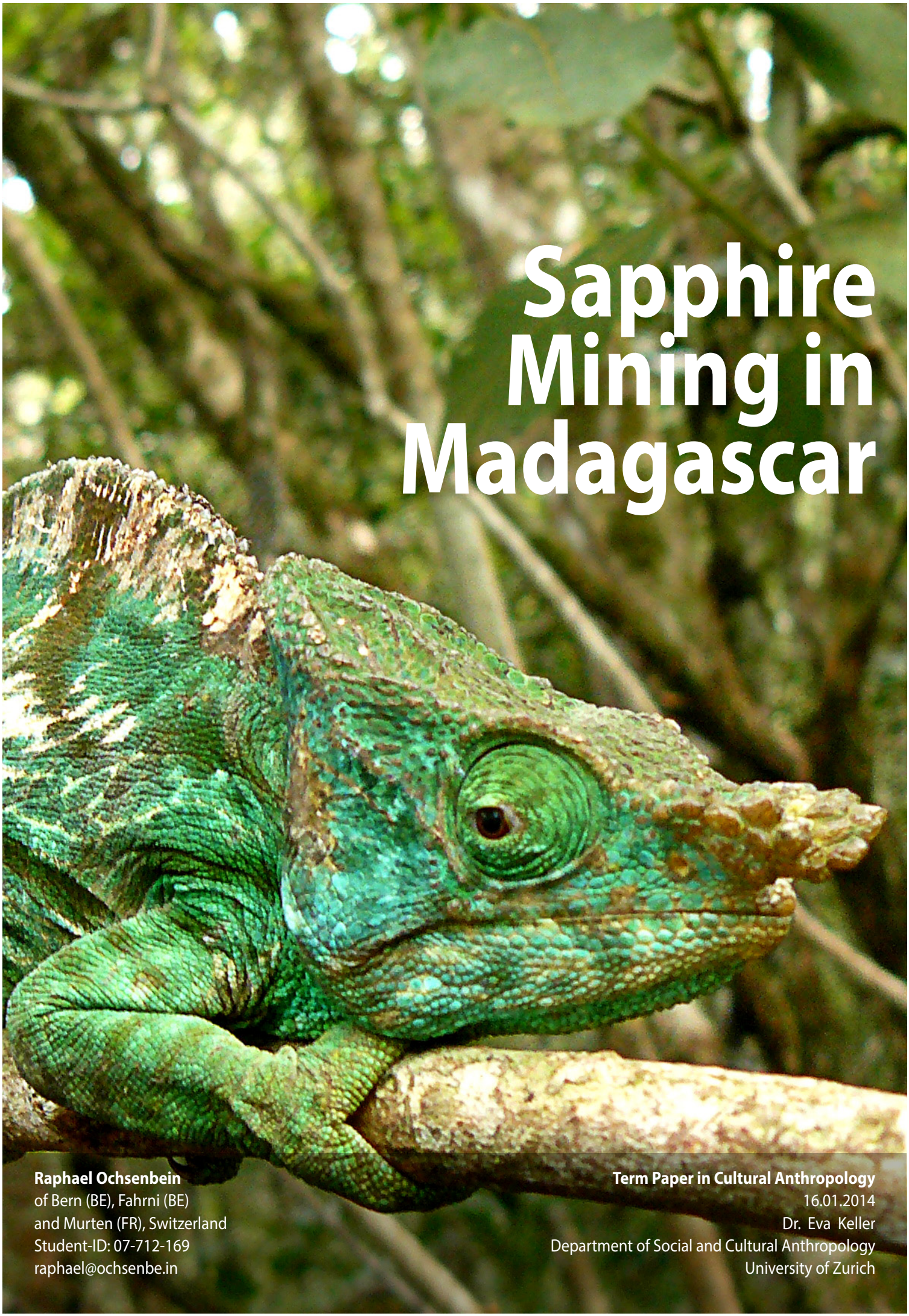

Sapphire Mining in Madagascar

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Sapphire Mining in Madagascar & the Frontier Process

1 Introduction

If one is talking about Madagascar in Switzerland, the animated movies by DreamWorks. From what little I remember of the movie, it is less about the island and nation of Madagascar than about American culture. Alternatively, one may think of the unique nature and the unique animal life, as the example of a Chameleon on the title exemplifies. In the following paper, I will summarize actual ethnographic work to gain a new perspective of the country.

The reason for my choosing to have a deeper look at Madagascar was that I am hoping to visit there this summer for civil service. This *"deeper look"* will take the reader to Ankarana, a national park in the northern part of the country and the sapphire mining operations by the local Malagasy population therein.

As it will be shown, these miners are mostly migrants from other parts in the country, hoping to escape social stratification and earn a fortune by finding valuable gemstones. This phenomenon will be analysed in the broader theoretical framework of the *"frontier"* as a cultural element common to the Sub-Saharan Africa as a whole.

The field of the sapphire mining in Madagascar plays to the strengths of cultural anthropology, where global interests intersect with the local life and leads to profound impacts on the lifestyles of the indigenous population.

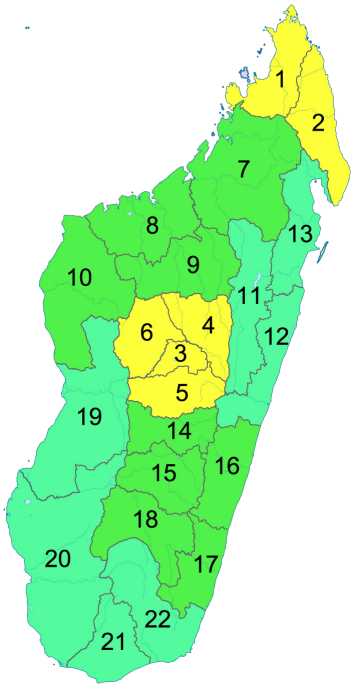
1.1. The Country of Madagascar

According to the book recently published by the Andrew Lees Trust, Madagascar is one of the world's poorest countries and the world's fourth largest island (2009: 6). With an area of about 5.8 * 105 square kilometres, the island is approximately fourteen times as big as Switzerland and has a population of 22 million people, according to the CIA (2011).

Madagascar is known by many for the high rate of endemic species and the relative danger of extinction these species are facing. Myers, Norman, *et al.* classify Madagascar as one of the eight *"hottest hotspots"* for *"areas featuring exceptional concentrations of endemic species and experiencing exceptional loss of habitat"* (2000: 853). The unique nature of Madagascar was formed more than 60 million years ago, when continental shift deposited the island at its current location and evolution could thrive in isolation (cf. Tilghman *et al.* 2005: 1, 2).

However, while global actors such as the WWF are trying to preserve the natural wonders of Madagascar, they face multifaceted and complex challenges in practice. Rosaleen Duffy finds these challenges best illustrated by the illicit sapphire mining operations in Madagascar (2005: 831). The goal of the following term paper will be, to go beyond the black & white of environmental preservation and to look into the greyscale lives of the Malagasy population.

Since such a venture is a forte of anthropological work, this article will mainly refer to the Monograph written by Andrew Walsh (2012). In addition to Walsh's work focussing on the Ankarana Reserve in the North of Madagascar (Region number 1 on the illustration to the right), consideration will also be given to Duffy's research in Ilakaka, in the south of Madagascar (region number 18). A general overview over the book's contents is provided in the following section.



2 Made in Madagascar

The testimony Walsh writes of his field work in Madagascar is the culmination of two decades of research, starting with his first visit in 1992 (2012: xix). His investigation on the Ankarana National Park centred on two towns, the sapphire mining town of Ambondromifehy and the eco-tourism hub of Mahamasina (ibid.). Walsh offers an introduction, a conclusion and four chapters detailing different aspects of *"The Place of the Rocks"*, as Ankarana is known to the locals.

The introduction is probably meant for readers who are not familiar with ethnographic literature whose mission Walsh defines as *"taking people seriously (ibid: xxix). The conclusion mirrors the introduction in that it is a personal reflection on the insights Walsh was able to crystallize from his research (2012: 104–112). This means, coming to grips with the extreme poverty and powerlessness of his subjects and the fact that Walsh can afford to* "mine" *knowledge by using his pens, all the while recognizing the fact that all are equally human (ibid: 108–111). Walsh affords the opinion, that he conducts research,* "because he can"*, quite like the sapphire miners who pursue their illicit operations, because they too can make do that way (ibid: 111). And defining Anthropology's objective again, he states that fieldwork is about* "talking to everybody", to listen to the competing voices and deeds, in order to untangle the realities beneath them (ibid: 111, 112) – that is taking the locals seriously.

The first chapter serves to transport the reader to the jungle and introduces the region of Ankarana in particular (Walsh 2012: 1). He describes three different lenses through which the place is perceived by three important stakeholder types. For one, Ankarana is seen as a sacred place by the 'original' indigenous population who honour their ancestors in rituals at historically important locations (ibid: 4-7). This does not only sound rather anthropologic, Walsh himself was introduced to the region by attending to such a ceremony taking place in these ancestral caves (ibid.). However, this ceremony was not only frequented by the indigenous people and the odd anthropologist, but also by the French consulate, politicians, tourists, NGO representatives and television reporters (ibid: 7). The question of what these people were doing there leads us to the second way of perceiving Ankarana – as a Natural Wonder. It has been previously mentioned that Madagascar is seen as an endangered paradise, where a unique biodiversity faces extinction caused by

anthropogenic threats. Ankarana is one location, where those who subscribe to such a view concentrate their efforts of saving the nature by establishing national parks (ibid: 9-11). Walsh argues that this activism is also a new phenomenon, even if Madagascar has long been known for its unique nature by the people foreign to the land (ibid.). However, establishing a clean park where the rules of ecologic sustainability are adhered to, proves to be difficult because of the third lens by which Ankarana is seen – as a *"place of opportunity"*. A sapphire rush gripped the region in 1996, and many miners migrated to Ambondromifehy in search of the riches they hoped to find buried in Ankarana (ibid: 14-19). This young Malagasy population sees the place as a lawless *"frontier town"*, where they can strike it *"big"* (ibid: 18).

The second chapter is concerned with the lives of the residents of Ambondromifehy. In the wake of a mass migration that saw the town grow from 400 souls to more than 15'000 in the two years preceding 1997, a transformation of the sociopolitical landscape is to be expected (cf. Walsh 2012: 14, 23). Before that time, an anecdote tells that sapphires were but used by children as stones in their slingshots (ibid: 23). This immigrated generation of miners is largely determining the livestyle of this new town, and they certainly have other priorities than preserving the nature. While they do make much more wealth than it is usual for Madagascar, this money is seen as *"hot money"* that has to be spent immediately (ibid: 28, 29). The sapphires are mined in considerably risky conditions: In a legal limbo, where the park cannot contain the mass of miners, and the export of the stones not being completely proper; furthermore, the digging itself is risky and dangerous in itself, when the unregulated digs can collapse (ibid: 26, 27). The traces they leave on the landscape is very visible, one guide for example had to explain to his tourists that the mining holes were made by some kind of animal during the rainy season (ibid: 63, 64). In light of the risks taken by the miners, it is unsurprising that they spend their earnings on living *"la vie"* (ibid: 30, 31). Walsh compares these activities to the Moroccan bazaar as described by Clifford Geertz (ibid: 33). In practice, this means that information is key to success in the market and that therefore a huge competition for this knowledge exists. Sapphires, for instance, have different colours, form factors, sizes, structures determining their value, and a buyer with knowledge about these will have a competitive advantage (cf. Walsh 2012: 34). The value of information is not limited to just the value of sapphires, but also consists of knowing to whom to sell which stones and how to conduct the trades in general. Since the miners have the least knowledge about the sapphire market and yet are dependent on the selling of the stones for their subsistence, they are the least favoured by this bazaar economy, and the foreign buyers who can find alternative sources have the biggest knowledge differential and the most power in the market (ibid: 36, 37). Another element of the 'lawless' notion the population has about the sapphire business is that social contracts are weaker. As such, conning people instead of following upon socially accepted rules of transaction behaviour can frequently be observed (ibid: 38-43).

The third chapter contrasts and compares the sapphire mining business with the competing ecotourism business. While Ankarana was highly rated in the Lonely Planet of 2012, Walsh describes this also as a fairly recent development (2012:

52). Walsh uses a tourist guide as a protagonist to spin the tale of ecotourism in Ankarana, as Walsh finds that they also practice anthropology's method of *"participant observation"* in order to learn about their customers (ibid: 65). He describes the guide's job as skilled work, mainly depending on language knowledge, but also on the ability to interact with humans and the possession of specialized local knowledge (ibid: 58-62). The guides regard the sapphire miners as the greatest danger to their livelihood, as the mining work disturbs the tourists' sensitivities who are coming to see an undisturbed natural wonder (ibid: 63, 64). This causes friction between the guides and the minors, a point central to Rosaleen Duffy's paper (2005: 837). Walsh further finds that the 'win-win' for both the tourists and the local population as proposed by the proponents of ecotourism is not as simple as it sounds (2012: 71, 72). The main beneficiaries are not the local indigenous population, but migrant entrepreneurs, like the previously mentioned guide, who reap the benefits (ibid: 73). A closer investigation of this will be made in the comparison between Walsh and Duffy in a later section.

On a slightly digressive note, the seemingly vast growth of visitors to Madagascar observed by Walsh can be completely explained by a simple exponential growth ($r^2 = 0.9985$), and should therefore not be understood as an extremely outlandish occurrence – human population also grows exponentially and therefore the increased visitor count should not come as a surprise (cf. Walsh 2012: 53). However, Walsh is rightly observing the difference experienced as a consequence of this growth, and the vibrant touristic business came into existence in recent time. I am of the humble opinion that exponential growth is one defining feature of the current modernity which is characterized by some as *"post postmodernism"*(cf. Braidotti 2005: 169), and therefore any account of the changes brought by exponential growing phenomena, such as population growth or the climate warming observed in the environment, is scientifically valuable.

Moving on to the fourth chapter, where Walsh draws a connection between ecotourism and sapphire mining: both businesses stand and fall with the foreign interest in the product being sold (2012: 73). He argues that this can explain why the Malagasy people are not able to profit from the sapphire boom and why Madagascar remains a poor country in spite of becoming one of the most important sources for cuttable rough sapphire material, as the seller has less power than the buyer and is therefore undercompensated for his work (ibid: 76, 78). He further compares the socially construed value of both the biodiversity and the sapphires as *"natural wonders"* (ibid: 96). Sapphires, for instance, can be created with a higher quality and for a smaller price synthetically, yet the demand for 'natural' sapphires remains unabated (ibid: 79). From this follows that the purchasers of gemstones must derive the value of the sapphires not from the physical properties of the stones, but rather from intangible properties ascribed to the stones. Walsh further states that in fact it is perfectly normal for people to appraise objects by intangible properties, and that this is a social process by which the buyers of certain products cultivate a specific identity through the consumption choices they make (ibid: 96). Ecotourists are the best example for this, as becomes evident in the description of one particular woman who toured Ankarana after her retirement from a career in

environmental management (ibid: 91). She was not seeking relaxing beach holidays, but much rather an 'original' environment and people living in 'harmony with nature', and as such her tourism was in line with the identity she formed during her career. However, from this point in his observations onwards, Walsh recurs to the reflection of power differential between the foreigners who can afford such consumption and the marginalized local population. With these thoughts, Walsh concludes his book.

Overall, the argumentation put forward by Walsh is certainly convincing and delivers a vivid picture of the live 'on the rock'. In the remainder of this thesis, the focus will lie on connecting the observations from the first two chapters of the book with a macro analysis of the social dynamics on the African continent, and ultimately of the human nature. To prepare for this, the summaries of the first two chapters were already slightly longer than the summaries of the following chapters. In the next section, the comparison of Ankara with a similar region within Madagascar will be made, before tackling the comparison with the African continent in general.

3 Sapphire Mining in Context

3.1. Sapphire Mining in a Shadow State

Even though Rosaleen Duffy's field site is located on the other end of Madagascar, in the town of Ilakaka, the situation is surprisingly similar to what Walsh encountered earlier in Ankarana. Like Ambondromifehy, Ilakaka is a town on the border of protected area – Isalo National Park, located in southern Madagascar (Duffy 2005: 833). Even the attachment of the indigenous Bara people to the park due to ancestral graves and other sacred sites is present (ibid: 836). Furthermore, the Bara also cooperated with ecological organisations in their efforts to protect the nature and presumably their own interests, in a similar manner to the Antankarana kingdom (Duffy 2005: 836; Walsh 2012: 3-12). Additionally, the miners and the Bara started to clash with each other – a conflict that seems to have ended even in deaths (Duffy 2005: 837). Walsh does not describe the conflicts to have degenerated to such a degree, but he does write that the elders of Ambondromifehy were unhappy with the miners since they did not honour the local customs and did not behave as they should have (2012: 31).

Duffy directly borrows Walsh's term of *"hot money"* to describe the spending behaviour of the sapphire miners (2005: 839). Walsh details this in his 2003 essay, using the term *"conspicuous consumption"* to refer to the public and overly exaggerated spending of the miner's earnings, theorizing that this behaviour is *"to the maintenance of the unique characters who inhabit the place"* (2003: 291). For Walsh, the motif underlying the extravagant consumption, or what he coins *"daring consumption"* is found in the practice of establishing and maintaining an identity of a risk-taker who is living the life (ibid.).

In her work with the futures traders in Chicago, Caitlin Zaloom makes a strong

case for the constructive role risk can play for an identity (cf. Zaloom 2004: 382-384). Walsh sees this consumption of the miners as a strategy of dealing with the uncertainties they face and creating agency in a world that's largely out of their own control (2003: 298). He suggests that through this consumption and gifting to each other, the *"ephemeral social networks on which so many of Ambondromifehy's transitory miners rely"* upon are reproduced through reciprocity (ibid: 302).

Duffy explains the social structure of the miners differently, by referring to Reno's notion of the *"Shadow States"* usually reserved for *"political management of informal markets in sub-Saharan Africa"* (2005: 828). While, like Reno, Duffy ties the shadow state to corruption, she stresses that it is essentially more than that: *"it is a systematized challenge to the formal institutions of control and authority in particular locations"* (2005: 839). By this, she is referring to the global social network enabling and sustaining the sapphire mining industry in a way that is rather similar to the *"global bazaar"* Walsh uses to explain the same phenomenon.

One last point to note about Ilakaka is that the town's population increased drastically during the local sapphire boom, as the following quote from Duffy demonstrates (2005: 835):

"The case of Ilakaka is instructive. Ilakaka town sprang up in the late 1990s, after the discovery of high quality sapphires: it was estimated that the population of Ilakaka town increased from 30 to 100,000 between 1998 and 2000."

This comparison allows us to discuss the main unifying constant observed by these scientists in their research: Both found an extremely high willingness for a certain subset of the Malagasy population to migrate in order to earn money.

3.2. Sapphire Mining & Migration

In the following, a theoretical framework explaining this migrational behaviour in the African context shall be discussed and a short summary of the migration in Madagascar as described in ethnographic literature is provided. Until now, the focus of this text has mainly been on the migrating sapphire miners who originate from within Madagascar. However, already here it becomes obvious that such migrations actually span more than just one African country: Especially the traders who transport the gems from Madagascar to Thailand are often foreigners, as the example of Omar who is originally from Sierra Leone illustrates (Walsh 2012: 37). Therefore, the following theoretical discussion will be looking at a pan-African context.

3.3. Migration & Frontiers

In one telling interview, a miner speaks of Ambondromifehy as a *"frontier town"*, stating, *"this place is Texas"* (Walsh 2012: 18). Frederick Jackson Turner explains how the frontier had a major role in shaping the American political character, as Igor Kopytoff explains when he is adapting the thesis for the African context (cf. Kopytoff 1989: 3). For Kopytoff, the concept of the frontier can be used to under-

stand the wider cultural context of a pan-African culture (1989: 3):

*"The aim of this book is to introduce a particular perspective on African societies and African cultural history – the perspective of the "*frontier*" from which we may better understand the formation of these societies and the perpetuation of a pan-African political culture."*

For Kopytoff, populations in Sub-Saharan Africa are, compared to other continents, recent occupants of their present home, and the histories of these societies is market by a constant flow of people (ibid: 7). These societies were usually formed around an initial core-group who migrated into the perceived political vacuum labelled *"frontier"* with the goal of leaving their established society (ibid: 7-10). Opposed to the frontiers are the *"metropoles"*, where the rigid hierarchy conflicts with the ideological equality within one kin-group, often leading to a fissure and segmentation of the group and consequently the emigration of a subgroup (ibid: 18). A prominent example is the accusation of witchcraft which excludes the accused from the original group. These so-called *"frontiersmen"* can have a wide range of reasons to search for a new home, be it that they are driven from war or other conflicts, or be it that they are just seeking out new places in a quest for success (ibid: 19-22). In any case, the availability of frontiersmen and frontiers are the basis for the *"ceaseless flux"* of populations in Kopytoff's frontier process (ibid: 7).
This process implies a historic flow of events, and Kopytoff distinguishes four stages in the development of frontier settlements (ibid: 69-70). In the first stage, the initial settlement is organized according to a corporate kin group. In the second stage, the kin-group grows into a chieftaincy that recruits new members who are separated from the ruling kin-group. During the third stage, the chieftainship becomes an established kingdom. Lastly, in the fourth stage, the kingdom expands by conquest and domination of peripheral areas.

All of this leads to the reproduction of the social order in Africa, argues Kopytoff, as the migrants try to recreate the pre-existing social order once they migrated to a new land (ibid: 33).

While the ethnographic example of sapphire miners does not afford the verification of such a grand historic process, when Kopytoff describes the frontiersmen as *"entrepreneurs"* (ibid: 40), then a reminiscence to the migrant workers of Ambondromifehy and Ilakaka is evoked. Therefore, the frontier process offers a sound theoretical basis to analyse the behaviour of the sapphire miners. In order to examine the ethnographic data, the following section will elaborate on the analogies between the frontier process and the situation in Madagascar.

3.4. Frontiers in Sapphire Mining

Walsh opens the account of his field work by introducing the *"people of the place of the rocks"* – the *"Antankarana"* as they call themselves (2012: 2). This shows that already in the very way people see themselves, we encounter traces of Kopytoff's frontier concept: He writes that the established group often bases the legitimacy of its rule on the fact that they were the local firstcomers and are connected to the

spirits of the lands in a special way (cf. Kopytoff 1989: 52-53).

Walsh writes further, that *"'Antankarana' is one of many ethnic terms in Madagascar that suggests a connection between a particular group of people and a particular landscape"*, even though he cautions to not assume a strong connection (ibid: 3). Rather than referring to the people's origin, the term 'Antankarana' is tied to the local landscape through the genesis of a new kingdom in the seventeenth century (ibid: 4). The royalty of the kingdom were originally immigrants to the massif, to be followed by other Malagasy groups and colonial settlers – Walsh even notes that this constant immigration of humans *"have made this region what it is today"* (ibid: 14).

This corresponds to Kopytoff's statement that the frontier is the legitimizing historical model, shaping the relations within the polity. Furthermore, both Walsh and Kopytoff describe how the kings themselves are subjected to many rules and taboos leading to a complicated relationship between ruler and ruled (cf. Kopytoff 1989: 66; Walsh 2012: 6). The rituals like the ritual Walsh attended to when he first entered Madagascar are used to forge a connection between the land and the rulers, as required by the frontier thesis to legitimize their rule (cf. Kopytoff 1989: 72; Walsh 2012: 4-5).

The most important connection however is that political mobility becomes possible through migration (Kopytoff 1989: 51). African people often have hierarchies based on their age and gender and often follow the principle of lifelong tenure (ibid: 36-37). Walsh describes how the young sapphire miners effectively use migration to escape such hierarchies and freely spending their money as they please instead of investing it according to their elders wishes (2012: 31). This goes as far as calling Ambondromifehy *"a place without parents"* (Walsh 2013: 178-179).

It is only after the boom, when the population decreases and the city becomes better organized and safer that a social order becomes established and elders are passing judgements and regulate land disputes (ibid: 181). Walsh even describes that the families of the previous elders were able to re-establish themselves in positions that may in the future well become similar to their old status (cf. 2013: 185). This is akin to how Kopytoff explains that after a migration to the frontier, existing and new hierarchies are negotiated and a chieftainship slowly develops (1989: 54, 55, 69, 70).

Furthermore, the stance that the African population is prone to migrate for various reasons can also be found in another example: The tourist guides observed by Walsh are often also migrants and *"certainly as mobile as any of the miners or traders"* (ibid: 61).

Overall, the various links that can be made between Kopytoff's description of the frontier process and both Walsh's and Duffy's accounts of the sapphire mining in Madagascar are strikingly accurate, indicating that the frontier theory is in fact a valid theory explaining the reproduction of the social structures in Sub-Saharan Africa.

3.5. Sapphire Mining in the Global Bazaar

Incidentally, the first time the denomination *"Madagascar"* appears in European literature is usually ascribed to Marco Polo, even if the man's description is not quite correct in the details, when he is describing a kind birds that can carry elephants away (cf. Walsh 2012: 86). Eric Wolf on the other hand, uses Marco Polo as the prime example for how the world was interconnected already in the 13th century (1982: 24). This should make the connection between Walsh's and Wolf's respective works rather obvious: in both cases, a point is made for the power of vast social networks spanning several continents. Both authors are extensively describing a world, where local social structures are shaped by global relationships and the power differential inherent to these ties (cf. Walsh 2012, Wolf 1982).

When reflecting on the unfairness of the world system, or the systematic marginalization, to use Walsh's words, Walsh makes the direct comparison to Wolf's works himself (Walsh 2012: 104, 107). Here, Walsh explains the dependence of the Malagasy gemstone producers on the interest of foreigners who buy a certain product on the global bazaar (ibid.). This dependence comes from the very livelihood of the miners being a replaceable product in the minds of the consumers. When Wolf writes about the trade links connecting Europe to the *"people without history"*, his main focus is not only proving that these links exist, but much rather that these links have existed for a long time (1982: 24-25). The example for this historic process mentioned by Walsh is the background story of the Antankarana people who were evicted from the region to reconquer it with the assistance of the French colonial empire (2012: 4). Wolf on the other hand mentions that the Dutch captured slaves in Madagascar with the help of slave-hunting kingdoms during the 17th century (1982: 195, 228). Both examples serve to highlight the importance of global links in the historic context of Madagascar.

4 Conclusion

Before reading Walsh, the frontier process introduced by Kopytoff seemed arcane and outdated, not a model fit for explaining the current social transformation in African countries. However, once an actual ethnographic account of such a situation is investigated in detail, many parallels between the model and the exemplary situation can be drawn.

This makes for a strong argument for the thesis put forward by Kopytoff, especially since the miners themselves also referred to the *"frontier"* to describe their own situation. Furthermore, the motivations of the sapphire miners are quite fitting for frontiersmen. Lastly, even within the two decades of research conducted by Walsh, a historic process becomes apparent not unlike what Kopytoff describes.

It should be noted however, that the wider political structure encompassing the frontier process seems to be less impacted by the events described by Walsh. Here, it seems to be better to see the frontier process embedded in a wider global and

historic context, instead of relying solely on the frontier process to explain the reproduction of African societies. If we consider Wolf who states that Africa has been integrated in a global system of trade, then it would make sense to theorize that these global relationships have also contributed to the reproduction of societal structures in Africa.

Taken together, these two approaches offer a compelling lens through which the developments in the sapphire boom in Madagascar can be analysed.

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