–Barrick-deal-takes-new-twist/1840340-4149444-5awd3kz/index.html (accessed 24.10.2017).

Herrmann, C., 2019. Foundation Stone Laid for Controversial Hydroelectric Dam in Tanzania, Deutsche Welle, Jul 26. https://www.dw.com/en/foundation-stone-laid-for-controversial-hydroelectric-dam-in-tanzania/a-49265447 (accessed 29.7.2019).

Ismail, B., 2018. Construction of Mirerani Mines Perimeter Wall Complete. The Citizen, Feb 25. https://www.thecitizen.co.tz/news/Construction-of-Mirerani-mines-perimeter-wall-complete/1840340-4319152-mmaxy5z/index.html (accessed 8.3.2018).

Jamasmie, C., 2019a. Tanzania Threatens Acacia with Closing North Mara over Water Pollution. Mining.com, Mar 8. https://www.mining.com/tanzania-threatens-acacia-closing-north-mara-water-pollution/ (accessed 1.8.2019).

Jamasmie, C., 2019b. Tanzania Goes after Acacia's Flagship Mine. Mining.com, Jun 12. https://www.mining.com/tanzania-goes-after-acacia-minings-only-fully-operating-mine/ (accessed 1.8.2019).

Jamasmie, C., 2018a. Acacia Mining Admits in Talks with Chinese over Potential Sale of Tanzania Assets. Mining.com, Feb 16. https://www.mining.com/acacia-mining-admits-talks-chinese-potential-sale-tanzania-assets/ (accessed 4.3.2018).

Jamasmie, C., 2018b. Tanzania Anti-Corruption Body Charges Acacia Subsidiaries with Tax Evasion, Money Laundering. Minin.com, Oct 17. https://www.mining.com/tanzania-anti-corruption-body-arrests-acacia-mining-employees/ (accessed 12.11.2018).

Jamasmie, C., 2017a. AngloGold Taking Tanzania to UN Court over Country's New Mining Law. Mining.com, Jul 13. http://www.mining.com/anglogold-taking-tanzania-un-court-countrys-new-mining-law (accessed 15.7.2017).

Jamasmie, C., 2017b. Acacia Mining now Hit with $190 Billion Tax Bill in Tanzania. Mining.com. Jul 24. http://www.mining.com/acacia-mining-now-hit-190-billion-tax-bill-tanzania/ (accessed 30.7.2017)

Jamasmie, C., 2017c. Barrick to Give Tanzania Stake in Mines, 300 Million to End Dispute. Mining.com, Oct 19. http://www.mining.com/barrick-give-tanzania-stake-mines-300-million-end-dispute (accessed 30.10.2017)

Jamasmie, C., 2017d. Tanzania Kicks off Probe into Petra Diamonds Contract, Orders Officials to Resign. Mining.com, Sep 7. http://www.mining.com/tanzania-kicks-off-probe-into-petra-diamonds-contract-orders-officials-to-resign/ (accessed 12.9.2017)

Juma, 2018. Tanzanite Smuggling Persists despite New Wall. The Citizen, Jul 27.

https://www.thecitizen.co.tz/news/1840340-4667024-5d4auwz/index.html (accessed 24.7.2019).

Kaijage, F., 2018. Magufuli Appoints Team to Probe Ferry Disaster. The East African, Nov 24. https://www.theeastafrican.co.ke/news/ea/Tanzania-Magufuli-appoint-team-to-probe-ferry-disaster/4552908-4775386-qi2srt/index.html (accessed 1.8.2019)

Kamagi, D., 2018. CRDB Launches New Branch in Chato. The Citizen, Mar 9. http://www.thecitizen.co.tz/News/CRDB-launches-new-branch-in-Chato-/1840340-4334836-jg67n0z/index.html (accessed 2.4.2018)

Kasumuni, L., 2018. Tanzania Mining Commission Approves 7,000 Licences. The Citizen, May 29. https://www.thecitizen.co.tz/news/Commission-approves-7-000-licences/1840340-4584660-ycikkv/index.html (accessed 24.7.2018)

Kimboy, F., 2020a. Magufuli: Tax Dispute with Barrick over. The Citizen, Jan 24. https://www.thecitizen.co.tz/news/Magufuli--Tax-dispute-with-Barrick-over-/1840340-5430182-vjjj6pz/index.html (accessed 10.02.2020).

Kimboy, F., 2020b. Tanzania Government, Barrick ink Historic Mining Deal . The Citizen, Jan 25. https://www.thecitizen.co.tz/news/-Tanzania-government--Barrick-ink-historic-mining-deal/1840340-5431094-qu89p8z/index.html https:// (accessed 10.02.2020).

Kimboy, F., 2019. Barrick says it has finally acquired Acacia Mining. The Citizen, Sep 14. https://www.thecitizen.co.tz/news/1840340-5272986-format-xhtml-12xy0t9/index.html (accessed 10.02.2020).

Kolumbia, L., 2019. Details of Tanzania-Barrick Deal Emerge. The Citizen, Jul 22. https://www.thecitizen.co.tz/news/1840340-5205818-98937s/index.html (accessed 24.7.19).

Kolumbia, L., 2017. Mineral Agency Board Axed over of Losses in Concentrate. The Citizen, May 26, 3.

“Magufuli Gestures for Relaxation of Tax Regime in Mining”, 2019. The Citizen, Jan 23.

https://www.thecitizen.co.tz/news/Magufuli-gestures-for-relaxation-of-tax-regime-in-mining/1840340-4947170-11byx13/index.html (accessed 7.24.2019).

"Magufuli Sacks Head of Power Firm", 2017. New Times Rwanda, Jan 4. URL https://www.newtimes.co.rw/section/read/206806 (accessed 24.6.18).

"Magufuli Says Will Close all Mines if Firms Delay Talks to Resolve Tax Dispute", 2017. The East African, Jul 22. http://www.theeastafrican.co.ke/business/Magufuli-threatens-to-close-mines-if-owners-delay-negotiations/2560-4027536-u3cnfqz/index.html http://www.theeastafrican.co.ke/business/Magufuli-threatens-to-close-mines-if-owners-delay-negotiations/2560-4027536-u3 (accessed 11.11.2017).

"Magufuli: We'll Negotiate on our Own Terms", 2017. The Citizen, Jun 13, 2.

Malanga, A., 2019a. Tanzania Government: Thousands of Sacked Public Workers Reinstated. The Citizen, May 9. https://www.thecitizen.co.tz/news/1840340-5102598-8o47d9/index.html (accessed .26.7.2019).

Malanga, A., 2019b. President Magufuli Pushes for Intra-African Trade. The Citizen, Aug 6. https://www.thecitizen.co.tz/news/1840340-5224922-99ghhf/index.html (accessed 12.8.19).

Malanga, A., 2017. Barrick Deal to Serve as Model, Says JPM. The Citizen, Oct 20. http://www.thecitizen.co.tz/News/Barrick-deal-to-serve-as-model–says-JPM/1840340-4147898-3qjumhz/index.html (accessed 25.20.2017).

Masare, A., 2017. We Have Nothing to Hide, Says Acacia amid Damning Report. The Citizen, May 25, 2.

Masuguliko, R., 2018. Chato Airport to Promote Tourism, Stir Economic Growth. Daily News, Feb 17. URL https://www.dailynews.co.tz/news/chato-airport-to-promote-tourism-stir-economic-growth.aspx (accessed 7.29.2019).

Materu, B., 2019. Barrick's Offer Would Alter Tanzania Protective Mining Law. The Citizen, Jul 30.

https://www.thecitizen.co.tz/news/1840340-5215118-98uglw/index.html (accessed 31.7.2019).

Matowo, R., 2017. Gold Production at Bulyanhulu Mine to Be Slashed by Over Half. The Citizen, Sep 18. http://www.thecitizen.co.tz/News/Gold-production-at-Bulyanhulu-mine-to-be-slashed-by-over-half/1840340-4100510-djwa9g/index.html (accessed 4.10.2018).

Maxwell, G., 1934. Railway and Road Communications: How the Goldfields are Served Today. Financial Times, Supplement No 125, Nov 26.

Mbani, M., 2017. Why Acacia Sackings May Cost Banks Tens of Billions. The Citizen, Sep 19. http://www.thecitizen.co.tz/News/Why-Acacia-sackings-may-cost-banks-tens-of-billions/1840340-4102110-2b3m6i/index.html(accessed 29.7.2017).

Mirondo, R., 2019. JNIA Terminal 3 nearly Done, Says Govt. The Citizen, Apr 23. https://www.thecitizen.co.tz/news/-JNIA-Terminal-3-nearly-done--says-govt/1840340-5083492-c7r0edz/index.html (accessed 17.6.2019).

Mirondo, R., 2017. JPM Vows to Make Tough Decision for Tanzanian Interests. The Citizen, Jul 12. http://www.thecitizen.co.tz/News/JPM-vows-to-make-tough-decision-for-Tanzanian-interests/1840340-3966804-2qjkdwz/index.html (accessed 20.8.2017).

Mtulya, A., 2017. Magufuli: Barrick Ready to Pay What It Owes Tanzania. The Citizen., Jun 14. http://www.thecitizen.co.tz/News/Magufuli–Barrick-ready-to-pay-what-it-owes-Tanzania-/1840340-3970276-xaonelz/index.html (accessed 20.8.2017).

Mumbere, D., 2018. Tanzania Cyber Law Introduces $900 Fees for Bloggers, Compulsory Passwords. Africanews, Apr 12. https://www.africanews.com/2018/04/12/tanzania-cyber-law-introduces-900-fees-for-bloggers-compulsory-passwords/ (accessed 15.7.2018).

Mwakideu, C., 2016. Magufuli's "Bulldozing" Leadership Questioned. Deutsche Welle, Jul 1. https://www.dw.com/en/magufulis-bulldozing-leadership-questioned/a-19371737 (accessed 26.7.2019).

Mwangode, H., 2017. No Respite for Officials Behind Mineral Looting. The Guardian, Jun 14, 1–2.

Namkwahe, J., 2017. President Magufuli Sacks 9,932 Civil Servants at a Go. The Citizen, Apr 28. http://www.thecitizen.co.tz/News/President-Magufuli-sacks-9-932-civil-servants-at-a-go/1840340-3907102-1htv2cz/index.html (accessed 11.8.2017).

Ng'wanakilala, F., 2019a. Tanzania Opposition Activist Found Beaten, Dumped in Village. Reuters, May 9. URL https://www.reuters.com/article/us-tanzania-politics-idUSKCN1SF13O (accessed 27.6.2019).

Ng'wanakilala, F., 2019b. Chinese Firms to Build Gold Smelter, Refineries in Tanzania. Reuters, Jul 24. https://af.reuters.com/article/tanzaniaNews/idAFL4N24P3W2 (accessed 1.8.019)

Ng'wanakilala, F., 2018. Tanzania Police Threaten to Beat Protesters "Like Stray Dogs" to Halt Demos. Reuters, Apr 25. https://www.reuters.com/article/us-tanzania-protests/tanzania-police-threaten-to-beat-protesters-like-stray-dogs-to-halt-demos-idUSKBN1HW2BU (accessed 10.5.2018).

Oforo, V., 2017. President Magufuli to Launch Nationalism Campaign. The Citizen, Dec 7. http://www.thecitizen.co.tz/News/President-Magufuli-to-launch-nationalism-campaign/1840340-4218998-126v01kz/index.html (accessed 12.12.2017).

Omboki, A., 2018. It was a Political Assassination Attempt, Claims Lissu. The Citizen, Jan 6.

https://www.thecitizen.co.tz/news/It-was-a-political-assassination-attempt--claims-Lissu/1840340-4252938-1kmlbsz/index.html (accessed 18.3.2018).

Onyango, E., 2018. Wall around Tanzanite Mines has Started Paying Off. The East African, Nov 6. https://www.theeastafrican.co.ke/business/Wall-around-tanzanite-mines-has-started-paying-off/2560-4839124-12vhaqxz/index.html (accessed 8.1.2019).

Paget, D., 2017. Magufuli Has Been President for Two Years: How He's Changing Tanzania. The Conversation, Nov 2. http://theconversation.com/magufuli-has-been-president-for-two-years-how-hes-changing-tanzania-86777 (accessed 8.1.2019).

Pekkonen, S., 2018. Tanzania Press Freedom Plunges into Unprecedented Crisis. Ipi Media, Aug 14. https://ipi.media/tanzania-press-freedom-plunges-into-unprecedented-crisis/ (accessed 27.6.2019).

Said, K., Bahemu, E., 2018. President Magufuli out to Leave Mega Projects Legacy. The Citizen, Nov 6. https://www.thecitizen.co.tz/news/President-Magufuli-out-to-leave-mega-projects-legacy/1840340-4838814-dbnbu0z/index.html (accessed 7.12.18).

Sauwa, S., 2017. Parliament Orders Probe over Sh1.6 Billion Paid by Acacia. The Citizen, Aug 29. http://www.thecitizen.co.tz/News/Parliament-orders-probe-over-Sh1-6-billion-paid-by-Acacia/1840340-4075094-w1isy3/index.html (accessed 4.10.2017)

Shabalala, Z., 2018. Glencore, Barrick Expect Prospecting Licence for Tanzania Nickel Project. Mining.com, May 14. https://www.mining.com/web/glenco**re-**barrick-expect-prospecting-licence-tanzania-nickel-project/ (accessed 8.6.2019).

Shaban, M., 2017. Acacia's North Mara Gold Mine Receive a Mob Visit Demand for Compensation. Azania Post June 19.

http://www.azaniapost.com/agenda/acacias-north-mara-gold-minereceive-a-mob-visit-demand-for-compensation-h4572.html (accessed 25.6.2017)

"Shanta Gold to Expand Search in Tanzania, as New Laws Deter Others", 2018. FurtherAfrica, May 14. https://furtherafrica.com/2018/05/15/shanta-gold-to-expand-search-in-tanzania-as-new-laws-deter-others/ (accessed 7.9.2018).

"Significance of Tanganyika's Auriferous Areas: Past and Present Exploitation", 1935. Financial Times, Supplement No. 138. Dec 10.

"Tanzania, Barrick form new Joint-Venture to replace Acacia", 2019. The Citizen, Oct 20. https://www.thecitizen.co.tz/news/1840340-5318666-format-xhtml-gsv7td/index.html (accessed 10.02.2020).

"Tanzania now Set to Disclose Mining Contracts", 2019. The Citizen, Jul 1. https://mobile.thecitizen.co.tz/news/Tanzania-now-set-to-disclose-mining-contracts/2304482-5178810-format-xhtml-cpxcrk/index.html (accessed 24.7.2019).

"Tanzania Scraps Independence Day Revelry", 2015. BBC News, Nov 14. https://www.bbc.com/news/world-africa-34909111 (accessed 10.3.2016).

"Tanzania's Magufuli Sacks Officials Who Failed to Recall Public Works Budget Figures", 2017.Reuters, Nov 7. https://www.reuters.com/article/us-tanzania-politics-idUSKBN1D70E7 (accessed 20.1.2018).

"The Tanzanite Wall: Production, Government Revenue and Community", 2019. The Citizen, Jun 26. https://www.thecitizen.co.tz/supplement/5043016-5171960-6qrfhqz/index.html (accessed 1.7.2019).

Topf, A., 2017. Villagers Invade Acacia's North Mara Mine in Tanzania. Mining.com, Jun 25. http://www.mining.com/villagers-invade-acacias-north-mara-mine-tanzania (accessed 1.8.2017)

"Tundu Lissu Sets September 7 as His Return Date to Tanzania", 2019. The Citizen, May 22.

https://www.thecitizen.co.tz/news/Tundu-Lissu-sets-September-7-as-his-return-date-to-Tanzania-/1840340-5126698-773wpez/index.html (accessed 26.7.2019).

"Tundu Lissu Stripped of Singida East Parliamentary Seat", 2019. The Citizen, Jul 28. https://www.thecitizen.co.tz/news/Tundu-Lissu-stripped-of-Singida-East-parliamentary-seat-/1840340-5175826-f8d0xx/index.html (accessed 28.7.19).

van Eyssen, B., 2019. A Controversial Bill Awaits the Tanzanian President's Signature. Deutsche Welle, Jun 28. https://www.dw.com/en/a-controversial-bill-awaits-the-tanzanian-presidents-signature/a-49400335 (accessed 25.7.19).

Wanjiru, E., 2018. Tanzania: Freedom of Expression "Deteriorating" under Magufuli. Deutsche Welle, Apr 17. https://www.dw.com/en/tanzania-freedom-of-expression-deteriorating-under-magufuli/a-43423391 (accessed 25.7.2019).

"Why Top Acacia Officials Resigned", 2017. The Citizen, Nov 3. http://www.thecitizen.co.tz/News/Why-top-Acacia-officials-resigned/1840340-4167334-fkx6nlz/index.html (accessed 5.11.2017).

8.1.3 Legislation

Department of Mines, 1930. Mining Ordinance 1929. Dar es Salaam.

Department of Mines, 1921. Mining Ordinance 1920. Dar es Salaam.

„Kaiserliche Bergverordnung für die afrikanischen und Südseeschutzgebiete mit Ausnahme von Deutsch-Südwestafrika", 1906. In: *Deutsches Reichsgesetzblatt 1906 (13)*. 363–386.

United Republic of Tanzania, 2017a. The Written Laws (Miscellaneous Amendments) Act. Government Printer, Dar es Salaam.

United Republic of Tanzania, 2017b. Natural Wealth and Resources (Permanent Sovereignty) Act. Government Printer, Dar es Salaam.

United Republic of Tanzania, 2015. The Tanzania Extractive Industries (Transparency and Accountability Act. Government Printer, Dar es Salaam

United Republic of Tanzania, 2010. The Mining Act. Government Printer, Dar es Salaam.

United Republic of Tanzania, 2009. The Mineral Policy of Tanzania. Government Printer, Dar es Salaam.

United Republic of Tanzania, 1998. The Mining Act No. 5. Government Printer, Dar es Salaam.

United Republic of Tanzania, 1997. The Mineral Policy. Government Printer, Dar es Salaam.

United Republic of Tanzania, 1979. The Mining Act. Government Printer, Dar es Salaam.

„Verordnung zum Bergwesen in Deutsch-Ostafrika“, 1898. in: *Deutsches Reichsgesetzblatt, 1898 (48*), 1045–1060.

8.1.4 *Interviews*

# NUMBER	DATE	INTERLOCUTOR	DURATION
# 1	3.5.2017	Artisanal Gold Miner	23:02 min.
# 2	4.5.2017	Medium Scale Gold Mining Company	19:34 min.
# 3	9.5.2017	Friedrich Ebert Stiftung	33:16 min
# 4	10.5.2017	GIZ	61:23 min
# 5	17.5.2017	Geologist, University of Dar es Salaam	30:50 min
# 6	17.5.2017	Medium Scale Gold Mining Company	29:06 min
# 7	24.5.2017	Tanzanian Geologist, worked for multiple MNCs	91:27 min
# 8	26.5.2017	Commissioner of Minerals, Ministry of Minerals and Energy	19:40 min
# 9	26.5.2017	Tanzania Extractive Industries Transparency Initiative	80:07 min
# 10	1.6.2017	National Resource Governance Institute	80:40 min
# 11	6.6.2017	Economist, University of Dar es Salaam	74:15 min
# 12	9.6.2017	Geologist, University of Dar es Salaam	No record
# 13	9.6.2017	Policy Forum, Civil Society	73:03 min
# 14	9.6.2017	Lawyers' Environmental Action Team	31:25 min
# 15	10.6.2017	Mining Civil Society Organization, Leader	45:39 min
# 16	14.6.2017	Interfaith Committee	46:36 min
# 17	19.6.2017	REPOA, Think Tank, Dar es Salaam	16:29 min
# 18	4.4.2018	Mining Civil Society Organization, Leader	83:59 min
# 19	4.4.2018	Mining Civil Society Organization, Assistant	41:38 min
# 20	13.4.2018	Artisanal Tanzanite Miner	69:25 min
# 21	18.4.2018	Regional Government Officer, Mwanza	30:16 min
# 22	18.4.2018	IPIS	79:10 min
# 23	24.4.2018	Political Economist	69:11 min

8.2 Secondary Sources

Ackah-Baidoo, A., 2012. Enclave Development and `Offshore Corporate Social Responsibility': Implications for Oil-Rich Sub-Saharan Africa. *Resources Policy 37*, 152–159.

Acosta, A., 2013. Extractivism and Neoextractism: Two Sides of the Same Curse, in: Lang, M., Mokrani, D. (Eds.), *Beyond Development: Alternative Visions from Latin America*, 61–86.

Adusah-Karikari, A., 2015. Black Gold in Ghana: Changing Livelihoods for Women in Communities Affected by Oil Production. *The Extractive Industries and Society 2 (1),* 24–32.

Agnew, J., 2015. Revisiting the Territorial Trap. *Nordic Geographical Publications 44 (4), 43-48.*

Agnew, J., 2005. Sovereignty Regimes: Territoriality and State Authority in Contemporary World Politics. *Annals of the Association of American Geographers 95 (2*), 437–461.

Agnew, J., 1994. The Territorial Trap: The Geographical Assumptions of International Relations Theory. *Review of International Political Economy 1*, 53–80.

Alexander, P., 2008. Challenging Cheap-Labour Theory: Natal and Transvaal Coal Miners, ca. 1890 - 1950. *Labour History 49*, 47–70.

Amnesty International, 2019. Tanzania should Discard New Rushed Law Restricting Human Rights.
https://www.amnesty.org/en/latest/news/2019/06/tanzania-authorities-rushing-to-pass-bill-to-further-repress-human-rights/ (accessed 26.7.19).

Anderson, D.M., Browne, A.J., 2011. The Politics of Oil in Eastern Africa. *Journal of Eastern African Studies 5 (2*), 369–410.

Andreasson, S., 2015. Varieties of Resource Nationalism in Sub-Saharan Africa's Energy and Minerals Markets. *The Extractive Industries and Society 2 (2*), 310–319.

Appel, H.C., 2012. Walls and White Elephants: Oil Extraction, Responsibility, and Infrastructural Violence in Equatorial Guinea. *Ethnography 13 (4*), 439–465.

Appiah, D.O., Buaben, J.N., 2012. Is Gold Mining a Bane or a Blessing in Sub- Saharan Africa: The Case of Ghana. *International Journal of Development and Sustainability 1 (3)*, 1033–1048.

Arias, M., Atienza, M., Cademartori, J., 2013. Large Mining Enterprises and Regional Development in Chile: Between the Enclave and Cluster. *Journal of Economic Geography 14 (1*), 73–95.

Aubynn, A., 2009. Sustainable Solution or a Marriage of Inconvenience? The Coexistence of Large-Scale Mining and Artisanal and Small-Scale Mining on the Abosso Goldfields Concession in Western Ghana. *Resources Policy 34*, 64–70.

Auty, R., 2006. Mining Enclave to Economic Catalyst: Large Mineral Projects in Developing Countries. *The Brown Journal of World Affairs 13 (1*), 135–145.

Auty, R., 2002. Sustaining Development in Mineral Economies: The Resource Curse Thesis. Routledge, London.

Ayelazuno, J., 2014. Oil Wealth and the Well-Being of the Subaltern Classes in Sub-Saharan Africa: A Critical Analysis of the Resource Curse in Ghana. *Resources Policy 40,* 66–73.

Badeeb, R.A., Lean, H.H., Clark, J., 2016. The Evolution of the Natural Resource Curse Thesis: A Critical Literature Survey. *Resources Policy 51*, 123–134.

Ballard, C., Banks, G., 2003. Resource Wars: The Anthropology of Mining. *Annual Review of Anthropology 32*, 287–313.

Baltzer, F., 1916. Die Kolonialbahnen: mit besonderer Berücksichtigung Afrikas. G. J. Göschen'sche Verlgshandlung, Leipzig.

Banchirigah, S.M., Hilson, G., 2010. De-agrarianization, Re-agrarianization and Local Economic Development: Re-orientating Livelihoods in African artisanal Mining Communities. *Policy Sciences 43 (2*), 157–180.

Barnitzke, J.E., 1913. Aussichten des Goldbergbaues im Gebiet des Viktoriasees, Deutsch-Ostafrika. *Metall Erz 10*, 963–967.

Bebbington, A., Hinojosa, L., Humphreys Bebbington, D., Burneo, M.L., Warnaars, X., 2008. Contention and Ambiguity: Mining and the Possibilities of Development. *Development and Change 39 (6*), 887–914.

Behrends, A., Reyna, S., Schlee, G. (Eds.), 2013. Crude Domination: An Anthropology of Oil. Berghahn, New York.

Belina, B., 2013. Raum. Westfälisches Dampfboot, Münster.

Bernard, R., 2006. Research Methods in Anthropology: Qualitative and Quantitative Approaches. Altamira Press, Lanham.

Berry, S., 2018. Who Owns the Land? Social Relations and Conflict over Resources in Africa. GLOCON Working Paper, 7. Berlin.

Bersaglio, B., Cleaver, F., 2018. Artisanal Mining in Southern Tanzania: Preliminary Reflections on a "Green Squeeze." *The Extractive Industries and Society 5 (3*), 274–277.

Bezuidenhout, A., Buhlungu, S., 2016. Enclave Rustenburg: Platinum Mining and the Post-Apartheid Social Order. *Review of African Political Economy 42 (146*), 526–544.

Bjerk, P.K., 2017. Julius Nyerere. Ohio University Press, Athens.

Bloch, R., Owusu, G., 2012. Linkages in Ghana's Gold Mining Industry: Challenging the Enclave Thesis. *Resources Policy 37*, 434–442.

Bofin, P., Pedersen, R.H., 2017. Tanzanian's Oil and Gas Contract Regime, Investments and Markets. DIIS Working Paper, 01/2017. DIIS, Copenhagen.

Bornhardt, W., 1899. Über nutzbare Lagerstätten Deutsch-Ostafrikas. *Zeitschrift für Praktische Geologie 7*, 217–218.

Bornhardt, W., 1898. Über die bergmännischen und geologischen Ergebnisse seiner Reisen in Deutsch-Ostafrika. *Zeitschrift der Deutschen Geologischen Gesellschaft 50*, 59–73.

Bourgouin, F., 2014. The Politics of Mining. Foreign Direct Investment, the State and Artisanal Mining in Tanzania, in: Bryceson, D.F., Fisher, E., Jønsson, J.B., Mwaipopo, R. (Eds.), *Mining and Social Transformation in Africa*. Routledge, London, 148–160.

Brand, U., Dietz, K., Lang, M., 2016. Neo-Extractivism in Latin America. One Side of a New Phase of Global Capitalist Dynamics. *Ciencia Política 11 (21*), 125–159.

Bremmer, I., Johnston, R., 2009. The Rise and Fall of Resource Nationalism. *Survival 51*, 149–158.

Bridge, G., 2015. The Hole World: Scales and Spaces of Extraction. *Scenario 5*.

Bryceson, D., MacKinnon, D., 2012. Eureka and Beyond: Mining's Impact on African Urbanisation. *Journal of Contemporary African Studies 30 (4*), 513–537.

Bryceson, D.F., 2014. Youth in Tanzania's Urbanizing Mining Settlements: Prospecting a Mineralized Future, WIDER Working Paper, 8/2014.

Bryceson, D.F., Fisher, E., 2014. Artisanal Mining's Democratizing Directions and Deviations, in: Bryceson, D.F., Fisher, E., Jønsson, J.B., Mwaipopo, R. (Eds.), *Mining and Social Transformation in Africa. Routledge,* London, 179–206.

Bryceson, D.F., Fisher, E., Jønsson, J.B., Mwaipopo, R. (Eds.), 2014. Mining and Social Transformation in Africa. Routledge, London.

Bryceson, D.F., Geenen, S., 2016. Artisanal Frontier Mining of Gold in Africa: Labour Transformation in Tanzania and the Democratic Republic of Congo. *African Affairs 115 (459*), 296–317.

Bryceson, D.F., Jønsson, J.B., 2014. Mineralizing Africa and Artisanal Mining's Democratizing Influence, in: Bryceson, D.F., Fisher, E., Jønsson, J.B., Mwaipopo, R. (Eds.), *Mining and Social Transformation in Africa*. Routledge, London, 1–22.

Bryceson, D.F., Jønsson, J.B., 2010. Gold Digging Careers in Rural East Africa: Small-Scale Miners' Livelihood Choices. *World Development 38 (3*), 379–392.

Bryceson, D.F., Jønsson, J.B., Kinabo, C., Shand, M., 2012. Unearthing Treasure and Trouble: Mining as an Impetus to Urbanisation in Tanzania. *Journal of Contemporary African Studies 30 (4),* 631–649.

Bryceson, D.F., Jønsson, J.B., Sherrington, R., 2010. Miners' Magic: Artisanal Mining, the Albino Fetish and Murder in Tanzania. *The Journal of Modern African Studies 48 (3*), 353–382.

Bryceson, D.F., Jønsson, J.B., Verbrugge, H., 2013. Prostitution or Partnership? Wifestyles in Tanzanian Artisanal Gold-Mining Settlements. *The Journal of Modern African Studies 51 (1),* 33–56.

Bryceson, D.F., Yankson, P., 2010. Frontier Mining Settlements: Livelihood Promises and Predicaments, in: Agergaard, J., Fold, N., Gogh, K. (Eds.), *Rural-Urban Dynamics.* Routledge, London, 189–197.

Bunker, S.G., 1984. Modes of Extraction, Unequal Exchange, and the Progressive Underdevelopment of an Extreme Periphery: The Brazilian Amazon, 1600-1980. *American Journal of Sociology 89 (5)*, 1017–1064.

Burton, E., 2017. Tansanias „Afrikanischer Sozialismus“ und die Entwicklungspolitik der beiden deutschen Staaten: Akteure, Beziehungen und Handlungsspielräume, 1961-1990. University of Vienna, Vienna.

Burton, R.F., 1860. The Lake Regions of Central Africa. Harper, New York.

Butler, A., 2013. Resource Nationalism and the African National Congress. *The Journal of the Southern African Institute of Mining and Metallurgy 113*, 11–20.

Butler, P., 2004. Tanzania: Liberalisation of Investment and the Mining Sector: Analysis of the Content and Certain Implications of the Tanzania 1998 Mining Act, in: Campbell, B. (Ed.), *Regulating Mining in Africa*, Discussion Paper, 26. Uppsala, 67–80.

Buur, L., Nystrand, M.J., Pedersen, R.H., 2017. The Political Economy of Land and Natural Resource Investments in Africa: An Analytical Framework.

Calkins, S., Ille, E., 2014. Territories of Gold Mining: International Investment and Artisanal Extraction in Sudan, in: Gertel, J., Rottenburg, R., Calkins, S. (Eds.), *Disrupting Territories.* James Currey, Woodbridge, 52–76.

Calvano, L., 2008. Multinational Corporations and Local Communities: A Critical Analysis of Conflict. *Journal of Business Ethics 82 (4*), 793–805.

Campbell, B., 2012. Corporate Social Responsibility and Development in Africa: Redefining the Roles and Responsibilities of Public and Private Actors in the Mining Sector. *Resources Policy 37*, 138–143.

Carmody, P. (Ed.), 2011. The New Scramble for Africa. Polity Press, Cambridge.

Chachage, C.S.L., 1995. The Meek Shall Inherit the Earth but not the Mining Rights: The Mining Industry and Accumulation in Tanzania, in: Gibbon, P. (Ed.), *Liberalised Development in Tanzania*. Uppsala, 37–108.

Chachage, C.S.L., 1993. New forms of accumulation in Tanzania: The case of gold mining, in: Chachage, C.S.L., Ericsson, M., Gibbon, P. (Eds.), *Mining and Structural Adjustment*, Research Report, 92. Nordiska Afrikainstitutet, Uppsala, 79–112.

Childs, J., 2018. Extraction in Four Dimensions: Time, Space and the Emerging Geo(-) Politics of Deep Sea Mining. Geopolitics. https://www.tandfonline.com/doi/full/10.1080/14650045.2018.1465041 (accessed 27.6.2019).

Childs, J., 2014. From `Criminals of the Earth' to `Stewards of the Environment': The Social and Environmental Justice of Fair Trade Gold. *Geoforum 57*, 129–137.

Chirikure, S., 2015. Metals in Past Societies: A Global Perspective on Indigenous African Metallurgy. Springer, Cham.

Ciuffolini, M.A., de La Vega, C., 2013. Konfliktivität und Territorium: Reflexionen über Bergbaukonflikte in Argentinien. *Peripherie 33 (132*), 425–444.

Conning, J.H., Robinson, J.A., 2009. Enclaves and Development: An Empirical Assessment. *Studies in Comparative International Development 44 (4*), 359–385.

Cooper, F., 2014. Africa in the World. Capitalism, Empire, Nation-State. Harvard University Press, Cambridge.

Corrigan, C.C., 2014. Breaking the Resource Curse: Transparency in the Natural Resource Sector and the Extractive Industries Transparency Initiative. *Resources Policy 40*, 17-30.

Coulson, A., 2013. Tanzania: A Political Economy. Oxford University Press, Oxford.

Curtis, M., Lissu, T., 2008. A Golden Opportunity: How Tanzania is Failing to Benefit from Gold Mining. Christian Council of Tanzania and Tanzanian Episcopal Conference and National Council of Muslims in Tanzania, Dar es Salaam.

D'Angelo, L., Pijpers, R., 2018. Mining Temporalities: An Overview. *The Extractive Industries and Society 5 (2*), 215–222.

Dansereau, S., 2010. Win-Win or New Imperialism? Public- Private Partnerships in Africa Mining. *Review Literature and Arts of the Americas 32 (103),* 47–62.

Department of Lands and Mines, 1938. Mining Publicity Pamphlet. Government Printer, Dar es Salaam.

Descola, P., 2014. Beyond Nature and Culture. University of Chicago Press, Chicago.

Dietz, K., 2013. (Neo-)Extraktivismus. *Peipherie 33 (132)*, 511–513.

Doevenspeck, M., 2012. Konfliktmineralien: Rohstoffhandel und bewaffnete Konflikte im Ostkongo. *Geographische Rundschau 64*, 12–19.

Dolan, C., Rajak, D. (Eds.), 2016. The Anthropology of Corporate Social Responsibility. Berghahn, New York.

Dumett, R.E., 2012. Parallel Mining Frontiers in the Gold Coast and Asante in the Late 19th and Early 20th Centuries, in: Werthmann, K., Grätz, T. (Eds.), *Mining*

Frontiers in Africa: Anthropological and Historical Perspectives. Köppe, Köln, 33–54.

Dumett, R.E., 1998. El Dorado in West Africa: The Gold-Mining Frontier, African Labour, and Colonial Capitalism in the Gold Coast, 1875-1900. Ohio University Press, Athens.

Ebenau, M., Páres, F., Arnici, L.S. 2013. Zurück in die Zukunft? Dependenzperspektiven in der Analyse der Diversität des Gegenwartskapitalismus. *Peripherie 130/131*, 220-242.

Eckert, A., 2007. Herrschen und Verwalten: Afrikanische Bürokraten, staatliche Ordnung und Politik in Tanzania. München, Oldenbourg.

Eckert, A., 2006. Cultural Commuters: African Employees in Late Colonial Tanzania, in: Lawrance, B., Osborne, E.L., Roberts, R. (Eds.), *Intermediaries, Interpreters, and Clerks*. The University of Wisconsin Press, Madison, 248–272.

Elbra, A., 2017. Governing African Gold Mining. Palgrave Macmillan, London.

Elbra, A., 2014. Gold Mining in Sub-Saharan Africa: Towards Private Sector Governance. *The Extractive Industries and Society 1 (2*), 216–224.

Elden, S., 2010. Land, Terrain, Territory. *Progress in Human Geography 34 (6*), 799–817.

Emel, J., Huber, M.T., 2008. A Risky Business: Mining, Rent and the Neoliberalization of "Risk." *Geoforum 39 (3*), 1393–1407.

Emel, J., Huber, M.T., Makene, M.H., 2011. Extracting Sovereignty: Capital, Territory, and Gold Mining in Tanzania. *Political Geography 30 (2*), 70–79.

Engel, U., 2018. Regionalismen, Dialektik des Globalen - Kernbegriffe. de Gruyter, Berlin.

Engels, B., 2016. Mining Conflicts in Sub-Saharan Africa: Global Change - Local Conflicts? Conflicts over Land in Latin America and Sub-Saharan Africa, GLOCON Working Paper, 2. Berlin.

Enns, C., Bersaglio, B., 2015. Enclave Oil Development and the Rearticulation of Citizenship in Turkana, Kenya: Exploring `Crude Citizenship'. *Geoforum 67*, 78-88.

Ewald, J., 2011. Challenges for the Democratisation Process in Tanzania: Moving Towards Consolidation 50 Years after independence? Mkuki na Nyota, Dar es Salaam.

Ey, M., Sherval, M., 2016. Exploring the Minescape: Engaging With the Complexity of the Extractive Sector. *Area 48 (2),* 176–182.

Ferguson, J., 2006. Global Shadows: Africa in the Neoliberal World Order. Duke University Press, Durham.

Ferguson, J., 2005. Seeing like an Oil Company: Space, Security, and Global Capital in Neoliberal Africa. *American Anthropologist 107 (3*), 377–382.

Fessehaie, J., Morris, M., 2013. Value Chain Dynamics of Chinese Copper Mining in Zambia: Enclave or Linkage Development. *European Journal of Development Research 25 (4)*, 537–556.

Fisher, E., 2008. Artisanal Gold Mining at the Margins of Mineral Resource Governance: A Case from Tanzania. *Development Southern Africa 25 (2),* 199–213.

Fisher, E., 2007. Occupying the Margins: Labour Integration and Social Exclusion in Artisanal Mining in Tanzania. *Development and Change 38 (4*), 735–760.

Fisher, E., Mwaipopo, R., Mutagwaba, W., Nyange, D., Yaron, G., 2009. "The Ladder that Sends Us to Wealth": Artisanal Mining and Poverty Reduction in Tanzania. *Resources Policy 34*, 32–38.

Fold, N., Jønsson, J.B., Yankson, P., 2014. Buying into Formalization? State Institutions and Interlocked Markets in African Small-Scale Gold Mining. *Futures 62*, 128–139.

Foster, J.J., Bills, J.H., 2002. Comparison of the Impact of the Fiscal Regime on Gold Projects in Tanzania and Burkina Faso. *Applied Earth Science 111 (3)*, 195–199.

Frankel, J.A., 2012. The Natural Resource Curse: A Survey of Diagnoses and Some Prescriptions. HKS Faculty Research Working Paper Series, RWP 12-014. John F. Kennedy School of Government, Harvard University.

Franks, D., 2009. Avoiding Mine-Community Conflict: From Dialogue to Shared Futures. *ENVIROMINE* 2009, Santiago de Chile.

Fredricks, R., 2014. Vital Infrastructures of Trash in Dakar. *Comparative Studies of South Asia, Africa and the Middle East 34 (4)*, 532–548.

Futterer, K., 1895. Afrika in seiner Bedeutung für die Goldproduktion in Vergangenheit, Gegenwart und Zukunft. Reimer, Berlin.

Gagl, C., 1909. Die nutzbaren Lagerstätten Deutsch-Ostafrikas. *Glückauf 25*, 10129–11033.

Gamu, J., Le Billon, P., Spiegel, S., 2015. Extractive Industries and Poverty: A Review of Recent Findings and Linkage Mechanisms. *The Extractive Industries and Society 2 (1*), 162–176.

Geenen, S., Verbrugge, B., 2019. The Gold Commodity Frontier: A Fresh Perspective on Change and Diversity on the Global Gold Mining Economy. *The Extractive Industries and Society 6 (2),* 413–423.

Geological Survey of Tanzania, 2015. Explantory Notes for the Minerogenic Map of Tanzania. Geological Survey of Tanzania, Dodoma.

Ghebremusse, S., 2016. New Directions in African Developmentalism: The Emerging Developmental State in Resource-Rich Africa. *Journal of Sustainable Development Law & Policy 7 (1*), 1–24.

Gibbon, P., 1995. Merchantisation of Production and Privatisation of Development in Post-Ujamaa Tanzania: An Introduction, in: Gibbon, P. (Ed.), *Liberalised Development in Tanzania*. Nordiska Afrikainstitutet, Uppsala, 9–36.

Giddens, A., 1984. The constitution of Society: Outline of the Theory of Structuration. University of California Press, Berkeley.

Gordillo, G., 2014. Rubble: The Afterlife of Destruction. Duke University Press, Durham.

Grant, R., Oteng-Ababio, M., 2016. The Global Transformation of Materials and the Emergence of Informal Urban Mining in Accra, Ghana. *Africa Today 62 (4*), 3–20.

Grätz, T., 2013. The »Frontier« Revisited: Gold Mining Camps and Mining Communities in West Africa. ZMO Working Papers, 10. Zentrum Moderner Orient, Berlin.

Green, M., 2014. The Development State. Aid, Culture and Civil Society in Tanzania. James Currey, Woodbridge.

Gudynas, E., 2011. Neo-Extraktivismus und Ausgleichsmechanismen der progressiven südamerikanischen Regierungen. *Kurswechsel 3*, 69–80.

Gwassa, G.C.K., 1969. The German Intervention and African Resistance in Tanzania, in: Kimambo, I.N., Temu, A.J. (Eds.), *A History of Tanzania*. East African Publ. House, Nairobi, 85–122.

Hansen, M.W., 2014. From Enclave to Linkage Economies? A Review of the Literature on Linkages between Extractive Multinational Corporations and Local Industry in Africa, DIIS Working Paper, 2/2014. DIIS, Copenhagen.

Hansen, M.W., Buur, L., Kjaer, A.M., Therkildsen, O., 2016. The Economics and Politics of Local Content in African Extractives: Lessons from Tanzania, Uganda and Mozambique. *Forum for Development Studies 43 (2*), 201–228.

Hartmann, J., 1990. the rise and rise of private capital, in: O'Neill, N., Mustafa, K. (Eds.), *Capitalism, Socialism and the Development Crisis in Tanzania*. Avebury, Aldershot, 233–254.

Harvey, D., 2001. Spaces of Capital: Towards a Critical Geography. Edinburgh University Press, Edinburgh.

Havnevik, K., 2010. A Historical Framework for Analysing Current Tanzanian Transitions: The Post-Independence Model, Nyerere's Ideas and Some Interpretations, in: Havnevik, K., Isinika, A.C. (Eds.), T*anzania in Transition. From Nyerere to Mkapa.* Mkuki na Nyota, Dar es Salaam, 19–55.

Helliesen, M.S., 2012. Tangled up in Blue: Tanzanite Mining and Conflict in Mererani, Tanzania. *Critical African Studies 4 (7*), 58–93.

Herzog, J., 1986. Geschichte Tansanias: Vom Beginn des 19. Jahrhunderts bis zur Gegenwart. VEB Deutscher Verlag der Wissenschaften, Berlin.

Hetzer, K.-F., 1995. Gold in Deutsch-Ostafrika: Die Geschichte des Goldbergbaus in D.O.A von 1901-1916. Traditionsverband ehemaliger Schutz- und Überseetruppen/Freunde der früheren deutschen Schutzgebiete e.V., Greifenstein.

Hilson, G., 2008. `Fair Trade Gold': Antecedents, Prospects and Challenges. *Geoforum 39 (1),* 386–400.

Hilson, G., Gatsinzi, A., 2014. A Rocky Road Ahead? Critical Reflections on the Futures of Small-Scale Mining in Sub-Saharan Africa. *Futures 62,* 1-9.

Hilson, G., McQuilken, J., 2014. Four Decades of Support for Artisanal and Small-Scale Mining in Sub-Saharan Africa: A Critical Review. *The Extractive Industries and Society 1 (1*), 104-118.

Hilson, G., Yakovleva, N., 2007. Strained Relations: A Critical Analysis of the Mining Conflict in Prestea, Ghana. *Political Geography 26 (1*), 98–119.

Holterman, D., 2014. Slow Violence, Extraction and Human Rights Defence in Tanzania: Notes from the Field. *Resources Policy 40*, 59–65.

Hönke, J., 2018. Port Geographies: Africa's Infrastructure Boom and the Reconfiguration of Power and Authority, in: Schubert, J., Engel, U., Macamo, E. (Eds.), *Extractive Industries and Changing State Dynamics in Africa*. Routledge, London, 41–57.

Hönke, J., 2009a. Extractive Orders: Transnational Mining Companies in the Nineteenth and Twenty-First Centuries in the Central African Copperbelt, in: Southall, R., Melber, H. (Eds.), *A New Scramble for Africa*. University of KwaZulu-Natal Press, Scottsville, 274–298.

Hönke, J., 2009b. Transnational Pockets of Territoriality: Governing the Security of Extraction in Katanga (DRC). Working Paper Series, 2. Graduate Centre Humanities and Social Sciences, Leipzig.

Hönke, J., Cuesta-Fernandez, I., 2017. A Topological Approach to Infrastructure: Political Topography, Topology and the Port of Dar es Salaam. *Environment and Planning D: Society and Space 35 (6),* 1076–1095.

Hopf, C., 2013. Qualitative Interviews - Ein Überblick, in: Flick, U., von Kardorff, E., Steinke, Ines (Eds.), *Qualitative Sozialforschung. Ein Handbuch*. Rowohlt, Reinbek bei Hamburg, 349–359.

Human Rights Watch, n.d. World Report 2019: Rights Trends in Tanzania. https://www.hrw.org/world-report/2019/country-chapters/tanzania-and-zanzibar (accessed, 26.7.19.)

Hyden, G., 1980. Beyond Ujamaa in Tanzania. Underdevelopment and an Uncaptured Peasantry. University of California Press, Berkeley.

Ibhawoh, B., Dibua, J.I., 2003. Deconstructing Ujamaa: The Legacy of Julius Nyerere in the Quest for Social and Economic Development in Africa. *African Journal of Political Science 8 (1*), 59–83.

Ibrahim-Shilima, A.J., Konishi, H., 2014. The Impact of Tax Concessions on Extraction of Non-renewable Resources: An Application to Gold Mining in Tanzania. Working Paper. Waseda University, Tokyo.

Iliffe, J., 1979. A Modern History of Tanganyika, African Studies. Cambridge University Press, Cambridge.

Iliffe, J., 1973. Tanganyika Under German Rule 1905-1912. East African Publishing House, Nairobi.

Imparato, N., 2010. Artisanal Gold and Transformational Exchange: Toward a Public–Private Partnership in Tanzania. *Journal of Cleaner Production 18 (5*), 462–470.

Ingold, T., 2011. Being Alive: Essays on Movement, Knowledge and Description. Routledge, London.

Jacob, T., 2018. State Caught in the Middle: Coal Extraction and Community Struggles in Tanzania, DIIS Working Paper, 8/2018. DIIS, Copenhagen.

Jacob, T., Pedersen, R.H., 2018. New Resource Nationalism? Continuity and Change in Tanzania's Extractive Industries. *The Extractive Industries and Society 5 (2*), 287–292.

Jacob, T., Pedersen, R.H., Maganga, O., Kweka, O., 2016. Rights to Land and Extractive Resources in Tanzania (2/2): The Return of the State, DIIS Working Paper, 12/2016. DIIS, Copenhagen.

Jeeves, A., 1985. Migrant Labor in South Africa's Mining Economy: The Struggle for the Gold Mines' Labor Supply, 1890 - 1920. McGill-Queen's University Press, Kingston.

Jessop, B., Brenner, N., Jones, M., 2008. Theorizing Sociospatial Relations. *Environment and Planning D: Society and Space 26 (3*), 389–401.

Jønsson, J.B., Bryceson, D.F., 2009. Rushing for Gold: Mobility and Small-Scale Mining in East Africa. *Development and Change 40 (2*), 249–279.

Jønsson, J.B., Fold, N., 2014. Dealing with Ambiguity. Policy and Practice mong Artisanal Gold Miners, in: Bryceson, D.F., Fisher, E., Jønsson, J.B., Mwaipopo, R. (Eds.), *Mining and Social Transformation in Africa*. Routledge, London, 113–129.

Jønsson, J.B., Fold, N., 2009. Handling uncertainty: Policy and organizational practices in Tanzania's small-scale gold mining sector. *Natural Resources Forum 33*, 211–220.

Kaiserliches Gouvernement von Deutsch-Ostafrika, 1910. Auskunft über Deutsch-Ostafrika. Kaiserliches Gouvernement von Deutsch-Ostafrika, Dar es Salaam.

Kamete, A.Y., 2012. Of Prosperity, Ghost Towns and Havens: Mining and Urbanisation in Zimbabwe. *Journal of Contemporary African Studies 30 (4*), 589–609.

Kimambo, R.H., 1984. Mining and Mineral Prospects in Tanzania. Eastern Africa Publications Ltd, Arusha.

Kinyondo, A., Huggins, C., 2019. Resource Nationalism in Tanzania: Implications for Artisanal and Small-Scale Mining. *The Extractive Industries and Society 6 (1*), 181–189.

Kitula, A.G.N., 2006. The Environmental and Socio-Economic Impacts of Mining on Local Livelihoods in Tanzania: A Case study of Geita District. *Journal of Cleaner Production 14 (3-4*), 405–414.

Knapp, F., 2016. The Birth of the Flexible Mine: Changing Geographies of Mining and the E-Waste Commodity Frontier. *Environment and Planning A 48 (10)*, 1889–1909.

Koert, W., 1913. Ergebnisse der neueren geologischen Forschung in den deutsch-afrikanischen Schutzgebieten, *Beiträge zur Geologischen Erforschung der Deutschen Schutzgebiete,* 1.

Koponen, J., 1988. People and Production in Late Precolonial Tanzania: History and Structures. Finnish Society for Development Studies, Helsinki.

Koponen, J., 1984. Development for Exploitation. German Colonial Policies in Mainland Tanzania, 1884 - 1914. Lit, Münster.

Kopytoff, I., 1987. The African Frontier: The Reproduction of Traditional African Societies. Indiana University Press, Bloomington.

Korf, B., Schetter, C., 2012. Räume des Ausnahmezustands: Carl Schmitts Raumphilosophie, Frontiers und Ungoverned Territories. *Peripherie 32 (126/127*), 147–170.

Kossmat, F., 1897. Die Geologie der deutschen Schutzgebiete in Afrika. *Geographische Zeitschrift 3 (10)*, 585–588.

Kulindwa, K., Mashindano, O., Shechambo, F., Sosovele, H., 2003. Mining for Sustainable Development in Tanzania. Dar es Salaam University Press, Dar es Salaam.

Kuntz, J., 1909. Beitrag zur Geologie der Hochländer Deutsch-Ostafrikas mit besonderer Berücksichtigung der Goldvorkommen. *Zeitschrift für Praktische Geologie 17*, 205–232.

Kwai, B., Hilson, G., 2010. Livelihood Diversification and the Expansion of Artisanal Mining in Rural Tanzania: Drivers and Policy Implications. *Outlook on Agriculture 39 (2*), 141–147.

Kweka, J., 2009. The Role of TNCs in the extractive industry of the United Republic of Tanzania. *Transnational Corporations 18 (1*), 93–124.

Lange, S., Kinyondo, A., 2016. Resource Nationalism and Local Content in Tanzania: Experiences from Mining and Consequences for the Petroleum Sector. *The Extractive Industries and Society 3 (4*), 1095–1104.

Lange, S., Kolstad, I., 2012. Corporate Community Involvement and Local Institutions: Two Case Studies from the Mining Industry in Tanzania. Journal of African Business 13, 134–144.

Lanzano, C., 2018. Gold Digging and the Politics of Time: Changing Timescapes of Artisanal Mining in West Africa. *The Extractive Industries and Society 5 (2),* 253–259.

Lauwo, S., 2018. Challenging Masculinity in CSR Disclosures: Silencing of Women’s Voices in Tanzania’s Mining Industry. *Journal of Business Ethics 149 (3*), 689–706.

Lauwo, S., Otusanya, O.J., 2014. Corporate Accountability and Human Rights Disclosures: A Case Study of Barrick Gold Mine in Tanzania. *Accounting Forum 38 (2*), 91–108.

Lee, M., 2006. The 21st Century Scramble for Africa. *Journal of Contemporary African Studies 24 (3*), 303–330.

Lefebvre, H., 1991. The Production of Space. Blackwell, Malden.

Lemelle, S., 1986. Capital, State and Labor: A History of the Gold Mining Industry in Colonial Tanganyika 1890-1942. University of California, Los Angeles.

Li, Z., Lyons, M., Brown, A., 2012. China’s “Chocolate City”: An Ethnic Enclave in a Changing Landscape. African Diaspora 5, 51–72.

Lieder, G., 1892. Über das Vorkommen technisch verwertbarer Mineralien im deutsch-ostafrikanischen Kolonialgebiete auf Grund eigener Untersuchungen während der Jahre 1891 und 1892. *Deutsches Kolonialblatt 3*, 466–469.

Löw, M., Sturm, G., 2005. Raumsoziologie, in: Kessl, F., Reutlinger, C., Maurer, S., Frey, O. (Eds.), *Handbuch Sozialraum*. VS Verlag für Sozialwissenschaften, Wiesbaden, 31–48.

Lugoe, F., 2011. The Land Factor in Mining Gold Reserves in Tanzania, *Policy Briefing, 34*. South African Institute of Foreign Affairs, Johannesburg.

Lundestøl, O., Raballand, G., Nyirongo, F., 2015. Low Government Revenue from the Mining Sector in Zambia and Tanzania: Fiscal Design, Technical Capacity or Political Will?, ICTD Working Paper, 9. International Centre for Tax and Development, Brighton.

Luning, S., 2018. Mining Temporalities. Future Perspectives. *The Extractive Industries and Society 5 (2),* 281-286.

Luning, S., 2014. The Future of Artisanal Miners from a Large-Scale Perspective: From Valued Pathfinders to Disposable Illegals? *Futures 62*, 67–74.

Luning, S., 2012. Corporate Social Responsibility (CSR) for Exploration: Consultants, Companies and Communities in Processes of Engagements. *Resources Policy 37*, 205–2011.

Luning, S., Pijpers, R., 2017. Governing Access to Gold in Ghana: In-depth Geopolitics on Mining Concessions. *Africa 87 (4*), 758–779.

Macco, A., 1903. Die nutzbaren Bodenschätze der deutschen Schutzgebiete. *Zeitschrift für Praktische Geologie 11,* 193–202.

Maconachie, R., 2012. Diamond Mining, Urbanisation and Social Transformation in Sierra Leone. *Journal of Contemporary African Studies 30 (4*), 705–723.

Magai, P., Márquez-Velázquez, A., 2011. Tanzania’s Mining Sector and Its Implications for the Country’s Development, Berlin Working Papers on Money, Finance, Trade and Development, 04/2011. Competence Center Money, Trade, Finance and Development.

Magai, P.S., Márquez-Velázquez, A., 2013. Taxation in the Tanzanian Gold Sector: Overview of Impacts and Possible Solutions. *Development Southern Africa 30 (2)*, 279–292.

Makulilo, A.B., 2017. Against Foreign Capital? The Populist Temptation in Tanzania. *Whitehead Journal of Diplomacy & International Relations 49*, 49–65.

Maliganya, W., Simon, S.M., Paul, R., 2013. Large Scale Mining Activities and the Livelihood of Adjacent Communities in Tanzania: A Case of Geita Gold Mine. REPOA, Dar es Salaam.

Mark-Thiesen, C., 2018. Mediators, Contract Men, and Colonial Capital: Mechanized Gold Mining in the Gold Coast Colony, 1879-1909. University of Rochester Press, Rochester.

Mascarenhas, A., 1971. The German Administration. In: Berry, L. (Ed.) *Tanzania in Maps*. University of London Press, London, 106-107.

Mayring, P., 2013. Qualitative Inhaltsanalyse, in: Flick, U., von Kardorff, E., Steinke, Ines (Eds.), *Qualitative Sozialforschung. Ein Handbuch*. Rowohlt, Reinbek bei Hamburg, 468–474.

Mbembe, A., 2002. The Power of the Archive and its Limits, in: Hamilton, C., Harris, V., Taylor, J., Pickover, M., Reid, G., Saleh, R. (Eds.), *Refiguring the Archive*. Kluwer, Dordrecht, 20–26.

Mbogoni, L.E.Y., 2013. Aspects of Colonial Tanzania History. Mkuki na Nyota, Dar es Salaam.

Merket, H., Foubert, E., 2019. Dissecting the Social License to Operate. Local Community Perceptions of Industrial Mining in Northwest Tanzania. International Peace Information Service, Antwerp.

Middell, M., 2019a. Category of Spaital Formats: To What End?, in: Marung, S., Middell, M. (Eds.), *Spatial Formats under the Global Condition*. De Gruyter, Berlin, 15-47.

Middell, M., 2019b. Raumformate: Bausteine in Prozesse der Neuverräumlichung, Working Paper Series des SFB 1199 an der Universität Leipzig, 14. SFB 1199, Leipzig.

Middell, M., Naumann, K., 2010. Global History and the Spatial Turn: From the impact of Area Studies to the Study of Critical Junctures of Globalization. *Journal of Global History 5*, 1–22.

Ministry of Information and Tourism United Republic of Tanzania, 1968. Tanzania Today: A Portrait of the United Republic. University Press of Africa, Nairobi.

Mohan, G., 2013. Beyond the Enclave: Towards a Critical Political Economy of China and Africa. Development and Change 44 (6), Moore, J., 2000. Sugar and the Expansion of the Early Modern World Economy: Commodity Frontiers, Ecological Transformations, and Industrialization. *Review (Fernand Braudel Center) 23 (3*), 409–433.

Moshi, H.P.B., 1992. Development and Mineral Resources in Africa: The Case of Tanzania, in: Khennas, S. (Ed.), *Industrialization, Mineral Resources and Energy in Africa*. CODESRIA, Dakar, 47–80.

Moyo, S., Yeros, P., Jha, P., 2012. Imperialism and Primitive Accumulation: Notes on the new Scramble for Africa. *Agrarian South: Journal of Political Economy 1 (2*), 181–203.

Muganyizi, T., 2012. Mining Sector Taxation in Tanzania. Research Report. Institute for Development Studies, Brighton.

Muhanga, M.I., 2016. Tanzania's Mining Sector Reforms: Towards or Away from Mwalimu Nyerere' s Ujamaa Ideology. *Research on Humanities and Social Sciences 6 (21*), 28–39.

Narins, T., 2017. The Battery Business: Lithium Availability and the Growth of the Global Electric Car Industry. *The Extractive Industries and Society 4 (2*), 321–328.

Newenham-Kahindi, A.M., 2011. A Global Mining Corporation and Local Communities in the Lake Victoria Zone: The Case of Barrick Gold Multinational in Tanzania. *Journal of Business Ethics 99 (2*), 253–282.

Nyankweli, E., 2012. Foreign Direct Investment and Poverty Alleviation: The Case of Bulyanhulu and Geita Gold Mines, Tanzania, African Studies Collection, 44. Leiden.

Nyerere, J.K., 1968. Ujamaa: Essays on Socialism. Oxford University Press, London.

Oakley, P., 2018. After Mining: Contrived Dereliction, Dualistic Time and the Moment of Rupture in the Presentation of Mining Heritage. *The Extractive Industries and Society 5 (2*), 274–280.

Obeng-Odoom, F., 2013. Resource Curse or Blessing in Africa's Oil Cities? Empirical Evidence from Sekondi-Takoradi, West Africa. *City, Culture and Society 4 (4),* 229–240.

Obi, C., 2010. Oil extraction, Dispossession, Resistance, and Conflict in Nigeria's Oil-rich Niger Delta. *Canadian Journal of Development Studies 30 (1-2),* 219–236.

Okoh, G.A., 2014. Grievance and Conflict in Ghana's Gold Mining Industry: The Case of Obuasi. *Futures 62*, 51–57.

Okoko, K., 1987. Socialism and self-reliance in Tanzania. KPI, London.

Osterhammel, J., 2011. Die Verwandlung der Welt: Eine Geschichte des 19. Jahrhunderts. C.H. Beck, Munich.

Pallaver, K., 2012. Muslim Communities, Long-distance Traders and Wage Labour Along the Central Caravan Road: Tanzania, 19th Century. *Storicamente* 8, 1–10.

Patton, M.Q., 2002. Qualitative Research and Evaluation Options. Sage, Thousand Oaks.

Pedersen, R.H., Jacob, T., 2017. Reconfigured State-Community Relations in Africa's Extractive Sectors. Insights from Post-Liberalisation Tanzania. *The Extractive Industries and Society 4 (4),* 915-922.

Pedersen, R.H., Jacob, T., Maganga, F., Kweka, O., 2016. Rights to Land and Extractive Resources in Tanzania: The History. DIIS Working Paper 11/2016. DIIS, Copenhagen.

Pesek, M., 2011. Foucault Hardly Came to Africa. Some Notes on Colonial and Post-Colonial Governmentality. *Comparativ 21* (1), 41–59.

Pesek, M., 2010. Das Ende eines Kolonialreiches: Ostafrika im Ersten Weltkrieg. Campus, Frankfurt am Main.

Pesek, M., 2005. Koloniale Herrschaft in Deutsch-Ostafrika: Expeditionen, Militär und Verwaltung seit 1880. Campus, Frankfurt am Main.

Phelps, N.A., Atienza, M., Arias, M., 2015. Encore for the Enclave: The Changing Nature of the Industry Enclave with Illustrations from the Mining Industry in Chile. *Economic Geography 91 (2*), 119–146.

Pijpers, R., 2016. Mining, Expectations and Turbulent Times: Locating Accelerated Change in Rural Sierra Leone. *History and Anthropology 27 (5),* 504–520.

Pitzl, G.R., 2004. Encyclopedia of Human Geography. Greenwood Publishing, Westport.

Poncian, J., 2019. Extractive Resource Ownership and the Subnational Resource Curse: Insights from Tanzania. *The Extractive Industries and Society 6 (2)*, 332–342.

Poncian, J., Kigodi, H.M., 2015. Natural Resource Conflicts as a Struggle for Space: The Case of Mining in Tanzania*. RIMCIS - International and Multidisciplinary Journal of Social Sciences 4 (3)*, 271–292.

Rajak, D., 2011. In Good Company: An Anatomy of Corporate Social Responsibility. Stanford University Press, Stanford.

Rasmussen, M.B., Lund, C., 2018. Reconfiguring Frontier Spaces: The Territorialization of Resource Control. *World Development 101*, 388–399.

Reichard, P., 1892. Deutsch-Ostafrika: Das Land und seine Bewohner, seine politische und wirtschaftliche Entwickelung. Otto Spam, Leipzig.

Robbins, G., 2013. Mining FDI and Urban Economies in sub-Saharan Africa: Exploring the Possible Linkages. *Local Economy 28 (2),* 158–169.

Roberts, A.D., 1986. The Gold Boom of the 1930s in Eastern Africa. *African Affairs 85 (341)*, 545–562.

Rockel, S., 1997. Caravan Porters of the Nyika: Labour, Culture and Society in Nineteenth Century Tanzania. University of Toronto, Toronto.

Roder, K., 2019. “Bulldozer politics”, State-making and (Neo-)Extractive Industries in Tanzania’s Gold Mining Sector. *The Extractive Industries and Society 6 (2*), 407–412.

Roder, K., 2017. When the Bulldozer Comes - Burning Bridges or Renaissance in the making? Resource Worlds, https://resourceworlds.org/2017/09/11/when-the-bulldozer-comes-burning-bridges-or-renaissance-in-the-making/, (accessed 22.3.2019).

Rosenthal, G., 2015. Interpretative Sozialforschung: Eine Einführung. Beltz, Weinheim.

Rosser, A., 2006. The Political Economy of the Resource Curse: A Literature Survey. Working Paper, 286. Institute for Development Studies, Sussex.

Rubbers, B., 2019. Mining Towns, Enclaves and Spaces: A Genealogy of Worker Camps in the Congolese Copperbelt. *Geoforum* 98, 88-96.

Rustad, S.A., Ostby, G., Nordas, R., 2016. Artisanal Mining, Conflict, and Sexual Violence in Eastern DRC. *The Extractive Industries and Society 3 (2*), 475–484.

Sack, R.D., 1986. Human Territoriality: Its Theory and History. Cambridge University Press, Cambridge.

Sarraf, M., Jiwanji, M., 2001. Beating the Resource Curse: The Case of Botswana. Environmental Economics Series. World Bank, Washington, D.C.

Satgar, V., 2009. Global Capitalism and the Neo-Liberalisation of Africa, in: Southall, R., Melber, H. (Eds.), A New Scramble for Africa. University of KwaZulu-Natal Press, Scottsville, 35–55.

Saunders, R., Caramento, A., 2018. An Extractive Developmental State in Southern Africa? The Cases of Zambia and Zimbabwe. *Third World Quarterly 39 (6),* 1166–1190.

Schmeisser, K., 1908. Die nutzbaren Bodenschätze und die Entwicklung des Bergbaus in den deutschen Kolonien. W.G. Korn, Breslau.

Schroeder, R.A., 2012. Africa After Apartheid. South Africa, Race and Nation in Tanzania. Indiana University Press, Bloomington.

Schroeder, R.A., 2010. Tanzanite as Conflict Gem: Certifying a Secure Commodity Chain in Tanzania. *Geoforum 41 (1*), 56–65.

Schroeder, R.A., 2008. South African Capital in the Land of Ujamaa: Contested Terrain in Tanzania. *African Sociological Review 12 (1)*, 20–34.

Scott, J., 1998. Seeing Like a State. Yale University Press, New Haven.

Shivji, I.G., 2009. Accumulation in an African Periphery: A Theoretical Framework. Mkuki na Nyota, Dar es Salaam.

Sidaway, J., 2007. Enclave Space: A New Metageography of Development? *Area 39 (3)*, 331–339.

Society for International Development, 2009. The Extractive Resource Industry in Tanzania: Status and Challenges of the Mining Sector. Society for International Development, Nairobi.

Southall, R., Melber, H. (Eds.), 2009. A New Scramble for Africa: Imperialism, Investment and Development. University of KwaZulu-Natal Press, Scottsville.

Speke, J.H., 1864. Journal of the Discovery of the Source of the Nile. Harper, New York.

Stockley, G.M., 1948. The Geology and Mineral Resources of Tanganyika Territory, Bulletin. Tanganyika Territory, Geological Survey Department, London.

Spiegel, S., 2012, Analysis of Formalization Approaches in the Artisanal and Small-Scale Gold Mining Sector Based on Experiences in Ecuador, Mongolia, Peru, Tanzania and Uganda: Tanzania Case Study. United Nations Environment Programme.

Stoler, A.L., 2002. Colonial Archives and the Arts of Governance. *Archival Science 2*, 87–109.

Stromer von Reichenbach, E., 1896. Die Geologie der Deutschen Schutzgebiete in Afrika. Oldenbourg, München.

Sunseri, T., 1998. Dispersing the Fields. Railway Labor and Rural Change in Early Colonial Tanzania. *Canadian Journal of African Studies 32 (3), 558-583.*

Tanzania Invest, n.d. Mining. http://www.tanzaniainvest.com/mining, (accessed 27.12.2017).

Tegera, A., Doevenspeck, M., 2015. Und jetzt auch noch Öl! Der neue Erdölkomplex im Albertgraben. *Geographische Rundschau 67 (6)*, 18–23.

TEITI, 2018. Final Report for the Period July 1 2015 to June 30 2016, Dar es Salaam.

TEITI, 2011. Third Reconciliation Report: Tanzania Extractive Industries Transparency Initiative (TEITI) for the year ended 30 June 2011. TEITI, Dar es Salaam.

Temple, P., 1971. Mining, in: Berry, L. (Ed.), *Tanzania in Maps*. University of London Press, London, 90–93.

Tetzlaff, R., 1970. Koloniale Entwicklung und Ausbeutung. Wirtschafts- und Sozialgeschichte Deutsch-Ostafrikas. Duncker & Humblot, Berlin.

Tornau, F., 1913. Zur Geologie des mittleren und westlichen Teiles von Deutsch-Ostafrika, Beiträge zur Geologischen Erforschung der Deutschen Schutzgebiete. Geologische Landesanstalt, Berlin.

Tornau, F., 1907. Die nutzbaren Mineralvorkommen, insbesondere die Goldlagerstätten Deutsch-Ostafrikas. *Zeitschrift der Deutschen Geologischen Gesellschaft 59*, 60–75.

Tsing, A. L., 2003. Resources Natural and Capitalist Frontiers. *Economic and Political Weekly* 38 (48), 5100–5106.

Turner, F.J., 1893. The Significance of the Frontier in American History, in: *Annual Report of the American Historical Association for the Year 1983*, 199–207.

van Alstine, J., Manyindo, J., Smith, L., Dixon, J., AmanigaRuhanga, I., 2014. Resource Governance Dynamics: The Challenge of `New Oil' in Uganda*. Resources Policy 40*, 48–58.

van Campenhout, B., 2002. The Impact of the Mining Industry on the Future Development of Tanzania: Future Research Needs. Economic and Social Research Foundation, Dar es Salaam.

Veltmeyer, H., Petras, J., 2014. The New Extractivism. A New Model of Extractvive Imperialism. Zed Books, London.

Verbrugge, B., 2016. Voices from Below: Artisanal- and Small-Scale Mining as a Product and Catalyst of Rural Transformation. *Journal of Rural Studies* 47 (A), 108-116.

Vibe, D., 2013. Conflict, Claims, and Access to Gold: A Thesis on the Conflict between Artisanal Miners and a Mining Company in North Mara, Tanzania (MA Thesis). Roskilde University, Roskilde.

Vokes, R., 2012. The Politics of Oil in Uganda. *African Affairs 111 (443)*, 303–314.

von Freyhold, M., 1979. Ujama Villages in Tanzania: Analysis of a social experiment. Heinemann, London.

Warf, B., Arias, S., 2009. Introduction: The Reinsertion of Space into the Social Sciences and Humanities, in: Warf, B., Arias, S. (Eds.), *The Spatial Turn*. Routledge, London, 1–10.

Watts, M., 2004. Resource curse? Governmentality, Oil and Power in the Niger Delta, Nigeria. *Geopolitics 9 (1*), 50–80.

Watts, M.J., 2018. Frontiers: Authority, Precarity, and Insurgency at the Edge of the State. *World Development 101*, 477–488.

Watts, M.J., 2009. Crude Politics: Life and Death on the Nigerian Oil Fields, Economies of Violence. University of California Press, Berkeley.

Werthmann, K., 2019. Enklaven, Dialektik des Globalen - Kernbegriffe. de Gruyter, Berlin.

Werthmann, K., 2017. The Drawbacks of Privatization: Artisanal Gold Mining in Burkina Faso, 1896-2016. *Resources Policy 52*, 418–426.

Werthmann, K., 2012. Gold Mining in Burkina Faso since the 1980s, in: Werthmann, K., Grätz, T. (Eds.), *Mining Frontiers in Africa: Anthropological and Historical Perspectives.* Köppe, Köln, 9–22.

Werthmann, K., 2009. Working in a Boom-Town: Female Perspectives on Gold-Mining in Burkina Faso. *Resources Policy 34,* 18–23.

Werthmann, K., 2007. Gold Mining and Jula Influence in Pre-colonial Southern Burkina Faso. *Journal of African History 48*, 395–414.

Werthmann, K., 2003. Cowries, Gold and "Bitter Money" Gold-Mining and Notions of Ill-Gotten Wealth in Burkina Faso. *Paideuma 49*, 105–124.

Werthmann, K., Grätz, T., 2012. Introduction, in: Werthmann, K., Grätz, T. (Eds.), *Mining Frontiers in Africa: Anthropological and Historical Perspectives.* Köppe, Köln, pp. 9–22.

Wiegink, N., 2018. Imagining Booms and Busts: Conflicting Temporalities and the Extraction Nexus in Mozambique. *The Extractive Industries and Society 5 (2*), 245–252.

Wijsen, F., 1995. The Gold and the Spirits are Close: Popular Religion and Social Transformation in Sukumaland, North-West Tanzania. *Exchange 24 (1)*, 45–60.

Wilson, J.D., 2015. Understanding Resource Nationalism: Economic Dynamics and Political Institutions. *Contemporary Politics* 21 (4), 399–416.

Witzel, A., 2000. Das problemzentrierte Interview. Forum Qualitative Sozialforschung 1.

Wolff, S., 2013. Dokumenten- und Aktenanalyse, in: Flick, U., von Kardorff, E., Steinke, Ines (Eds.), *Qualitative Sozialforschung. Ein Handbuch*. Rowohlt, Reinbek bei Hamburg, pp. 502–513.

World Bank, 1992. Strategy for African Mining, Africa Technical Department Series, World Bank Technical Paper. World Bank, Washington, DC.

WWF, Tanzania Chamber of Minerals and Energy, 2012. Integrating Environment into Investment Decisions: Introductory Guidance for Tanzania's Mining Sector.

Young, K. A., 2017. Blood of the Earth. Resource Nationalism, Revolution, and Empire in Bolivia. Austin, University of Texas Press.

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