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NAVIGATING SEAS, SMOKE, AND SOCIAL RELATIONS

Making a living in a Sierra Leonean fishing town

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10 June 2022

PhD thesis

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Thesis abstract and lay summary

This thesis explores maritime livelihoods in the fishing town of Tombo, in Sierra Leone's Western Province. With global attention on the decreasing fish stocks in the Gulf of Guinea, and national and international policies of economic development through the use of marine resources, I research how people navigate in a shifting social, ecological and economic landscape to sustain themselves, their families and their communities. At its core, this thesis is about what happens – socially, economically, and ecologically – in a fishing community when there are less and less fish in the sea. Central to the project is the question of how an ethnographic exploration of a West African community and the people involved in the artisanal fishing sector can contribute to new understandings of entanglements between the global and local, between the human and the non-human, and between the land and the sea.

Focusing on the fishing boats, the *banda* fish smoking houses, and the wharfs where fish are traded, I trace gendered and generational working relations that centre on capturing, trading, and materially transforming the fish. By analysing people's socio-economic navigational practices (chapter 3 and 4) and relation-building and trust through fresh and smoked fish (chapter 5), I show how fishermen and fish processors search for new economic patrons, as evidenced by foreign fish export companies (chapter 4) and development NGOs (chapter 6), which again affects the gendered fish trade in the artisanal sector. Building on the literature on relationality in West Africa, I argue for an incorporation of shifting material environments and other-than-human beings, like fish, to understand how the embodied skills of the fishermen and fish processors are shaped through their relations with moving fish, the smoke they use, and the profits they earn, as well as how these skills inform their continued hustle. Throughout the thesis, I focus on the relationality and embodied knowledges as being shaped through lives lived by and at the sea, to argue how the working lives in a resource depleted environment should not be reduced to individual survival tactics in a post-conflict landscape of social breakdown. Rather, working together on the fishing boats, trading fish on the wharfs, and making smoked fish in the *banda* smoke houses, shape the foundations for local relations of trust and solidarity, competition and exploitation, which are historically situated while always containing temporal possibilities and creative potential.

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Glossary

<i>Banda</i>	Smoke oven for fish, or the house containing the smoke oven
<i>Capitale boat</i>	A 3-5 man artisanal fishing boat that fishes at night with drift nets
<i>Chen/chain</i>	Fishing net
<i>Chingichoga</i>	Semi-industrial trawlers, mainly owned by foreign fish export companies
<i>Dri</i>	“Dry”, not prosperous or without money
<i>Ghanaboat</i>	A larger 15-20 man artisanal canoe that fishes during the day for bonga and herring, using ring nets
<i>Gwangwa</i>	Bobo croaker, a fish that makes a croaking sound
<i>Half-half</i>	A piecemeal approach to gathering materials, doing small-scale sales
<i>Knack</i>	Fish coming to the water surface to draw air
<i>Kostament</i>	“Customer” with a longer term relation of support and aid
<i>Minna boat</i>	Artisanal fishing boats fishing for herring
<i>Phoneman</i>	A diver who locates fish by listening for fish sounds underwater
<i>Plassas</i>	Sauce or stew, served with rice
<i>Poda-poda</i>	Minibuses that transport people and goods
<i>Sarakassa boat</i>	A 3-7 man artisanal fishing boat that fishes for bonga, using gill nets
<i>Swit wata</i>	“Sweet water”, referring to mixed batches of different smaller species of fish that cohabitate
<i>Trɔs</i>	“Trust” with a material dimension of providing credit or giving gifts to establish a business relation
<i>Yele boat</i>	Smaller artisanal canoes, either motorised or with a sail and paddle, fishing mainly with short set-nets and drift-nets.

Acknowledgements

I am forever grateful to the people of Tombo, who welcomed me into their lives, onto their boats, and into their bandas. Without your encouraging laughter, inquisitive attention, and insightful reflections, this research project would not have been possible. I also want to send a warm thank you to the Ministry of Fisheries and Marine Resources, who helped me with all opening formalities and who held their doors open for me throughout my fieldwork. As part of the ANTHUSIA research project, I have been lucky to have a good network of colleagues, and while the COVID-19 pandemic put a stop to many of our planned workshops and meetings, I am grateful for the support, feedback and curiosity you have been able to show also through online meetings. Especially, I want to thank Tanja D. Hendriks, Charline Kopf, and Kirsten M. Nielsen for your insightful comments and willingness to engage with both messy drafts and final polishing. Furthermore, my fellow fisherwoman and office mate, Amanda Møller Rasmussen, I would not have survived working late nights or the pandemic lockdowns without sharing fishy tales and coffee on walks through the empty streets of Aarhus with you. A thank you also to my three supervisors, Michael Eilenberg, Gerhard Anders, and José-María Muñoz, and to my secondment supervisor in Sierra Leone Salieu K. Sankoh. Moreover, I have been lucky to get insightful feedback from Adrienne Mannov and Ann Cassiman during my thesis seminar in Aarhus that encouraged me to trace the smoke and rot in fish processing, and from Leo Hopkinson and Teodor Zidaru-Bărbulescu during their LSE workshop on competition, which pushed my analysis towards trust. Finally, and most importantly, I want to thank my parents, and my sister, as well as my friends for their support, and my dear partner Jakob, for your love, for your never-ending encouragements and for your curiosity about *phonemen* and *fine fish*.



Figure 1: Map showing Sierra Leone, locating Tombo. Map base layer sourced from OpenStreetMap.org.

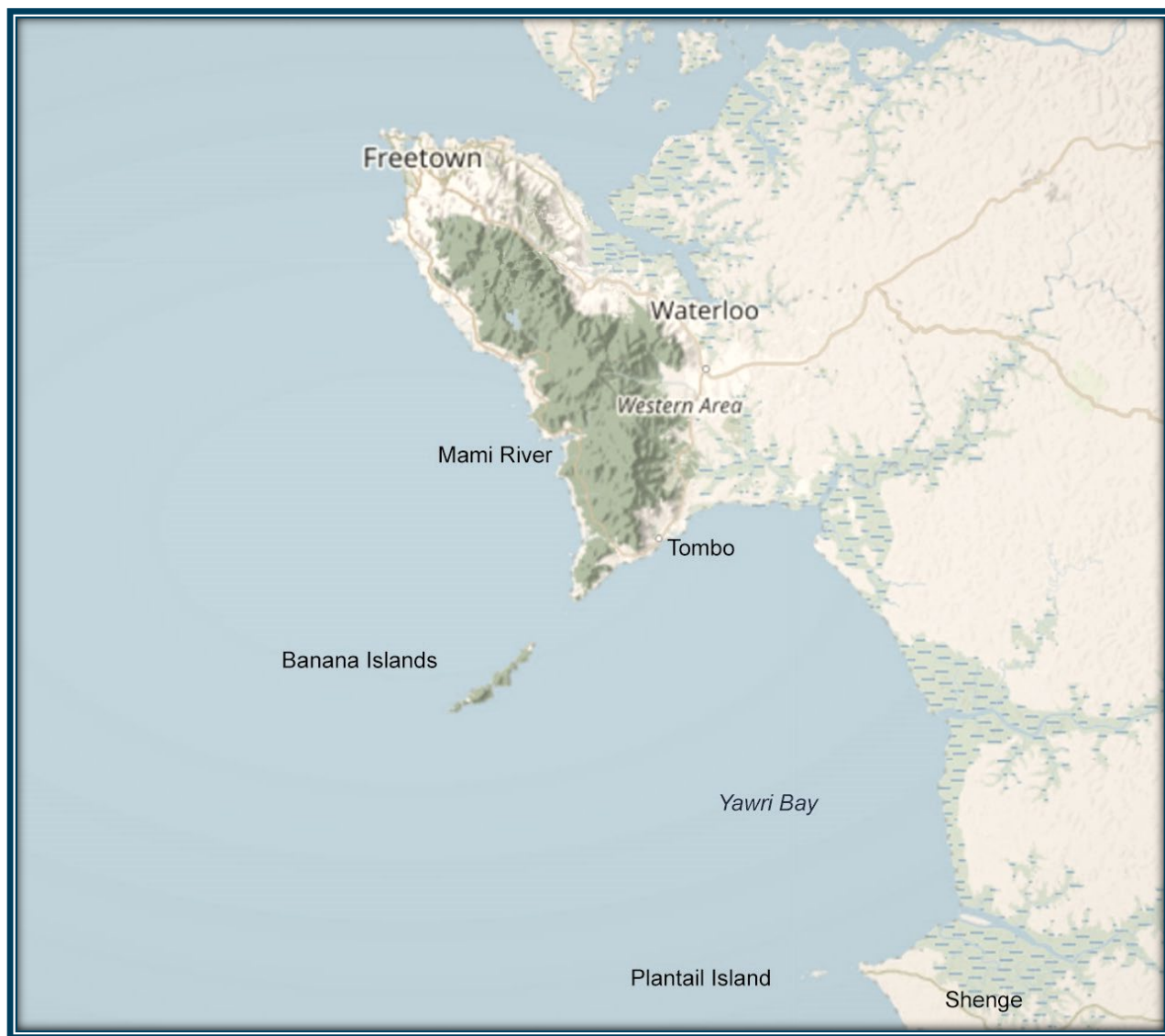


Figure 2: Map showing the Western Area and Yawri Bay. Map base layer from OpenStreetMap.org.



Figure 3: Picking fish from a Ghanaboat fishing net

Introduction



Figure 4: A flag of confidence on a boat heading out to sea

Introduction prelude

Our wooden boat glides gently upon the grey waters of Yawri Bay. The water lies flat, and the sun is high and hot. The low frequency humming from our outboard engine hides voices and sounds from the close to fifty other fishing boats that surround us. Like us, they are moving slowly through the water as they scout for fish. Sometimes the water carries a shout, a command, or an excited message across to us. We look, listen. Nothing. Just the grey waters, and the hot sun.

Our only contact point with the water is the wooden boards of *Surprise*' hull. The water and mud we had on board two hours ago is washed away by salt water, and scooped out with half of a yellow jerry can. *Surprise* is almost dry again, and is a material manifestation of the distance between us; the fishing crew, humans, terrestrial animals, and the seas with all their secrets below. Two hours ago, we entered the sea and the sea entered us, as we hauled our first fishing net of the day. Hauling a fishing net out of the water and into a boat is a strenuous activity that, for a brief moment, reveals what hides below the surface of the water. We do not know what our net has entrapped, but we labour in anticipation of the fish we may have caught. The sea reveals, and drenches us in muddy water as we haul the net into the boat. The wooden boards of the boat become wet and slippery, and for some time the sea controls our movement on board. Tread lightly but firmly, move with the boat as it moves with the water, and beware of the slippery boards. We haul, we labour, with songs, jokes and encouragement. But also with an embodied respect for entering a space that is not our own.

How does being with water shape our being with other beings, be they human or other-than-human? The fishermen make use of small visible signs on the water's surface to find fish. Dark shadows, small ripples moving differently from the ripples caused by the weather and currents, and weak sounds of fish breaking the water's surface, all tell us of life below our wooden keel. The embodied knowledge of life below the surface, and of connections to schools of fish, other fishing fleets and foreign interests beyond the hazy line on the horizon, shape categories of engagement both at sea and on land. At times, immediacy rules our every move, as choppy seas dictate our balance on board the boat, or a school of spotted fish makes us rush to capture it. At other times, we patiently wait for the fish, for the sun, for the tides. Spotting a trawler, or hauling out a sea urchin in the nets prompts stories and longer temporal trajectories, as well as concern over the global networks of interests that all converge in the 300 km² Yawri Bay.

To partake in a waterscape is to be reminded that, just like water refuses to be bounded and

contained, our human labour is both an effect of and affects others far beyond what is immediately visible. It nods to the different 'elsewheres' that shape our activities and which we shape with ours, as we haul out a net of fish, litter a plastic bag, or return to the shore, at times with boats filled to the brim with fish, at times with only sea urchins and puffer fish. Turning inwards, to our own bodies as bodies of water is, Astrida Neimanis argues, a reminder that "embodiment [is] both a politics of location, where one's specific situatedness is acknowledged, and [...] simultaneously partaking in a hydrocommons of wet relations" (2016:3-4). The flow of water through our body was once the water evaporated from the sea, falling as rain through air filled with smoke and particles from oil-powered container ships, wheels on tarmac, and wood-fired ovens in central Tombo. Thinking of embodiment as a politics of location is to ask where and when the body *is*, as a separate and bounded entity, and how it is simultaneously relational, and co-worldly made (Haraway 1988). Or, as Neimanis puts it, it is "to activate and amplify the more-than-human modes of living *that are also always part of existence and part of our 'own' corporeality*" (2016:63, original emphasis).

On *Surprise*, we search and labour, but today the waters of Yawri Bay contain only herring and sea urchins. At least that is all we find: a small school of herring and lots of sea urchins. Our catch is a product of the present, a prediction for the future and a reminder of the past. One of the senior fishermen grumbles that we wasted our day searching for *gwangwa*, a type of fish the Korean companies buy, when we should have gone further out to sea, where the school fish go on warm days like today. Our *phonemen*, the divers, just shrug, and continue to twist water out of their wet clothes. Having hauled the second net of the day, *Surprise* is again full of water and mud from the bottom of the bay. Two of the younger fishermen are standing in the bulkhead midship, with murky water almost up to their knees, as they ready the yellow jerry can to throw the water back overboard. The water is full of sea urchins, prompting Ishmael to comment how he never used to see sea urchins when he was a boy. "It was an event, everyone wanted to see it," he said. "People don't know what brought them here, but they arrived at the same time as the trawlers did," he continues. "Maybe the trawlers brought them."

Audu picks two spikes from the sea urchins out of his calloused hands, as Abibu sets *Surprise* on a course back to Tombo's Big Wharf. "Do you see why we call them *chuk-chuk*?" Audu laughs. His hands have hauled the five hundred yard fishing net on board *Surprise*, and other boats, for almost a decade. They are marked by the fish, sea urchins, sand, and seaweeds that have entangled with the fishing net. Sea urchins are animals who manage to live in exhausted environments. Environmentalists see them as evidence of the environmental destruction caused by millions of

meters of fishing nets dragged along the sandy bottom. To the fishermen, they are material reminders of times past and futures to come, and of the global economic interests in the waters, lurking just beyond the horizon.

The sun is low, the boat is dry, and the herring are now dead. Together with the other artisanal boats that fish around us in Yawri Bay, we return to Tombo with our small heap of fish. In the golden light of the setting sun, we long to dock our boat and go home after a long day of work. However, the closer we get to the shore, the more people and activities we see, and the more shouts, noises and music the water carries across to our now slowly moving boat. What sort of ambiance and mood will we meet at the wharf today? Will people fight over our herring, and give us a fair price? Or will we be lucky to even part with it? Manoeuvring our 17-metre long boat in between the others, Captain M shouts to his brother on the shore that he can send a *totman*, a porter. But just one, he indicates with his finger, as the awaiting customers scout the incoming boats and listen for valuable information about catch and price in the shouts to shore.



Figure 5: Can you find the valuable fish?

Introduction

This thesis focuses on maritime livelihoods in the fishing town of Tombo, in Sierra Leone's Western Province. By following the fishermen on board artisanal fishing boats like *Surprise*, the fish traders on the wharfs, and the female fish processors who smoke the caught fish, I trace how people navigate the material scarcities, social obligations, and global connections that all link back to fish from West African waters. Starting with the increasing amount of international attention on the ocean and call for more "ocean data" (Brett et al. 2020, Elipot et al. 2022, Trice et al. 2021), alongside reports of decreasing fish stocks in the Gulf of Guinea, I analyse the livelihood practices of men and women, showing how ecological uncertainties and global connections are shapers of, and shaped by, the socio-economic activities and relations in Tombo. By tracing the material relations between fishermen and fish, between fish processors and smoke, and between men and women through fish, I show how people's livelihood practices are more than individual tactics adapted to a resource depleted environment in post-civil-war social setting. Through navigating in a shifting social and ecological environment, people come to know each other through material objects and other-than-human beings like fresh and smoked fish, and through this knowledge they engender new forms of flexible trust and solidarity.

Tombo is a fishing town located about an hour and a half south of Sierra Leone's capital Freetown, along the southern shores of the Western Peninsula. There are no official statistics, but an NGO report¹ from 2017 estimates around 40,000 people living within the 1.5km² local headman boundaries, with the majority in the congested town centre close to the wharfs; an area of around 200m². Some 250 boats, depending on the season, call one of the five wharfs of Tombo their home, and based on a very rough calculation it is likely that around 11,000 people make a living from the sea, either as fishermen, fish processors, traders, boat builders or in other auxiliary services². Yet, like Maria, a primary school teacher in Tombo, once put it: "We are all affected [by the fishing activities]. If the fishermen do not bring back fish to sell or eat, the children will go hungry and not come to school."

¹ It formed the baseline survey for one of the development interventions in Tombo in 2019, funded by the Icelandic Ministry of Foreign Affairs. It is not public, but I was shown the report several times by NGO workers and consultants.

² If the national estimate of nine 'auxiliary' workers for every fisherman (see page 14) holds in Tombo, the calculation of an average of five fishermen per boat gives 250 boats x 5 fishermen x 9 = 11,250 people.

This thesis engages with Maria's reflection on the relationality of life in a fishing community, and people's interdependencies with each other, with fish, and with the marine environment, as I explore how people make a living from the sea in Tombo. Throughout the thesis, it is the interconnected work-worlds of men and women, young and old, and their socio-material navigational practices, a term I adapt from Henrik Vigh's social navigation (2006, 2009), in shifting material and social environments, that remain in focus. Focusing on the fishing boats, the *banda* fish smoking houses, and the wharfs where fish are traded, I trace the gendered and generational working relations that centre on capturing, trading, and materially transforming the fish. Through an analysis of people's navigational practices, relation-building and trust through fresh and smoked fish, I show how fishermen and fish processors search for new economic patrons, as evidenced by foreign fish export companies and development NGOs, which again affects the gendered fish trade in the artisanal sector. Building on the West African literature on relational identities and wealth-in-people (Shaw 2000, Guyer and Eno Belinga 1995, Bledsoe 1980), I incorporate shifting material environments and other-than-human beings, like fish, into the analysis of socio-economic relations, as active shapers of economic profits, of relational knowledge and of how people experience relations considered mainly socio-cultural. Furthermore, expanding anthropological research on the agency of marginalized groups, especially young men (Richards 1996, Peters 2011b), I show how people in Tombo, especially young fishermen, do not seek to simply attach to or detach from social obligations and support networks, but rather reshape and negotiate these through more fleeting work interactions, and by socially and materially entrusting working mates and business associates through small scale material and social practices. Working on fishing boats, and in fish smoking houses, I show how the embodied skills of the fishermen and fish processors are shaped through their relations with moving fish, the smoke from the ovens they use, and the profits they earn, as well as how these skills inform their continued "hustle" through and with their marginalisation (Thieme 2017).

The thesis zooms in on the work that people do, at land and at sea, to sustain themselves and their families. However, work and livelihoods involve more than the tasks required – they are also cultural and social practices. Livelihoods shape, and are shaped, by the material world people find themselves in, and are made and remade in more-than-human relations across time and space. The work and material practices of fishermen and fisherwomen shape how the ecological environment is understood by the differing parties, which again shapes how people conceptualise both the fundamentals of, and threats to, their lives and livelihoods. At times, the constitutive forces are Gods

and devils, at times development programmes, British, Chinese, or white people. At times it is the local and national political institutions, and at times it is the ocean, and the fish itself.

In a fishing community, living alongside an ocean containing less fish, they say water is still life³, and money is out there at sea⁴. However, as new global economic interests, shifting developmental concerns, and re-appropriated local networks of support and strain shift, people find themselves continually navigating new waters. The immediate threat may be an illegal trawler in the local fishing waters, but the sense of insecurity comes just as much from not knowing who is behind the trawler. Some, like the divers known as *phonemen*, have been able to capitalise on new global interests and carve out a new profession for themselves, whereas others experience the continued cycle of promises and raised hopes as instead making local support networks increasingly fragile. As Mami Konima, a fish processor, once told me about a micro-credit scheme: “When you take a loan from the outside, you may end up in a worse condition than before. They say they bring goodness, but end up showing their crookedness.”

The ethnography is developed around three spaces, all of which grew out of my year-long fieldwork in Tombo. The first space is the fishing boats and the ocean as a world of economic opportunities, of hard bodily work and of connectivity to other times and other places. I focus on the embodied knowledges as shaped through lives lived by and on the sea to argue how the increasingly precarious situation of the local fishermen does not structurally align with either neoliberal or neo-Marxist interpretations. Rather, the boats and other forms of experiences at sea shape the foundations for local relations of trust and solidarity, competition and exploitation, which are historically situated while always containing temporal possibilities and creative potential.

The second space moves us back from the sea and onto land, and the meeting space of the fishing wharfs of Tombo. Fish and money changes hands, profit is made, debts are initiated, re-negotiated, and repaid. But the wharfs, although highly local places, exemplify the global connections that are present through the sale agents of the Korean fish processing companies, the long-distance fish traders, and the visiting consultants who have come to “bring development” to Sierra Leone fisheries. Fishermen and women in Tombo make a living with and through socio-economic and ecological uncertainties (Cooper and Pratten 2015, Tsing 2015), and the changes they build their lives around are primarily felt in localised worlds: in bodies, houses, boats and hometowns (Mueggler 2001), as these are the spaces where knowledges about extra-local phenomena like

³ Krio: *Wata na layf*, often uttered ironically during the rainy season.

⁴ Krio: *Moni dae na sea*, overheard in a bar during a discussion about profits in the fishing sector.

wider ecological change, global political economy relations, and governing institutions like the state, are produced to make them understood. By focusing the exchange of fresh and smoked fish, and the material qualities of these fish, I analyse how fishermen and fisherwomen come to know each other, and renegotiate forms of trust through the materials.

The third space takes us into the smoking houses known as *bandas*, where fish processors, most of them female, smoke the catch that the fishermen bring home. Whereas the ocean is experienced as a place for chance, luck and sudden turns of events, the smoke houses provide a sense of continuity and stability, in terms of family history, economic stability and material relations through food. However, the smoking houses, and especially smoke oven technologies, have been the single most targeted activity of development projects in the fishing sector in Sierra Leone since the 1970s. In the meeting between the development organisations and the fish processors, I focus especially on the skills and embodied knowledges of the processors, alongside the market demands and networks through which the women trade their fish. I show how the female processors come to trust their ovens and their smoked fish product, and how this material trust transforms the socio-economic relations between themselves and their customers as they re-evaluate the trustworthiness of their business relations.

In the introduction chapter that follows, I introduce the key sites, problematics and conceptual framework of the thesis. I open with a section that situates Tombo and the Tomborian fishing activities in the Sierra Leonean and West African landscape. I then follow up with a wider contextual section, focusing on the current international and national focus on marine resource extraction and fisheries management, before laying out the research aims and research contributions. Following this is the conceptual framework, where I situate my research alongside the literature on Sierra Leonean youth, like the majority of the fishermen are. I elaborate on my use of socio-material navigation (cf. Vigh 2006, 2009) and on hustling in a global fishing economy, as I borrow from research on urban livelihoods in East Africa (cf. Thieme 2017, Thieme, Ference and van Stapele 2021). Finally, I conceptualise my relational understandings of socio-economic obligations like debts, trading partner relations known as *kostaments* and the material relations involved in relations of trust, entangling these with a wider, more-than-human environment that the fishermen and fisherwomen work with and through.

Fish and fishermen between the sea and the road

Entering Tombo from the sea, the sounds of human activities reach far out into the shallow Yawri Bay. Before the people on shore become visible, a pulsating crescendo can be heard all the way out to the approaching fishing boats. Closing in on the concrete-slab wharfs, upbeat tunes from several loudspeakers carry across the water's surface, alongside individual shouts and deep voices that can be discerned from the crowd. Whether midday or midnight, morning or afternoon, the main wharfs of Tombo seethe with activity. Fishermen from all along the Yawri Bay communities and the Western Peninsula come to dock their boats and access the Tombo markets. Fish processors and

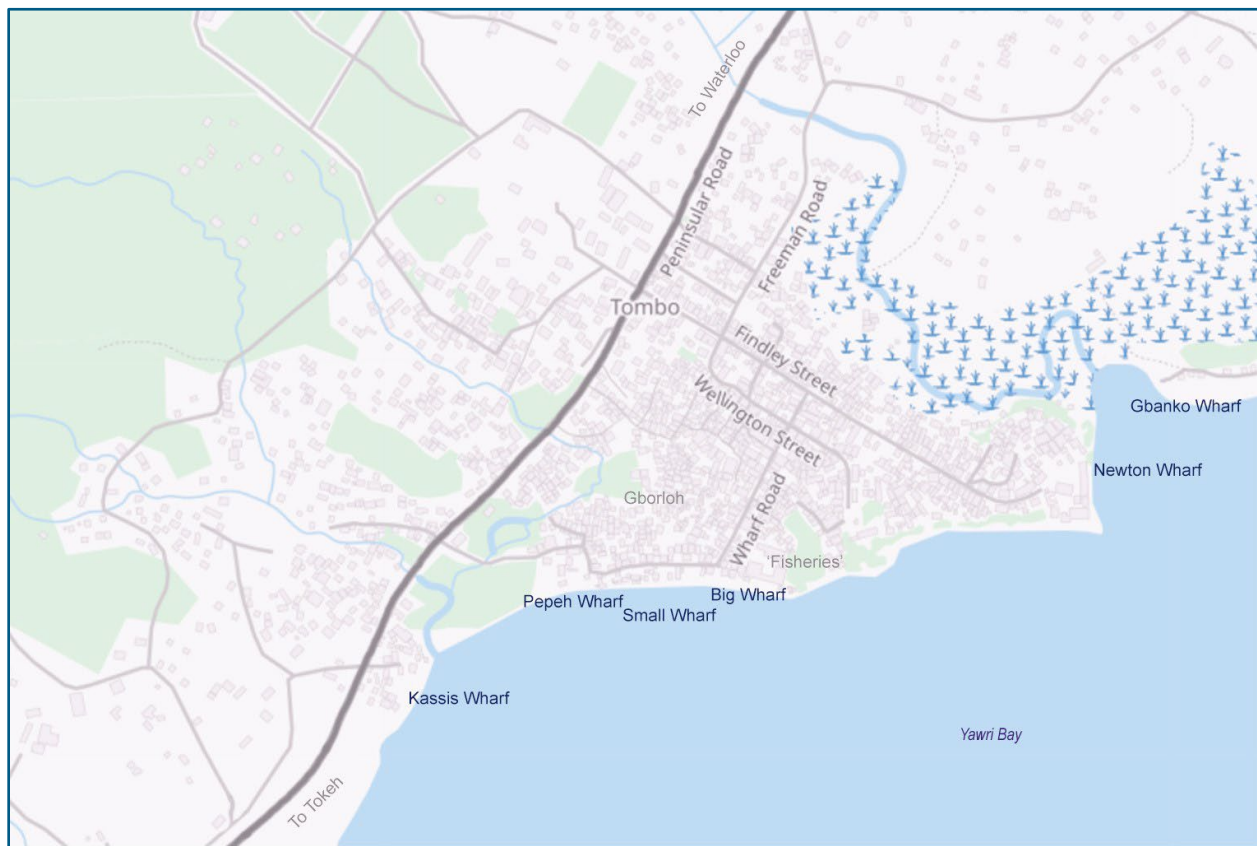


Figure 6: Map of Tombo. Map base layer sourced from [OpenStreetMap.org](https://www.openstreetmap.org).

traders, locally based and from the regional markets and the capital of Freetown, buy fish in Tombo, as it is considered cheaper than at the wharfs in or closer to Freetown, yet is still accessible by road.

“In Tombo, fish always *get price*,” Ishmael, a fisherman in his forties told me on one of my first fishing trips with him and the crew on board *Surprise*, the 17 metre artisanal fishing canoe I got to go fishing with throughout most of 2019. He was referring to Tombo’s popularity with fishing boats

from all along Yawri Bay, even neighbouring countries. Tombo is known as a place where fish always change hands for money. In smaller communities, the fish price dynamics are in part dependent on the availability of smoke ovens to process the fish, leading to situations (although increasingly rare) when there is an oversupply of fish. On such days, fishermen are unable to sell their fish. “Just yesterday, there was too much herring, we could not process it all,” the harbour master in Goderich, a fishing community in the greater Freetown area told me during a visit there in December 2019. “We just left it rotting on the beach,” he sighed. Throughout my 11 months in Sierra Leone, I never saw or heard of such an occurrence in Tombo. In Tombo, the combination of a large number of smoke ovens, good roads to Freetown, and several surrounding foreign owned fish processing companies, meant that fish was always sold, never given away or left to rot.

“Kabba built this road after the war,” Mr. A told me one afternoon, while we were sitting on the veranda outside the fishermen’s union office in Tombo. Mr. A was a founding member of the local fishermen’s union, and we often had long conversations about the history of fishing in the region, and of fisheries management, from the union veranda. Sitting on the veranda, the sounds of passing lorries, honking *okada* motorcycle-taxis, and streetside hawkers carrying goods was ever-present, as the road runs close by the union office. The road is wide and in good condition. It runs from the Western Peninsula beach towns to the west of Tombo, to the district capital town of Waterloo, where it connects to the main four-lane highway between Freetown and *upline* – the inland regions of Sierra Leone. “Before the war, we had only a dirt road, it took hours to travel. After former president Kabba constructed the new road, so many people came to trade and settle in Tombo,” Mr. A explained. “The new road really changed this community.”

Mr. A was not alone in pointing out the importance of the road for Tombo’s popularity and growing fishing economy. The fishermen and fisherwomen in Tombo, as well as the policymakers, often emphasised Tombo’s strategic position. The paved road from Tombo made transport of both fresh and smoked fish between these sites much easier, and as a result, the fish markets in Tombo are always bustling with activities both on ordinary days, and on the bi-weekly market days, known as *louma*. Its geographic location, makes the dynamics of the fishing economy in Tombo different from other big coastal communities further south, like the town of Tissana on Shenge, studied by Jennifer Diggins in 2010 (see Diggins 2015, 2018). Diggins describes the roads to Tissana as being dreaded by traders, and close to impassable in the rainy season, which several of my informants in Tombo also confirmed during my fieldwork in Tombo nine years later. Whereas Diggins details the efforts of fish traders that weekly visit Tissana and Shenge by road (2018), much of the fish caught by fishermen based on Shenge, the Plantain Islands, and even Bonthe further south, makes its way by

transport boats to the Tombo markets. For *louma*, heavily loaded boats from the south enter Tombo's Pepeh Wharf with large bails of smoked fish, and passengers ready to buy and sell what their respective hometowns lack or have on offer. As smoked fish, palm oil, pepper and vegetables travel north by sea, the Tombo markets in return offer imported rice, Maggi cubes and packaged spices, second-hand clothes, plastic houseware and imported electronics from China.

The fishing economies of West Africa are locally embedded and place-specific, as the above introduction details. Simultaneously, the local fishermen and fisherwomen, the boats and the fish caught are nodes in global networks. Consumer trends, regulatory regimes, and knowledge practices related to ecologies and the natural environment in places thousands of miles away may impact, and be impacted by, daily activities in Tombo. Furthermore, the *fish themselves* live global lives. Whether it is schools of migrating herring, moving with the warm Guinea Current from the depths of the Atlantic Ocean towards the nutritious upwelling zone of the West African continental shelf, or larger predatory fish like sharks and skates that follow their prey, fish know no borders. Similarly, fishing boats, from small wooden canoes to high-tech trawlers, move between countries and continents, the shore and the deep sea, with their respective crews, catch, and small contained ecosystems in their ballast waters and boat keels. "When I went to Mali, even the Mali desert(!), it was our own fish I saw in their markets," Auntie Aisatu, a fish processor and community advocate, claimed during a discussion about the quality of Sierra Leonean fish. Although neighbouring Guinea and Liberia were the most common foreign destinations for Sierra Leonean fish, many fish processors in Tombo told me how trade networks expanded across the whole West African region. Furthermore, while Sierra Leone has been issued a so-called yellow card on its fish by the EU, meaning it is essentially blocked from supplying the EU internal market (Popescu 2021), fish finds its way to Europe along less regulated trade routes through Guinea, Mauretania, and Spain (the Canary Islands) (EJF 2009; 2012, Greenpeace 2020), as well as to Asian and American markets. Much of the fresh fish trade is controlled by Korean and Chinese networks, with fish moving from trawlers, via refrigerated reefers, to larger carriers and bulk ships going east (Belhabib et al. 2012, Okafor-Yarwood 2019, Ndiaye 2011). Smoked fish, on the other hand, is often processed by individuals, who ship internationally with DHL or other freight companies to customers, often in the US, who in turn sell African foodstuffs in grocery stores or online⁵.

⁵ See for example Afrizar.com (<https://www.afrizar.com/shop/we-yone-african-market-produce>). Fish products like smoked kini and smoked kuta (barracuda) could indicate they originate in Sierra Leone, although I have not been able to confirm this. In 2022, during a follow-up conversation with a World Bank consultant, I was told the smoke ovens built by Mátis in 2019 had been used to process high-value fish species for the US market.

In Sierra Leone, an estimated 50,000 people work as fishermen, whereas another 450,000 or so are employed in auxiliary activities (MFMR 2021) that all trace back to the fish and the net, above and below the surface. The artisanal fishing boats that trawl the coast of Sierra Leone come in a myriad of sizes, ranging from a one-man dugout canoe using hooks or small drift nets to catch their daily fish, to the 20-or-so metre long “Ghana boats” – wooden planked canoe-style boats with 500 yard long ring nets that employ up to 25 men and can bring back fish for several million Leones⁶. The fish is landed on concrete wharfs or sandy beaches, where a wide network of customers, relatives, and professional fish traders are ready to receive and bargain for a good price.

The seaside and wharfs are the pulsating hearts of Tombo. In a day, it feels as if half the adult population of Tombo will have been at, passed through, or in some way spent time at one of the wharfs. If you’re looking for someone in Tombo and ask around, *i dae na waf* is a more common answer than ‘I don’t know’. And, most of the time, the person telling you ‘s/he is at the wharf’ is correct. Early morning, the wharfs fill with fishermen who ready the boats for another day at sea, and who set out according to times set by the tides, the weather and the availability of fuel for the outboard engines. Following the boats’ departure, groups of crews take to the wharf to repair fishing nets and other gear. When the shops that line the concrete docks at Big and Small wharf open, more and more traders, workers and fishmongers start to crowd the wharf. Towards the afternoon and early evening, the boats fishing for pelagic fish begin to arrive with their catch of the day, and throughout the evening and night, the wharfs are frenetic markets for the sale of freshly caught fish. A boat arriving with a large catch, or with certain valuable species, creates a frenzy of both hopeful customers and curious onlookers waiting for something to bring back home: a couple of free fish, news of today’s catch, or a good story to tell after evening prayers in the neighbourhood mosque. Apart from witnessing the catch of the day, the wharf atmosphere speaks of the fishing fleets’ recent luck at sea. Even after all the fish is sold off, the loudspeakers from surrounding shops and food stalls blast their tunes into the late hours as the wharfs continue as social gathering places.

For many visitors, including myself in the first few months of my fieldwork, the wharfs of Tombo appear to be complete chaos. There are people, fish, goods, and boats everywhere, with their accompanying shouts and laughter, boats knocking together in the waves, fish spattering as they are dumped on the ground, and music playing from loudspeakers, all encompassed by a raunchy smell where smoke, seaweed, human waste and fresh fish compete for domination. However, it is impossible to avoid the wharfs, at least for more than a few days, and even while doing other

⁶ 1 million Leone equalled roughly 100 USD in 2019, roughly 87 USD in 2022.

activities around Tombo, the wharfs are continually present. What happens at the wharfs structures many other activities in Tombo, and they are also temporal structures that turn with the environmental cycles of the water, tides, and weather. For example, when it is “late water”, meaning low tide around 7 am or later, boats leave later, waiting for the water to rise and the fish to draw back in. It thus follows that the wharf’s rhythms impact other community activities. “We can’t present the whole act,” a Ministry representative once said with respect during a meeting on the new Fisheries Act, “because it will take the whole day and boats are on their way [to Tombo].” The people present nodded their approval. Community meetings, which occurred at least once a week, were often structured around the fishing rhythms and wharf activities. Community leaders and ministry personnel, particularly those with good knowledge of local fishing activities, knew that if they did not respect the wharf’s temporality, people simply would not show up.

While the above description highlights the agency and decision-making power of the fishermen and fisherwomen, their actual roles in the global fishing economy, and the seeming respect that the fishing community demands from the public authorities, all is not as well in Tombo as the above makes it seem. Fish don’t always “get price”, as Ishmael said was the case in Tombo. In fact, a common complaint among the fishermen was the difficulty they had to obtain a good price for their fish; similarly, the fisherwomen engaged in fish processing and trading often came back from the market shrugging at their lack of profit, stating *fish no get price*. “I don’t know what happened, these days...*tsk*,” Sule, a young fisherman told me one day when I came by the office of Tombo’s Harbour Master. Sule was sitting outside the office with a friend, and as we got talking about their fishing activities, both said they dreamed of one day becoming boat owners themselves, and not working on their uncle’s boat. But the money was “too small,” Sule shrugged. Many fishermen, especially those who were young, told me of similar aspirations: they wanted to build their own boats, implying there was still money to be earned by going out to sea. In fact, *moni dae na sea*⁷, a common Krio phrase (and an apt name for several fishing boats in Tombo), was often uttered in conversations about fishing as one of the still-profitable sectors in a troubled Sierra Leonean economy. In the next section, I reflect on what we may learn when turning the two Krio statements into questions. Is it so, that fish always *get price* in Tombo? And can the current fish stock assessments and regulatory regimes tell us about whether money really is there out at sea, and whether money and fish will continue to be present?

⁷ Literally: there is money at sea.





Figure 7: Sea never dry, Lumley Beach in Freetown

Making a living from the sea: Contextualising marine resource extraction from the Gulf of Guinea

“We can’t eat peace,” political scientist Ibrahim Bangura’s interlocutors told him over a decade after the end of the civil war in Sierra Leone (Bangura 2016). Up until this day, Sierra Leone remains one of the poorest countries in the world according to UNDP Human Development Index (UNDP 2020), and many of its citizens struggle to put enough food on the table, send their children to school, and ensure adequate healthcare for their families. In this section, I outline the recent trends in the Sierra Leone and wider West African fishing economies, focusing on the current concerns with overfishing and resource depletion, as well as locating the current trends in fisheries management in Sierra Leone with global trends of privatising and commercialising natural resources and ocean space.

Since the end of the country’s ten year long civil war in 2001, GDP has grown fourfold and GDP per capita has roughly doubled (World Bank 2022), but inflation and the trade balance deficit continue to threaten economic progress (IMF 2020, WITS 2018). Addressing unemployment and food security remains high on the government and international donors’ agendas, as Sierra Leone aspires to become a middle-income country by 2035 (GoSL 2013, 2019). In the latest National Human Development Report (UNDP 2019), unemployment and underemployment are cited as serious obstacles to Sierra Leone’s road to “resilience”, a current development-buzzword employed in frameworks linking development with peace and stability⁸. Considering economic development, the fishing sector has moved in and out of the authorities’ focus. In late 2019, optimism reigned among development donors when President Julius Maada Bio addressed fisheries and marine resources in his Parliament Opening Speech (Bio 2019), signalling the centrality of the sector for the national development agenda. Indeed, the fishing sector is key to the country’s current economic performance and future projections, currently employing about 10 percent of the population and supplying up to 80 percent of the animal protein consumed in country (GoSL 2019, Seto et al. 2017, ADB 2013). Government revenue is generated through licencing industrial trawlers, artisanal canoes, and by levying fines, and the sector as a whole contributes to around 12 percent of the country’s GDP (GoSL 2019, ADB 2013). But what does all this look like on the ground – and at sea?

⁸ Examples are human security (UNDP 1994, Chandler 2012, Paris 2001), the security-development nexus or the triple humanitarian-development-peace nexus (DuBois 2020, Buur, Jensen, and Stepputat 2007, OECD 2020), and liberal peace (Duffield 2001, Paris 2010).

Throughout my fieldwork, one Krio phrase kept cropping up in so many conversations that after a while, I barely noticed it anymore. *Di gron dri*, literally “the ground is dry”, refers to the economic hardships many Sierra Leoneans face in their everyday lives. Possibly coming from an agricultural context, it connotes how business is difficult when people have little money or resources to spend and circulate. *Di gron dri* has become such a common lamentation that it has entered popular music, as in Fadah Cross’ song “The gron dry oo”⁹. It is cited in policy outlooks like Afrobarometer (M’Cormack-Hale and Lavali 2020), and has even entered World Bank partnership frameworks where the “increasingly common saying” evidences “the impacts of the macro-fiscal pressures” (World Bank 2020:3). In 2019, *di gron dri* was at times used to critique the government, while at others it referred to seasonal difficulties (ironically referring to the rainy season), and others still to connote the post-war period as a whole. In a maritime setting, the etymologically similar “*sea never dri*” was often used to name fishing boats. Apart from the very literal meaning, most Sierra Leoneans I met, fisherman or not, used this to refer to the ocean as seething with life. While a farmer’s crops can dry out, and a businessman’s customers disappear, a fisherman will always catch some fish to feed his family. Or so, at least, the *Sea Never Dri* and other boats named with hope would imply.

The daily realities at sea, alongside the few catch statistics available, tell a different story. The West African waters, from small rivers and estuaries to the Gulf of Guinea and the deep Atlantic, have for decades been overfished, and the marine ecosystems are adversely affected by human activities, climate change, and marine pollution (FCWC 2018, MFMR 2021, Lucht 2012). Although fishing was still a popular profession and new migrants still arrived on a regular basis, the days when fishermen could “*flop*” the boat – that is, “fill-up” the boat to the brim¹⁰ – were only remembered by some of the most senior fishermen in Tombo. “Fishing has changed,” Pa Ibrahim, an elderly fisherman working on board the *Family First*, a ten-metre Sarakassa-type fishing canoe, told me one afternoon as we were motoring back to Tombo.

Before, you would not waste time at sea. See today, all day [at sea], two times draw chain (set and heave the net), and we only got this small catch.

He shrugged his head as he pointed towards the small heap of fish in the large compartment midship. Sorie, the youngest crewmember on board, chimed in *fish no dae* – there is no fish. Throughout 2019, fishermen regularly shared similar stories and remarks. I myself participated in

⁹ Various spellings circulate, see Bangura (2019) to access music video.

¹⁰ Gunwale in English naval terms.

as many unprofitable fishing trips as trips with a mentionable profit. The Tomborian experience from 2019 is not new, or unique. Diggins writes similarly from her fieldwork, ten years prior to mine, how the “commercial heyday [of Tissana fisheries] was already a memory” (2018:17). During the commercial boom years in the 1970s and 1980s, Yawri Bay was seething with marine life, and Diggins interlocutor’s reminisced how the country was “sweet-sweet” (2018:50).¹¹

Although most the fishermen I met agreed that the sea was increasingly *dri*, there was uncertainty among fisheries scientists and governing agencies as to what types of fish stocks¹² were overfished, and to what degree. With funding from the World Bank WARFP (West Africa Regional Fisheries Program), EU ISFM (Institutional Support to the Fisheries Management), and other development donors, the Sierra Leone government has repeatedly attempted to conduct a fish biomass survey and make catch statistics publicly available, but they remain in the pipeline. In 2019, a one-year-long fish stock assessment conducted by a Chinese vessel and crew was launched under the government’s MoU with the PRC (MFMR 2019), an MoU which also involves a heavily criticised fish landing site (see McVeigh and Kargbo 2021). While Western development consultants I met expressed their worries that the survey could be manipulated to show healthy fish stocks, and thus allow for an increased number of (Chinese) foreign trawlers, the Ministry of Fisheries and Marine Resources (MFMR) were keen on having a well-equipped vessel surveying coastal waters for the first time in decades. “Finally, we will have reliable numbers for our artisanal waters,” a senior ministry staff enthusiastically told me during the official launch. He compared the Chinese-led survey, which specifically targeted coastal areas where artisanal boats fish, with the EAF-Nansen programme, funded by FAO and Norway, which primarily targets deeper trawling grounds further off the coast (see Gjertsen 2020 Chart I-III Cruise no 2019409).

While more comprehensive fish biomass surveys are still awaited, the current data available suggests the majority of the major fish stocks are fully exploited or over-exploited. The Ministry of Fisheries and Marine Resources acknowledge this themselves in the recently published Fisheries Management Plan for 2020-2025 (MFMR 2021). Using data from Baio (2010), EU ISFM (Sei 2011, EU in SL 2009), and the MFMR/IMBO¹³ Scientific Observer Programme collecting catch data from the industrial trawlers, the Fisheries Management Plan states that commercially exploited demersal fisheries show symptoms of over-exploitation, shrimp fishing being harvested past “a sustainable

¹¹ I’ll return to Diggins (2018) work later in the introduction, and engage especially with her treatment of precarity in the fishing economy in Chapter 5 on gendered trade relations.

¹² Fish populations, often referring to one fish species, or a group of similar fish species, who share an area.

¹³ Institute of Marine Biology and Oceanography at Fourah Bay College University of Sierra Leone.

exploitation level” (2021:8), and small pelagic fisheries in need of “a management framework that will prevent further overfishing and possible collapse of the fishery” (2021:11).

Uncertainties surrounding the total fish biomass reduce the governing agencies ability to calculate a sustainable level of fishing efforts (the so-called maximum sustainable yield) (Sei, Baio, and Sankoh 2014, Seto et al. 2015). Furthermore, as calculated by Seto et al. (2017) for Sierra Leone, and Belhabib and Pauly (2015) for the West African region¹⁴, there is a discrepancy between the registered landed tonnage and the reconstructed tonnage, the latter of which includes illegal, unreported, and unregulated (IUU) catches¹⁵. Based on Seto et al.’s calculations (2015), actual fish landings in Sierra Leone could be 2.25 times higher than the officially reported number. IUU-fishing is a serious concern for both the government and local fishing communities, and environmental NGOs like EJF, MRAG, and Oceana increasingly emphasise the global connections of what are often-deemed local problems. Whereas the MFMR mainly focuses on the loss of government revenue (see MFMR 2020), the environmental NGOs, although using less nuanced terms like theft and pirate fishing (Oceana 2013, EJF 2009), emphasise how IUU catches reduce the ability to monitor fish biomass and whether stocks are sustainably managed or over-exploited. Their advocacy-oriented research highlights how local fishing communities all around the world tend to be on the losing side, as artisanal boats must travel further for a lesser catch of poorer quality. Furthermore, they show how fish-stocks are often shared across borders, and thus how fishing activities and ecosystem imbalance in one area will have regional, and at times global, consequences (MRAG 2005, Schorr 2004, EJF 2005, New Economics Foundation 2018).

For the government in Sierra Leone, and in other development countries (Overå 2001; 2011, Jentoft 2019, Béné 2003, Thorpe et al. 2009), as well as for international partners and institutions like the World Bank, IMO, and FAO, the current problems with over-exploited stocks and IUU-fishing are to be solved with increased monitoring, control and surveillance (MCS) efforts, and a tighter access-rights regime. For example, while acknowledging that fisheries management is complex and needs

¹⁴ See Belhabib and Pauly’s (2015) edited volume for individual chapters on several West African case studies, including Guinea-Bissau and Côte D’Ivoire that shares fish stocks with Sierra Leone, and who regularly have fishing boats migrating to and from Sierra Leone.

¹⁵ Illegal, unreported and unregulated fishing (IUU) includes a variety of issues. Illegal fishing covers unlicensed fishing vessels and vessels fishing illegally in designated or protected waters, whereas unregulated fishing refers to vessels who do not follow regulations for those waters, or fly the flag of a nation who are not party to the regional regulations, as well as fishing in unregulated waters (Okafor-Yarwood 2019). Unreported fishing is also taken as part of the same phenomenon, because it is not registered according to the management plans or quota regimes in place.

local adaptation, the World Bank states in their report *the Sunken Billions Revisited*¹⁶ (2017b) that “[o]ne of the greatest and most vexing problems that plagues fisheries management is the open access regime, under which a common pool of fish resources can be accessed and harvested by anyone” (2017b:17). Narratives of marine resources as suffering from a “tragedy of the commons” (Hardin 1968) and the oceans as problematically ungovernable loom large, as illustrated by a quote from Maria Damanaki, the former European Union Fisheries Commissioner: “Flying over the Atlantic, I looked down and wondered, how many boats are fishing that shouldn’t be fishing? Do we really know?” (Damanaki, quoted in Oceana 2013). However, as Béné (2003) points out in his review of why “fishery” has come to “rhyme with poverty”, this seemingly conventional logic conflates open access regimes with common property regimes, assuming that there is little-to-no control over fishing efforts unless the resource can be privately owned.

An increasing number of countries around the world are regulating fishing access rights through quota management regimes, like the marketised ITQ (Individual Transferable Quotas) (Roszko 2021, McCay 2004, Baelde 2007, Pinkerton 2017) or more community-oriented quota regimes (Chuenpagdee and Jentoft 2018, Isaacs 2011). There are still uncertainties around the ecological impact of quotas (Pálsson and Helgason 1995, Rose and Rowe 2015, Frank et al. 2011). Social science research has questioned the ability of ITQs to ensure equitable access to fishing resources (Isaacs 2011), shown how quotas can stir up divisions and conflicts within and between communities and indigenous groups (McCormack 2012), and induce new costs to local communities with regards to both day-to-day resource management and bureaucratic documentation (Donda 2017). As McCormack (2017) convincingly argues concerning New Zealand and the country’s Quota Management System and indigenous Māori fishing rights, the use of fishing quotas to ensure sustainable resource extraction contributes to sustaining a neoliberal logic of private ownership, where sustainable extraction upholds the wealth of the quota holder, disregarding any social dimension like inequality and cultural loss.

In the Sierra Leonean context, the MFMR with support (and pressure) from development donors has sought to regulate access to the country’s fishing resources, with varying success. With regards to the industrial trawlers, there has been pressure to reduce the number of licensed vessels, although as a World Bank consultant told me with frustration, the trawling hours and trawling capacity of the licensed vessels kept going up. In the artisanal sector, the MFMR and World Bank WARFP programme has established Community Management Associations (CMA) around the

¹⁶ Revisited referring to the first report from 2009.

country, including in Tombo, which were thought to be a locally sensitive adaptation that merged communal rights to common property with national management requirements. The CMAs are intended to manage their respective 6nm IEZ (Inshore Exclusive Zone) reserved for the local artisanal boats, but they often lack funding and institutional support for the MCS-efforts. For example, during a donor meeting in April 2019, the arrest of two Guinean boats in the Tombo CMA's area was presented as a CMA success. Following the meeting, Mr. A frustratingly told me "I put the fuel for the boat! It was the Union¹⁷ who organised, paid for, everything!" While he had refrained from causing a scene at the meeting, and making the Ministry lose face in front of the donors, he was clearly not satisfied with presenting the CMAs as empowered managers.

While the CMAs were thought to uphold the communal property regime, 2019 saw a new development towards individualising access rights. The MFMR took national control over issuing fishing licenses to the local artisanal boats, to streamline the license price which had previously been different from District to District, and with the broader aim of being able to control the number of licenses in the future. The rolling-out of the more expensive licenses caused heated debates in Tombo and elsewhere, and although many boat owners complied, those who did not were labelled thieves and "against development".

If you don't have a license, the police will hold your boat. [...] Any fish you caught, forget about it. Because without a license, you have stolen the fish.

This threat was uttered by a government fisheries officer during a community meeting in September 2019. Although the MFMR was yet to fully licence and control the artisanal fleet by the time my fieldwork ended in December 2019, the Tomborian and Sierra Leonean case is illustrative of the larger trend of increasing privatisation of ocean spaces and marine resources.

While Hardin's (1968) thesis still reflects Western economists' and international donors' viewpoint of marine resource governance, the traditional stewardship of common pool resources like fish, fishing grounds, and ocean spaces has existed, and still exists, across the world (Durrenberger and Pálsson 1987, McCormack 2012, McCormack and Barklay 2013, Sultana and Thompson 2007, Acheson 1981). During his PhD research, Salieu Sankoh (personal communication) recorded traditional fishing regulations managed by the local Poro secret society, mainly in Southern Sierra Leone and inland following the rivers. In Tombo, I was often told of how in southern Sierra Leone, especially around Bonthe and Sherbro Island, the traditional rulers are "so strong," as Ishmael put

¹⁷ Fishermen's Union.

it. “They use flags to say if you can go fishing or not” he explained, contrasting the day-to-day and seasonal regulations of fishing activities around Sherbro Island with Tombo and the Western Area. “This was the Colony, they [the traditional rulers] have no authority here,” Captain M. of the *Surprise* chimed into our conversation. The legacy of the colonial governance structures, where Sierra Leone was divided into the Crown Colony ruled directly by the British colonial apparatus, and the Protectorate governed more indirectly through the British use of “traditional” authorities (Fyfe 1962, Cornwall 2006, Baio 2009), often cropped up in conversations about resource management in Tombo. The Western Area, one of Sierra Leone’s five principal geographical regions¹⁸, which comprises Tombo, has – unlike the other provinces and their respective districts – no associated chiefdoms and chief-authorities, given the area’s history as a Crown Colony. Instead, each of the 16 ethnic groups of the country are represented by so-called Tribal Heads, who mainly involve themselves in family and land disputes. In Tombo, as the crewmembers on *Surprise* pointed out to me, these traditional authorities have little direct influence on the fishing activities and day-to-day marine resource management.

Combined, it may seem like the fishing activities in Tombo are scarcely regulated, as both the traditional authorities and the CMA (Community Management Association) have little resources and community standing to control activities. However, while there is no central authority (although the MFMR does seek to impose themselves as such through their fisheries officers) that command the respect of all boat owners and smoke oven processors, there are various authority figures that in combination manage day-to-day activities at the wharfs, market and at sea. The fishermen’s union is a strong voice; similarly, the Harbour Master and Master Fisherman both have political leverage to impose fines and control various activities. Furthermore, the harbour police deal with fights, intercept foreign boats, and investigate theft, and the secret societies ensure a wider societal control over many of Tombo’s inhabitants (Ménard 2017b, Murphy 2010). While I am less concerned with assessing to what extent Tombo fisheries “are governed”, the regulatory framework and governing institutions shape the forms of socio-economic relations that the fishermen and fisherwomen develop and navigate through in the fishing economy, and vice versa: the relations and knowledge practices of those in the sector, shape the everyday regulation of fishing activities and extraction from the sea. Beyond quotas to fish, access to the sea is regulated by social relations, contact with the boat owners, and access to capital and loans. Making a profit from the sale of fish depends on the skills the fishermen have in locating the fish beneath the water’s

¹⁸ The four others are called Provinces, respectively Eastern, Northern, Western, and Southern Province.

surface (see chapter 4), and for the fish processors, their skills of producing “fine” smoked fish (see chapter 5 and 6). The ecological knowledge the fishermen and fisherwomen have depends not on biomass surveys conducted by scientists, but on their embodied relations with an other-than-human environment, relations they are acutely aware they depend on to make a living from the sea. Throughout the thesis, I question the reduction of nature to objects, to be extracted and controlled by humans, as a means towards a goal. By exploring the everyday relationality between fishermen and fisherwomen, between fish and human, all within a wider ecological environment of smoke particles, sea urchins, trawler engines, and fishing nets, I shed light on how people make a living through and with economic and ecological uncertainties, tying the immediate with the imagined, to envision “new becomings” (Biehl and Locke 2010) for themselves and their communities.

Research aims and contributions

The following section lays out the research aims and research contribution of my thesis. Given the project’s funding and integration within the ANTHUSIA research network¹⁹, the broader frame of human security has shaped my project’s focus towards a concern with livelihoods and marine resources. Globally, as outlined in the previous section, there has been increasing attention given to human impact on marine life, in combination with a drive towards development of the “blue economy”. When the UN Resident Coordinator in Sierra Leone, Babatunde Ahonsi, who lists the challenges faced by Sierra Leoneans: “extreme poverty, food insecurity, and unemployment” (Ahonsi 2021), it may also seem evident that “the economy must begin to thrive again”, which includes “pro-actively harness[ing...] Sierra Leone’s bountiful water endowments” while keeping environmental sustainability in mind (Ahonsi 2021). As outlined in the above section on marine resource extraction and management, I aim to bring nuance to the one-sided narratives of linear growth, simplified notions of sustainability and conservation, and ideas of fisheries as a “last resort” for poor people.

The central focus of the thesis is on the fishermen and fisherwomen in Tombo, and their ways of making a living as part of what Livingston terms an animated ecology:

not a nature out there upon which humans act or from which humans extract. It is a living manifestation of a tangle of historical relationships between entities large and small, humans

¹⁹ Anthropology of Human Security in Africa, (see <https://anthusia.eu/>).

past and present (Livingston 2019a:34).

This may sound paradoxical, as fishing, in its very essence, is the extraction of life from a watery environment. Tombo, like other fishing communities in Sierra Leone and around the world, is a highly commercial place, where the everyday wharf scenes bear little resemblance to the at times romanticised notions of “indigenous” respect for nature and other beings (Pottier 2003, Crewe and Harrison 1998). Fish are killed, to be eaten or (hopefully) sold at a profit. *Moni dea na sea*. People fish with dynamite and poisoned bait, catch juvenile fish, and these are just a few examples of the problematic practices that ultimately threaten life below the water surface. Sharks and skates die a slow death in the bulks of the artisanal canoes, many of them, like the guitar fish, considered endangered by international conservation organizations (NOAA 2021). People in Tombo dream of ‘development’, including having large, nice houses, eating expensive fish and beef, watching news and movies on the latest iPhone and a slim widescreen TV.

The Sierra Leonean fishermen, fish processors and market traders are all entangled in a global, capitalist economy. However, I want to caution against moving from one political history context to another, and generalising all forms of resource use as based upon similar forms of commoditisation and production of life-non-life boundaries (Yusoff 2018). The political and economic-ecological history of West Africa and the Western world are different, one being colonised by the other, one extracting life and materials as economic resources in the form of fish, human slaves, timber, diamonds, and peanuts – to mention but a few – from the other. Taking these historical contexts to heart, I seek the forms of relations, the forms of embodied knowledge and environmental experiences that people have in coastal Sierra Leone, and how they make use of, contest, resist and adapt these relations to both the contemporary opportunities and constraints, and to imaginaries of better futures.

Throughout the fieldwork in 2019, and in the data analysis process, the guiding research aims have been the following:

- How do people *navigate* in a shifting social, ecological and economic landscape to sustain themselves and their communities?
- How do people in Tombo *experience* the changing ecological environment?
- What forms of *social relations* (gendered and generational) as well as *ecological relations* do people make use of, re-shape, and resist in their everyday lives in coastal Sierra Leone?
- How does the global attention to marine resources shape international interventions and development programs in the fishing sector in Tombo, and how do these development

interventions influence peoples' abilities to shape 'habitable worlds'²⁰ at land and at sea?

When I sought to explain my research on "making a living by the sea" and livelihoods to people in Tombo, I had difficulty translating the English concepts. Mr. A and others fluent in English insisted on translating livelihood into Krio as *an-to-mot*, literally "hand to mouth". Especially during my first months in Sierra Leone, before my Krio improved, I struggled with this translation, as to my ears it connoted a short-sightedness, a notion of barely surviving, and of subsistence activities. Although the precariousness of life in Sierra Leone is evident, and the majority of people in the fishing sector indeed struggle to make ends meet, the scale of business activities in the fishing sector meant the term did not resonate with me. However, the phrase kept cropping up in different contexts, from everyday conversations on how *di gron dri, pipul den dey sofa foh fen den an to mot*²¹, to community meetings where political dignitaries talked about the importance of the fishing sector for the national economy and for *mek de pipul fen den an to mot*²². It is not unlikely that the Krio term grew out of the British classification of Sierra Leonean economic activities during colonial times. For example, when colonial ethnographer Thomas Alldridge wrote about fishing, it was a "hand-to-mouth affair" in the early 1900s (Alldridge 1910:249, quoted in Diggins 2018:42)²³.

Addressing livelihood, and especially sustainable livelihoods, has gained popularity in the policy world and with NGOs, including those working in a maritime setting. But what does livelihood and livelihoods actually entail? At the core is a concern with the activities carried out by different people in a variety of places, with the use of resources, tools and skills, to put food on the table and make ends meet. But there is more. Livelihoods are cultural and social practices. They involve symbols and rituals, engender hope, shape trust, and interlock with uncertainties and insecurities. Livelihoods both shape and are shaped by the material world we find ourselves in, and are made and remade in relations with humans and other-than-human beings across time and space. In this thesis, my consideration of livelihood is embedded in Narotsky and Besnier's (2014) rethinking of the economy. The economy, following their thinking, is "all the processes that are involved [...] in 'making a living'" (2014:S5). This conceptualisation is temporal, centring livelihoods as that which enables life over generations, but avoids "privileging a particular domain of activity (market-

²⁰ A concept I am borrowing from Mueggler (2001).

²¹ Meaning there is little money going around and people struggle to make a living, literally: "the ground is dry, people suffer to find their hand-to-mouth".

²² For people's livelihoods, literally "for making people find their hand-to-mouth".

²³ Diggins uses the historical account, alongside life histories from elderly fishermen, to compare the changing scale of activities in the fishing sector, and the same could be said from Tombo. However, my point here is that the linguistic 'hand-to-mouth' phrase has remained as the Krio way to talk of livelihoods and how people make a living.

exchange), a particular intentionality of action (financial-gain), or a particular valuation process (market-calculation)” (2015:S6), that capitalist economics often take as givens. This perspective on the economic, *and* on the sustainable livelihoods involved, enables the contradictions, ambiguities and conflicts to come to the fore. Sometimes the protection of lives and of livelihoods are at odds. At other times it is a spatial and scalar incongruence. Sometimes, the immediate and long-term benefits do not match up.

As Ferguson and Li (2018) show, ideas of the “proper job” tend to dictate government policies, development projects and research on economic development, unemployment and precarious living. Nevertheless, the salaried job is far from an attainable reality for a majority of people in the world, particularly in what the World Bank defines as emerging economies, or developing countries (World Bank 2019). *An-to-mot* “livelihoods” problematise the distinction between “making do” and “making a living”. In English, the two are distinguished by temporality and necessity; whereas those who make do, make do with what they have right now to survive, those who are making a living from something, are associated with some sort of permanency and stability in this regard. Similar distinctions can be found in Sierra Leone as well; however, their normative value is asserted less in terms of stability and permanence, and more the socio-economic networks and relations they are embedded in, alongside the moral-legal perspective on the kind of activity happening.

In the next section, I lay out the conceptual framework that frames the thesis’ analyses. Drawing especially on literature from West Africa that considers the socio-economic navigational practices of young people, alongside socio-material relations to things and other-than-human beings, I situate the coming ethnographic chapters within a framing of relational ontology.

Conceptual framework: Hustling and navigation in other-than-human environments

Like so many rivers in Africa, Omi-Ala was once believed to be a god; people worshipped it. They erected shrines in its name, and courted the intercession and guidance of Iyenoja, Osha, mermaids, and other spirits and gods that dwelt in water bodies. This changed when the colonialists came from Europe, and introduced the Bible, which then prised Omi-Ala's adherents from it, and the people, now largely Christians, began to see it as an evil place.

Chigozie Obioma, *The fishermen*, 2016:27

In mid-July, the rainy season was still gathering strength, with heavy grey clouds in the sky and a near-constant light drizzle in the air. The Tombo fleet was readying to pause activities during the weeks with the heaviest rains, and many boats hoped to get some final days of good catches in, to save up “rainy season money”: spending money for the weeks of no business, and capital to re-start activities following the heavy rains. On our way out towards the fishing grounds near Banana Island, Abibu told me that many boats had left for Portee east of Freetown, and Lungi to the north.

They have good herring there now, the herring like that muddy water, Abibu said.

How come Surprise does not go? I asked.

We don't have lead, Abibu answered.

Lead refers to the fishing weights, made from lead (Pb), attached to the bottom of the fishing net, which hold the bottom of the net weighted onto the ocean floor in the shallow Yawri Bay. Given that *Surprise's* fishing net had lead-weights, my confused looks made Audu, one of the more experienced fishermen, jump into the conversation. “The herring is *too smart* [very cunning],” Audu laughed. “Our small lead is not enough, it [the herring] swims like this.” He used his left hand as the school of herring, and his right hand as the fishing net. With a swimming-like motion, the herring-hand dove down, and squeezed itself in under the net-hand, before slowly lifting up the net-hand from the imaginary ocean floor. “And then all the other fish escape,” Abibu continued from Audu’s demonstration. “Fishing that herring, we need a lot of heavy lead,” he concluded, “and there is no money.” “Memuna,” Audu followed up, using the local name I had been given by Tombo’s Headman. “You can lend us the money! Or, maybe *your people*?” So far, I had been (somewhat) spared for requests for money on board *Surprise*, and since I preferred to keep it so, I politely declined. “How about the boat owner, Captain M’s brother, or your own people?” I asked Audu instead. He grunted. “*Surprise* has loan for fuel²⁴ now, and nobody want to help us young fishermen.”

The short episode illustrates some of the key themes of the thesis: Audu’s feeling of fishermen and young men as being without a support network, and the opportunistic search for (economic) patrons. It illustrates the ecological understanding many fishermen have of their environment, and of how the fish they seek to entrap have intent and agency. Finally, the episode captures how fishing activities adapt to a shifting material and ecological environment, where economic activities and strategies are continually adjusted to new challenges and opportunities. In the following section, I draw upon these cues from the episode to elaborate on the conceptual framework I employ

²⁴ Money borrowed to pay for the daily fuel expenses of around Le 250,000.

throughout the thesis. My research is embedded in the body of literature on Sierra Leone and West Africa that highlights the agency of people, and especially of young people, who live their lives in places with turbulent political histories, uncertain economic prospects, and material scarcities (Richards 1996, Hoffman 2011, Utas 2012).

Throughout the thesis, I draw in particular on Henrik Vigh's work from Guinea-Bissau, and his analytical concept *social navigation* (Vigh 2006, 2008, 2009). Departing from Vigh, and others who focus on young men and ex-combatants (Hoffman 2011, Utas and Christensen 2016, Mitton 2015), I employ a generational and gendered lens to highlight how men and women, junior and senior, inter-relate through socio-economic practices. Furthermore, I situate the navigational practices people employ within material environments, in relation to other beings and things that co-create human possibilities and becomings. Drawing inspiration from new materialism (Barad 2007, Drakopoulos 2020, Law 2009, Law and Lien 2014), the blue humanities and oceanic histories (Neimanis 2016, Ingersoll 2016, Chen, MacLeod and Neimanis 2013, Sivasundaram, Bashford and Armitage 2018, Farrelly, Taffel and Shaw 2021), and decolonial feminist scholars (Haraway 2008; 2016, Watts 2013, Sharpe 2016, Povinelli 2016), I expand social relations to include entanglements of subjects and objects; people and fish, smoke and smoke ovens, boats and waters, arguing how they co-create each others' worlds and *become* through their relations with others.

When the colonialists came, Nigerian author Chigozie Obioma writes, they prised the people from the river, and from the spirits and gods of water bodies. The river became associated with evil, and an evil water body and its inhabitants can be captured, controlled, and commodified without relational consequences. While the commercial fisheries of Tombo are highly extractive and commoditising, with fish likened to money, commoditisation and objectification are historically and politically constituted processes (Yusoff 2018, Alaimo 2010, Haraway 2016), that are coupled with other forms of relational practices, as such taking the agential and world-making capacities of those deemed less seriously. The regional anthropological literature on West Africa, has for more than two decades expanded on our understanding of the agency of especially young men, often deemed to have a marginal economic and political position (Richards 1996; 2005, Vigh 2006, Utas 2012, Guyer 2004). In the following I situate my research in relation to work on "the crisis of youth" and unemployment in Sierra Leone (Peters 2011b, Enria 2018), while expanding the I expand upon the socio-economic and material practices that people – young and old – make use of to make a living in an uncertain and unstable environment, and the wider relational ontology that makes up the West African worlds of fishermen and fisherwomen, fish and sea urchins.

Livelihoods and the problematic youth?

The majority of the fishermen I worked with were men ranging from their early twenties to mid-forties. Some of them were born in Tombo, coming from families of fishermen and fisherwomen. Others had moved to Tombo looking for work, and decided to settle down as the opportunity arose. This could be because of an existing network of relatives in the community, because they found a stable job on a boat, or saved enough money to get married and build a small house. For the women I worked with, stories like that of Chairlady Sento were common. Sento's family lived about an hour inland of Tombo, and she moved to Tombo when she got married. "My husband brought me to Tombo. Here, people only know fishing, so I also decided to learn," she told me. The fishermen are *men*. In Tombo, and generally in Sierra Leone, women do not go fishing, and it seemed like an unquestioned norm no one really discussed much. Although several of the older people in Tombo, who had migrated from the more rural areas further south, told me how their parents or grandparents had gone fishing together, with the man fishing and the woman paddling, the heavy labour of the current fishing techniques seemed to confirm a narrative of fishing being too strenuous for women. The local term for someone who goes to sea is fisherman, and I will be using this throughout my thesis. Fisherwoman, on the other hand, refers to women in the fishing sector, who are either responsible for buying and selling fish at the wharf, or for processing fish, and often both. In addition, many of the fisherwomen, including Chairlady Sento, are boat owners. Employing a trusted *bossman* to take care of the activities at sea, they have themselves acquired the capital to construct the boat, and as boat owners, they acquire part of the catch, or buy it at a very cheap rate.

Many of my informants, especially among the fishermen, considered themselves part of the Sierra Leonean youth. Many of them were married and had children, but still described themselves as *di youthman dem*²⁵; 'youthmen'. Much has been written about the Sierra Leone *youthman dem*, a loose category of men, who seem to be on the losing side of the national labour market and the globalised economy (Richards 1996; 2005, Bangura 1994; 1997, Reno 1995, Peters 2010; 2011b, Abdullah 1998; 2002; 2020, Honwana 2012, Shaw 2014, Christiansen, Utas and Vigh 2006, Peters 2010, Murphy 2010, Abdullah 2002). As Christensen and Utas rightly point out, youth as a demographic category in West Africa signals a social position and potential for political contestation more than age per se (2008). They show how the political history of Sierra Leone has often been told in terms

²⁵ Krio uses a plural form where *dem* is added behind the singular form.

of the “potentially dangerous youth”, as groups of primarily young men have been used as political thugs and violent labour, especially during election campaigns (see also Abdullah 2020, de Bruijne 2019).

The connection between disgruntled and marginalised youth and (political) violence is essential to understanding the political and economic landscape of Sierra Leone. However, the “problematic youth” as a category has to a certain extent developed into a trope that overly colours both the academic scholarship, and the policy work that shapes government and development interventions. As Luisa Enria details in her book on the youth and labour market in Freetown, the securitisation of unemployment and Sierra Leone’s youth as a ticking bomb “tell us little about the processes that connect labour market experiences to young people’s involvement in political violence” (2018:3). Enria’s research follows political scientist John Cramer’s writings on the political economy of war and violence (2006, see Enria 2018), and I am appreciative of Enria’s elaborations on the politics of work in Sierra Leone as “the articulation between individual and collective social experiences on the one hand, and the histories and political economies in which they are embedded, on the other” (2018:22). While Enria’s research on urban labour markets provide novel insights, she remains within a well-established post-conflict frame, focusing on violent labour and political mobilisation. My research, on the other hand, seeks to move away from the civil war as a reference point, as many of my informants have lived the majority of their lives, and especially their working lives, without violent conflict. In addition, while there in 2019 were fights on a regular basis at the wharfs, and Tombo fishermen also engage in violent political labour²⁶, violence was rarely an accepted form of labour in the fishing economy. As such, my interlocutors could be seen as more ‘successfully’ integrated in the national economy and the labour market, than those of researchers who have worked with (un)employment in Freetown (Enria 2018) or among ex-combatants (Mitton 2105, Peters 2011b, Utas and Christensen 2016, Menzel 2011). At the same time, they navigate similar uncertainties related to a volatile political and economic situation, and there are many shared sentiments and experiences like mistrust, frustration with corruption and nepotism, and marginalisation with those reported in research among former combatants or street gang members.

Apart from *youthman dem*, fisherman and fisherwoman, there were other social categories in place used to describe people’s socio-economic activities and positions. *Rarray-boy* and *rarray-gyal*, alongside *dreg-man/uman* were common. Enria translates the Krio *rarray boy/gyal* to street

²⁶ As a COVID-19 related riot in 2020 evidenced, see Kamara (2020) and Pratt (2020)

criminal, borrowing from Abdullah's (2005) definition as "pickpockets and petty criminals, engaged in violence in their everyday life (Abdullah 2005:173, see Enria 2018:94). Many in Tombo would agree to this definition; however, those considered *rarray* in Tombo are not primarily considered thieves or more violent than others, but defined primarily by their unethical way of acquiring money, either by selling drugs or doing sex work. Possibly more important is the way the *rarray boy* and *gyal dem* (pl.) are likened to be detached from the ordinary socio-economic networks. This is a characteristic they share with those considered as *dreg-man/uman* (man or woman who *dregs*). Mr. A, and others who advocated for better governance and more order in the fisheries sector, often complained that the fisheries had become more unruly since the end of the war because of all the *rarray boys dem* and *dreg-uman dem*, who do not contribute to the fishing sector but still depend on it. "They do not go to sea, but come and *dreg* for fish and small-small jobs when the boats return," was a common lamentation. To *dreg* for fish, is, in short, to ask for a few free fish for the evening meal, but without implying the establishment (or existence) of a mutual relation. According to Oyètádé and Fashole-Luke (2005), to *dreg* means to go search for food, money or other resources, and it became a common Krio word during the civil war. To *dreg* as a verb, and *rarray boy/gyal* as social positions, were often used by more economically successful and politically integrated groups in Tombo to morally denounce some of the younger fishermen, or those who worked only part-time. This could provide for a reading emphasising generational conflicts in Tombo, however, as the next section, and the thesis as a whole, aims to show, both young and old employ hustling skills and navigational practices at times contribute to collective identities and action, at times provide mainly individual gain and personal detachment.





Figure 8: Many people help to push a new boat from the boat yard

While a fisherman is semantically and socially distinguished from both *rarray boy* and *dregman*, many of the same skills apply, including negotiating social rules, capitalising upon opportunities and new relations, and knowing how to “play the game”, as Michael Bürge’s Makeni interlocutors told him (2018:105). *Hustling* was a concept I often heard my English-speaking informants use, when they lamented the everyday struggles of ‘making do’; of balancing social obligations with their own hopes and dreams, and of juggling different jobs and opportunities at the same time. In Krio, *to dreg* could be used as a verb describing similar activities, without necessarily relegating the person to the status of *dregman* or *dreg-uman* (*dreg-woman*). Hustling, as Tatiana Thieme²⁷ argues based on fieldwork in urban Kenya, is a form of “economic performance” practices in uncertain and unstable environments (2017:3). Working in informal settlements in Nairobi, Thieme argues that hustling “encapsulates rhythms of resourcefulness, diverse adaptations and contingency plans in the face of constant interruptions, uncertain returns, potential breakdown and marginalization” (2021:37).

Much of the literature on hustling in African contexts follows on from a concern with the economic activities and social performativity of people in the so-called informal sector (Hart 1973, 2008). Examples include Di Nunzio’s (2012, 2014, 2019) work on marginality and street economies in Addis Ababa, Monteith and Mirembe’s (2021) research from Kampala and Nairobi, and Gaibazzi’s (2015) research from The Gambia on mobility and hustling, Newell’s (2009, 2012) analyses of *bluffing*, social performativity and the sexual economy, Chernoff’s (2003, 2005) books on Hawa the “bar girl” in Accra, and the work on the *okada* motorcycle economies by Bürge (2011, 2018), Menzel (2011) and Nyanzi, Nyanzi-Wakholi and Kalina (2009). Given how close to none of my interlocutors in Tombo had a formal, wage-earning job that placed them in a structured relation with a bureaucratic state, Wacquant’s definition of the “world of hustling stand[ing] in structural opposition to that of wage labour” (1998:4, see also Espeland 2017:15) could be deemed fitting. However, if every economic activity in Tombo is defined as informal hustling, “one fails to ask what is actually happening in Africa”, to paraphrase Cooper (2001:206, quoted in Meagher 2012:1074). Furthermore, as Espeland convincingly argues in his PhD research on middle-men politics in Dar es Salaam, hustling cannot be relegated to the informal economy of the urban streets, as it also “takes

²⁷ I introduce Thieme’s work in the introduction.

place as a constituent of formal practices in office buildings, factories, airports and universities” (2017:15).

Following Thieme (2017) and Thieme, Ference, and van Stapele’s work from East Africa, I understand *hustling* in a Sierra Leonean context

as a political-economic language of improvisation, struggle and solidarity (Moten 2003; Simone 2004) that contests the continued colonial and singular framing of Africa (Mazrui 2005) and ongoing uneven development and urban marginality. (Thieme, Ference, and van Stapele 2021:2)

The authors locate hustling within a global system of racial capitalism (Bhattacharyya 2018, Robinson 1983, see also Yusoff 2018), viewing the global inequalities reproduced through capitalist integration as underpinned by racial and colonial hierarchies, which shapes the social experiences and shared identities of many urban youth across Africa. The solidarities, belonging and relatedness that urban youth ‘harness through the hustle’ (cf. Thieme, Ference and van Stapele 2021), it follows, is a form envisioning alternative future trajectories; it is a part of the socially imagined.

Writing of the inner city of Addis Ababa, Di Nunzio argues that it is “the ability of the hustler to make do and, importantly, with his or her capacity to live smartly and toughly *through* a condition of marginality and exclusion” (2019: 3, my emphasis). Following Di Nunzio, Thieme, Ference and van Stapele (2021), I employ hustling as an analytical frame to highlight how to *dreg* or hustle implies a moral denunciation of the wider, global hierarchies, of experiencing exclusion while rejecting those structures and forms of socio-economic activities that are enforced by the dominant. As such, hustlers do not immediately seek to transcend their marginalisation, but rather make use of their precarious position to find meaning, belonging and (economic) opportunities. “Since I am a dog, beware my fangs,” Keen (2002) stated in the context of the civil war and the grievances of young militants in Sierra Leone, and while I do not directly consider the processes of subjectivation and the search for respect and recognition (see also Fassin 2013a; 2014, Bourgois 1995; 1996), the strategic use of subject positions ascribed by dominant global hierarchies is an essential aspect of the everyday hustling practices that fishermen and fisherwomen in Tombo do.

Following on from hustling as opportunistic livelihood strategies situated within a global economic and political hierarchy that contribute to the marginalisation of fishing communities, I make use of *navigation* to analyse the concrete practices and embodied skills people employ to make a living and a life by the sea. Henrik Vigh develops the concept of social navigation (2006, 2010, 2018) from

his work among the youth in Guinea-Bissau, where he encountered *dubriagem* in a conversation with two interlocutors, who part translated it as dynamic movements, part-enacted it as if shadowboxing and “dodging [...] the pulls and pushes of social forces” (2010:150). Drawing on his informants talk of “*dubria* to survive”, he develops social navigation as an analytical tool to highlight the dual temporality and *motion squared* of life in West Africa. Social navigation is a form of praxis that temporally relates both to the immediate and to the future, as a form of positioning oneself within a moving environment based on future projections. “People invest a great deal of time in making sense of and predicting the movement of their social environment,” Vigh writes (2009:420). As such, social navigation bears temporal resemblance with the Krio ‘livelihood’ translation of *an-to-mot*, which blurs the boundaries between the immediate ‘making do’ and the more long-term ‘making a living’. While I write about a fishing community on the edge of survival, the everyday activities people do to make ends meet is more than just survival; they are what make life bearable, fun and generative, imbue activities with meaning and relations with care and trust. Thus, as people navigate in a shifting socio-political environment, “dodging” the social forces around them, they do so with intention and aspirations.

Navigation requires embodied skills attuned to an environment in motion, where the practice of tuning in and out different signals of something out of the ordinary, could be the difference between success and failure, and ultimately between life and death. Using a maritime metaphor, Vigh argues that

[t]hinking with seascapes may allow us to place people within moving environments and highlight the way that they strike an interpretative dialogue between the influence of multiple forces, their envisioned motion through them and the actual interaction within them[.]
(2009:430)

Although he moves on from thinking with scapes to thinking with the environments in motion that humans move within, there is something “adrift” with the analysis. I want to add to Vigh’s understanding of navigation, by re-emphasising the *environment*. In the fishermen’s lives, the moving seascape is not simply an analogy for an environment in motion; it is the everyday, embodied experience of being a fisherman at sea. Furthermore, not only is the socio-political environment constantly shifting, so is the *material* environment, and the more-than-human ecologies within which the fishermen labour. One day there are large schools of fish in the waters of Yawri Bay, the next there are only sea urchins. The following week, there may be millions of herring, *gwangwa*, and barracudas swimming in the waters, but none caught in the fishermen’s nets

as the winds and waves, alongside sound pollution from outboard engines and trawlers, makes it difficult to locate the fish. The navigational practices of the fishermen in Tombo are more-than social; they are also attuned to the more-than-human environment they are part of, which I elaborate on in the final section. Before doing so, however, I return to the gendered and generational perspectives I make use of, situating the social navigation practices of the young fishermen within a wider relational ontology, focusing on debts and trust in trade networks.

Kostament, trust and debt: a West African relational ontology

To focus the conceptual framework in this section, I make use of another Krio term that was commonly used in Tombo, namely *kostament*. *Kostament* comes from the English customer, and refers to a long-term relation of mutual aid to each other's business. Very often, it is a relationship between a fisherman as the borrower and a fisherwomen as the lender, sometimes, but not predominantly, from the same family or household. In fisheries, it defines how a boat owner or fisherman is aided with loans for his operations, often when building or repairing his boat, as well as with fuel costs when catches are scarce, and how the fishmonger or fish processor is given priority for his catch and a good price. *Kostament*-relations resemble how others have described patron-client relations in West Africa, as the *kostaments* emphasise moral support and mutual obligation (Olivier de Sardan 1999, Carrier 2018), but without political affiliations. Furthermore, they may be considered as network nodes, at times acting as patrons, at times as clients (Utas 2012, Simone 2004, Bledsoe 1980). Someone with many *kostament*-relations, especially wealthy fishmongers (many of whom are women) would be considered "Big" people (Ferme 2001, Menzel 2017, Murphy 2010, Utas 2012), and, indeed, establishing oneself as a *kostament*-patron requires both material resources and political capital.

Kostament relations entail a form of trust, as maintaining *kostament* relations requires entrusting materials to someone whose life is most likely as precarious as one's own. This socio-economic trustworthiness is furthermore a form of social capital (Bourdieu 1986), as one proves they are a person others can entrust with their own resources and their own investments. Even though *kostament* relations imply material debt, these forms of debt are productive. Debt, as Utas and Christensen argue, "[...] has long been seen as a key asset in building social relations and creating moral and material systems." (2016:26). This understanding of debt as also being capital draws on a large body of anthropological literature, especially that on big men and patronage (Médard 1992,

Olivier de Sardan 1999, Utas 2012, Bayart 1993), greeting practices and gift-giving (Mauss 1995, Smith 2007), concerning the production of selfhood through relations (Strathern 1988; 1999, Spiro 1993), and the notion of wealth in people (Bledsoe 1980, Guyer and Eno Belinga 1995, Austen 1993, Olivier de Sardan 1999, Murphy 2010).

Utas and Christensen (2016) considers the temporality of debts, as patrons seek to delay repayment, which adds a dimension of uncertainty to the relation, as one never knows whether the value of ones' capital will remain the same in the future. Utas and Christensen's work shows how the kind of "big man system" (2016:42) political networks that are found in Sierra Leone are unstable and continually shifting, as the big men refuse to pay up for the "gifts" they have received from the ex-militia members, and how people themselves continuously search for new ties and loyalties. This form of uncertainty and negotiation resembles some of the *kostament*-relations I encountered in Tombo. While many spoke of trust and support, others spoke of deception and always being ready to cut ties.

Trust, or *trɔs* in Krio, entails a material dimension, as people who *trɔs* each other will give each other gifts, material support, and loans. My reading of debt and trust thus involves the materials that shape the relations that comprise them. In a Sierra Leonean context, and also in a maritime setting, Jennifer Diggins has been a novel voice on extending understandings of relatedness to include the material world (Diggins 2018, 2015, 2019). In her 2018 book, she draws on histories of clientship and patronage, and of both social obligations to, and wealth in people, who are central to understanding the Sierra Leonean notions of economic labour. Diggins innovatively argues how the increasing material scarcity in Tissana forces people into more "sticky webs of obligation" (2018:121). Furthermore, expanding the anthropological literature on the spiritual world and esoteric practices in Sierra Leone and West Africa (see Ferme 2001, Bellman 1984, Comaroff and Comaroff 2000) to the material, she considers how "pragmatic livelihood strategies are interwoven with material strategies that might appear to belong to the sphere of 'ritual' or 'esoteric' practice" (Diggins 2018:6). Diggins' research remains a thorough inspiration within my own research, especially her considerations on trust, morality and materiality. However, whereas Diggins advocates for the materiality of the spiritual underneath, I instead explore the liveliness of the material, to which I will return in the final section.

While I situate my own relational approach within the West African literature on debt and patron-client relations, I seek to extend the conventional understanding of socioeconomic relatedness to also involve the other-than-human beings, and the objects and materials of those relations.

Acknowledging perspectives from West African literature (Cheney-Coker 1990; 2013, Obioma 2016, Okri 1991, Okorafor 2014), as well as the oral traditions and tales ²⁸ that articulate the agency of animals, environments and objects, I emphasise how the colonial history ‘pried the river Omi-Ala from its people’, to paraphrase Obioma (2016), and thus removed other-than-human beings and objects from the world of actants. By extending relations to the socio-*material* and understanding networks as being made from, and shaped by, both human and non-human, living and non-living things, I seek to redress an often overlooked element of many Africanist ethnographies, whereby relatedness is treated as a cultural (Chabal and Daloz 1999), social (Utas 2012, Nugent 1995), economic (Bayart 1993, Guyer 2004) or political (Médard 1992) trait. As such, I aim to build my ethnography as a relational ontology (Chilisa et al. 2016, Botha, Griffiths and Prozesky 2021, Chalfin 2019, Jackson 2013) that acknowledges the world-making capacities of fishermen and fish, sea urchins and fisherwomen alike.

Navigating with materials in more-than-human environments

In coastal Sierra Leone, hundreds of thousands of people depend on fish for their daily livelihood, but the possibility for life itself, on land and in water, is embedded in the animated ecology (Livingston 2019a, 2019b) of other beings and of the material environments within which fish and people live. When development organisations push their neoliberal concerns about the “inefficient” use of resources (Bebbington 2000), and neo-colonial forces, which commoditise fish and marine beings, see privatisation and fishing through quotas as the only possible saviour for global fish stocks (Spalding and de Ycaza 2020, Pratt 1992) researchers should try to explore “the otherwise” (Roitman 2017, Lien, Swanson and Ween 2018). By attending to materials and more-than-human liveability (Tsing, Mathews and Bubandt 2019), I show how global lessons can be learnt from coastal livelihoods in West Africa, at a time of massive species extinction and global anthropogenic climate change.

The fishermen and fisherwomen in Tombo are part of a global fishing economy where they, historically and contemporarily, hold the shortest straw. They see the waters where they fish

²⁸ See for example Bascom (1975) recounting stories from Kono and Kpelle oral traditions of chiefs sending insects and animals to reclaim his cows, Johnson and Moore (1972) on the turtle tricking the leopard in Liberia, Kilson (1976) and Jackson (1982) for extensive recordings from the Mende and Kuranko, respectively, Finnegan (1988) for collections of hunting songs and poetry, as well as collections about the spider-tricker, like *wosi* among the Limba (Finnegan 2007, 1967) and Ananse among the Ashanti (Pelton 1980).

emptied by 1000 ton trawlers²⁹, and hear stories of the fish they sell to the foreign companies outside Tombo going for a hundred times the price in Busan or Seoul. Development organisations keep launching and relaunching new projects that are said to help bring growth to the fishing sector, but few people see an economic change for the better. How may we study capitalism, Anna Tsing asks in her book on the matsutake mushroom, “without assuming progress” and growth? (Tsing 2015:5). Similarly, Julie Livingston’s work from Botswana illustrates how the developmental struggle towards growth can become “self-devouring” (2019a, 2019b), when “nature – now separated from humans – becomes an object with limits to be overcome, domesticated” (2019a:34). This form of developmental growth underscores the current regulation of marine resources, including government policies and donor funded programmes, in Sierra Leone, as outlined earlier in the introduction. Furthermore, the current conservation measures, promoted globally through international institutions, simultaneously maintain a status quo, where the capacity of the current wealth-holders to uphold their wealth is central to the notions of sustainability (see McCormack 2017). In short, if there are no fish in the sea, how can we make (more) money from fish, you see? “Blue growth” and the Blue Economy currently dominates the political climate around the ocean and marine resources, both internationally and in Sierra Leone, but these are based on world-views centring the primacy of humans (Watts 2013, Moore 2012, Nustad 2018), which prioritise economic growth over social and ecological sustainability (Okafor-Yarwood et al. 2020, Romain et al. 2017, Béné, Hersoug and Allison 2010).

Similar to how Diggins’ (2018) argues how the materiality of fish (as easily rotting) affords it certain forms of socio-economic relations, I draw up a West African relational ontology (Chalfin 2019), alongside feminist and STS-scholars (Alaimo 2012; 2010, Haraway 1988; 2016, Watts 2013, Tuck and McKenzie 2015, Ingersoll 2016), to trace how the ‘beings’ part of a relationship have different capacities to shape their environment and the said relation. In Tombo, the fish are central to *kostament*-relations, as objects of exchange, and makers of profit. But the fish itself remakes the relations, as the qualities of the fish – slippery, fresh, hard, smoked – come to qualify the social and economic relation as well, producing and shifting experiences of both what fish is, and what a *kostament* is for another (see Law and Lien 2014, and chapter 5 in this thesis). While I often remain with the Anthropos, given the thesis’ main focus on human activities and the livelihoods of men and women in the fishing economy, I show how the cunning herring, actively escape the fishing nets by diving down and lifting up the fishing net weights, are as much a part of the relations that make up

²⁹ See the official license lists publicised by the Ministry of Fisheries and Marine Resources (www.mfmr.gov.sl).

the fishing activity, as the patron sought for monetary support to buy more lead weights. This is not to ignore hierarchies, power differentials, and the different capacities of development consultants, fishermen, smoke, and sea urchins to affect the world around them and take control over their environments and relations. Rather, it is to explore agential capacities and relations without assuming linearity and developmental growth.

In this thesis, I learn from the *phonemen* – the specialised divers who listen for talking fish (who are the focus of chapter 4) and their way of navigating moving environments and shifting socio-economic opportunities, alongside attending to the histories and shifting presence of marine beings like sea-urchins, to illustrate how humans, waters and marine beings become in and through their relations with each other. By exploring people's navigational practices in a material environment, animated by other-than-human beings with agential capacities (Watts 2013, Jackson 1989, see also Fairhead and Leach 1996), I attend to the embodied skills and knowledge developed by the fishermen and fisherwomen through their work and livelihoods. As Michael Jackson has argued, based on his long time engagement with the Kuranko ethnic groups in Sierra Leone and indigenous communities in Australia and New Zealand, work is “experienced not as a relationship between an acting subject and an inert field, but as an intersubjective and reciprocal relationship [...]” (2007:69). Through their work with fish, boats, and smoke ovens, people in Tombo amass ecological and relational knowledge, embodied in praxis, which they make use of to navigate the shifting and unstable economic and ecological environments. As such, the fishermen and fisherwomen make a living through and with existential uncertainties. Like Lévi-Straussian bricoleurs (Lévi Strauss 1962, Ferme 2018), they make use of the materials and information available at hand. But, unlike bricolage, hustling entails a refusal of the dominant categories and hierarchies that contribute to the hustlers' marginalisation.

The everyday hustling in Tombo is a reminder that people are “not bound to react to domination in the very terms with which this domination has been effected” (Jackson 2007:236, drawing on Guha 1983). The fishermen and fisherwomen do not revolt, or conform, but rather make use of their marginal position and the uncertainties afforded by an environment in motion to make a living and shape new becomings for themselves and their communities. The embodied skills, developed by attuning themselves to the fish underwater and sensing the smoke from the smoke ovens, inform people's continued hustle. Poking ones finger on the spikes of an urchin is an embodied reminder of global inequalities, and justifies a lack of trust in politicians, authorities, and the international community's ability to create a country liveable for both fishermen and fish. So people hustle. This is a story of how they hustle.

Dissertation outline

The thesis opens with a methodological chapter that outlines how the fieldwork process unfolded, and what methodological choices I made along the way. I introduce some of the key interlocutors and fieldwork sites in Tombo, as well as the secondment contract I had with the development project West African Regional Fisheries Programme in Sierra Leone, funded by the World Bank. Focusing on some of the key issues raised by doing “applied anthropology” during fieldwork, I outline some of the ethical considerations I made in the field. Finally, I show how some of the challenges of doing fieldwork in an economically impoverished field site translated into fieldwork data and the analytical consideration of trust within my thesis.

The second chapter provides a historical contextualisation of fishing activities and socio-economic relations in coastal Sierra Leone. I trace increasing migration to the coast, and the commercialisation following the introduction of new fishing methods, which subsequently also changed gendered trade relations. Following the end of the civil war, I outline how trade relations and trust shifted with new foreign actors in the fishing sector, continued coastal migration, and the reduction of fish stocks in the Gulf of Guinea.

The first ethnographic chapter, chapter 3, focuses on the fishermen and their activities at sea. Analysing working relations on board the largest type of artisanal fishing boat in Tombo, the so-called Ghanaboats, I focus on how crewmembers compete for payment through what is known as *handfailure*. For fisheries governance advocates, and others “on land”, *handfailure* may be seen as an individual tactic for survival in a resource depleted ‘seascape’, one that removes the need for trust and support in boat owners or other crewmembers. On the boats, however, I show how participating in *handfailure* and labouring together in an uncertain ecological environment engenders new forms of flexible trust and solidarity.

This point is followed through to chapter 4, where we remain on board the Ghanaboats at sea. In this chapter, I follow a specialised group of divers called *phonemen*. These men *phone* for fish, meaning they listen for special types of talking fish under water. The fish are especially valuable to the foreign Korean companies, which many of the artisanal boats have entered into trade agreements with. In the chapter, I interlink the opportunities and challenges that follow from these global-local links, and how the fishermen, and *phonemen*, navigate social and material relations on board the fishing boats and underwater, as well as hustle in an unequal global fishing economy.

Chapter 5 follows the caught fish back onto land, and focuses on the fish transactions and trade relations between men and women – “youthman” and “fish mammi” – through fish. I employ the local concept *kostament*, which refers to long-term trade relations that emphasise the material support and involvement in each others’ businesses, to show how people build relations of “*trɔs-trust*” through the trade in fish. Furthermore, by employing a new materialist perspective, I show how the material qualities of the fish themselves, as either slippery or rotten, come to qualify the relationship between *kostaments* and other trade partners, and thus affect their trust and material support.

In the final chapter of the thesis, I link the Tombo fish economy to the current global concern with developing a blue economy. I zoom in on the WARFP development project that I was a part of in 2019, and focus on the specific project component of improved fish smoking ovens, which were considered inefficient and unhealthy. In the chapter, I trace how we in the project came to see the smoke processing in Tombo, and compare this with the existential, embodied knowledges that the fish processors themselves have developed through their practical work with smoke ovens, smoke, and firewood. I show how women must entrust fresh fish to their smoke ovens, and use their trust and knowledge of their final smoked fish product to evaluate claims and tricks by their *kostament* relations, as well as how the new development-funded smoke ovens did not take these socio-material relations into account.



Figure 9: Early morning outside a banda fish smoking house

CHAPTER 1

Methodological considerations

Researching socio-economic relations in a poor coastal community



Figure 10: Rainy season troubles

Chapter 1 prelude

During the rainy season in Tombo, the pace of life slows down with the sound of raindrops on metal roofs. In late April and early May, the very beginning of the season, the rain falls during the night-time only. It's a light patter, gently tapping the sheet metal roofs, which leaves nothing but damp ground as evidence in the morning. Then, over a couple of weeks, heavy clouds gather around the tops of the Western Peninsula mountains, clouds that every few days give a hint of what is on its way.

Tap.

A longer pause.

Tap.

Another pause.

Tap. Tap.

Four drops of heavy rain. Then several days pass with only the nightly drizzle, before the sky again sends a few heavy warning drops onto roofs during the day.

After two weeks of teasing, the clouds seem to be unable to bear all the moisture.

Tap.

A short pause.

Tap. Tap.

Tap-tap. Tap-tap-taptaptap.

The roof vibrates, and the drops comes down too fast to be counted. It's the first daily rain shower, finally washing all the dust off our roofs. Filling the gutters in minutes with water, coloured red by the Harmattan dust that's been covering the rooftops since December. Children cheer in the streets, playing with the water and mud. Mothers yell at children to stop playing in the rain and instead put out buckets to collect the now-clean water where it drains from the roofs. All the while, the rain keeps drumming on the metal roofs.

The beginning of the rainy season brings ease and enjoyment, its soundtrack cheery like the melodies of Sierra Leonean musician Emmerson Bockarie³⁰. After weeks, or months, of irregular water supply, scorching sun during the day and choking heat at night, with potentially good fishing but dangerous erratic winds, the early rainy season exemplifies the country's nickname of Sweet Salone. For the fishermen, it is a time when catches are still relatively stable and weather predictable, as changes can be seen on the horizon, allowing the coastal fleet to seek safe harbour from approaching storms. The nightly rain showers have washed the Harmattan dust out of the sky, allowing for good visibility from the fishing boats watching the clouds rolling over land. Life is sweet, in the literal sense, as the streets overflow with ripe mangos. In the evening, the leftovers from a day at the market are given to families and lucky passers-by, filling the evening air with loud smacking and slurps as people on every corner suck the sweet juice from overripe mangoes.

After a few weeks, the regularity and intensity of the rain showers increase. During the day, business activities are paused when the first taps from heavy rain drops hit the metal roofs. With haste, everyone runs to fetch buckets, barrels, *baffs*, even pots and lids; any container that can hold the fresh, sweet water falling from the sky. In the very first weeks of the rainy season, while rain only falls in the night-time, all we can do is sleep through the drizzle, as no one would be stupid enough to leave a bucket out at night. The two short weeks with lighter rain showers bring a sense of security and ease, as we watch our buckets and pots fill with clear, clean water. Hearing the rain of the first few weeks of the wet season brings an ambivalent feeling, like the seductively happy tones of an Emmerson song, initially hiding the hard-hitting lyrics that we all know are there. Most seemed to agree with Emmerson: *Yesterday betteh pass today*³¹. If yesterday was better than today, then what of tomorrow? When the rain comes down with relentless force and the sheer quantity of water fills the back alleys with over a foot of water, the sound is overpowering, deafening. Sounds resembling the heavy drops of water on a metal can still scare me. Not the sound of water itself, but rather what it covers, what it hides.

During the months of July and August, I lost count of the number of robberies and break-ins people told me about. One of the first serious thefts I heard about was following a night of heavy rain, when someone had broken into Jameela's former neighbour's house and stolen money and electronics. As the rainy nights became heavier and longer, the intensity of the robberies increased. With people hiding inside from the rain, back alleys and paths were left unwatched, and it was easy to walk

³⁰ <https://www.youtube.com/watch?v=WwldQzSvblw>

³¹ <https://www.youtube.com/watch?v=ucl46sfdRWE>

unnoticed. From the inside of the houses, the sound of rain on the roof is deafening, and can last for hours on end. The individual tap-tap-taps are a distant memory, as are the vibrating roofs of the rain showers of May and June. This is a thunderous rumble, almost an earthquake. It comes and goes in intensity, with the severe rains resembling an empty lorry as it drives over a pothole – a metallic, hollow rumble. Only, unlike the vehicle once it's passed the bad section of the road, this sound does not go away. The torrential rain is the perfect sound to cover other noises, like a crowbar pulling apart window planks.



Figure 11: Development-funded training sessions in fish smoking

Introduction

In this chapter, I draw up an account of my fieldwork experiences, considering the methods used and ethical reflections I have made along the way. In many ways, my fieldwork could be described as the ‘traditional’ anthropological fieldwork, where the researcher goes to a selected field site, finds a place to live, and stays there to immerse herself in the field as much as possible. At the same time, as Günel, Varma, and Watanabe write in their *Patchwork Ethnography*, where they question the clear delineations of the field far-far away and the researchers’ home, anthropology must “acknowledge and accommodate how researchers’ lives in their full complexity shape knowledge production” (2020). I had multiple positions and roles during my fieldwork, especially given my secondment-internship to a World Bank funded fisheries project. Furthermore, just as my cognitive reflections and theoretical training shaped my analytical interests during the fieldwork, so did my affective experiences and emotions. Finally, “the field” itself is not a place, but rather a social construct shaped by the research inquiry (Amit 2000, Chua and Mathur 2018, Clifford and Marcus 1986), and as such, I find it especially important to outline the methodological considerations, ethical concerns, and analytical reflections I made along the way.

In the following chapter, I show how I accessed the field site, how I integrated into some of the areas that became my prime sites for data collection, and who my key interlocutors were in Tombo. Furthermore, I situate my fieldwork in relation to my secondment to the World Bank project (WARFP). Finally, I describe some of the challenges I struggled with during the fieldwork, and how these shaped both the fieldwork methodologies and the later analysis and writing up.

Gaining access

“Tombo?! You must really enjoy smoked fish!”

My first experience with Tombo, on the very day I landed in Sierra Leone, came in the form of a spontaneous comment from my Freetown taxi driver as he took me from the airport shuttle to the hotel. Chatting in the car, he had asked me what I was coming to do in Sierra Leone. I told him that I was coming to study the fishing activities in Tombo, and he laughingly replied with the above. It was both a question – whether I really liked smoked fish – as well as a statement, saying that to live in Tombo, you have to not just acclimatise yourself to the smells and taste of smoked fish, you must

also come to enjoy it. By the time I travelled to Tombo for the first time, some weeks later, I had forgotten his words, but only for a brief period – until smoked fish became a part of my everyday life.

I had decided on Tombo as my primary field site, before I went to Sierra Leone in January 2019, for two main reasons. First, I had learned through reading newspaper articles³² and speaking with other researchers that Tombo was the biggest artisanal fishing “village” in the country, and that it had strong connections with both the markets in the capital and inland. Furthermore, I had learned there was a high presence of foreign fish processing companies³³ close by. This made Tombo an attractive site to explore the links to the global fishing economy and the apparent increased pressure on West African fish resources (Belhabib et.al. 2016, INTERPOL 2014, Seto et.al. 2015; 2017, Okafor-Yarwood 2019). Second, I had learned from contacts through my secondment agreement to the World Bank funded West Africa Regional Fisheries Program (WARFP, to which I will return below), that since the 1980s Tombo had attracted large-scale development projects that had sought to “improve” the fishing sector in various ways. WARFP had closely followed activities in Tombo since 2014, and there were new interventions planned for 2019 as well, which made it an interesting site for exploring local experiences with development interventions.

After spending a month in Freetown for a PhD summer school on environmental disasters³⁴, as well as securing a research permit from the Ministry of Fisheries and Marine Resources (MFMR), I travelled to Tombo with two MFMR fisheries officers. They kindly introduced me to several key resource people in Tombo, who would later become some of my closest interlocutors and friends during my fieldwork. With the aid of the ministry staff, I was able to present my research objectives to both the Community Management Association in Tombo, the Fishermen’s Union, and other harbour authorities in a way that gained me immediate access and acceptance. Having ministry staff introduce me also allowed me to directly show to the community authorities that the ministry was aware of and approved of my project, in a way that was different to merely presenting a document. Following the first visit, my local secondment supervisor, Dr. Salieu Sankoh, arranged for me to stay in in a bright pink house, located a little outside of central Tombo, north of the tarred road. The house was owned by MFMR, renovated with WARFP funding, and initially intended for

³² See for example Margai (2016), Acland (2016), and TBI (2018).

³³ Often simply called Korean companies; see chapter 2 and chapter 4.

³⁴ LOST Research Group “From disasters to planetary care,” exploring the aftermaths of the 2017 mudslide in Freetown (LOST n.d., Aljazeera 2017).

Ministry officers to live in. However, the house was unoccupied, and staying there allowed me to ease into fieldwork and establish some trustworthy connections before choosing a more permanent place to live.

Initially, I was worried that the introduction by ministry staff, as well as staying in their pink house, would lead people in Tombo to associate me too much with MFMR and the Sierra Leonean government, as well as with the WARFP and other development consultants who frequently visit Tombo. However, I quickly learned that the fisheries authorities, whether older or recently established, all worked closely with the Ministry, and thus my association with MFMR became instead a stamp of approval, disassociating me from journalists looking for controversies or development consultants (critically) evaluating project impacts. That said, there are many fishermen and women who are critical, and rightfully so, of the Sierra Leonean government, including MFMR. Many initially felt uncertain how to place me, and how I would disclose the information they gave me. Over time, I was able to build many strong relationships with people who came to trust me with their stories on sensitive issues. Furthermore, I gained access to a variety of voices – young and old, male and female, from different ethnicities and religions, and from opposing political parties. That said, my research is undoubtedly coloured by the identities of some of my key informants, to which I will return below.

There were times when I struggled to navigate the internal divisions both between community authority groups and within civil servant hierarchies at MFMR, which made some interlocutors uncomfortable. For example, some of the junior civil servants were uncertain as to how to deal with my “top and bottom” access: whereas they had to convey information to and from Tombo and MFMR through a very hierarchical bureaucratic chain of command, I had direct access to both the Minister and the Director of fisheries, as well as to many of the ministry’s development funders through WARFP, while also having witnessed (and partaken) in activities on the ground in Tombo. On two occasions, I made the mistake of recounting what I considered to be success stories of fisheries management in Tombo during ministerial meetings, while the local government staff were still busy writing up the reports from the work they had done, and waiting for their bosses’ approval. Having a foreigner reveal this news to the minister thus amounted to a betrayal, as they now (in addition to doing all the work and getting no glory) had to prove that they were not delaying or withholding any information out of disloyalty.

Integrating into the key areas of the fishing economy

After a couple of weeks in the bright pink ministry-owned house, Mr. A helped me get a rented room in the compound of one of his in-laws, Mr. Jamaal and his family. From the very first night, I was swiftly reminded of my Freetown taxi driver's comment, as smoked fish became a part of my daily environment. The first week in downtown Tombo, the nightly smoking going on in the three *banda* smoke ovens we had in our compound, as well as the dozens of surrounding *bandas*, gave me runny eyes and a dry cough. It was April by then, and the fishing high season meant many boats landed good catches, and the smoke ovens in our neighbourhood were in daily use. Up in the pink ministry house, I had been too far from the main fishing and fish smoking activities to learn about – and feel with my body – the afternoon and nightly activities in the sector. Participant observation includes much more than simply what can be seen with the eyes. As Okely (2012:5) puts it, participant observation is an embodied experience, where the fieldworker must attend to our body and *all* its senses. Similarly, Pink (2009) argues that situating the multi-sensory body in places foregrounds the sensory rhythms and material practices that shape social experiences. Thus living in the midst of the fishing community enabled me to use my whole body as a tool, to fully capture the existential conditions shaped through a life with smelly fish, runny eyes from fish smoking, and loud voices from fighting neighbours and generator-fuelled loudspeakers.

Moving in with Mr. Jamaal and his family, I was immediately thrown into the everyday activities of Tomborian households. Although I had my own ten square-metre room, the house – which consisted of nine other similar rooms – was occupied by seventeen or so people, and the compound had another two houses, a neighbourhood mosque, and a hand-pumped well run by Mr. Jamaal's aunt and neighbour. There were always people around the compound, and neighbours passing through. Throughout the year, most of the people who lived nearby came to know me and greeted me by the everyday Memuna, *how di bodi?*³⁵, with Memuna being the name I was given by Tombo's headman. However, right through to my final week in Tombo, I was still met by wide-eyed people who passed through our compound exclaiming *Oporto* (white person in the Temne language), or *Oporto ye ma di* (white person, give me food). To me it was a daily reminder of the colonial history of Sierra Leone, as *Oporto* likely comes from Oh Portuguese, and may have been used as a warning call in villages during slave raids, according to some of my interlocutors.

Much of my fieldwork was conducted *na waf*; at the wharf. The wharf in Tombo is in fact three, four,

³⁵ Memuna, how are you? Literally: How is your body/health.

or even six different wharfs, depending on who you ask. At the two extreme ends are Kassis wharf to the west and Gbanko wharf across a river to the east. From Gbanko across the river, you enter Newtown wharf. Despite the name, Newtown is the oldest wharf in Tombo. It is located on a long sandbank along the river, and is sheltered from the strongest winds and waves to the south by the hard rocky ground upon which Newtown is built, and to the east by another sandbank. Today, Newtown wharf remains fairly isolated from the main commercial activity which centres around Big Wharf, Small Wharf and Pepeh Wharf. All three are located alongside one another on the southern shore of Tombo, on what used to be a long sandy beach that had been increasingly modified with concrete slabs. Although I followed the market interactions at Pepeh Wharf, I have only done shorter interviews and visits there, whereas on Big Wharf and Small Wharf, I could participate in many of the activities going on.

It was from Big Wharf and Small Wharf that I was able to join some of the boats for fishing trips. In Tombo, I was the only woman who went out to sea, and from the start of my fieldwork, I wanted to make sure that my desire to join the boats did not breach any community rules, or endanger me, or the fishermen I joined, in any way. As I was getting settled into Tombo, I asked Mr. A what he thought about me going fishing, and he was immediately enthusiastic. “You should join, you must learn from them,” he encouraged me. Similarly, when I later met the CMA youth leader, I was told I needed to go to sea to learn “what fishing is about.” I did not need to be told thrice, so after asking the community Headman for permission, as well as the CMA chairman, Mr. A arranged for me to join his brother’s boat, the Ghanaboat *Surprise*, and its crew. Throughout 2019, I joined a few other boats, but mainly went fishing with *Surprise*, partly out of safety concerns, but also as I wanted to know and trust the people in charge of the boat I joined. Furthermore, I found freedom in sharing a boat with crewmembers that knew me and my research, so that I could join in activities and learn about their crew dynamics. I had many offers to join other boats, but over time I became associated with *Surprise*, and if I passed through Big Wharf during the day, I was often asked where *Surprise* and the other Ghanaboats were docked, and why I had not joined *Surprise* on that particular day.

Only once was I directly told by a self-declared youth leader (whose authority the CMA youth leader, and Tombo Headman, later rejected) that I should not go fishing because “we don’t let women go to sea”. However, the crew on board the *Family First*, which I was with that day, backed me up, and with the approval of several traditional authorities, I did not feel wrong in standing up to him. While considering fishing activities, it is also worth reflecting on my own position with regards to boating and sailing, which probably affected my access. While I made no attempt to hide the fact that I was utterly incapable of being any sort of help in hauling in the heavy fishing net, my

background as a leisure sailor with my own sailboat, and two years of work experience on a top-sail schooner, may have helped to convince the fishermen that I would at least not be a nuisance on board. After my first fishing trip, I was immediately asked when I would join again (which then became the next day). Whenever there were new fishermen on board *Surprise* who didn't know me, they often tried to tell me to sit down, to not stress myself, or to watch my step on board, but they were always shut down by Ishmael, Audu, or some of the other senior fishermen who knew me. "Leave her, she is our fisherwoman" they would say, indicating that they felt safe taking me with them to sea and allowing me to join their activities.



Figure 12: Mama Jameela and I after a funeral for an okada motorbike driver

Key interlocutors

From April onwards, I lived with Mr. Jamaal and his family for the rest of 2019. The family is middle class by Tombo standards, with Jamaal and his wife Ramatu both being teachers, and two of the elder women in the compound running the fish processing businesses. Apart from these four, there were a further ten young adults, four children and three babies in our house, with another fifteen or so in the other two houses in the compound. The family helped me a great deal in understanding everyday compound life, where the tasks centre on cooking, washing clothes, fetching water, watching the kids. Much time was spent sharing stories and news from around town, listening to the radio or music from mobile phones, and chatting with neighbours passing by or through the compound. That said, language was at times a barrier, because many of the family-members only spoke Temne but not Krio. Although I tried to arrange local Temne lessons, I was never able to engage a teacher permanently, and mostly ended up relying on my interlocutor network to teach me one word at a time. However, as both Jamaal and Ramatu, as well as several of the young women in the compound, spoke Krio, there was almost always someone to help with translation. In addition to language and everyday activities, the family were a great help in introducing me to other people who worked in the sector, giving context information to meetings or events I had participated in but not fully understood, and sharing histories from Tombo and Sierra Leone of the past. Finally, the two female fish processors in the compound; Mami Zainab and Mbalu, also invited me into their *banda* smoking houses when they were processing fish, and generously shared their knowledge of processing techniques, fish packing skills, and fish prices at the markets.

Apart from Mbalu and Mami Zainab, I also worked closely with five other fish processors, as well as some peripherally. Some of them took me along to the local markets when they were selling their fish. However, because none of them travelled with fish themselves to inland markets, I was never able to observe the process further than the Western Peninsula. I tried arranging this a few times, but the plans always fell through, and Tombo remained continuously interesting, making me not want to miss activities there. I therefore limited my focus to the fish processing activities themselves, and to the marketing activities that the Tomborian women did in Tombo or in neighbouring Waterloo.

Throughout my fieldwork, I had two friends and interlocutors who, in addition to providing me with vast amounts of information and a good contact network, were a huge support and trusted confidantes. Whenever I struggled with something, felt lonely, or simply needed a friend for

everyday chitchat, both Mr. A and Jameela were there with kind words, ready to listen and share. Although I have given them pseudonyms, they will be recognizable to Tomborians in my thesis, purely from the amount of time I spent with them. Although I have mentioned them both earlier in the thesis, they deserve a longer introduction.

Mr. A has lived most of his adult life in Tombo, but his family comes from a fishing community further south. He is proud of his Sherbro culture and language, and also speaks fluent English, Krio, and Temne. Thus, he is capable of communicating freely with the majority of people in Tombo. Being a devout Muslim, as are the majority of people in Tombo, Mr. A has two wives in separate households, and four children. When he was younger, he used to go fishing, but since the 1990s has mostly been involved in land-based business ventures, and in facilitating development projects. Along with several of his brothers and some of the other community leaders in the fishing sector, he founded the local Fishermen's Union in 2001, working against illegal fishing practices, like the use of dynamite and poison, and fishing nets with a small mesh. Today, the union is one of the main advocacy groups for increased regulation of activities in the maritime sector, and are involved in rolling out many development projects and advocacy campaigns on sustainable resource management, and are also working in close contact with the Ministry of Fisheries and Marine Resources (MFMR).

Mr. A is well known throughout Tombo, and in general respected for his work. Whenever he walks through Tombo, he is greeted on the street, approached with news and asked for favours. He has a kind appearance, but often walks hastily, as (if) he is always on a mission. That said, Sierra Leone small town life is not without conflict, and like others with access to political and development resources, he has to juggle the economic demands of an extended family, and communal critique of who he prioritises for development projects and beneficiary lists. Throughout my year in Tombo, Mr. A invited me to many community meetings and advocacy activities in Tombo and the region, and introduced me to a variety of different people and actors in the fishing sector. He always generously shared his knowledge of the history of politics of his country and town, and shared the stories and narratives experienced during his 50 years, which were always connected to the sea and maritime industries. As mentioned above, the boat *Surprise* that I went fishing with belonged to Mr. A's older brother who was based in Freetown, and was captained by his younger brother, who also lives in Tombo. His nephew Abibu, a secondary school graduate in his early twenties, fishing to earn money for further studies, often took the role of my patient teacher on board *Surprise*.

My other main interlocutor was my Tombo 'Mama' Jameela. I met Jameela on my second day in Tombo as I was walking down from the bright pink house towards the town centre. When I stopped by the road, probably looking quite lost, she called me over and asked if I was going to the beach towns west of Tombo (like other white girls who occasionally pass through Tombo). "The transport, *okada*, is Le5000 only," she said. I laughed, told her I thought it was expensive, and said I was not going there anyway. Jameela later told me she liked my attitude of "not accepting anything right away," which was why she encouraged me to come and sit down in her corner stall by the road, where she sold water, cigarettes, and candy for a living. Jameela is a smart and strong headed woman in her 40s, who knows how to hustle her way through everything from bureaucracies to football crowds, from witchcrafts trials to police harassments. From the day I met her, she called herself my mama in Tombo, and she took care of me, ensuring my safety and facilitating knowledge about both everyday things and intimate and contentious topics. Like Mr. A, she always invited me along with her to activities that she had planned, taught me how to cook Sierra Leone dishes, and told me all the gossip of the town. She helped me get my own motorbike, and voted me in as Vice Chairlady of the local Okadamen's union, where she held the position of chairlady. Together with Jameela and the motorbike riders, I always felt welcome and safe on the Sierra Leone streets, even in the evening time.

Outside of Tombo, I have had regular contact with, and done interviews with, people working at the Ministry of Fisheries and Marine Resources. They helped me from my very first day, acquiring research permits and ensuring that the authorities in Tombo were made aware of my plans to conduct research there. Although I know many were uncertain about having a foreign researcher nose around in what could be sensitive cases of control, money and information flow, I always found the Ministry to be welcoming and interested in what I had to say. In Freetown, I also engaged with other government agencies, and with different NGOs and foreign representatives who have knowledge of or projects within the fishing sector, and whenever I heard of foreign or Freetownian NGOs visiting Tombo, I sought them out for a conversation.





Figure 13: Mr. A walking purposefully through the Gborloh neighbourhood of Tombo

While the majority of the material has been collected through everyday conversations and participant observation, I have made 9 taped interviews and 25 semi-structured interviews with key interlocutors both in Tombo, Freetown and abroad. For all of these, I sought to have either their written informed consent or their oral taped consent; however, many felt uncertain about this formal consent procedure. Some worried their name would be presented to the government, or that when I left Sierra Leone, my bags would be checked at the airport, again leading the authorities to dissenting voices. Others associated signing documents with land sale procedures, and worried their signature could be misused. Throughout my fieldwork, I prioritised my interlocutors safety and feelings of uncertainty, and thus never sought to push anyone to document their consent. All the people who appear in this thesis were informed of my research project and asked if, and how, they would like to participate. In everyday conversations and field participation, I continually asked people if I could recount the conversations or activities I had participated in, and most people were happy to be asked, and often added their elaborations to what had transpired. Thus, consent procedures and ethical considerations also became a way to encourage participation and collaboration on my interlocutors' terms. That being said, I cannot guarantee that everyone involved has fully understood the purpose of my research, or would agree with the portrait I am painting of them and their town. There were times, for example, when the fishermen stopped me in my note taking, asking me to recount what I was writing down. "Audu, the smoke [cigarette], she is writing it!" I remember a younger fisherman laughed at his crewmember Audu, one afternoon on *Surprise*, when I was indeed taking notes about what the fishermen did during the break between hauling nets. While I had already had conversations with Audu, and the other permanent crewmembers on *Surprise*, about what I wrote down, there were often new, temporary crewmembers on board, who I did not always have time to update before we went out to sea. Furthermore, there were also everyday situations at the market, the wharfs, and during meetings, that I initially took little notice of, only to later realize the significance of a comment or activity. In these situations, I have sometimes struggled to relocate the person, especially as Tombo is a highly mobile town. In these situations, I have taken the information as background, situating knowledge, without directly quoting or referring to the event in the final written product.

WARPF's applied anthropologist?

During 2019, there were several different development interventions in Tombo, and I was particularly involved in one of them, namely the World Bank funded West African Regional Fisheries Program (WARFP). As stipulated in my PhD funding³⁶, part of my fieldwork period was to be spent in collaboration with a 'development partner', to disseminate the research findings up to that point and build a relevant network for later work. Through a so-called secondment contract, which resembles an internship, I was interned to the consultancy firm MEP (MacAlister & Elliott & Partners) and the University of Sierra Leone's Institute of Marine Biology and Oceanography, who were both contracted as the Sierra Leonean partners on WARFP. While I had developed the research proposal before contacting the WARFP team, my project has been thoroughly shaped by the secondment. As mentioned above, I chose Tombo as a field site because there were several interventions planned there, and because, through the WARFP-contacts, I was able to get access to the government employees at the Ministry, who later encouraged me to do research in Tombo. Furthermore, many of the activities I did during my secondment took up a lot of time, and although they generated interesting data material that I could further use for my project (see chapter 6), it meant there was less time to follow other "serendipitous" leads (Okely 2012, Howell 2017).

Throughout 2019, I was invited to several of the WARFP team's field mission meetings, including top-level meetings with ministers and ambassadors. This gave me unique access for my later fieldwork; however, it also brought some challenges as to how to relate to lower tiered bureaucrats (see the above section on gaining access). I often used these meetings to present myself and my research project, and later return to some of the contacts for follow up interviews. During these team missions, I also disseminated small findings from my field research so far, discussing practices I had seen, elaborating on the challenges the fishermen and fish processors told me about, and discussing the team's suggested solutions and policy changes. At the same time, it was a fine balancing act, as discussions often moved into the political realm, with concerns about corruption and economic fidelity, the trustworthiness of local participants, and what observable 'progress' there was. Several times, I was reminded of how 'do no harm' always begs the follow up 'to whom', because, as in any other fieldwork site, there are different experiences and opinions. While many of the fishermen told me to go and "speak up" about what I witnessed at sea during ministerial meetings, making use of the privileged access that I had, I often found that I had to resort to a form

³⁶ European Union's Horizon 2020 research and innovation program, under the Marie Skłodowska-Curie grant agreement no. 764546.

of *“tok af, lef af”* (Shaw 2000) diplomacy, as I did not want to compromise the political work of local groups in Tombo by fuelling antagonisms.

While these were some of the more practical, everyday considerations I took, there is a wider debate in anthropology about doing “applied” or “public” anthropology, especially in relation to development projects (Crewe and Axelby 2013, Mosse 2011, Carruth 2021). Lewis (2012) summarises the relationship of anthropologists to development interventions and ‘applied research’ into three positions: those taking a distanced and critical stance; those who (reluctantly) offer policy advice; and activist anthropologists who combine research with advocacy on behalf of marginalised groups. Throughout both my fieldwork and the data analysis I oscillated between all these positions, as will become particularly evident in chapter 6. During fieldwork, there were certain development projects that I found had problematic assumptions about “communal African life”, and who considered their project “just development”, without political implications (Ferguson 1990, Li 2011). Regarding these, I sometimes directly challenged their assumptions, or tried to connect them with local advocates and stakeholders, while also noting it down as data in my field notes. In the World Bank project, I often sought to take an engaged position when it came to the continual reduction of the social to the economic (Lewis 2012, Goldman 2005). However, as Mosse (2011, 2004), Bangstad (2017) and Fassin (2013) have noted, if anthropologists are to have a place at the table, we must acknowledge that those we consider our public also influence how we phrase our questions and concerns, and while we should engage with the dominant categories and discourses critically, we must nevertheless find a way to engage beyond discursive critiques.

In Tombo, I was particularly involved in a pilot study on smoke oven technology, which aimed to provide the preliminary data for a larger investment in new smoking technology across West Africa through the existing national WARFP projects. This pilot study is the focus of chapter 6, where I use my own role in the consultancy team as an insight into the “black box of development intervention” (Lewis 2012:483). In this section, I focus on some methodological and ethical considerations for my wider research. In Tombo, my association with the World Bank project clearly situated me as a Big Woman, or at least in a form of broker position where I could negotiate people’s access to development funds (see also Utas 2019). I found it a difficult position to navigate, as there were always many more demands than spots on the list. I wanted to make sure the interventions indeed targeted or involved people who were, somehow, “rightful” recipients and who could make use of the resources or training provided, but who was I to decide? In a town where the majority of people live in deep economic poverty, wouldn’t everyone be able to make use of some smoke oven materials, an extra meal with some juicy chicken, or at least a cold soft drink? In these situations, I

tried to learn from people themselves, and adjust my actions to their reactions to me. People seemed to accept and expect that those I spent the most time with would also be the first in line when I had the chance to involve someone in a development setting. Secondly, I also asked people directly, but in a private setting, who they would like to have involved. For example, when we engaged smoke processors for a study, I asked some of the processors I knew as highly active, who they would recommend. All of them were happy to be asked, as it again allowed them to take on a broker-like position.

The smoke oven pilot study we organised in Tombo had four components: first, a socio-economic survey of fifty fish processors; second, a registration of all the smoke ovens in Tombo to calculate the smoking capacity of the town; third, monitoring twenty four smoke runs conducted by different fish processors; and, finally, constructing an Ahotor oven for similar test runs and to gauge the community's acceptance. The pilot study was developed by David, a fish smoking technologist working as a consultant on WARFP, together with Lisa, another consultant and fisheries specialist, and myself, as the local coordinator. In addition, we wanted two local enumerators with inside knowledge of the fishing sector, who both spoke English and the local languages. I was asked for recommendations, and it was thus natural to ask Mr. A. First, given his track record of facilitating numerous other development projects, and his thorough insight into the local fishing scene, including valuable contacts who were active fish processors, I considered him a highly skilled candidate. Second, it would have been a complete break with the trust Mr. A had shown me, taking me along to all his activities and union meetings, if I had asked someone else first. The second enumerator we chose, Maria, was also a member of the union, and one of the few women who spoke good English, given her position as a primary school teacher. This thus became a fairly easy choice, given the gender equality requirements in World Bank policy.

Fieldwork challenges

I found Tombo an intense and often strenuous place to work. I have done previous long-term fieldwork and stays in Nigeria, Cameroon, and Ghana, but the Sierra Leone street-life seemed to require an extra level of sharp-mindedness and a hustle mentality. This, of course, is one of the constraints of fieldwork one may just have to adapt to, and make strategies around. That one adapts to the harassment and uncomfortable (often sexualized) attention, does not mean one is not affected by it. Some days, I could "be accessible" to Tombo for hours on end, putting on my best

hustling game and daring smile. For example, one afternoon at the wharf with Mr. A and the Headman of Tombo, we were passing through an area of Pepeh Wharf with many “teashops”, which were a colloquial for tea and rice served out front, and *jamba* in the back. As we stopped to discuss some of the boats, a group of young men blocked my path and started chitchatting. Mr. A and the Headman took no notice and continued on; I was in a devilish mood, so I allowed the men to stop and talk with me. It didn’t take long before the most vocal guy asked who was “touching my boobies” now that my husband³⁷ was not here. I felt a raging fury, and was probably a little scared, but I turned to his friends with a stern and calm face. In my fieldnotes, I have written that I grew ten centimetres taller. I probably felt I needed to, to indicate how small I found this annoying boy. Calmly, I asked the guys what was wrong with their friend. Was this really how they treated guests in Tombo? I took one step closer to them, and told them to apologise. At first uncertain, it took them a second before they did, and one even lightly tapped the offender who, somewhat reluctantly, also apologised. I feigned indignation, as if they were really too small for me to bother about, and walked off. The first guy followed up by saying that Pepeh Wharf “is okay for you sister, no problem again.” I was never bothered in the same way again at Pepeh Wharf, and I took it as an example of how Tombo often required a kind of daring presence.

At other times, even frequently, it was difficult to grow those necessary ten centimetres, and to take that step closer instead of a step back. There were indeed times when I just wanted to (and did) go back to my room and lock the door as fast as possible. One time, while walking down Tombo’s main street, two men were walking behind me and Jameela. I overheard one of them saying I had a fine ass and that he was going to marry me. The other said he was okay with that, as long as he could take me first. I exploded. If it hadn’t been for Jameela walking in between us, shouting angrily in Krio and Temne, and then quickly leading me into one of her friend’s shops nearby, I might have gotten myself into trouble. Jameela was often a great help in these kind of situations, herself a headstrong and incredibly street-smart woman. However, she also confided to me how the male attention could be too much for her as well. “One day, I felt fine, I put on my nice dress from Bathurst-Gambie³⁸, even just to sell my water. Tsk, all these *okada*-boys³⁹, they whistle, touch, say I *bluff*⁴⁰ too much. I don’t think I want to wear my dress again,” she said. Another time, after my two-week holiday back home to Norway, she cried with joy when I was back. “The boys they all laughed at me, said my

³⁷ I was referring to my then partner (who also came to visit in May) as my husband, which the majority of my interlocutors respected.

³⁸ Former name for Banjul, capital of The Gambia.

³⁹ Motorcycle-taxi drivers.

⁴⁰ Show off.

white friend had left me and I was just a nobody.” Even though she was an excellent jester herself, some of these comments clearly bothered Jameela, and like me, there were days she didn’t leave the house because she couldn’t be bothered with “these people today,” as she put it.

In many academic works, Sierra Leone has been emblematic in simplistic narratives about natural resources, violence, and poverty⁴¹. Imbued with vast riches in diamonds and minerals, primary commodities like timber, palm oil, and fish, as well as its geographic location in a climate favourable to human life with sufficient water and fertile land, Sierra Leone’s designation as one of the world’s poorest countries (UNDP 2020, Thorpe et.al. 2009) seems contradictory. Sierra Leoneans themselves lament daily the lack of social economic progress they experience. Many blame the endemic corruption among politicians and the economic elite in the country. Some connected the high levels of poverty with continued neo-colonial subordination to European powers and supranational organizations like the IMF and World Bank. Others again, like Christina, a government employee working in Tombo, blamed their fellow citizens for the lack of solidarity and support.

When I was a little girl, I watched the James Bond movie ‘Diamonds are forever’, where they say the best diamonds in the world come from Sierra Leone. I asked my father if it was true, and he said yes. Ai! If you go to Kono today, you wouldn’t want to spend even one single night there. Even Tombo is better. Sierra Leone is blessed with so many natural resources, but if you see the people God put in this country...

Christina expressed a deep lack of trust in other Sierra Leoneans, a form of mistrust I also came to develop over the year of fieldwork. In the few following episodes, I elaborate on these emotions in the field, not to equate or substitute “knowing the self” [with] ‘knowing otherness’”, as Ghassan Hage (2010:133) writes on political emotions during his fieldwork in the Arab-Israeli conflict. Rather, I want to challenge “analytical cuts between emotion and thought” (Davies 2010:25), by illustrating how affect and emotions are sources of intersubjective knowledge-making (Jackson 1989), that have guided my analytical framework towards trust and mistrust.

In her book *Lagoon*, about extra-terrestrial beings emerging out of the seas outside Lagos to overtake the city, Nnedi Okorafor (2014) describes chaotic scenes where the so-called Area Boys of

⁴¹ See Collier and Hoeffler (2012), Ross (2003, 2015), and Fearon (2004).

For critiques, Cramer (2002) on the use of problematic proxies and the reduction of social to individual motivations in neoclassical econometric studies, and Voors et.al. (2017) on not finding statistically significant correlations in the case of Sierra Leone.

Lagos capitalise on the general mayhem. The scene resonated immediately with me, and reading it took me out of my 2021 Aarhus apartment, and back to Tombo 2019. Tombo is filled with Area Boys. The organised equivalent of the Lagosian Area Boys are the gangs that work out of Pepah wharf, Madina, or Newtown wharf. They make a living from theft and petty trade, political violence (cf. Utas and Christensen 2016), control of the local drug market and the prostitution scene, in combination with more socially condoned activities like driving motorcycle taxis and manual labour on community or development projects. However, the mood captured in Okorafor's description is one where, although it is not socially accepted, it is realistically expected that people will opportunistically make use of any situation to enrich themselves, including 'kicking a man when he is down'. If you crash your car or motorcycle, someone will take the parts from it. If rain destroys the door to your house, thieves will enter and steal what they can get.

In August, during the heaviest weeks of the rainy season, a frustrated Mr. Hassan walked into the Fishery Boat Yard, but did not open the CMA office. The keys were gone, alongside his backpack with documents and some money, which had been stolen from an unoccupied room in his house. The week before, the harbour office had been broken into, and was vandalised when the thieves found no money. Leaving town for a few days, or even visiting friends in Tombo for a few hours, always ran the risk that someone would successfully break into your house. This was how the thieves got me; I was out of town, and during the worst rainstorm yet of that rainy season, someone broke the window to my room and got away with some money, a power bank, and a solar charger. I am happy I was not there. There were regular stories of break-ins, and several serious injuries resulting from people who resisted thieves. Jameela told me of two murders, both of them *osusu*-men who handle money from *osusu* saving groups⁴². The fishermen I went fishing with all had stories of money lost during the rainy season. "Really, it is better not to have it," Audu, one of the senior fishermen on the Ghanaboat I often went fishing with, shrugged during one of the few fishing trips we attempted during the rainy season.

It was worse for the boat owners, who needed 'rain capital'. Savings put aside for the rainy season, when there is poor fishing or no catches at all, were best kept in the bank or with family members who lived in more secure compounds in Freetown or Waterloo. But not everyone was so privileged, and those who trusted their own hands more than those of family members were always certain to stay close to home during the rains. For Mamadu, a neighbouring boat owner, the rainy season of 2019 proved particularly difficult, when the flooding of August 6th caused serious damage to his

⁴² Rotating credit savings groups.

boat. Then, as he was preparing to repair it, using some of his savings, his room was broken into, and a large part of the money was stolen. Some days later still, after he had bought some strong wooden boards for the remainder of the money, a thief carried off several of the boards in the middle of the night, having used a hacksaw to cut the chain holding the boards. The theft was halted when Mamadu himself got up to use the toilet during the night, catching a young man with a board on his head.

My fieldnotes from the morning of August 28th read

Someone tried to break in through the window again during the night, around 4 am. I slept terribly afterwards. I was awake for a long time, sometimes dosing off, but always awakened by something. All sounds are frightening. Raindrops. Loud rain, because it is impossible to hear other sounds. Footsteps, people walking. People snoring, is it something else? Is it a crowbar, again? Wind on the roof, making the metal sheets move, and squeak, like a crowbar pulling nails out of the wall. All sounds are frightening.

For those who live in Tombo, the sonic material gathered from years of living with Sierra Leone's heavy rain is valuable, yet double-edged. Martin Daughtry writes of the ambiguity of sonic experiences during war, as they are "simultaneously a rich source of tactical information and a profound source of trauma" (2015:5). The rainy season break-ins and economic challenges, are an analytical reminder that temporality, in the form of seasonal changes in the material environment, shape the daily rhythms and activity patterns, which in turn shape social relations and trust.

"Look around you, Memuna, that *thiefman* must have known you were not there," Jameela said after the robbery in my room. My increasing distrust towards those around me might have scared me even more than the sound of heavy rain on the metal roof. My fieldnotes some days later recorded an episode from a Freetown market, where I watched a small mob beat a suspected thief.

I am on my way to buy matches at one of the stalls in lower Central Business District, when I hear shouting and commotion. There is a crowd beating a guy with long sticks and plastic canes. He is middle-aged, skinny, and he looks confused while he tries to run away. He does not run very fast, he falls. People laugh, they follow, beat and laugh. Smile. The lady who sells matches discusses with the lady at the neighbouring stall: "He is not going to die."

Na tiefman? I ask. Is it a thief? The lady confirms, and repeats that he will not die.

I stay in the back, by the lady who sells matches under the yellow Maggi-cube umbrella. The mob continues to beat and to laugh. I observe calmly, not as disturbed as I was when watching a mob beating a thief during a football match some months back. That time, we had stopped the mob. Now, after the robbery of my own room, and many sleepless nights, some part of me feels that that the thief deserves it.

Doing fieldwork in impoverished communities, where the inescapability of inequalities insert themselves into every social situation, is difficult. Writing about it, I have found, is even harder. In a short piece on writing violence, K. Drybread posits the difficulties of balancing “the competing desires of wanting to present myself as a likable protagonist and wanting to honestly relate the ways that my ethnographic practice could not help but become entwined with the forms of violence that I’ve studied” (2020:129). As ethnographers, we are entwined in the social situations we study, and despite our methodological training, teaching us that “ethnographic sitting” is a means to counter neo-liberal demands of efficiency and “doing something” (Pigg 2013:127), *being* in the field often demands *doing*, and it follows that writing is also a way of doing (cf. Clifford and Marcus 1986).

~~Dis~~entangling fieldworker and field

*When you go back to your country, tell the story of Sweet Salone! We will see
all your people coming [here] to enjoy!*

*Ai Memuna, tell your people how we fishermen suffer, make them come and
help us.*

Many of the people who decided to share their stories and experiences with me during 2019, also sought to encourage me and advise me on what I should do with their story. Some told me to show videos and pictures of how “Tombo people suffer”, hoping it would encourage my audience to send money and things to Sierra Leone, initiate solidarity organisations, or even come and “collect” Sierra Leonean children to send them to school abroad, as Jameela would sometimes put it (see also Jackson 2004, Utas 2019). Other times, it was the sweetness of life, the kindness and welcoming attitude of Sierra Leoneans, and of course the best fish in the world, that was to guide my story. “When tourists come, they like our *couta* [barracuda], and lobster, they say it’s the best!” Ishmael sometimes commented when we were out fishing with *Surprise*. “Tell your people, if they come to

Salone, they will get the best.” I appreciate all the advice and encouragement I received, and this thesis is in part a product of the stories people told me I should tell.

Many Sierra Leoneans have an ambivalent feeling about both their fellow Sierra Leoneans and about foreigners, which the Krio saying *Sierra Leone lek strangers* captures well. That people like, and thus welcome, strangers, including foreigners like myself, makes it fairly easy to associate with others and sit down to have everyday conversations with them. However, what the saying says without words is how people like strangers *too much*. Many aspire to go to Europe, attach themselves to a foreign patron, or even associate with, and trust, foreigners more than their own kinsmen. But what did it mean when people said this to me – a stranger? Was it a warning, an encouragement, an acknowledgement that I was no longer as foreign as development workers and peace corps volunteers on their way to a nearby beach? I do not know, and I think it was also the case that people themselves didn’t quite know. Almost as a way to “test the waters” and to test me, to see how I reacted, this way of at times including me, at times excluding me, resembled their way of navigating other social relationships. Acknowledging and attending to the doubts and uncertainties of others, Lisa Stevenson writes, “implicates us in a mutual project of discovering the world. [...] It becomes a practice of the self in which, in the interest of understanding another, we allow ourselves to be shaken, displaced from our customary dispositions and beliefs [...]” (2009:56). As Diggins writes about her own qualms about monetary gifts during fieldwork, which became “valuable windows” (2018:61) into people’s own moral-economic uncertainties, I use my own experiences of support and solidarity, mistrust and deceit in Tombo to dive into a coastal world and challenge conventional views of crisis and poverty.



Figure 14: No place like home?

CHAPTER 2

Historical trajectories and contemporary changes in coastal Sierra Leone

Contextualising social relations and environmental changes in coastal economies



Figure 15: Pepeh wharf at low tide

Introduction

Tombo, often spoken of as a village or a community, is a large fishing town, based on its population size and density, and level of economic activity. It's almost cosmopolitan in character⁴³, with a wide variety of ethnic groups and languages, several foreign companies located in its immediate surroundings, and being a key market hub for fish products, there are many people who come and go. "For fishing, Tombo is the most popular in all of Salone⁴⁴," the local Sherbro chief proudly said during an interview, echoing sentiments I had heard many times during my fieldwork. The daily fish catches in Tombo seemed to be on the decline, as the majority of the buckets carried off the boats at the end of the day contained bony herring and a mix of various juvenile fish, rather than high-value adult specimens; nonetheless, young migrants still arrived on a daily basis. Every month a new fishing boat or two were '*pulled*' (launched) out from the boat building yards. Similarly, foreign companies from Korea⁴⁵ were highly active in the fishing and export trade, and Chinese-registered⁴⁶ trawlers still favoured the Sierra Leonean waters. However, the artisanal fishing economy of Tombo could also be described as "desperate," to borrow from a British fisheries consultant who has worked on Sierra Leonean fisheries since the 1980s, as the size of fishing net meshes keep decreasing – despite regulations – to catch the remaining small, juvenile fish, and the *banda*-women processing the fish, increasingly only made fish-spice; dried, pounded juvenile fish used as protein substitute and spice on rice with palm-oil, instead of adult smoked fish.

This chapter gives an overview of the historical changes seen in the fishing economy on the Sierra Leone coast. I trace some of the larger events in Sierra Leone through the Tomborian experience, describing how the decade-long civil war affected migration to and fisheries in Tombo, as well as how the shifting development interventions have impacted socio-economic relations in the fishing sector. The chapter also follows on from the introduction, tracing changes in the socio-economic support networks, *kostament*-relations, and the circulation of materials and favours. Furthermore, I position the Tombo fishing economy within global flows of fish and profit, with particular focus on

⁴³ Similarly, Diggins describe Tissana as "part of a highly interconnected, cosmopolitan world" (2018:5), tracing how fish, people and cash flow along Yawri Bay. I appreciate Diggins' critique of narratives that isolate African fishing communities based on their remoteness, and extend her relational approach to involve global actors like development NGOs and Asian fishing companies.

⁴⁴ Sierra Leone.

⁴⁵ South Korea.

⁴⁶ People's Republic of China.

two elements. First, I describe the presence of foreign trawlers and export-oriented fish trading companies, who buy up fish from the local fishermen, contributing to a circulation of profit out of the local economy. Second, I introduce development projects as a continuing, yet highly unstable, presence in Tombo. These provide resources that are more or less detached from the local practical work developed through fishing or fish processing, which people seek through political work and party politics.

To build a boat half-half

Mr. Idriss, an elder fisherman in Tombo, in 2019 owned a motorised *yele*-boat, a smaller canoe crewed by 2 to 4 men. His boat, aptly named *Sea never dri*⁴⁷, was located some thirty kilometres south of Tombo in his home community on the Plantain Islands. When I first met Mr. Idriss in March 2019, he told me that his boat was under repair, but I was welcome to come fishing with him once the boat was ready. However, the year went by without *Sea never dri* ever leaving the sandy beach on Plantain. Meanwhile, Mr. Idriss lived in a rented room of a family compound in Tombo with his daughter, gathering goods to make the necessary repairs to his boat. At one point, an uncle had sent him some money. Another week, he had been able to acquire some nails from a wealthy fishmonger. The next month, he had gotten a good price on some wooden boards from a cousin who was in the process of making his own boat.

One day I was sitting at a corner shop with Mr. Idriss and some of his friends, who were discussing painting styles for the boats. They all agreed the painting should preferably be done in one go to get the best result. “If you want a good carpenter, you should also engage him ‘one time’,” Mr Peter said, and the other men nodded. Still not familiar with all the Krio expressions, I asked the men what they meant, and Mr. Idriss explained that ‘one time means not do it half-half’.

If I have a little money, I buy what I can, say I buy one bundle of fishing net (10 yards) and then I store it. If I get something small, I buy nails, maybe two packets. So I get everything, half-half, and when the time comes, I can call the carpenter and make the necessary arrangements for him to come one time.

⁴⁷ See thesis introduction.

Half-half refers to the piecemeal approach of gathering small amounts of materials from various sources over a period of time. This is how the majority of the fishing boats are built, as well as repaired. Later on, I asked Mr. Idriss whether, if it was not an issue, he would have rather had a brand new boat, bought ready-to-use at the market, instead of repairing his old *Sea never dri*. “Well,” he lingered, looking for the words. “Who doesn’t want a brand new boat?” At first he laughed, before continuing with more certainty in his voice. “I have my *kostament*, who is helping me, and my brother who is a painter, and those who help me with timber and boards.”

He never used the word responsibility or anything equivalent, but it was clear in his listing of how he and his *kostaments* helped each other that he felt an obligation to use his connections to improve his own business. In order to use one’s *kostament*-connections, maintaining them, reinvigorating them, and ensuring their strength to uphold the vitality of life is the essence of why the piecemeal approach is significant. Although the prospects of a brand new boat, as well as becoming the poshest fisherman on Plantain, made Mr. Idriss chuckle, buying an already finished boat symbolised a distance and disconnect from the relations that matter for the future of his fishing business. It would be a refusal of the opportunity that a boat repair gives, both to reaffirm relations and to be a provider of larger and smaller jobs.

In Sierra Leone, as well as West Africa at large⁴⁸, the fishing economy, and the relations and networks through which boat owners build their boats *half-half*, have historically been facilitated by the profits generated by the catch, processing and further sale of the fish itself. This is not to say that fishing has been the only occupation of the families and communities involved, nor that people separate their fishing business from the other ventures they undertake. The fish that are caught and later processed are incorporated into a dynamic network of a variety of socioeconomic activities, and the profits from this (or the debts generated) are channelled into diverse networks. Nevertheless, the fish itself has been a principal source of the profitable surplus through which the owners of assets like boats or smoking rooms can accumulate a high surplus and sustain a large network of people. This is now shifting, as boat owners, fishmongers and fish processors find themselves with less and less of a profitable surplus to sustain their network. Mr. Idriss, despite his generally calm, optimistic manner, often lamented how long it was taking to acquire the necessary materials. The experience of the process dragging on was not unique to Mr. Idriss, but common throughout the community. I relate this experience to the shifting economic balance in the fishing

⁴⁸ See for example Overå (1998, 2002), Lucht (2003, 2010), Hill (1963), Syfert (1977), Nadel-Klein and Davies (1988), and Smith (1977).

economy, and especially the diminishing returns on investment for those involved. I will return to this in the final section of this chapter.

A historical glance at the coastal fishing economies

Coastal fishing economies during colonial rule

Fishing has a long history in Sierra Leone, and the West African region in general. In early European accounts from the Upper Guinea Coast, the use of large dugout canoes carrying tens of men was noted down with awe and fascination among traders and missionaries⁴⁹. Portuguese sailors were the first European contacts with coastal West Africa, and the name Sierra Leone dates back to the Portuguese description of the Serra Lyoa: the lion mountains (Fyfe 1962, Shaw 1997). With an expanding slave trade, the regional trade networks and settlement patterns on the Upper Guinea Coast increasingly integrated the region into an Atlantic economy (Rodney 1970, Fage 1992, DeCorse 2015; 2001, Gilroy 1993). Less is known about pre-colonial economic activities in coastal West Africa, but it is likely that certain coastal communities were orientated towards inland trade routes with the Mali and Songhai Empires, also establishing connections with northern Africa and the Arab world (Riddell 1974, Syfert 1977). Davidson writes that people in Senegambia traded “a great deal of dried sea-fish” (1981:63) with the empire of Mali and southern Wolof states (see also Hopkins 1973). A Danish colonial merchant from Accra, Ghana, notes how the European settlers lacked fresh food in the rainy season, and had to buy “dry herring from the Blacks and fry it in a little palm oil” (Rømer 2000:196). Evidently, local communities knew how to preserve fish for the stormy rainy season, and traded surplus fish with both colonizers and non-fishing local communities. From Sierra Leone, Riddell (1974) argues that while coastal communities were not permanently integrated in long-distance trade, they traded their surplus, primarily through valuable goods like salt, kola nuts and (dried) fish.

Following the establishment of the Province of Freetown under British protection in 1787 by former enslaved people and so-called Black Poor, before becoming a British Crown Colony in 1808, trade in the Western Peninsula gravitated towards Freetown and its settlements (Bangura 2017). Throughout the 1800s, the British controlled trading posts along the coast and riverine areas grew

⁴⁹ See for example Pereira (1937), Kup (1962) and Krabacher (1990).

around the trades in palm oil, timber, rice, and cotton, which also affected the local settlement patterns (Fyfe 1962). By the 1850s, records show a bustling fish market in Freetown, with smaller settlements of subsistence farmers and fishermen along the Western Peninsula coast (Hall 1938, Poole 1850). Trade in the British Crown Colony, what is today the Western Area of Sierra Leone, was up until the late 1800s controlled by the British and the Krio (Harris 2014, Alie 1990).

However, increasing migration from the British annexed territories inland, becoming the Sierra Leone Protectorate in 1896, shifted the ethnic composition of the market relations. In her study of female traders in Freetown, White points out how Yoruba women have historically been chief traders, and that Freetown's Yoruba community⁵⁰ had an impact on Sierra Leone's wider gender relations where women, both historically and today, also have been key market figures (White 1982). Historian Joseph Bangura (2017) highlights the importance that Temne market traders, and especially Temne women, had in the booming fishing economy during the 1920s. For example, Haja 'Kai' Bangura ran a successful fishing business by renting out canoes and traded fish out of Jimmy Market in Freetown. In the late 1940s, she owned five fishing boats, rented out on a weekly basis, and ran a microcredit funding scheme for young traders (Bangura 2017).

Hendrix' (1983, 1984) research from Tombo indicates how the colonial imposition of a "house tax"⁵¹ in 1900 had an impact on the gender relations in fishing towns. Whereas historically, the fishermen had employed a technique of brining and smoking fish in sand boxes on board the fishing canoes, the women began to take increasingly take responsibility for smoking and selling fish products at the regional market in Waterloo, Hendrix argues (1983). While it is likely that women also participated in smoking and trading before 1900, the increasing commercialisation and formalisation of gendered roles and trading partner relations probably coincided with more expansive colonial policies like taxation, and the growth of Freetown and regional trading towns.

Today, Sierra Leone's administrative borders and governing bodies are remnants of the colonial setup made by the British, with a division between the Colony of Sierra Leone, namely Freetown and the Western Peninsula, and the provinces. In the provinces, their governing strategy was based on ideas of indirect rule, where the traditional authorities were envisioned to rule on behalf of the British (Albrecht 2017). In the Colony, on the other hand, they established a centralised bureaucratic system, and Tombo was placed under the constituency of York, further out on the Peninsula. The colonial legacy of the Western Peninsula was often brought up in discussions about

⁵⁰ Descendants of the formerly enslaved people, who were captured from all across the West African coast and often returned to Sierra Leone following the British Slavery Abolition Act of 1833.

⁵¹ See Abraham (1974) and Bangura (2017) on the Hut/House Tax War of 1898.

the regulation of coastal communities, and why Tombo differs from other places along the Yawri Bay. “This was the Colony,” people would often tell me, when I asked about chiefs and fisheries regulations. “That’s why we have so much trouble here, people think they live in an urban area, so they [the authorities] have no authority,” Pa Santiagi, the current leader of the CMA (Community Management Association, see below) regularly complained. In his experience, the Tombo CMA was the least efficient of all the Yawri Bay CMA’s, because the community did not have a history of “respecting the leaders”.

Migration and increasing commercialisation of Tombo fisheries

Historically, and similar to many other fishing communities along Yawri Bay and further south, Tombo is considered a Sherbro indigenous community. The name comes from the Sherbro language, and I was told by the Sherbro chief⁵² that it was first known as *tombok*, which means vegetable leaves, or to beg for vegetable leaves for the *plassas* sauce. The name came from people in neighbouring areas, who came to Tombo to beg for these *plassas* leaves, which were grown in what is today the Gborloh area of central Tombo⁵³. “But, when the missionaries came, they wanted a strong leader for their church, so they found the strongest man in the area, they called him Tombom, Big Tom,” the Sherbro chief added, “and then the place became known as Tombom, and today we only say Tombo.” Although I was unable to confirm this, it may be that the missionaries in the Sherbro chief’s account were Krio, and not British, as others told me there used to be “two Tombos”; one for the Krio (New Town) and one for the Sherbro (Sherbro Town). The Krio, being descendants of freed slaves from the US, UK, Caribbean and interrupted slave ships, have in general been higher educated and mainly Christian, as opposed to the predominantly Muslim Sherbro and Temne populations. They rarely engage in fishing activities, but are key actors in village political life. The third, and by far largest ethnic group present in Tombo⁵⁴ are the Temne, constituting about 80 percent of the population. They migrated from northern Sierra Leone to many communities along the Sierra Leonean coast in the late 1800s to partake in fishing activities (Baio 2009, Kotnik 1981, Diggins 2018, Krabacher 1990, Ménard 2017a).

⁵² Formal title: Sherbro tribal head for the Western Area.

⁵³ This is also known from missionary sources, according to Kotnik (1981). See also Baio (2009) and Ménard (2017a) for other versions of Tombo’s origin story.

⁵⁴ All 16 of Sierra Leone’s ethnic groups are present in Tombo.

Following the influx of Temne migrants, who had a more commercial profile than the then-subsistence activities of many Sherbro vessels (Kotnik 1981), Ghanaian Fante fishermen began arriving in the 1950s, continuing the shift towards a more industrialised and profit-oriented economy. Tombo is not unique in this regard, as the migratory Fante fishermen settled all along the Yawri Bay, and brought with them new fishing boats and techniques. In her study from Tissana, Diggins narrates the local memories of resistance to the Ghanaian migrant fishing boats in the late colonial period (2018). The local canoe fishing crews' experience with the large Ghanaian boats, who caught "a canoe-full of bonga" (Diggins 2018:45) in comparison with the local subsistence fisheries at the time, was one of unfair exploitation. According to Diggins, the local *poro*-society⁵⁵ was mobilised in Tissana to expel the Ghanaians, but with government intervention, the visitors instead agreed to train the local fishermen in their methods.

A similar account is noted by Krabacher (1990) from Katta, however, he narrates how the Ghanaians had had a cordial relationship with the local Sherbro populations, whereas the Temne had been more hostile. Krabacher notes how a local conflict was brewing until 1967, when President Siaka Stevens expelled the Ghanaians, possibly in an attempt to gain political support. In Tombo, there are still some descendants of the first Ghanaian migrants to Sierra Leone, and I never heard anyone speaking of the Ghanaians in hostile terms. Instead, many a historical narrative began with Tombo becoming "the most popular fishing town" in Sierra Leone with the arrival of the first Ghanaians, because the Fante migrants introduced the larger "Ghanaboats" and ring-net fishing that required many more men than the traditional *yele*-canoes used in Sierra Leone. The Ghanaboat-type of fishing is the focus of chapter two, and here it is sufficient to note how the shift towards the Ghanaboat style of fishing led to increased catches, and thus profits, as well as boats needing many more fishermen to haul the heavy nets.

By the mid-1970s, at least one industrial fishing company was well-established in Sierra Leone⁵⁶, as was the trawling industry, with trawlers from several countries present, the majority from the Soviet Union (Shimura 1983, Baio 2009, Thorpe et.al. 2009). There may have been interactions between these and activities in Tombo, and Mr. A, who was a teenager at the time, told me how he

⁵⁵ The *Poro*-society is a secret male society, responsible for initiation rituals but also political alliance building and negotiation; see Little (1965, 1966), Ellis (2010), Rodney (1970), Keefer (2018), and Ménard (2017b).

⁵⁶ The Sierra Fishing Company, then a joint venture between the Sierra Leonean government and the Soviet Union, today owned by a Lebanese-Sierra Leonean family with ties to the trade in diamonds and other natural resources (Alie 1990; 2015, Aubrey 1977).

remembered seeing “hundreds⁵⁷ of trawlers every day. No license, no IEZ [reserved for artisanal boats], no boundaries, no control!” During the civil war, many trawlers left the country, according to Mr. A and others I spoke with in Tombo. Thorpe et.al. (2009) and Seto et.al. (2017) confirm this through available catch statistics, and also add that the Sierra Leonean war coincided with the fall of the Soviet Union and a collapse (due to overfishing in the 1980s) of prized demersal fish stocks, which also contributed to many trawlers pulling out of the country.

An all-encompassing development project and growing community tensions

Following Sierra Leone’s Independence in 1961, the fishing sector drew attention from foreign development partners, many now seeking to “partner” with their former colonies, bringing technological solutions and “modernization” (Overå 2011, Escobar 1995, Derbyshire 2019, Ferguson 1999). There are no clear records of the first development interventions in Tombo, but Aubrey’s (1977) sectorial overview shows how, in the 1970s, there were already several programmes targeting the artisanal sector, of which Tombo was likely a part. Tombo has been a key target site since 1980, and organisations ranging from the FAO and the Peace Corps, to bilateral country support from Scandinavian countries, the Soviet Union and the Federal Republic of Germany have all sought to address the ‘underdevelopment’ of the fishing sector and the community at large by – in their eyes – improving, reorganising, or regulating fishing activities. While there have been other organisations and projects working in Tombo since the 1980s, this section deals with a project run by the German GTZ⁵⁸, as one of the most comprehensive and long-term development projects in Tombo, which straddled a variety of sectors and concerns.

Today simply known as ‘the German project’ in Tombo, the *Fisheries Pilot Project Tombo* (FPPT) was initiated during Siaka Stevens’ one-party rule in 1980 (Baio 2009, Beck 1986), and focused on infrastructure, technological transfers, and communal decision making groups in the fishing sector (under GTZ-led oversight) (Beck and During 1986). Many of the buildings constructed during the project, like the Government Fisheries Compound alongside Big Wharf (also known as Fisheries, or Fisheries Boat Yard), the health centre, FSU (family support unit under the local police), and community radio building, are still in daily use. Mr. A and his fellow union members, who have their

⁵⁷ Baio’s (2009) and Thorpe et.al. (2009) indicate 288 vessels registered in 1987, Seto et.al. (2017) estimate these legal vessels caught 200,000 tonnes, while the IUU-catches could amount to 100,000 tonnes in 1987.

⁵⁸ Gesellschaft für Technische Zusammenarbeit, German technical cooperation agency, today known as GIZ: Deutsche Gesellschaft für Internationale Zusammenarbeit.

offices in one of the buildings built by the GTZ, would at times say things like “those Germans really know how to build strong buildings”.

Most of the active fishermen I spoke with had little recollection of the GTZ-project, either because they were too young, or had migrated to Tombo after the war. Whenever I tried to bring it up on board the fishing boats, I got little more than ‘my father told me about the German people’, or ‘they say it was the Germans who built Fisheries [boat yard], right?’ Among the elder fishermen, some recollected how the GTZ had supported youth livelihoods with boats, fishing equipment, as well as technical training. The reports I read from the Tombo archives, also confirm this focus on technical provisions. For example, there was a Cooperative-run fisheries retail store selling imported materials and gear, training in outboard engine mechanics, trials with fishing boats with inboard engines and with sails, and trials with fishing gear, especially the ring nets used in bonga and herring fisheries⁵⁹. Mr. Hassan, an active member of the CMA, was one of the fishermen who benefitted from the GTZ programme at the time. He moved to Tombo in 1982 to work as a fisherman on a boat that had belonged to a family member. When he joined the GTZ-run cooperative society, he had gotten the chance to work on a Ghanaboat built with cooperative money, but the boat had broken down after some time.

At an organisational level, the GTZ organised community leaders, fisheries professionals, and local businessmen into what was known as the VDA, the Village Development Association⁶⁰. “The VDA was established by the very first Germans who came here,” Pa Santigi told me one morning before a community meeting. Seated on plastic chairs that the CMA had bought with money from another development funder, outside the CMA offices in the Government Fisheries Compound, Pa Santigi continued to talk of how Tombo at that time had been “just a village” and people had been subsistence fishermen, rather than fishing industrial quantities. “Everyone was part of the VDA, including the master fisherman, including the harbour master⁶¹.” Following the meeting, I met Mr. A and asked him about his experience with the VDA. “We were all part of it at that time,” he said, and continued:

It changed during the war, but not because of the war. It was all political. The Germans had been the custodians of the cooperatives, but when they were phased out [during the war], they gave the responsibility to the VDA. The local administrators were too corrupt. When the war

⁵⁹ See for example Beck (1986), Beck and During (1986), FPPT (1984), and Walter (1981).

⁶⁰ Some also referred to it as the VDC, village development committee, but VDA was the most used term.

⁶¹ Both these positions are today appointed politically.

broke out, one selfish man took control of the VDA. With the January 6th invasion of Freetown, when the Waterloo axis was closed, all people and things between Freetown and the south came through Tombo. Traffic flourished through here then, and so many trucks stopped here with goods. Then the interim VDA decided to collect dues for three months, and the money these guys made – hey! But it was never accounted for. Millions of leones. When peace was restored, the community came and asked for the money since the VDA said they operated on behalf of all of us, but they never saw any of it. This was the beginning of the problems between the Temne and the Sherbro here in this community.

I had heard about the ethnic tensions even before I went to Tombo, when a World Bank consultant described the two ethnic groups as “uneasy bedfellows”. It is likely that the ethnic tensions dated to further back, when the Temne migrants became increasingly numerous in Tombo, as Ménard (2017a) notes from historically Sherbro communities along the Western Peninsula, and Diggins (2018) from Shenge. Kotnik (1981), who worked as a gender consultant on the GTZ-project note how the central political position of village headman/headwoman, , was claimed to belong to both the Sherbro and Krio populations in Tombo. Although the one-party state of APC under Siaka Stevens was considered ethnically aligned with the Temne northerners, it was not until 2004, when the SLPP government put in place the Local Government Act (Ferme 2018, GoSL 2004) to decentralise the state, that the position of village Headman was opened up to all village inhabitants, including Temne (Baio 2009). I will return to the ethnic and political tensions below, but to trace the historical changes in Tombo somewhat chronologically, let me first sketch the town’s wartime experiences.

Changing social relations and material environment during the civil war

War don, as then-President Kabba stated in January 2022, is often quoted in the post-conflict literature on Sierra Leone (Hoffman 2011, Ferme 2018, Jackson 2004, Solheim 2003). I also heard it several times during my fieldwork, often used to smooth over escalating brawls or quarrels, or if someone used wartime language to interpret a misfortune today. *War don* translates to “the war is over”. We are done with the war, leave it be. Many of those I met during my fieldwork indeed felt that the eleven year civil war, lasting from March 1991 until January 2002, was a thing of the past. For some, it was a traumatic time that they preferred not to remember and re-live. For others, the war was an excuse that was too easily available for politicians and others to not take responsibility

for Sierra Leone's continued poor economic situation and lack of social and infrastructural development. Others still were too young to have really experienced the war. Although they might have been born during the war, its end in 2002 meant that many of the fishermen in their late teens and early twenties had few memories of it when I met them in 2019. Some of them also used *war don* to signal that there was a new generation growing up without the shackles of violence and trauma, who were ready to take a lead in shaping a future, better community and country.

That said, just as common as *war don*, was "the war opened our eyes". Although the war was over, it has had a lasting and continuing impact, especially on socio-political relations and trust. "We know ourselves," Jameela often said, a double entendre indicating both a shared knowledge of other's activities, and an unwillingness to share in activities as people "only know themselves". Many told me how people used to be more considerate towards each other, and more willing to share resources and burdens before the war. A naïve openness was shattered during the war, as brother killed brother, rebels slaughtered the farmers who had fed them, and politicians used and abused the violent labour of young Sierra Leoneans to further their own position and riches (Utas and Christensen 2016, Christensen and Utas 2008, Hoffman 2011). In a similar vein to Jameela's cynical attitude towards her fellow Sierra Leoneans, conversations about the difficulties Sierra Leone was facing, economically and in terms of social development, often drifted between remnants of wartime experiences, along with other histories, and grand narratives of the selfish black man. 'Wi blacks no lek wisef', translating to "we Africans do not like ourselves", with the Krio *lek* (like) involving a degree of friendliness and support towards one another. "Liking someone" is shown in material ways, as gifts, favours and relational support sediment feelings and trust in one another. However, the war experience foregrounded a paradox, namely how those who had received support, for example through kinship relations or political patronage networks, could turn out to be treacherous enemies. Material support was no longer a certain way to establish strong and trustworthy relations, but became instead associated with dangers, and the closest, most intimate relations were revealed as the most dangerous.

Apart from the impact on social trust and political imaginaries, the war displaced over 2 million people (NRC 2003), many of whom migrated to Tombo. Furthermore, new trade routes and infrastructures within and beyond the community, as well as concrete episodes of open conflict and military involvement, still reverberate in the historical accounts of Tombo and its people. To begin with the latter, Tombo saw episodic violence throughout the war, with the days and weeks leading up to the 6 January RUF invasion of Freetown (also known as operation No Living Thing) seeing the heaviest fighting. These days of fighting were often central to the narratives of the recent Tombo

history that were told by many of my informants. Some focused on how they, or their family members, had been able to escape by boats. Others had fled to the forested hills, and either hid there for days or walked to surrounding villages, or the capital. Many people also stayed behind in Tombo, hiding in houses, secretly moving from neighbourhood to neighbourhood as the rebels advanced.

“We fled there during the rebel invasion, behind their backs,” Jamaal, my landlord and host father, told me once after I had visited the nearby Banana Island. “We were here in Tombo, hiding in this very house” he said, pointing to the house we were sitting outside of, waiting for his eldest daughter to cook the evening meal.

At times, we heard gun-shots, like ratt-tatt-tatt, and we knew they had found someone. We could only pray the rebels would not find us. Then in the night, we used the back alleys when the rebels were rampaging the government lodging quarters⁶². We ran all the way to Kent, where we got a small canoe to Banana Island.

Aside from December 1998 and January 1999, intense fighting was for the most part an exception during the war in Tombo. Instead, and similar to how Diggins (2018) describes Tissana on Shenge during the war, Tombo was considered by many as a place of economic opportunities in the fishing sector and auxiliary services. Both during and after the war, Tombo welcomed many displaced people from camps in Freetown or the neighbouring countries, from the wider Western area region, and from the rural inlands. Encouraged by the government and post-conflict reconstruction programmes, the local authorities granted land north of the highway and east towards neighbouring Madina village to displaced populations, and over the years the settlements there have grown into full-fledged neighbourhoods with small shops, mosques and schools.

The old neighbourhoods of central Tombo were also changed by the war. One feature was the cutting down of mangrove trees and forested areas in and around the settlements. “One Nigerian *Oga*⁶³ ordered it,” I was told, referring to the Nigerian ECOMOG forces stationed at Benguema barracks outside Waterloo on the way to Tombo. It was done to prevent the movement of rebels either by land or sea, as they were known to make strategic use of forests for hiding and were

⁶² Located in Newtown between the Fisheries boat yard and the RSLAF naval wing base. The quarters were built by the GTZ development funding, and house offices and sleeping quarters, and have since been left empty or partly re-appropriated by the surrounding land-owners.

⁶³ In Nigerian pidgin, from Yorùbá, *Oga* means boss or sir; it entered Krio from the Nigerian soldiers who were part of the ECOMOG peacekeeping forces during the civil war.

symbolically associated with the forest and its mystical powers and resources (Richards 1996). Also, when the mangroves were cut down, new areas in central Tombo could be filled with gravel, sand and soil, and thus land was made available for houses, *bandas* and gardens.

Finally, as mentioned above, there were several periods of road blockages during the war, leading to increased traffic along the Peninsula Road and to Tombo, from where people took boats either further south, or inland up the Ribi or Bumpe rivers. Local businesses profited from the increased flow of people and goods through the community and, as Mr. A critiqued in the above section, the headman and harbour authorities introduced fees, which to this day are paid by transport boats coming from the south. This combination of newly cleared land, and the increased flow of goods, finally led to the formalisation of a third wharf in central Tombo: Pepeh wharf. It takes its name from the hot chilli pepper that is the key ingredient in seemingly every Sierra Leone dish, which was transported through Tombo during the war. When the local authorities sought to tax the boats, they formalised the beach into today's Pepeh Wharf, which was later turned into a fishing wharf when road transportation resumed. Today, Pepeh Wharf is the main landing site for the *ice-box boats* in Tombo, who carry ice on board to keep the fish fresh as they stay at sea for three to four days at a time.

New actors, trust and socio-material environments: Contemporary changes

In the previous sections of the chapter, I traced the historical changes in Tombo, focusing on the changing administrative structures and gendered trade relations during the colonial period, the increasing commercialisation of the fishing activities with the arrival of Temne and Fante migrants to Yawri Bay, the large-scale development project run by GTZ in the 1980s, and the impact of the eleven year civil war on Tombo's material and social structure. In this section, I shift the focus to contemporary Tombo, tracing how new actors impact social trust, and how the circulation of fish and support from development projects are channelled through both political networks and *kostament*-relations. Finally, I emphasise how changes in the material and more-than-human environment relate to the socio-economic relations between fishermen and fisherwomen.





Figure 16: Central Tombo and the wharf road leading down to Big and Small Wharf

Migrating young fishermen

“After the war, the FAO, government, and NGOs decided to help fisheries, and the value of fish grew, so many people decided to join.” Mr. A gazed out of the office building where we were seated, in the direction of the wharfs and the ocean. Although hidden from our current view, as the office was located in the upper part of Tombo behind several other concrete buildings, the wharf and fishing activities were always an immediate point of focus. “From that time, anyone could come and join the boats,” Mr. A continued. “And that meant that boat owners no longer knew their crew. The crew can even change from day to day. And that is one of the challenges with Tombo fisheries today.” Being an advocate for increased fisheries governance and organisation, it was no surprise that Mr. A considered these changes in the sector problematic. Many of the other people I met in the fishing industry considered the changes in and of themselves less problematic; however, all agreed that there had been changes, especially since the war, and that life in the fishing town had not necessarily changed for the better.

“Fisherman today is a *rarray man*⁶⁴”, Mr. Idriss said one afternoon as I visited the compound house where he rented a room together with his daughter. As Jameela’s neighbour, I would often have afternoon conversations with Mr. Idriss and some of the others who rented rooms in the compound, owned by Mr. Idriss’ in-laws. Mr. Idriss was in his late fifties, and has been fishing his whole life on smaller commercial canoes, like the *yele*-boat *Sea never dri* introduced earlier in this chapter. His statement was a potent one, and it resonated with and beyond the jokes between crewmembers onboard the fishing boats. Whereas the young men fishing together would often make fun of each other’s clothing, calling those with the most raggedy look the *rarray boys* on board, Mr. Idriss comment was based on the skills and economic mindset of the new generation of fishermen. “They just want to *find money*, but they don’t even know how to *patch chain*!” *Patching chain*, meaning to repair the fishing net, is an essential skill of every fisherman. Without the skill to repair a net, a crewmember is without value as a *crewmember*. His priority is himself, solely his own economic gain. Just like the *rarray boys*, Mr. Idriss said, the modern fisherman seeks profit without responsibility.

Mr. Idriss and Mr. A’s comments could be taken as grumpy sentiments held by an older generation, who feel cast aside or unappreciated by the younger fishermen. Indeed, in a Sierra Leonean context,

⁶⁴ *Rarray man* is less common than *rarray boy*, but in this context I considered it a wordplay on *fisherman*, because in Krio one often employs stylistic choice of words for emphasis.

many have written about how young Sierra Leoneans, both before and during the civil war (Richards 1996, Hoffman 2011) and in the post-war era, have sought to free themselves of earlier patrimonial ties (Hoffman 2003, Ferme 2018), distance themselves from control by community elders and rural farm labour (Bolten 2012, Gberie 2005, Murphy 2003), and find economic freedom by migrating to urban centres, mining towns, and the fishing economy (Ferme 2018, Diggins 2018; 2019, Fanthorpe and Maconachie 2010, Pijpers 2016). Similarly, there were tensions in Tombo that could be understood as generational or relating to concerns about indigeneity and migration. However, taken at face value, Mr. A and Mr. Idriss' comments also referred to the forms of knowledge – the relational knowledge of knowing and trusting the people on your boat, and the practical skills that make a fisherman a valuable crewmember on the shared boat – that they considered necessary for maintaining a strong, sustainable fishing economy. While I could delve into discussions about patronage, ethnicity, stranger-host relations, and the role of secret societies in community politics, others have done so better than me (see Ménard 2017a; 2017b, Menzel 2017, Spencer 2017, Ferme 2001, King 2016). Instead, I want to remain with the thesis' focus on socio-material relations.

Kostament-relations and trust in Tombo

Let me return to the *half-half* method of boat building, as introduced by Mr. Idriss in the beginning of the chapter. Mr. Idriss told me that his main *kostament* relation was one of the senior fishmongers in Tombo who had taken a liking to his initiative and luck at sea. When he was younger, he would fish with his brother near Plantain and sell the fish several times a week in Tombo. Impressed with the fish that the then-young Mr. Idriss brought in, a previously unrelated fishmonger had approached him for a *kostament* relation after they had done several trade deals without formal ties.

So the woman called me and said "bo [respectful term,] I'd like to have you as my kostament". Then when time came to paint the boat, I can ask for paint, or if she can't assist with paint, I will just ask for what she can give. Then when I push the boat [launch and start fishing operations], I can start to pay her.

Kostament relations involve trust and care. Following Veena Das (2020) and Sandra Laughier (2016), both drawing on Wittgenstein's *forms of life* concept, care is concerned with upholding our forms of life; it is everyday and ordinary, and ensures a maintenance and continuity of the worlds

that we inhabit. The *kostament* relations in coastal communities in Sierra Leone are productive debt relations that are inextricably tied to the everyday practices of care (see also Han 2012), where care can be seen as the “signifier of devalued ordinary labours that are crucial for getting us through the day” (Puig de la Bellacasa 2011:93).

Gendered and generational social networks, primarily through family networks, *kostaments* relations, and political affiliations, are the basis for economic activity and survival in Tombo. Nothing gets done without connections, or without investing in those relations, and trust in its various forms is central to making and maintaining these relations. Trust, or *trɔs* in Krio, as Bürge (2018) argues from his research among motorcycle drivers in Makeni, entails material support. Diggins (2018) goes even further, by translating *tross*⁶⁵ to credit, a notion I also encountered in Tombo. For example, to *trɔs fish* meant to give fish to someone on credit, in expectation of receiving money or other (monetary) favours in return. Beyond the more conventional understanding in English, centring on belief in another person’s honesty and reliability, trust in Sierra Leone is a form of social relationship that must be *done*, to borrow from Catherine Bolten:

“[...P]eople *do* their relationships rather than merely having them. In order to be connected to someone, one invests resources in their wellbeing, nurturing them from one’s own resources, with the expectation of return [...]” (Bolten 2014:38).

“Trusting someone” (*trɔs pesin*) and showing it materially, is a form of sedimenting the relation in a non-institutionalised way. Whereas family bonds and *kostament* relations are forms of social institutions that outline socioeconomic expectations and requirements, trust can be seen as having a voluntary or strategic component. People make use of trust to build vital relations, to acquire fish, goods, or capital, and to sediment more fleeting connections. Bürge likens *trɔs* among motorcycle riders in Makeni to the Bordieuan understanding of capital, meaningful only in the social relations that are “in turn, indispensable for generating money and wealth” (Bürge 2018:109). Furthermore, *trɔs* establishes a form of generative debt relations, similar to how Guérin describes debt through microcredit loans in Tamil Nadu (2014). Although the loans were rarely used for their intended business purposes, they were an additional source of liquidity, adding material value to the indebted, and, more importantly, through circulating this money, debt “expresses the size of one’s social network and people’s ability to activate this network” (2014:S44).

⁶⁵ Her orthography.

In the Sierra Leonean context, *trɔs* can produce, and sediment, social networks, and through fish transactions from a boat built with ‘trossed’ materials, fishermen and *banda* women, boat owners and fish mongers, shape relations of support and solidarity. Although many experienced Sierra Leoneans as ‘lacking’ trust or being distrustful (Bürge 2018), and thus trust could be likened to a social achievement, as Meinert (2015) argues of northern Uganda, *trɔs* also indicates a continuing action. As with Meinert’s interlocutor Peter stating “I study people before I tell [the truth]” (2015:126), Tomborians would similarly strategise and calculate based on an initial assumption of *distrust*, rather than trust. However, ‘studying people,’ like Meinert’s interlocutor put it, also means interacting with them, and I emphasise the material dimension of interacting again to show that people continually attempt to establish trust through small-scale *trɔs*. By giving some nails or a wooden plank for a fishing boat, selling fish at a good price, or performing other small-scale material favours, people test the waters to learn what form of *trɔs*-trust relation they can establish with the other person. This form of socio-material navigation (cf. Vigh 2006,2009) is essential to understanding socio-economic relations on the Sierra Leonean coast.

Decreasing fish stocks and foreign actors in the fishing economy

What, then, happens when new actors enter Tombo, and, simultaneously, the material environment changes? The *kostament*-networks, and the incremental forms of *trɔs*-trust, rely on surplus in the fishing economy, as it is the profits from the fish trade that the fishmongers or fish processors channel back into their networks as loans given to boat owners for equipment and repair. As illustrated in the introduction, the fish stocks of Sierra Leone, and the Gulf of Guinea at large, are diminishing. In 2019, most fishermen agreed that the sea was increasingly *dri*⁶⁶. In Tombo, most connected this with the increasing influx of foreign actors, especially trawlers, in the same waters as the Tomborian fishermen. “These trawlers were the beginning of the end for the fishermen in this country” was one of the first things Mr. A told me about fisheries in Sierra Leone when we met in February 2019. From the beginning of my fieldwork until the very end, the industrial trawlers, and the fish companies along the Western Peninsula that interact with the local fishing economy, were a daily discussion. Beyond the trawlers efficient fishing techniques that disturb the stock balance, the land-based Korean fish trading companies also affected local trade networks and *kostament* relations, as many artisanal fishermen now traded certain fish species to the companies.

⁶⁶ Without resources/business; see thesis introduction.

The relations between the local fishing community and the foreign presence are highly complex and dynamic, but both my fieldwork and other studies highlight the negative effects of the increasing international fishing pressure on the local fisheries, which will be further elaborated in chapter 4, which focuses on a specialised group of divers, called *phonemen*, who find fish the foreign companies want to buy.

The industrial trawlers in Sierra Leone all bore foreign flags in 2019, with Chinese flagged vessels making up the majority of them. It was especially these Chinese-flagged mid-water and demersal trawlers that local fishermen in Tombo and neighbouring fishing communities claimed to encounter when they were out at sea. Several times a month in 2019, there were local sightings and reports, some even including pictures on social media, of trawlers inside the IEZ during the night, moving slowly in a pattern that would indicate fishing activities. One time, after social media reports of some ‘blackface’-trawlers (the regional name for industrial vessels painted black, which were associated with illegal fishing⁶⁷) fishing close to the shore, I went to a neighbouring fishing town with Mahama, the CMA youth leader from Tombo. As we asked around, we were shocked by the number of fishermen on *Capitale* fishing boats, a type of boat that goes to fish at night, who said they regularly met trawlers. “There are many of them, every night,” we were told. Some of the fishermen were cautious about presenting direct accusations, possibly because they were uncertain of me, and not sure about Mahama’s role and connection to the government. One of Mahama’s friends at the same wharf, however, elaborated for us: “When we go out in the evening, we see their lights on the horizon. It does not take us long to meet them out there. Sometimes there are many of them, there can be up fifty boats around us.” I asked if they were coloured black, in reference to the new case of ‘blackface’ trawlers we were investigating. Mahama’s friend shrugged and said some of them were, but they also had other colours. “But we always see the same flag. It is the red one, with stars on it.”

The fact that the *Capitale* fishing boats met trawlers with Chinese flags could indicate that the trawlers were potentially complying with the national law of not fishing closer than six nautical miles to shore ⁶⁸, given how boats in violation of the law rarely use identification markers. This was also the attitude among government officials, who claimed the local artisanal boats went “out too far” at sea, and therefore encountered trawlers fishing legally. “These local fishermen they don’t

⁶⁷ See also Stop Illegal Fishing (2013).

⁶⁸ The WARFP programme facilitated the establishment of, and control over, the 6nm IEZ, Inshore Exclusion Zone, reserved only for artisanal fishing boats, although it was based on the former Fisheries Act provisions of inshore areas reserved for local boats.

know where they are, they don't know how long six nautical miles is," a military official at the maritime division once said when I confronted him with the story of trawler encounters. I am not able to ascertain the claims on either side, but other research shows how there have been breaches of the IEZ (Sei and Baio 2018, Seto et.al. 2015, Okeke-Ogbuafor, Gray, and Stead 2020). In May 2021, a rare Sea Shepherd – Government collaboration showcased continuing illegal activities among certain trawlers, despite the efforts of government agencies to control them (ADF 2021, Sea Shepherd 2021, 2022).

These incursions into the IEZ, alongside encounters on the open sea, are a great source of frustration and loss for the local fishermen, who at times have their gear destroyed, or fear for their own safety while fishing at night. Furthermore, fish schools are not stationary, and the fishermen experience their own fishing activities as being in competition with the much larger and more efficient trawlers. Data from the fisheries enumerator programme at IMBO indicates how trawlers increasingly compete with the local fishing boats for small pelagic fish (schools of fish like herring and bonga), as the catch composition has changed from being dominated by larger demersal fish, to a higher percentage of pelagic fish⁶⁹. Among the fishermen, there was a generally shared opinion that their fish catches were decreasing, and that this was related to the trawlers' activities. "Except during Ebola, we had good catches because all the people working on the trawlers were afraid [and left]," Captain Joseph on board the *Family First* told me, similar to Mr. A and other's accounts from the war period.

In addition to the PRC-flagged trawlers there were four land-based fish trading companies, all of whom had links to South Korea. The Korean companies, as they were known, were established in their current form around the mid-to-late 2000s on the Western Peninsula. The first, and largest, company was run by a man who was a private security guard to the president during the civil war, I was told. Following the war, he remained in the country and began to trawl and export fish to South Korea. His company, which I have given the pseudonym Eobu⁷⁰, along with three others, were the companies people spoke about and traded with in Tombo in 2019. However, in the official statistics and license lists⁷¹, it is difficult to track the companies and their associated trawlers, because names are often changed, and the official names do not always match with local descriptions. As research

⁶⁹ Personal communication with IMBO researchers and World Bank consultants. The scientists consider this a sign of diminishing stocks, with the demersal stocks being entirely or over-exploited, making the trawlers increasingly hunt for other fish to fill their quota.

⁷⁰ Korean word for fisherman.

⁷¹ For official license lists for the industrial companies, see mfmr.gov.sl. The Ministry was required to publish the license lists by the World Bank for continued funding for the WARFP fisheries programme.

and advocacy work on IUU-fishing⁷² shows, non-transparent, intricate ownership arrangements of fishing vessels and companies makes it difficult for regulatory authorities to trace health and safety measures, taxation, and compliance with maritime conventions (MRAG 2005, de Coning and Witbooi 2015, Haenlein 2017). According to the official license lists, Eobu was registered with their own trawlers, all foreign flagged. At least one of the other companies also operated so-called semi-industrial boats, which were the centre of discussions both among Tombo boats, and between the MFMR and international partners in 2019. The semi-industrial boats are smaller in length and tonnage than the registered trawlers, and in 2019 operated in a legal grey zone⁷³. Locally, these semi-industrial boats were known as *Chingichoga* and despised for their loud engines, as well as how they were often encountered in the same waters as the local boats.

Whereas the trawler activities affected the quantity of fish available to the artisanal boats, the local *kostament* relations and the circulation of fish from fishermen to (female) fish processors and out to the local and regional markets has been transformed by the establishment of the Korean land-based companies. The companies' main activity is fish export, and they buy fish both from industrial trawlers, and from the artisanal fleet. While the prices offered by the companies rarely exceeds the price at the local market, many fishermen nonetheless sell their fish to the companies because they have entered into legal agreements, contractually binding themselves to sell the fish to a company in return for a loan. I will elaborate on this in chapter 4 and 5, but wish to highlight here how there seemed to be a negative spiral of money circulating out of the artisanal fishing sector: When there was less fish because of the trawlers fishing activities, the local fishing economy did not have enough capital to circulate through *kostament*-relations for the fishermen to build boats, even *half-half*. This led the fishermen to search for new economic patrons from whom they can *trɔs* money, and the companies did so willingly if the fishermen agreed to sell the fish that the companies want exclusively to them. This, again, reduces the quantity of fish channelled into the local *kostament*-relations.

Despite his generally calm, optimistic manner, I sometimes heard Mr. Idriss lament the time it was taking to acquire the necessary materials. The experience of the process dragging on was not unique in Mr. Idriss' case, but common throughout the community. Nevertheless, fishing was still considered a viable investment and profession by many, and, as evidenced by the population growth, Tombo still received new migrants on a regular basis. There was a continued influx of

⁷² Illegal, Unreported and Unregulated fishing.

⁷³ The new Fisheries and Aquaculture Act, first proposed in 2011, again in 2016, was finally passed in 2019, defining the semi-industrial fishing vessels and their requirements to obtain fishing licenses. See MFMR (2018).

people seeking work on the boats, and those involved asking their network for favours. However, by tracing the surplus at both ends of a boat's production, namely where the money to build a boat comes from and where the surplus fish ends up, it becomes clear that the surplus is generated less and less frequently within the local fishing economy. The post-harvest fish surplus is channelled out of the local solidarity networks, as boat owners with ties to the companies sell the valuable fish to the Korean and Chinese companies.

To a certain extent, this may be seen as the individualising and atomising effect of global capitalism, as the boat owners trading with the foreign companies are less tied to the local solidarity networks, and remain responsible for their own business maintenance, instead of sourcing help through their network. Nevertheless, several times during my fieldwork, I tried to trace where the money people had used to build fishing boats had come from. Not once did I encounter a boat that was built without funds from outside the fishing sector. *Surprise* was built with money from Mr. A's brother's company and political work in Freetown. This also applied to several of the other Ghanaboat owners I asked. Mami Fatu and Mami Konima both built their boats with money from an earlier microcredit scheme. Three of the *Sarakassa* boatowners I met had family abroad who had sent money. Although this is not enough to produce a reliable result in quantitative terms, it does paint a picture that the current surplus generated from the ecologically depleted West African waters is insufficient to sustain the number of new artisanal boats being built. Put simply, the money obtained through one's family and *kostament* networks was rarely enough to build a boat.

Instead, many of the boats that are built within what people considered a reasonable time, sourced money from Freetown and political connections, from micro-credit loans and development projects, or from family abroad. As introduced in the former methods chapter, and outlined in the above historical contextualisation, Tombo has for decades been host to numerous development projects, from large-scale projects like the GTZ-run FPPT, to small-scale handouts and relief interventions. In 2019, there were a myriad of smaller interventions in Tombo, primarily by NGOs with a presence in Sierra Leone and who went on 'field visits' or did limited handouts in Tombo. On average, there was a community or stakeholder meeting once a week, and most – especially the various community leaders, including Mr. A as a Union representative – spent a lot of time coordinating and organising meeting activities at the Fisheries Boat Yard or the Community Centre.

Aside from the many small-scale interventions, there were the two projects run by UNICEF with funding from the Government of Iceland, and the WARFP project under control of the World Bank. The project funded by Iceland, simply known as the 'Iceland project', focused on water

infrastructure and sanitation, and communal smoke ovens. As is shown throughout this chapter, Tombo has experienced a high degree of population growth⁷⁴, but this has not been accompanied by infrastructural changes, meaning the increasingly congested town centre relies on the same number of boreholes, latrines, and dump sites as the roughly 7000 inhabitants did in the 1980s (Kotnik 1981). Part of the Icelandic funding went to renovating and expanding the gravity-fed water pipelines, fed by a large dam further up on the hillside. They also constructed some concrete slabs with tables and wash basins, and communal toilets on five of the wharfs. Finally, in addition to funding a UNICEF-led WASH programme⁷⁵, the Icelandic government had, through the United Nations University Fisheries Training Programme in Reykjavik and the research institute MATIS, constructed a “fuel saving fish smoking oven”⁷⁶. This was constructed from May onwards in 2019, and throughout several meetings it became clear that the Icelandic team envisioned the ovens to be communally owned and run through the Community Management Association. In October 2019, the construction was fairly close to completion, and the project was launched in the presence of several ministers and public nobilities. However, by the time I left in December, none of the structures were yet in use, as the ownership and responsibilities were yet to be decided. Because of time and length limitations, I will not focus on the Iceland-funded intervention in this thesis, but I do feel it is important to mention as contextual information.

The Iceland-funded intervention happened in collaboration with the other large-scale project present in Tombo in 2019, namely the World Bank funded West Africa Regional Fisheries Programme⁷⁷. The West Africa Regional Fisheries Programme (WARFP) was set up with the goal of becoming a key regional regulatory framework, with national projects in nine West African countries, and a regional body in the Sub-Regional Fisheries Commission⁷⁸. The first round of funding began in 2009, with the national project in Sierra Leone cancelled in 2014 after accusations of misappropriated funds. In 2016, a new “Additional Funding” project, through the World Bank’s Global Environment Facility (GEF), was funded for four West African countries, including Sierra Leone. The project has been simultaneously guided by a concern for decreasing fish stocks, mostly

⁷⁴ If the current population estimate of around 40,000 people is correct, it has grown almost 6 times its 1981 size of 7000 people (Kotnik 1981) and more than doubled since the UNFPA census in 2006 (18,000 people, Baio 2009).

⁷⁵ I had difficulty accessing the Freetown-based organisations and arenas where the WASH programme was discussed, and none of my interlocutors were involved in the project. I have therefore chosen to leave this intervention out of this thesis.

⁷⁶ Matis (2019), MFA-GI (2019a, 2019b).

⁷⁷ As mentioned in the former methods chapter, I was seconded to this project from April onwards in 2019, and participated in many of WARFP in country activities.

⁷⁸ <http://spsrpf.org/fr>

from over-fishing by international trawlers, leading to food and economic insecurity for coastal communities, and a concern about unemployed youth engaging in criminal activities at sea (Jacobsen and Nordby 2015), resonating with the civil war in the 1990s. The key components of WARFP have been: to increase the monitoring, control and surveillance capacities of the national authorities; to improve the juridical and policy frameworks, which for Sierra Leone has included a new Fisheries and Aquaculture Bill (MFMR 2018); and the creation of a new Fisheries Management Plan (MFMR 2020), in addition to value addition in the artisanal fishing sector. One of the central team members in WARFP told me in an interview before I went to Sierra Leone that the project's biggest success so far had been to gain more control over the fishing sector in West Africa, which "was like the Wild West" before WARFP. However, I quickly learned, also when I met up with her later during my fieldwork, how the WARFP team still worried about the progress of the project, and whether the governance structures they were funding and training would outlast the project.

In Tombo, some of my key interlocutors had similar worries. One of the first things Mr. A told me was his critical stance on development projects that did not have "sustainability in mind". He did not mean environmental sustainability, but rather socio-economic, based on his experience that most project activities and structures dwindle away once the funder or organiser leaves the community or country. "Even the German projects, yes we have their buildings, but that is all," he said with frustration, following a discussion on the GTZ-run VDA. Similar to how the GTZ organised the entire community into a VDA, the WARFP project set up 32 Community Management Associations (CMA) all across Sierra Leone, including in Tombo. Although the CMA had several highly active members who organised community activities, facilitated stakeholder meetings, and collaborated with the government fisheries officers, they often experienced getting the short straw. "The World Bank came and organised us," Pa Santigi explained one evening while I was seated in the CMA office at the Fisheries boat yard after a community meeting. "But then they left us, without support. Even these chairs we are seated on, that was another organisation who helped us. How can people take us seriously, if there are no seats?"

When a big donor sets in motion social and political change, expectations follow. While the CMA is authorised to collect fines from people who break the community bylaws, they have very little to no policing power in Tombo. Furthermore, when it came to delegating roles in, and thus also benefits from, development interventions in Tombo, there were several cases where the people initially chosen to participate were side-lined through more occluded political processes, connected with national party politics. For example, regarding the Icelandic ovens project, several of the community chairladies had come together, across political party divisions, to form the committee of

community smoke processors. However, following the official launch, a rumour began spreading that one of them who was associated with the SLPP, the current ruling party, had gone to her patron and asked to have more of the SLPP supporters in Tombo on the committee. “Now they [SLPP supporters] say ‘it’s our time to *chop*’,” said one of the other Chairladies, an APC supporter, partly also acknowledging that this was the slogan many APC supporters had used during the previous APC regime. Political patronage is of course nothing new in Sierra Leone, but what was becoming increasingly evident to many in Tombo was how the CMA was no “big” organisation, and the people involved were no Big men or women.

The combination of politicised development projects, and an increasing reliance on foreign companies for loans and credit, has had a negative impact on social relations and trust between fishermen and fisherwomen in Tombo both, young and old. Some, like Mr. Idriss, claim the problems in the sector are the fault of the young fishermen who are just *rarray-boy* fishermen, with no skills or care for the fishing profession. Others claim the female fishmongers are too greedy and make too much profit on their sales, while others still blame families for their lack of support and care of their extended networks. Simultaneously, people are critical of the “sticky bonds of debt and social obligation”, as Diggins (2018:17) also describes from Tissana, further south in Yawri Bay. “Just go, quick!” Mr. A would sometimes instruct me, when we were on our walks through Tombo and were stopped by relatives or contacts who hoped to get something from him. “Everywhere there are demands,” he would shrug, after quickly excusing us as having “no time now.”

If trust and care are deteriorating in Tombo, at the same time as fish stocks are decreasing and making it more difficult to make a living economically, how do people manage? How do the fishermen and fisherwomen make a living *and* make a life filled with meaning, love and solidarity? In the following four ethnographic chapters, I trace working relations, gendered trade networks, and material practices to show how people navigate the new demands and obligations in shifting economic and ecological environments. In the contextual background provided in this chapter, I have emphasized changing economic practices and working relations on the coast, and highlighted the historical but also shifting global connections of the Sierra Leonean fishing sector. Based on this background, I will show how people in Tombo labour together, share scarce resources, and build meaningful relations with both humans, fish, and things. As such, this thesis adds to the literature on how people make a living through and with instability and uncertainty (Tsing 2015, Cooper and Pratten 2015, Vigh 2006, Biehl and Locke 2010, Guyer 2004). In the next chapter, which is also the thesis’ first ethnographic chapter, I trace working relations onboard the largest type of artisanal fishing boats, known as Ghanaboats. Analysing *handfailure*, a competitive form of payment-with-

fish, I show how individualized competition in a resource-scarce environment also stimulates cohesion and a flexible form of trust between the crewmembers, that does not align with historical forms of patronage and dependency, nor negate the need for trust and collective action.



Figure 17: Hauling the fishing net on board Surprise

CHAPTER 3

Doing the *handfailure*

Competition and trust on board artisanal fishing boats



Figure 18: Storing the handfailure prize while the net is hauled

Chapter prelude

In the rainy season, especially in July and August when the rains are heavy and the winds unpredictable, the fishing activities in Tombo slow down. Compared with the dry season in December, January and February, when the majority of the Tomborian fleet of around 250 boats go to sea every day, only a few boats push their luck in the rainy season. By the end of July, almost half a year after she was launched brand new at the Fisheries Boat Yard, *Surprise* looked tattered and worn. The paint on the freeboard planks was no longer bright and shiny, and the gunwale plank around the edge of the boat was bleached from months of sun and saltwater. The port side plank looked especially worn, after months of hauling the fishing net up into the boat on this side. The fishing net itself had several larger holes that were yet to be patched. “The rains have been so severe, so we haven’t had time to repair yet,” Captain M said, when I asked him about it as we were heading out on one of July’s few fishing trips.

We left the harbour around 8am, after waiting around an hour for the crew. Captain M had called many of them the evening before to confirm we were going to try fishing the next day. While waiting for them at Big Wharf, I was approached several times by an older man, who tried to get a spot on board our boat. “You don’t know the rules of fishing?” I said, jokingly dismissed his requests, “approaching a crewmember, and not the *bossman*?” The other crewmembers around me laughed, and Abibu commented that “we have taught you well, Memuna.” This form of inclusion through exclusion was quite common in everyday interactions at the wharf and the fish market. As we stepped onto *Surprise* to head out, I noticed how the old man also approached Ishmael, the second-in-command. Ishmael just shrugged his head, before jumping onto a docked boat and balancing his way across to *Surprise*. “*Leh wi go*,” he said as the *operator* – the crewmember responsible for operating the outboard engine – started the engine. Let’s go.

We drove about an hour and a half, and began to scout for fish once we reached the waters outside Black Johnson beach. There is a river beside Black Johnson where fish congregate following rainy days⁷⁹. Some fishermen say it is because there are new nutrients in the water. “Also, herring like that muddy water,” Captain M explained. An hour passed, without much to be seen. Once or twice,

⁷⁹ The Black Johnson estuary received as lot of attention internationally in 2021, when the MFMR signed an MoU with the Chinese government about an industrial fish landing site planned in this area. See Brima (2021) and McVeigh and Kargbo (2021)

we heard a fish or two *knack*⁸⁰ the water, but nothing worth throwing in a net for. “Confidence, confidence,” Ishmael tried to motivate the crew. There were no other boats immediately around us, but we saw a couple of *yele-boats*⁸¹ closer to the shore. After drifting around for a while, the *operator* restarted the engine, and we drove south again along the coast, towards Banana Island. However, another five hours passed before we finally threw the net in the water. We had been followed by a small school of herring for a while, and hoped this might indicate that other, more valuable fish were feeding in the same area. Luck was not with *Surprise* that day, however, as the net tangled into itself when the apprentice *let-go-man* cast it into the water. *Let-go-man* is a skilled position, as the crewmember responsible for letting the net go as the boat circles a school of fish in order to encircle it. To untangle the apprentice’ mess, Audu, our experienced *let-go-man*, had to jump in the water. Perhaps it was the tangled net, or some of the bigger, unpatched holes in the net, which allowed the school of herring to escape. Or perhaps we had wrongly interpreted the small shadows on the water, and there was no school of herring. In the first hour as we hauled the net, we got one gilled fish.

The mood on board was as grey as the heavy rainclouds above us, as we tipped the final bulk of the net, now forming a purse seine, into the boat. It took us over an hour and a half to heave the net on board. Not because the net was heavy with fish – we ended up with barely five yellow jerry cans of fish - but because the crew lacked motivation and energy. It had been a long, relatively cold day, and the tiny catch of herring mixed with some *swit-wata*⁸² was barely enough to give each labouring crewmember some *plassas-fish*⁸³ to take home, let alone begin to cover the daily running cost of Le250,000 for fuel, oil, and lunch.

On the way home, Captain M and Audu were dividing the catch between the crewmembers based on positions, which is their responsibility on days with poor catches, when one of the junior fishermen muttered a protest. “What makes you think you can accept that fish,” he snapped at his fellow, who had just been given two dozen herring from the pile⁸⁴. “You already have your *handfailure!*” This caused confusion at first, and then a bigger argument followed, between Captain M, two of the senior crewmembers, and the two young ones. While we had hauled in the net, Captain M had been careful to spot the few valuable fish as they emerged with the fishing net

⁸⁰ Come up to the surface, making a weak knocking sound and tiny ripple.

⁸¹ Smaller canoes, from one-man dug-out canoes to 4 man planked canoes with small outboard engines.

⁸² *Swit-wata* (Krio for sweet water) is a mix of various kinds of fish that co-habit on sandy or muddy bottoms.

⁸³ Fish for the evening meal.

⁸⁴ With herring selling for the fairly high price of 1800/dozen during the rainy season because of shortage, this would give the crewmembers a pay of 3600 Leones for the day’s work, around 0.36USD in 2019 exchange rates.

hauled out of the water, and claimed them as part of the boat's fuel money. "How can we go fishing the next time if there is no fuel money," he had responded to a grumbling crewmember, who wanted to take the valuable fish for himself. Thus, it had been Captain M's impression that none of the crewmembers had been able to grab extra fish from the net for themselves. Hearing that one of the junior fishermen, outed by his buddy, had in fact been able to grab a so-called *handfailure* fish for himself, Captain M became angry with the crew. "You are all fighting for yourself, no care for your brother! Next time, I will leave you at the wharf!"



Figure 19: The let-go man sets the net, while the others guide the engine operator.

Introduction

During my first week in Tombo, I heard the concept of *handfailure* several times. Once, while sitting at Jameela's shop, I watched several uniformed men drag two young men separately into the police station. "Tsk, these fishermen," Jameela remarked. "Every day there is *handfailure*." When I inquired what she meant, she simply said they were fighting over fish. Later the same week, I heard Mr. A complain that *handfailure* was the reason fishermen were so unruly, and why the fishing sector was so difficult to manage. From land, it is easy to criticise fishermen for being troublemakers prone to fighting. The police are often called to stop fights at the wharf. Bureaucrats and state officials seek to regulate the process through documentation on catches and crewmembers, which can be difficult to keep track of. Family members and dependants of the fishermen inquire into the profits made from a day at sea, and the excuse of having lost valuable fish to *handfailure* is not always met with sympathy. Out at sea, on board the boats, on the other hand, the competition over a meagre catch merges with the need to work with and trust one's fellow crewmembers, between accumulating individual profit and forging valuable relationships. For the fishermen I met on board boats like *Surprise*, fishing was associated with prosperous potential, with hard work made easier through shared songs and laughter, and with playful competition between crewmates. *Handfailure*, as a form of payment and a skilled practice, encapsulates all three of these.

This chapter centres on the working relations and payment on board the artisanal fishing boats in Tombo, focusing on the biggest and most commercially oriented type of boat, the Ghanaboats. Drawing on the idiom of *handfailure*, I analyse how the working relations on board the boats, as well as the scarce ecological environment, stimulate competition between the crewmembers. As will be explained in more detail below, *handfailure* is an emic term referring to how fishermen compete with each other to be the first to grab a profitable fish as it is caught in the net. If you enter the competition, but someone else grabs the fish first, it means your hand has failed you, thus the name *handfailure*. It is a form of payment-for-labour or salary, developed in the increasingly resource exhausted marine environment. Nevertheless, and in contrast to the opening story, *handfailure* is not primarily an automated individualistic response to the question of survival. As will be argued in this chapter, *handfailure* is a form of individual accumulation that simultaneously enhances cohesion, even trust, on board the fishing vessels. *Doing the handfailure* is a form of hustling (Thieme 2017) that informs and is informed by a wider socioeconomic structure of hierarchical relations, environmental conditions and individual skills and motives. In a socio-material world considered untrustworthy and deceitful, *handfailure* affords new cohesive working

relations, and a flexible form of trust. As the fishermen attune their bodies to the work of others, and share the hard labour required for each to get 'paid', they also come to know and to trust their crewmembers to uphold the rules of the *handfailure* competition.

In the following section, I open with an ethnographic vignette that details how *handfailure* is practiced on board the Ghanaboats. The episode took place on board *Surprise*, like the opening vignette above, but earlier in my fieldwork and during the late dry season when the catches were still relatively good. Following the vignette, I historicise the development of *handfailure* in relation to youth labour migration and increasing environmental degradation, before detailing how *handfailure* is regulated and negotiated. Finally, I argue that within competitive working relations and *doing the handfailure*, the foundations for social cohesion and trust are laid as the fishermen attune their working bodies to those of their fellow crewmembers.

A case of *handfailure*

The sun's height indicated that we were getting close to noon, and *Surprise* rocked gently with each haul of the fishing net. In synchronised motions, the two working teams at the stern and the bow of the boat hauled the net closer, and into the boat, respectively. To cheer themselves on during the hard labour, the fishermen took turns to lead the group in song and rhythmised storytelling. Although I was yet to learn Temne, the most common language used on board *Surprise*, I recognised a storyline in Ishmael's song, sung in a mix of Temne and Krio, centring on the abilities of each of his fellow crewmembers.

Alhassan's eyes find good fish

Alhassan's eyes find good fish

Wurie help to guide the boat.

*Wurie help to guide the boat.*⁸⁵

⁸⁵ Recollection in English from incomplete fieldnotes, for illustration only. The example given is based on examples Ishmael himself gave me on a later fishing trip when I asked him to translate from Temne.

Ishmael called the names and the skills, and then the rest of the crew repeated his words. The beat made by the call-and-repeat⁸⁶ style of song guided the two working teams to keep the rhythm. Sometimes the lyrics brought laughter to the group; at times the individual fishermen would answer to their names, as if to confirm their skill and dedication to the crew and boat.

During a line about our *let-go-man* Audu, and his ability to keep the fishing net straight and untangled, a murmur went through the working team at the bow section of the boat. Only the stern team repeated Ishmael's line, before the song died out. Someone had spotted *kini* fish⁸⁷ caught in the net, and as the words were uttered, everyone's attention turned towards the boat's railing and the fishing net. Although the team at the stern kept hauling in synchronised motion as before, they did so while glancing towards the crewmembers at the bow. Up until this point, the team working the bow had kept the same rhythm, while picking out the herring and *latti*⁸⁸ gilled in the fishing net as they hauled it into the boat. Neither herring nor *latti*, both small pelagic fish, would fetch a good price at the wharf markets, and thus did not cause excitement among the crew. *Kini*, on the other hand, was always in demand. It is a prized fish often served for weddings and big occasions, sold to the upscale market in the bigger cities, or dried and exported to Europe or the US. Words of a *kini* in the net geared everyone's attention towards the railing and the incoming fishing net.

Herring. Three *latti*. Another two herring. Then the *kini* appeared out of the water, wriggling in the net. The two fishermen nearest to the section of the net where the fish were caught glanced at each other as they did one final, heavy pull of the net to get the section into the boat. Then, in a split second, they both threw themselves forward, hands fully extended towards the fish. The rest of us watched with excitement as Alhassan's left hand tried to grab the tail of the fish that his right hand had just missed. Milton, with a hard grip around the fish' gills, raised the *kini* up in the air triumphantly. Some of the other fishermen cheered him on, while others laughed at Alhassan's fumbling. Alhassan himself shouted some angry words at Milton, perhaps hoping to get some support from the other crewmembers, but the results were clear. Alhassan's hand had failed him, and the valuable prize went instead to Milton.

⁸⁶ Often known as echo-songs, distinguished from call-and-response songs where the call is answered by a response instead of simply repeated. Both styles were frequent in the work songs on the fishing boats.

⁸⁷ Juvenile barracuda, Lat. *Sphyraena spp.*

⁸⁸ Lat. *Illisha Africana*.

Situating *handfailure*

Handfailure is a Krio slang-term⁸⁹ used among fishermen in Sierra Leone to refer to the all-too-common feeling of being on the losing side; of having one's hand fail, as happened for Alhassan in the episode recounted above. On board Ghanaboats in Tombo, like *Surprise*, the crew on board do not receive a regular salary for their work. Instead, the crewmembers carry bags that they fill with an amount that varies depending on the catch of the day. What the bag contains depends on how many fish, and what type of fish, they are able to grab, or are given to them by the *bossman*. If they simply wait until the end of the day for the *bossman* to indicate how much of the common catch each should take, they get mainly small school-fish like herring, which rarely provide a good salary after they are sold on the market. To get a living wage, the fishermen instead seek to fill their bag with the most valuable fish caught in the net. They do so by grabbing (or trying to grab) the fish that is gilled in their 'section' of the fishing net where they are pulling. The whole process, of grabbing a fish, storing it in a bag, and being paid only by what you grab, is known as *handfailure*⁹⁰.

Ghanaboats are named after the Mfantse fishing communities that migrated from Ghana to Sierra Leone in the 1960s (see Chapter 2, and Krabacher 1990, 1992, MacCormack 1978, Diggins 2018). They introduced new and more efficient fishing techniques, with larger, planked fishing canoes and a ring-net style of fishing⁹¹. In comparison with the historically smaller and less labour-intensive *yele*-canoes, the Ghanaboats carry 20 men and have a small-meshed fishing net of some 400-700 yards in length and 15-20 fathoms deep. Ghanaboats are more capital-intensive than other forms of artisanal fisheries (see also Krabacher 1992). The fishing net and the 40 horsepower engine in particular, both imported, require a large capital investment, as well as high running and maintenance costs. The outboard engine burns about Le200,000⁹² in fuel daily, and the multifilament fishing net needs a monthly replacement of large sections.

The Ghanaboats focus their fishing efforts on pelagic schools of fish like herring and bonga. When a school of fish is spotted, and the direction it is swimming in is determined, a crewmember throws

⁸⁹ Dr. Simeon Koroma described it in personal communication to me as slang-Krio, which may not have a direct relation to other correct Krio expressions like 'get na hand business'. Like other slang expressions, it has developed in a specific context (here: fisheries) through a commonly shared experience, and is used by fishermen across the different languages present (mainly Temne, Sherbro, and Krio).

⁹⁰ Sometimes, *handfailure* was also uttered at the wharf when other boats came back with a better catch, however, I mainly heard it used to refer to individual situations on board each boat.

⁹¹ Now known as *Ghanachain*, meaning Ghana-net, then often spoken of as Ali-nets, which is the term that fisheries consultants often still use.

⁹² Roughly equal to 20 USD in 2019.

one end of the net into the water while the boat drives full speed in a large circle around the school. The *let-go-man* ensures that the fishing net leaves the boat untangled and with the cork up and lead weights down. In the shallow Yawri Bay, the ring net forms a wall around the school of fish, and when the boat comes full circle, the school of fish is trapped inside the ringed net, or gilled in the mesh. Then begins the hard work of hauling in the net. As described in the above vignette, the fishing net is hauled by two working teams. One team sits at the stern and handles the cork side, and the other team works at the bow and deals with the lead side. The whole process of hauling the net into the boat takes a little more than an hour, depending on the amount of fish in the net. The crew working the cork section at the stern do the heaviest labour, whereas those working the lead side at the bow are considered a little further up the crew ranking. First, this is because the labour is not as heavy as the hauling done by the cork-crew, but more importantly, because they are the ones picking the fish out of the net as it is hauled into the boat. This leaves room for *handfailure*.

When a fisherman grabs a fish, he has to store it somewhere, safely out of reach of the others. Those with a skilled position are given a compartment⁹³ on the boat. For example, the *let-go-man* throws all his fish into the first compartment, known as ‘one timber’, at the very fore of the boat. Those who work lead midship, on the other hand, all share the midship compartment, and thus have to single out their own fish from the bulk so no one steals it. They do so by putting their fish into rice bags tied onto the railing, known as either *taxi-bags* or *mattress-bags*, depending on their size. The other option is to wear a good pair of *trossis*; literally, trousers that the fishermen have redesigned, often into large, clown-sized versions with the lower hem sown together so the fish don’t fall out of the legs. “*Trossis* can hold much more and is right there when you catch the fish,” Ishmael once told me, while putting on his newly sown red, blue and grey *trossis*. “Look how I made it,” he grinned and held out the wide legs, indicating how much fish they could hold. Perhaps not the most fashionable choice – watching the best grabbers wobble around with their trousers full of fish is indeed a comical sight. This means that a good day of fishing, or someone who is very skilled in the game of *handfailure*, may lead to lots of jokes and mocking laughter, which helps to defuse the tensions or awe that can become jealousy.

The fishing sector in Sierra Leone is growing in terms of employment, and Ghanaboats are especially attractive for migrating young men, as they are always in need of extra “man-power”. Both Milton and Alhassan, along with the majority of the other crewmembers on board *Surprise*, described themselves as youth-men. Many of them were migrants to Tombo. In her work on

⁹³ Bulkhead, known locally as timber.

Tissana, Jennifer Diggins traces the histories of people who have sought freedom from predatory patronage and bonded labour in the rural areas inland by running away to the coast (2015).

Although, as Diggins also shows (see also Diggins 2018; 2019), the coast and fishing economy often turns out to be full of “sticky webs of material demands from relatives and neighbours” (Diggins 2015:323), many of my informants had indeed come to Tombo in search of economic opportunities and independence.

The narrative of fisheries as being quick money, where there is always a chance of getting an astronomical catch, was widespread. “One day, you see fisherman go to sea with holes in his pants, the next day he is building a house! Only one day at sea!” one of the younger fishermen on a smaller fishing boat once told me. Even Captain M on the *Surprise*, who otherwise kept neat track of the fuel expenditure and daily profits, sometimes spoke of the incredible one-day blessing from the sea, that could solve all your problems:

“If you go to sea for 2 years without even putting 10 million⁹⁴ in the bank, just maintain the boat and do repairs, then your time will come. In one day, you can get an 80-90-100 million catch.”

For the crewmembers, the opportunities provided by payment through *handfailure* were considered a potential life-changer. For example, I once met Pa Siaka coming back from the wharf, grinning: “Look,” he said, and held out a fat stack of money. “Over a hundred thousand! Just from this!” He gesticulated with his hands, as if grabbing invisible fish from a fishing net. Good days at sea were associated with hope and future prosperity. “We will catch that big kini, and when we do, I will grab it and enjoy⁹⁵!” the young fishermen sometimes exclaimed.

Despite these stories and irregular events, and the fact that Tombo, and the coast at large, continues to be a destination for economic migrants, the average profits in the artisanal fishing sector keep going down. Good days like Pa Siaka’s stroke of luck were rare. Some of the elder fishermen I met told stories of how in their youth, they would *flop the boat*, meaning fill it to the brim, several times a year. In 2019, I did not encounter this, or hear about it, even once. During a final wrap-up interview with Captain M on the *Surprise* in December 2019, he sounded optimistic about their future economic potential, but could nonetheless only recount four times since the boat was

⁹⁴ Approximately USD 1000 in 2019. Indicative prices of fishing gear in 2019: Le20 million to buy a 15hp outboard engine; Le1 million to buy 1-2 bundles of fishing net, out of the 30 bundles needed in total.

⁹⁵ See Diggins (2018:78) for an analysis of ‘enjoy’ in Krio.

launched in April when they had made more than Le3 million. “There are less fish in the sea, and so many boats,” he concluded.

While Captain M blamed the scarcity of fish on the sheer number of boats, others, like his brother Mr. A, blamed the artisanal boats for fishing juvenile fish. “But we would not fish juveniles if there were big fish again,” a boat owner complained at a community meeting about illegal practices, referring to how the industrial trawlers caught all the adult fish. During an interview with two fishermen in their thirties, they began discussing between themselves why fishing had become so much less profitable in recent years. While one of them, Mohammed, suggested the last few years had seen very rough weather, Saidu said it was the trawlers and the semi-industrial trawlers, known as *chingichoga*⁹⁶.

“Those *chingichoga* fish in the same waters as us, and they fish everything. Nothing is left for us!” Saidu said.

Mohammed agreed enthusiastically: “They gather everything in the sea, and also, their engine is so loud! [...] Like boom-boom-boom!”⁹⁷ And they go into the rivers, especially at night.”

“Finally, they do this bad method of fishing, with that small-small fishing net,” Saidu continued, and held up his pinkie finger.

“Fingerless?” I asked, referring to the smallest category of mesh size on fishing nets, known as fingerless because it cannot fit a grown man’s finger in one mesh hole. “But I thought the government had made this illegal?”

“Tsk, government haven’t done a thing.” Mohammed shrugged.

“Those people have connections, what can we do?” Saidu concluded rhetorically about the *chingichoga*.

The feeling of having to fend for themselves was widespread in the fishing economy. As Abdul, a taxi-driver who went fishing a few times a month, put it:

⁹⁶ Semi-industrial trawlers, see chapter 2 and chapter 4.

⁹⁷ Sound pollution is a focus in the following chapter of my thesis.

“When I go to sea, there is no salary; it is a fight for survival! [...] If I want to go to sea, no one helps me. I go to my friend’s boat, I bring my own bag and I go. No one says anything, no one helps.”

When I followed up, asking if his family sometimes helped him, he laughed and replied: “With us here in Africa, it is one-one⁹⁸!” One-one translates from Krio to every individual being separate from others, and is often used as a social critique at the lack of support, as in Abdul’s comment. That said, my own research, just like the longer trajectory of anthropological research in Sierra Leone and West Africa (Guyer and Eno Belinga 1995, Utas 2012, Richards 1996, Diggins 2018), indicates how people are not on their own, but instead enmeshed within large networks of socio-economic support, as well as exploitation. In Sierra Leone in particular, balancing support, obligations, and exploitation has a long social history with heavy political implications⁹⁹. However, I want to emphasise the general feeling that many of the fishermen had, of having to fend for themselves, as laying the ground for the growth of *handfailure* as a method of payment on the Ghanaboats. The “fight for survival” that Abdul referred to was how fishermen often described the individual character of life at, and making a living from, the sea. At times, it was described in positive connotations, as a form of individual control over time, individual success or (hand-)failure in acquiring fish, and a form of freedom from exploitative patronage relations. Indeed, as Diggins (2018) theorises about Tissana, many fishermen were longing for more freedom in the fishing trade, enabling transactions without debt and obligations. At other times, as with Abdul’s comment of everyone in Africa being ‘one-one’, the fight for survival connoted the experience of being *left alone*, without support, or being cheated out of something that was shared by selfish individuals.

To understand *handfailure* and the individual competitive accumulation of fish and profit on board the fishing boats in Sierra Leone, it must be situated within the longer trajectories of social relatedness, centring on trust and secrecy, in Sierra Leone. I do so below, by connecting the growth of Ghanaboat fishing as it coincided with both increased migration and wider changes in working relations in the fishing sector.

⁹⁸ In Krio: *wi na ya, Africa, na one-one*.

⁹⁹ See for example Shaw (2002) and Diggins (2015) on the memories of domestic slavery and bonded labour; Knorr and Filho (2010), and Murphy (2010) on reciprocities between landlord-strangers and patrimonial logics in politics; Richards (1996), Keen (2002), and Utas and Christensen (2016) on the civil war and relations between violence and political patronage; and Enria (2018), and Peters (2011a, 2011b) on the wider histories of youth marginalisation and patrimonial exploitation.

Trust and changing working relations on board Ghanaboats

I was given a longer history of how *handfailure* developed into the ordinary payment scheme on the Ghanaboats from two different sources: once by Mr. A, and on another occasion by two senior fishermen during a longer conversation about many of the changes between Sierra Leone fisheries from the 80s through to today. Both the fishermen and Mr. A highlighted a shift that occurred during and following the country's civil war. Before the war, people remembered having more solidarity with one another, and that a boat crew was like a family. The owner of the boat was responsible for his crew, for lodging and feeding them, as well as providing for them in other ways like paying medical bills and facilitating weddings. In exchange for this, the fishermen worked for free, and received only a small amount of *plassas fish*, translating to 'fish for the soup', which they could cook themselves or give to family members outside their lodging. The rest of the fish was for the boat owner, who also incurred all the costs of running and repairing the boat. One day a week, however, was for the fishermen, meaning that whatever they caught that day, the boat owner had no entitlement to. Most commonly, this day was Saturday¹⁰⁰. "We only added fuel on the boat, and *bap!* We went [to sea]," one of the senior fishermen reminisced. His fellow, however, also added, that if catches had been poor throughout the week, "and we met the *bossman* on land with [our] very good [Saturday] catch, of course we could share. Of course!"

While both Mr. A and the senior fishermen then recounted how things started to change around the time of the war, the reason for this change differed. Mr. A, whose family has long been involved in the fishing sector, including as boat owners, argued that it was mostly the fault of greedy boat owners:

When fish became scarce, the fishermen would "trɔs" the bossman money for fuel, but then the bossmen refused to pay them back. The fishermen did not agree, and complained, but then the bossman refused to cook for them and lodge them. So instead they all took their bag to sea every day to collect their payment.

As elaborated in the introduction, *trɔs* is the Krio word for trust, as well as for lending fish, money, or other material things. I will return to the concept shortly, further elaborating on trust in working relations.

¹⁰⁰ Interestingly, in Diggins (2018) fieldwork on Tissana in 2010, she notes how this system of paying fishermen in free days (two days in Tissana) had been operated over the last 15 years or so, and was considered a newer and more independent form of payment, as opposed to sharing fish or money every time a boat went to sea.

Mr. A's explanation for the wartime changes was similar to how the senior fishermen remembered the change; however, interestingly enough, they focused less on greedy boat owners who took advantage of the fishermen. "Now it is *ohlman* [everyone] for himself," they agreed. Like Mr. A, they related it to decreasing catches, but also to increasing migration to the coast. Before the war, the crew would remain with a boat for a long period, and thus delayed payment was no problem. With increased migration to the coast, the crewmembers without a fixed position would more often shift between different boats, depending on the boat's reputation and recent luck at sea. Thus, payment for a day's work was more desired than having to commit to a boat for a longer period. For example, one day we went to sea with 24 fishermen onboard the *Surprise*, and Ishmael told me that they had had good luck the day before, so today "everyone wants to join."

I find it likely that *handfailure* developed as the preferred method of payment through a combination of these factors. As catches decreased, the boat owners' ability to meet the daily costs of operating a Ghanaboat were compromised, leading some to demand a bigger share of the day or catch reserved for the fishermen. Instead of sharing part of a good Saturday catch out of solidarity and loyalty, as the senior fisherman indicated, the boat owners began to demand an increasing amount of the catch from a perhaps less loyal crew of migrant fishermen. *Handfailure* may have developed as a pragmatic and non-centralised form of dividing up payment.

Although many of the fishermen were too young to have experienced, or remember much from, the decade-long civil war, it was nevertheless a point of reference in many discussions on changing working relations, trust and solidarity in Sierra Leone. As the narratives of both Mr. A and the two senior fishermen point to above, migration within Sierra Leone has had a major impact on the fishing economy. Migrants, often noted as strangers in the Upper Guinea coast literature (Ménard 2017a, Dorjahn and Fyfe 1962, Brooks 1993), occupy a conspicuous position in both their host-communities and their places of origin, especially with regards to social support, solidarity and trust. Mitton's (2015) work among ex-combatants illustrates how the period of the civil war, and immediately following it, was a time when leaving one's community was associated with distrust. In rural Sierra Leone, people feared those who left, as they were associated with the RUF or other rebel factions. In her research on the coast a decade later, Diggins (2018, 2015) showed how the economic aspirations associated with leaving one's hometown, were once again associated with distrust, but in this context, the tables were turned. Her interlocutors were, instead, distrustful of the relatives they had left behind, who were continually inquiring about the migrants' whereabouts. Instead of telling their family their location, they would instead provide false information, to avoid having a hungry, debt-collecting or otherwise (assumed) money-seeking relative turn up.

As elaborated in the contextual chapter, trust in Sierra Leone, translated from the Krio word *trɔs*, must be shown in material ways. Or rather, when turned around, to *trɔs* someone money or fish is to establish a credit-relation, but also to “do” a relationship, to borrow from Bolten (2014). While *handfailure* fish should not be likened to a gift or loan, and as such, *handfailure* fish is not *trɔssed* fish, participating in *handfailure* resembles a form of navigational interaction where the fishermen, through daily, embodied interaction, may come to trust their fellow crewmembers, even for a very short while. *Handfailure* may thus be interpreted as a pragmatic adaptation to living in a world of mistrust; where the reliability of ‘stranger’ migrants is doubted, and the trustworthiness of boat owners is questioned. Instead of materialising relationships on board the fishing boats by entrusting the boat owner with a whole week’s catch, each individual fisherman grabs his own profit, and remains, at least in theory, free to invest the fish-profit in the relationships he instead deems viable; however, to do so, he must trust the other crewmembers to allow him a fair chance in the *handfailure* competition. I will return to the practicalities of this in the final section of the chapter.

The competitive working relations and individual accumulation at the cost of one’s crewmembers, as epitomised in *handfailure*, could easily be interpreted as a consequence of the increasing integration of coastal fisheries in West Africa into a global, neoliberal economy, given the ideological association of competitive self-interest with neoliberalism (Ganti 2014, Appel 2019, Ong 2006, Elyachar 2005). Furthermore, *handfailure* has several individualising and divisive consequences, which is why many, including some of the fishermen themselves, dislike the practice. Among governance advocates in the state apparatus, the local NGO sector, and amongst international development organisations, this was often connected with narratives of ungovernable fishing communities. *Handfailure* was at times the cause, at times the effect, of the fishermen’s lack of organisation. Both the local fishermen’s union and the government bureaucrats tasked with collecting licenses and stopping illegal fishing were quick to call out the problems with *handfailure*. “That *handfailure* is always causing fights, it is dangerous!” a senior government bureaucrat once lamented. Moreover, many of the data collectors employed to gather catch data from the boats complained how *handfailure* made it difficult to collect catch statistics, since much of a boat’s catch was already carried off in rice bags and *trossis* when they approached boat owners at the wharf.

However, neither *handfailure* as one of the ‘weapons of the weak’ (Scott 1985, Hoffman 2011) to avoid taxation, nor materialist reductions¹⁰¹ of *handfailure* as a response to overfishing, tells us much about the social relations and forms of interactions that guide *handfailure*. Furthermore, any time governance advocates, either locally or nationally, initiated serious discussions about new payment regulations, the fishermen objected in unison. “This is not Senegal¹⁰², oh!” was sometimes heard during meetings. “This is Sierra Leone, we have our own way,” was another common saying. When I asked people about this resistance to changes in payment regimes, the war again became a reference point. “The war opened our eyes,” Jameela once told me. Before the war, “we were so naïve, and we shared with everyone. Then the war came, and we saw brother kill brother [...] So now, people just fend for themselves.”

Jameela’s reflections illustrate the wider connection between trust, intimacy, and danger in West Africa (Geschiere 2013, Shaw 1997). Following Ferme’s argument on the ‘hermeneutic of suspicion’ (Ferme 2001:7), people take extra caution with drawing too close to another person, given the expectation that both intentions and power remain hidden behind layers of secrecy, often concealed in the material objects and surrounding world. Similarly, as Diggins observes about Tissana, south of Tombo,

People in Tissana find themselves navigating through an economic landscape in which they know that they have the best chance of scraping together a reasonable living if they risk tricking their rivals at sea and their bossman and business partners on land – and they know that this is as true of their neighbours as it is of themselves. (Diggins 2018:175).

This description holds for Tomborian fishermen as well. However, *handfailure* as competitive individual accumulation is more than a pragmatic adaptation to a materially exhausted, and mistrusted socio-economic world. By exploring *handfailure* as a competition, I shed light on how social cohesion and trust is practiced and produced in contemporary coastal Sierra Leone.

¹⁰¹ Relations between resource abundance and social order have been the source of anthropological debates for a century. One of the most famous scholars on the topic was cultural materialist and ecological determinist Marvin Harris, who argued that religious food taboos developed as cultural adaptations to ecological conditions (1979). Outside anthropology, political scientist Jeffrey Herbst has argued how state-formation in Africa was shaped by the continental abundance of land, making territorial control and hierarchical order expensive to uphold (2000). Geographer Terje Tvedt (1997, 2016) has launched a similar line of argument, concerning water and the role of access to it in pre-colonial African societies.

¹⁰² Known to be more organised, and having weekly or even monthly divisions of catch.

Negotiating *handfailure* through position, humour and shared work

Both *handfailure* practices and rewards are negotiated in situ or post-fishing. However, this does not mean that *handfailure* does not involve rules. In the following section, I trace some of the social relations and regulations on board the Ghanaboats that shape *handfailure* practices, and how these are negotiated. I highlight the rules that guide *handfailure*, when it is ok to do the *handfailure*, before I trace some of the outcomes and sanctions of the practice, and finally, what happens when “*handfailure* fails”.

Through the few, but important, regulatory functions of *handfailure*, new crewmembers learn how to find their place on the fishing boats, as well as the social norms that guide relations on board. *Handfailure* is a form of goal-oriented competition (see Thorbjørnson 2019:12, drawing on Simmel 1955), guided by two general rules. First of all, a fisherman can't leave his place while the net is hauled. Hauling the net on a Ghanaboat is strenuous work, and the large Ghana-net is made of multifilament nylon yarn that carries its weight in water. To get it on board a boat takes the effort of many strong, synchronised bodies. The type of songs described earlier in the chapter often helped to guide the rhythms of the labouring men. At other times, a crewmember would say simple, encouraging words like “Manpower! Manpower!” as the men hauled. The level of energy increased and decreased with the amount of fish hauled out of the sea, and with the level of physical exhaustion. In addition, both the weight of the net and the feeling of its weight changes as crewmembers attune their body to each other as they pull the net. This was a practice I first noticed as I began to participate in hauling the net myself.

As a novice, even balancing on the boat can be a challenge, as the boat rocks in the waves and with each haul of the net, and the gunwale and beam planks are slippery from mud, fish scales and water. “You get fined¹⁰³, oh!” Pa Kamara, a senior fisherman, jokingly said one time when I asked what happened if a crewmember fell overboard. Balancing on the boat comes with time and practice, but also through attuning the body to the boat and the net being hauled. The first times that I tried to “help” hauling the net, I was simply too excited, and hauled out of sync. Several times I had to catch myself from falling, using the net to balance myself. “Easy, Memuna, take time,” advised Audu, standing next to me. “Look,” he continued, and bent down to the gunwale to grab a section of the net, ready to haul. But before he hauled, he made an exaggerated move of gazing over to the four other men hauling the *lead*-section of the net, and as they reached down in synchronised motion,

¹⁰³ i.e. one must pay a fine to the bossman.

Audu added his body to the group and heaved his net section at the same time as they heaved theirs. “*Strong, saful* [gently, careful],” Audu concluded, and continued the work.

This was the only time I was directly instructed in hauling the net; similarly, I rarely heard any of the other newcomers on board receive instructions. However, I often witnessed the *bossman* telling the newbies to work the *cork*-section, and often placing them in the middle of the line of crewmembers, a position that makes it difficult to be out of sync, as long as the person in front of and behind you keep the same rhythm. Once, a junior fisherman, recently arrived from Makeni, placed himself at the very back of the line of *cork*-haulers. After ten minutes of heavy hauling, he looked tired, and began to haul out of sync. “Watch it,” one of the others said, as he moved forward when the rest leaned backwards. Getting the net into the boat is less heavy when bodies move in synchronized motions. Furthermore, while heaving, the changing *feel* of the weight informs the fishermen about the energy level of their fellow crewmembers. Again, this was never discussed, but I learnt it through participation, and later witnessed the interactions. Although I was the weakest crewmember by far, there were times while hauling the net when I felt how the man on either side of me got tired, which increased the weight of the net for me. It seemed as if the more senior members of the *lead*-crew, like Audu and Ishmael on board *Surprise*, also noticed this, as they would suddenly shift gear and heave with more strength, or start singing an encouraging tune, as if to compensate for the tired fisherman between us, or even to allow the guy a small break.

The simple, bodily realisation that the net is less heavy when the crew works in unison, is a potent experience that attunes one’s body toward other bodies, and away from only concentrating on grabbing the most valuable fish. While *doing the handfailure* enables each fisherman to earn a (small) living, hauling the net together acknowledges the same rights of all the crewmembers to a part of the catch and to practice *handfailure*. In addition, this embodied solidarity affects *handfailure* practices, because *handfailure* tends to break the rhythm of the heavy work. Those who are too eager to grab a fish for themselves, and let go of the shared task of pulling the net, are sooner or later likely to be left at the dock when the boat goes out to sea in the morning. Thus, the general rule is to stay put as the net is hauled and grab the fish as it arrives, possibly stretching without letting go of the tension on the net. Doing so in choppy waters on a slippery, wooden canoe tilted at least fifteen degrees towards the heavy fishing net is an advanced skill, which surely hints at why the seasoned fishermen tend to be more successful in their *handfailure* than the novices.

Secondly, everyone has ‘their’ section of the net, stretching from where they are standing down to the railing of the boat. Grabbing from another man’s part of the net is criticised, and can lead to

sanctions. In the ethnographic vignette above, it was only two of the fishermen; Milton and Alhassan, who reached for the *kini*, because the fish was in or between their sections of the net. If one of their neighbours had tried to enter the competition, as occurred once in a while, he might have been hindered by the other crewmembers around him. Or, if he had entered and won the competition, as I once witnessed on a different Ghanaboat, the *bossman* could intervene, and confiscate the fish and put it towards his own profits. That said, the two rules of not letting go of the tension on the net, and not grabbing fish from other's net sections, are more like guidelines to be negotiated, because it is not always easy to establish who a section of the net belongs to, or how early one can stretch forward to grab a fish.

While witnessing *handfailure*, it appears chaotic and confusing. I was rarely able to see clearly which hands were first, and who did what, when several fishermen jolted towards a fish in the net. The introductory vignette, where Milton grabbed a fish from Alhassan's fumbling hands, is a rare example of the opposite from my field notes. Most of the other times, I either noted if there were several people stretching for a fish, and how it ended. In the first few months I went fishing, I tried to ask after the episodes of *handfailure*, trying to understand what had happened. A few times, when the outcome had been undisputed, Abibu or one of the other crewmembers gave me a brief genealogy of whose part of the net it was, and whose hands were where. At other times, and as I began to realize, my questions were out of bounds, as the other crewmembers had also struggled to clearly affirm what had happened with their eyes. I will come back to this below.

Doing the handfailure is more than asserting one's right to a fish through social conventions and rules. It is a form of competition, where the physical element involves coordinating hands and eyes as you spot a fish in the net, while keeping your balance on the boat, and hoping that you are more skilled in doing so than your crewmates. At the same time, it is more than a competition in physical skills. *Doing the handfailure* is also a form of competitive negotiation, or hustling (Thieme 2017, see below), which involves playing the social relations on board the boat. It is a negotiated process, between crewmembers, between fisherman and net, and between fisherman and incredibly slippery fish¹⁰⁴. *Handfailure* tends to generate laughter, and the competitive episodes live on throughout the hard working day, and infuse the strenuous and monotonous work of hauling a heavy fishing net with play and competitive energy. There are rarely more than two or three fishermen grabbing for a fish at the same time, and the rest of the crew cheer them on. Winning the fish *and* keeping the peace often involves a whole lot more than simply getting there first. A smile or

¹⁰⁴ I explore the texture of fish further in chapter 4.

a joke, maybe a clumsy manoeuvre to imitate either one's own or one's competitors balance, are all small gestures that make the competition into an enjoyable performance for the other crewmembers, as well as a skilled form of workplace diplomacy. Wobbling around in *trossis* full of fish, or jokingly acting up when a wet fish wiggled inside one's trouser leg, were ways the fishermen skilfully defused situations that could otherwise be soured with jealousy and accusations.

Fishing in an exhausted environment like Yawri Bay, and the entertaining uncertainties of the competitive *handfailure* practices, resonate with the existential uncertainties of making a life from the sea. Uncertainty, however, should not be understood as degenerative; instead it can have a "positive and productive potential", to borrow from Cooper and Pratten (2015:1). In their edited volume on uncertainty on the African continent, they illustrate how people live with political instability, economic precarity, and social marginalisation (I would also add shifting ecological environments) in ways that shift their social horizons in productive ways, entangle them with new social relations and a creative use of circumstantial events. Furthermore, living with uncertainty can encourage "people to extend and deepen their social relations and engagements" (Cooper and Pratten 2015:7). *Doing the handfailure* enables the fishermen to negotiate new social commitments on board the fishing boats, within a social structure and economically precarious environment that would otherwise infuse relations with suspicion and mistrust. In comparison with earning a daily wage, structuring payment through a three-party system¹⁰⁵, or getting paid only on Saturdays, *handfailure* stimulates negotiation and engagement with the other crewmembers, the prize of the fish, and the guiding rules. This form of socio-economic negotiation is not restricted to *handfailure*, or fisheries. As Jane Guyer has argued, economic practices in Atlantic Africa have long been marked by an instability where every measure, scale and reference point is up for negotiation (2004). Skilful mastering of this negotiation process gives the possibility of what Guyer calls marginal gains, a possibility of incremental gains through each asymmetrical conversion. Participating in *handfailure* on board the fishing boat teaches negotiation skills – of working within the rules so it's not stealing, of grabbing as much as possible without being seen as greedy, of keeping a good tone, of evaluating ones owns and others' *handfailure* compared with the day's total catch, and calculating the types of fish to go after based on market trends in recent days.

By creating excitement, laughter and competitive motivation, *handfailure* breaks up the monotonous and strenuous work of manually hauling the fishing net (Dobler 2016). These

¹⁰⁵ Common in Senegal, and advocated by some NGOs in Sierra Leone. The three-party system divides a third of the catch each for the boat maintenance, for the owner, and for the crew.

moments of laughter and competitive camaraderie may be likened to how Johan Huizinga described the playful rivalry of *homo ludens* – man the playful (1950). However, whereas Huizinga's classic workplaces play "outside 'ordinary' life" (1950:13, quoted in Dudley 2003:25), the playful and competitive character of *handfailure* is integral into the survival of each fisherman and is a vital shaper of how people experience their social relations at work. The forms of playful negotiation practices in the heated moments of *handfailure* contribute to defusing tensions and antagonisms, and to keeping the spirits up by infusing the work with a competitive element. Furthermore, these negotiation practices often involve direct invocations of care and solidarity, as the crewmembers playfully ask their competitors to yield the catch because of how hard they have worked, or how much their girlfriend at home is nagging them for fish, or how their sick mama would bring blessings to the whole crew if she received a fine fish like the one just caught. These calls for solidarity are both used tactically to 'win' a fish, but also link life on the fishing boats with relations and networks on land. Labouring together in a resource-exhausted environment is facilitated by, and actualises, the social and material relations that both underscore further business, as well as other social, networks. The fish grabbed by a crewmember is ordinarily either sold onwards to his *kostament*, or brought home. Although it is the responsibility of the boat owners to bring lunch for their crew, the fishermen themselves would regularly bring small containers with rice and a fish sauce, proclaiming how "this is that fine bonga from yesterday" or "look how my sister cooked the Joeefish we caught". The very materiality in this relation – of the individually grabbed fish shared collectively, thus giving energy to all the crewmembers for another day of hard labour – showcases how individual gains have social origins and social consequences.

Although there is a hierarchy of positions on board the boats, everyone has their role to play in the game of *handfailure*. Many of those with a skilled position also partake in *handfailure*, and using (without abusing) one's authority is as much of a navigational skill (Vigh 2009) as when two equal crewmembers compete. The role of the *bossman* is, apart from securing his own fish, to ensure that peace on board is maintained. Captain M on board *Surprise* was known as a cool-headed boss. Apart from participating in much of the hard labour of hauling the net, he earned the respect of the crew also by intervening in cases of *handfailure* when he sensed they might take a bad turn. Although it may seem like all parties are playing good sports in the game of *handfailure*, the competition can get both heated and violent. Fishermen in Tombo are known for easily taking to their fists, and there was rarely a day at the harbour office without a boat or two coming back with a disagreement over fish. On board the *Surprise*, Captain M had a special skill of defusing situations that were in danger of escalating, which also fed back to his position of authority. This was in contrast to some of the

bossmen I met on other boats, including Captain M's uncle, who would captain *Surprise* when Captain M was engaged in other activities on land. The uncle had a much more laid-back style, and left all the work and most of the decisions to the fishermen themselves, including *handfailure* disputes. For example, one day on board *Surprise*, around midday after a bad first haul, two of the crewmembers who had argued over a fish during the haul kept throwing accusations at each other while we were cleaning up the boat and readying it for another search for fish. As the argument got increasingly heated, one of the more senior crewmembers tried to intervene, only for him to be accused of wanting the fish for himself. He quickly angered and the three fishermen began to push each other around. The uncle tried to shout some angry words, before he finally got up and tried to intervene. It took quite some time and the help of other crew members to break the three antagonists apart.

This was the only time I witnessed things getting violent on board a fishing boat; however, at the wharf, the harbour master regularly had to intervene in conflicts between crewmembers.

"*Handfailure* is the reason for all these fights," the harbour master once told me, after a group of fishermen had been brought to the police – a serious consequence, but not uncommon. If *handfailure* is a recently developed payment practice, which often causes confusion and conflict on the boats and at the wharf, despised by governance advocates and aligned with precarity and thievery amongst the fishermen, why does it continue to survive as a practice? In the final section, I will discuss what competition through *handfailure* does for individual motivation and for social cohesion and trust in Tombo.

Competition, accumulation, and trust through *handfailure*

In the overfished waters of Sierra Leone, where the prospects of an 80-90-100 million Leones worth of fish in a day become ever less likely, competition for the remaining fish is tough. For the fishermen, *handfailure* epitomises the competitive nature of fishing in an exhausted environment, and scales the competition down to a tangible lived reality in which each man competes for his own gain. That said, *handfailure* is more than the individualised consequence of the predatory global fish market, where the poorest and least empowered are left in a dog-eat-dog competition. Margaret Mead pointed out, back in 1937, that competitive and cooperative behaviour may not be as oppositional as psychologists at the time would have it. This analysis of *handfailure* as a competitive mode of individual accumulation, while simultaneously inducing cohesion and trust, follows from

Mead's point. Similarly, also in the context of fishing, Miller and Johnson (1981) showed how, in the salmon fisheries of southwest Alaska, the short and highly competitive fishing season "paradoxically bonds fishermen, while, at the same time, [...] pits them against one another" (1981:134). They describe how the fishermen's economic alliances, and how the shared experience of isolation at the fishing grounds, as well as the physical exhaustion and occupational hazards, promoted belonging and professional pride among the fishermen.

As I will show in the final section of this chapter, *handfailure* enables both cooperative trust and competitive, individual accumulation on board the fishing boats. That said, I believe there is a need to further nuance the clear-cut distinction between competition and cooperation, which is a long-lived binary that lives on in both scholarly work, and in how people morally evaluate social interactions. Going back to the opening story of this paragraph, Captain M dismissed some of the crewmembers following a bad day at sea when he heard one of them had grabbed a fish from himself. As quoted, he considered the crewmembers selfish, as they 'only cared for themselves'. However, this was a fairly unique episode, both in the active role Captain M took in denying any valuable fish as *handfailure* prizes, and in how the one junior crewmember ratted out his buddy. Much more common was a form of solidarity shaped through the adversary condition and in submitting to the rules of the *handfailure* competition. This solidarity centres on trust, and trust in one's fellow crewmembers to keep information about *handfailure* wins or inequalities to themselves.

Going back to my initial inquiries about the detail of *handfailure* episodes on board *Surprise*, I was asking questions that could not, and should not, be answered. The episode in the chapter prelude is interesting because of its uniqueness, as I take it as providing insights into the social processes concerning trust that are otherwise left unspoken. Captain M's accusation of both the fishermen indicates how *handfailure* is guided by a deeper notion of trusting one's comrades not simply to play by the rules, but also with information about the events as they unfold. Considering Meinert's (2015) work on trust from Uganda, and Carey's (2017) theory of mistrust, information and 'truth' is always negotiated through social interactions. Information about the other's fish-grabbing is a valuable resource, which the fishermen may use to establish valuable social relations in uncertain times (cf. Cooper and Pratten 2015). Exposing the information, or parts of it, at the right time and place, resembles the forms of street hustle practices that Thieme (2017) describes in Nairobi.





*Figure 20: "Memuna, let us show you
how we fishermen sometimes fight
for handfailure!"*

The junior fisherman who spoke out against his fellow broke the norm of not capitalising on his new information. Much more common, and another reason for the *handfailure* fights at the wharf, was for fishermen to claim part of someone else's *handfailure* prize because they have 'kept the information'. "That man saw his friend take a big catfish, and wanted something for not telling the bossman," Abibu told me once, after we had witnessed a loud argument about to turn violent at Small Wharf. Working in close quarters on the Ghanaboats, it is almost impossible for any act to go unnoticed by one of the other 20-or-so pairs of eyes. Thus, as a fisherman fills his bag with *handfailure* fish, at least some of the other crewmembers will be watching his actions. Given how *handfailure* is practiced as a social negotiation, those who are less skilful at open negotiation often attempt to pick from the shared piled in the midship compartment, sometimes even from their crewmembers bags. Most likely, they will be caught by another's eyes, but they are not always called out, unlike in the chapter prelude episode. In other words, a form of trust through information develops, and the fisherman who called out his buddy disproved himself by showing how he was *not trustworthy* with information.

As Bürge (2018) has argued about the hustling carried out motorcycle drivers in Makeni, and Vigh (2009) shows in the context of urban Guinea-Bissau, making relations through control of information is central in a "hustling economy" (cf. Thieme 2017). Also, in the longer trajectory, Shaw (2000) reflects on secrecy in relation to personhood and social relatedness in Sierra Leone, drawing on the history of the slave trade and of other socio-economic predatory relations. The idiom of 'tok af, lef af' [talk half, leave half], she argues, is vital to understanding how people see selfhood and relatedness in an untrustworthy social world. Through participating in *handfailure*, a form of trust through information develops. In the case from the rainy season, the fisherman who called out his buddy disproved himself by showing how he was *not trustworthy* with the information. It thus comes as no surprise that he was left out of the competition the following occasion, not being allowed to re-join the crew on board *Surprise*.

The cohesion and trust that the fishermen "harness through the hustle" (Thieme, Ference and van Stapele 2021), is thus a form of envisioning alternative future trajectories; it is a part of the socially *imagined* (Vigh 2009). Like Pa Siaka cheering for his Le100,000 salary in one day, and the young fishermen who dreamed of grabbing big fish out of the fishing net ("and enjoy!"), the potentials latent in *handfailure* couple survivalism with hope and aspirations. Participating in *handfailure* is predicated upon what Vigh calls social navigation in an environment in motion, where people navigate opportunities between "the socially *immediate* and the socially *imagined*" (2009:425, original emphasis). The *handfailure* prize – the valuable fish – may be an immediate necessity, and

the hopes of future good catches part of the future imagined. However, a selfish *handfailure* participant, who fails to keep the *imagined* in view, is left at the wharf the next day. A fisherman's right to his own *handfailure* is upheld only as long as he upholds the rights of others. The temporal horizon is thus longer than the immediate instant of grabbing and gaining. Given how luck at sea is in constant flux, and the true powers of the world are secret and concealed (Ferme 2001, Diggins 2018), *handfailure* ensures teamwork and acknowledging interdependence, while each and every man's individual strength and motivations of personal gain are stimulated through comradery and competition.

Finally, as Thieme, Ference, and van Staple (2021) acknowledge, hustling can at times be experienced as exploitative trickery, while at other times it is solidarity in the making. Returning to the first ethnographic vignette in this chapter, where Captain M sought to keep *handfailure* fish from the crew, the two junior crewmembers, who either engaged in *handfailure* or called it out, were both out of line with the social conventions on board *Surprise*. When only one fisherman engages in *handfailure*, he exploits the system, as the other fishermen have (tacitly) agreed to render the day's profit to the boat. But Captain M's comment about everyone fighting for themselves also extended to the fisherman who ratted out his comrade. This public accusation of stealing, of taking twice from the small pile – both his *handfailure* and the daily allotted herring – broke with the implicit norms of solidarity with one's brother on the boat. Fishermen in Tombo are often considered deceitful and untrustworthy, something Diggins (2018) also notes in Tissana on Shenge. For example, my host mother did not want her daughter to find [marry/be courted by] a fisherman, because “they are all *tiefman* [thieves]”, as she put it. Mr. A often complained how the fishermen on the wharf must be watched with both eyes: “He will greet you with fine words on the way from the boat, but if you don't watch your back [when he leaves], he will grab the good fish from your pile and be gone.” As I spent time at the wharf, I learnt that Mr. A's comments were more than a moral judgement of the fishermen's character. By closely watching the piles of fish laid out on tarpaulins, I often noted how some of the people passing by often had, successfully, sticky fingers. On board the *Surprise*, the fisherman who did the *handfailure* when he wasn't supposed to thus confirmed the social stereotype of thieving fishermen. The notion of fishermen as thieves was all too common, as the following vignette illustrates:

“Did you get your silverfish? Fisherman is a *tiefman*!” Laughing while talking to me, Abibu's question on whether I actually got the fish I picked out of the net, was also a general comment on the lack of solidarity between fishermen on the Ghanaboats in Sierra Leone. I had gone out fishing in the morning with the *Surprise*, and now in the late afternoon, we had hauled in the second and

final net of the day. While we were hauling, a silverfish had appeared in the net, and as the long, shiny fish slid over the railing, both Audu and I were close to the fish. Audu is my senior in both experience and position on board, and gave me a big, competitive smile as we both reached forward to grab the fish. Encouraging their apprentice anthropologist, the fishermen, including Audu (who had most probably held back), cheered as I grabbed the fish first, and we laughed together when I held up my wriggly catch. Ishmael commented that now I was part of the crew since I could *do the handfailure*. Feeling all too excited about my accomplishment of being included in the crew, I didn't really know what to do with my catch, as I had no proper trossis (nor, in all honesty, any wish to have a slimy fish slide down my trouser leg) or a durable bag to hold my catch. Instead, I dropped the fish down into the bulkhead to collect it at a later point. As we were later breaking for a few minutes, I had all but forgotten about my catch and pulled out my notebook to write about my achievements, instead of rummaging through the bulkhead to find my shiny silverfish. This prompted Abibu's later comment that all fishermen are thieves, because when I finally remembered, my silverfish was gone.

Doing the handfailure compounds trickery with trust. If all fishermen are thieves, one may wonder why there is not tighter control over the highly-prized fish, or why complete mayhem does not break out on board. As argued throughout this chapter, the fishermen must work together to get the heavy fishing net on board, and attune their bodies to the bodies of their fellow crewmembers to help, and get help, through the exhausting process. But beyond the shared labour, there is a deeper notion of trusting one's comrade with information that guides *handfailure*.

Concluding remarks

Handfailure prizes ensure a form of individual survival in a precarious marine environment, where the uncertainties are many, and the true powers of the world are concealed and hidden (Ferme 2001, Diggins 2018). Entangled in the global capitalist economy, Sierra Leonean fishermen have few opportunities to participate on equal terms. Just like the longer histories of colonial extraction from Sierra Leone, and the continent at large, the fishing economy continues to circulate the profits, leaving local producers and harvesters to fight for juvenile fish and bony herring. This makes it easy to write off competitive practices like *handfailure* as a product of globally circulating neoliberal logics of competitive individualism. Instead, I have argued how *handfailure* stimulates cohesion and even trust between diverse, and sometimes short-term, crewmembers, who learn to adapt their

bodies to the other crewmembers, and work by the guiding rules of *handfailure*. Through *handfailure*, the crewmembers compete for their own individual gain, but also build identity and belonging as a group of fishermen, where the shared experience of hauling the net together, interspersed with exhilarating moments of intense competition, stimulates camaraderie and teamwork.

For the young fishermen, *handfailure* enables a form of opposition to the patrimonial logics that often shape employment, and salary negotiation, in Sierra Leone and the wider Upper Guinea Coast (Utas 2012, Murphy 2016, Diggins 2015, Peters 2011b). In other words, as the fishermen establish their individual relation to the fish-prize through the *handfailure* competition, they detach the material relation of fish acquisition from wider patrimonial networks and socio-economic indebtedness. However, this does not mean they are independent and detached, as such. Through participating in the competition of *handfailure*, the fishermen engender trust and solidarity as they labour together. They come to trust each other with information, and to uphold the rules of *handfailure* so that everyone has a fair chance of participating. Furthermore, by labouring together, they learn to adapt their own working rhythms, and individual motivations, to those of the other crewmembers. Finally, working together entails a form of intimacy through knowledge, both of other's *handfailure* activities, and of getting to know their own abilities and those of their crewmembers, as illustrated by Ishmael's song in the opening vignette.

This chapter has focused on the working relations between crewmembers on board Ghanaboats in Tombo, situating them in an increasingly resource scarce environment and within a social structure characterised by mistrust. In the next chapter, we remain at sea with the crewmembers on the Ghanaboats, but entangle the local social relations with the presence of global actors only hinted at in this chapter, namely the industrial trawlers and fish export companies. Furthermore, following specialised divers called *phonemen*, I situate the socio-economic practices of the fishermen within a material, more-than-human environment that entangles human embodied skills with fish sounds and a watery environment in motion.



Figure 21: Throwing a line to the phonemen in the water.

CHAPTER 4

To *phone* for fish

Socio-material navigation in a global fishing economy



Figure 22: Abibu sorting croakers from bonga and swit wata fish

Chapter prelude

The West African coastline is dotted with wooden fishing boats in every colour imaginable. From the air, the bright colours are contrasted against the light turquoise and greyish waters. Red, green, blue, yellow. From below, under the surface, the muddy waters hide the visual inputs, and those who live there must rely on other senses, other forms of communication. Jumping into the water, the first thing I hear is the sound of water touching my body, my ears, and for a brief moment, I hear nothing but the splash, gush and bubbles moving. Water and air bubbles touching my skin. I try to remain calm and submerged. The soundscape changes. I hear the roaring outboard engines of the fishing boats around me. What about other sounds? What about... fish?

Like speckles of silvery light encapsulated in blue, the school of herring moves in the water column as it hunts for small amphipods and crustaceans. Dancing effortlessly as it follows the warm, nutritious Guinea currents, the school moves in one impressive, synchronized motion from afar. Swimming closer, and millions of shiny speckles morph into individuals. Individual fish. Into greyish, scaly herring. About 20 centimetre long, with searching eyes and effortless tail wagging that moves its body through the water, the adult herring lives in large schools off the coast of West Africa. From the central Atlantic Oceans, the Guinea currents lead the schools of herring towards the continental shelf, where the cold water rich in nutrients is upwelled from the bottoms. Outside Guinea and Guinea-Bissau, the herring enter the Guinea plateau, where the continental shelf stretches out almost 200 nautical miles into the Ocean, sloping gradually upwards from 6000 metres depth, to muddy shoals of the coast ranging from 50 to 10 metres of depth. This is where the herring comes to spawn, laying its eggs in riverine areas and mangroves.

As they travel up and down the water column, the herring communicates to synchronize the school's movements. While they have no lungs, they use their air-filled swim bladders to control buoyancy, as well as to communicate. Herring communicates with each other by releasing short bursts of air into the water, producing high-pitched ticks. Scientists call these sounds Fast Repetitive Ticks, or FRTs. Farts, the herring communicates with farts. Through releasing air-FRTs, the herring bodies attune to other herring bodies, so that predators are more likely to shallow water than a herring, if it enters the synchronized school. It's *fish* predators, that is, but what about humans?

In the Sierra Leonean waters, there are about 12,000 artisanal fishing boats, from the one-man dugout canoes to 20 metre long planked *Ghanaboats*. We are all hoping to catch our share of both the migrating schools of small pelagic fish like herring, and of demersal fish living more stationary in rocky reefs, rivers mouths, and on the sandy bottoms. Above the water we scout the surface for ripples, colour changes, and fish surfacing to draw air into their swim bladders. Sometimes diving seabirds can indicate where we should look. Under the surface, our human eyes are of no use. "We don't see fish, we listen," Foday says. Foday is our *phoneman*, who is specialized in *phoning* for fish under water. "This time, we only heard a faint herring sound, but *Insha'Allah*, we will hear *gwangwa!*" he smiles, and waves for me to join as he flips backwards into the warm, grey water of Yawri Bay.



Figure 23: What does the muddy water hide? Have we caught fish?

Introduction

This chapter elaborates on the *phonemen* and their skills of *phoning for fish*. Whereas the majority of the fishermen attune their bodies and set of skills to the water surface, be it by spotting dark-coloured areas or unusual ripples that moves against the current, the last decade has seen the growth of a new occupation within the artisanal fishing industry. Known as *phonemen*, translating to “the men who phone/call to fish”, they operate instead under water. Their body is specialized to listen through water, and locating the “talking” *gwangwa*, a bobo croaker fish. I elaborate on how the profession developed in relation to shifting global flows of extraction, more specifically the Korean market demand for the *gwangwa* fish, as well as with the local fishing boats search for new providers of capital, which they found in the Korean companies around on the peninsula.

The chapter illustrates how *phoning* is both a social practice and an embodied skill attuned to a material environment ordinarily out of reach for humans. Beyond the seas, the embodied skills of listening to and through a shifting environment diffuses through most socio-economic activities that Sierra Leoneans do, and they are essential for making a living without compromising social relations needed to “make a life” in an environment in motion (Vigh 2009, 2018). *Phoning* has an ad-hoc, opportunistic quality to it, as the *phonemen* adapt their practices to both the mood amongst the other fishermen on board the fishing boats, and information shared between the above-surface and below-surface crewmembers that may or may not enhance trust in the *phonemen*’s capacities. Although the new profession could be analysed as local adaptation to a new global flow, this time the Korean demand for the bobo croaker fish, providing only this narrative would reduce local practice to realignment with structural interpretations. Instead, I consider the potential in learning from the *phonemen*’s way of being with water and navigating in the more-than-human environment. Furthermore, I consider how the socio-economic relations between the *gwangwa* fishermen and the Korean companies resemble hustling (Thieme 2017, 2021) in a marginalized position.

The chapter opens with an ethnographic vignette of my first encounter with *phoning for fish* as a practice, and how I later (partially) learnt how to *phone*. Following the vignette, I historicize the growth of the *phoneman* occupation in relation to the increasing fish trade between South Korea and Sierra Leone, a trade that especially revolves around the bobo croaker fish, locally known as *gwangwa*. Then follows two analytical sections where I elaborate on the *phonemen*’s embodied skills, considering the transcorporeality (Alaimo 2012) of their bodies with the water and the

talking *gwangwa*. This is again linked for navigational practices, as I come to argue that *phoning* for fish is form of socio-material navigation in shifting ecological and social environments. Finally, I link the *gwangwa* fishing back to the Korean companies that buy the fish, and trace how the fishermen hustle in an unequal global fishing economy.

To *phone* for fish

It was the end of a grey day in May, at the very beginning of the rainy season. This was my fifth time out fishing with the Ghanaboat *Surprise*, and we were on our way back to the wharf, when Pa Kamara came up to bow where I was sitting with some of the other fishermen. Our day at sea had not yielded much, and the mood was sombre at the bow. Nevertheless, Pa Kamara was grinning as he sat down.

“Memuna¹⁰⁶,” he said. “Do you know how to phone for fish?”

I had heard the phrase *phone for fish* a few times before, but had yet to learn what it entailed.

“No, I don’t know, what is it?” I asked, while picturing some sort of telephone. “Do you have a way of calling on the fish to bring it closer to you?”

Pa Kamara burst out laughing, and the other fishermen joined in.

“Ai, Memuna, it is fish!” Ishmael said, still laughing. “You can’t call on fish, it will not listen to you.”

Although my ‘help’ in hauling the fishing net earlier had not left much room for doubt, this was the nail in the coffin: I was officially a newbie to the sea and the fishing profession. Although I was happy to have lightened the mood, I was still curious: What, then, did it mean to phone for fish?

“When the season comes, I will teach you how to *phone* for fish,” Pa Kamara said. Seeing my still confused looks, Abibu, who often helped explaining things to me on the fishing boats, continued:

“To *phone* for fish means to listen to how the fish talks. The fish talk together, and then when they talk, the *phoneman* can listen to [for] them.”

The other fishermen nodded, and Abibu continued by telling the story of how *phoning for fish*

¹⁰⁶ My local name, see chapter 2.

developed.

In a small fishing community close to Yelibuya, on the northern coast of Sierra Leone, an old fisherman fell into the water many years ago. He was lucky enough to fall right into a place where there were many croakers. “They talk like this: *Gluurp, gluurp, gluurp*,” Abibu made some deep guttural sounds. “Yes,” Pa Kamara interrupted, and added: “but people before also used to listen for fish, by putting their paddle into the water, like this.” He held an imaginary paddle in his hands and pointed the end into the water, while laying the other hand to his ears, as if listening through the paddle. “The paddle wood vibrates if there is talking fish in the water.” The others nodded, confirming Pa Kamara’s intervention, before Abibu continued, telling us how the old man had stayed some time under water. Once he was calm in the water, he could hear the sounds, the *gluurp, gluurp, gluurp*. When he realized it was fish, he climbed back into his boat, and set a fishing net there with great success. “Even today, that old Pa is the master for the *phonemen*, everyone goes to learn from him,” Abibu concluded.

I was fascinated, and asked if everyone can go there to learn how to phone for fish. Pa Kamara reiterated that he would teach me how to *phone* here in Tombo: “No problem, you know how to swim, right?” I confirmed that I could indeed swim, also under water, but was still not satisfied with the explanation of *phoning*. “So, I don’t need to have special skills, or special ears? Why is it called to *phone*, when fish don’t have telephones?” Again, I gave *Surprise*’ crewmembers a good laugh, and it took Pa Kamara a good minute to compose himself enough to answer my question. “Oh Memuna,” he said, “sometimes the fish is so far away. Like how you can listen to people in Freetown, Liberia, America, on the phone, the *phoneman* will listen to fish that are far away.” He concluded the conversation by saying that to phone for fish is “very normal”¹⁰⁷. Everyone’s ears are capable of hearing the fish talk.

When I first learnt about *phoning*, the season was over. There are several factors to the seasonality of the phoning. One of them is the availability of the *phonemen*. Many of them work part-time in the fishing sector, and go to their (family’s) farms in the beginning of the rainy season to plough and plant. Secondly, the general fishing season, with the dry season lasting from November until April is overall considered the best time to fish, and thus also a better time to invest in more crewmembers. During the rainy season, the weather is much more unstable, and the risk of being caught in a storm, or even blown out to sea, is high. Furthermore, the information the fishermen use to spot

¹⁰⁷ This is in contradistinction to what Diggins (2018:157-158) interlocutors told her of phonemen having “witch-eyes”.

school fish, is not as readily available when the waters are choppy, and the surface sprinkled by rain drops. To find fish, the fishermen interpret the small signs of life under water by tracing colour changes, or strange, localized current-like movements.

Localizing fish by scouting the water surface is a form of tacit, embodied knowledge to the seasoned fishermen. Anytime I asked for words to describe what they were looking for, I was told to “look at the water.” It took me months to know *what* to look for, and how to interpret the different signs. The fishermen also use sound above water, listening for fish “*knacking the water*”, meaning coming up to the surface to draw air and thus making a weak, high-pitched sound described as *knack*. As I learnt these small signs, I was excited every time I noticed anything. However, while the Sierra Leonean waters are still ‘surprisingly productive’, according to a marine scientist I spoke with in October, simply throwing one’s net in the water is doomed to fail. Thus, any information that can help locate a school of high-prized fish is of great value, also because hauling a 500 metre long fishing net carrying its weight in water can only be done twice during a day-trip before the crew is exhausted.

Finding fish requires commitment and time, of bodily attuning to read the small signs of the environment. “There, look!” I remember trying with a cautious, but excited, statement, after being encouraged to look for fish. “Eh, it is only herring,” Audu answered. I was clearly late to the party. (although party does not accurately describe the mood on board, which was quite the opposite.) Herring, fetching only a tenth the price of bonga at the Tombo wharfs, was rarely a cause for celebrations. Throwing the net in the water at the right time, and for *the right fish*, is essential for making a living from the sea. “The herring makes that fast *thick-thick-thick*,” Abibu explained on a later fishing trip. “The bonga *knacks more hard*.” Honestly, I never fully learnt to discern the two, although I could sometimes spot the bigger surface ripples that bonga makes.

The *phonemen*’s skills adds another ticket in what may seem as a random lottery of luck. With their skills of diving and listening through the water, the boat crew gains access to information from another medium and another world: the submarine environment. In the beginning of November, the Ghanaboats in Tombo began employing *phonemen* again. On *Surprise*, we were joined by Foday and his apprentice, Kabir. Foday was a chatty guy, and quickly invited me to come visit him and some of the other fishermen lodging for the season in a house belonging to Pa Kamara, in a neighbourhood on the outskirts of Tombo. “We are all lodging here,” Foday said, after greeting me welcome. He was seated outside the house, together with Kabir and three of the other crewmembers from *Surprise*. Kabir had a rolled joint ready in his hands, which the fishermen

shared while we chatted. On the other side of the house, there were regular pounding noises from a mortar, and a couple of times, Pa Kamara's granddaughter passed two buildings with plates and utensils. This was on a Friday, and following the mid-day sermon and prayers, Audu and two of the other senior fishermen from *Surprise* also joined us.

"This *phoning*, we only saw it here after the war began to *cool* [calm down]," Pa Kamara jumped straight into the conversation, knowing I was curious to learn more about the history of fishing and *phoning*. Foday first disagreed, but after a quick discussion back and forth, they seemed to settle on *phoning* as a profession developing in the latter years of the war, and that it began with the *channel* type of fishing boats. "Those type of boats are closer to the shoreline than *Ghanaboats*, and *Yele-boats*," Foday said, indicating that the types of fish the *phonemen* listen for live closer to the shore than pelagic fish like bonga and herring. "I have been fishing for twenty-one years," he continued:

It was my father who taught me how to fish. At that time, my father had a yele boat, and I would paddle for him. Then, with time, I saw that there was no profit in yele fishing, we caught so little fish. So I decided to join Ghanaboats. Because I am from the area with the original phoneman, I decided 'ok let me learn this'. I never fear the water.

The next week, I followed Foday and Kabir into the water, or at least attempted to. However, because they often jump out of the boat while the boat is still at speed, and swim several hundred metres to catch up with the boat, my introduction to listening for fish, was instead made physically easier, by jumping into the water when we had already encircled a school of fish. Swimming under water, in an environment now murky from the bottom mud we had swirled up with our net, was disorienting. I could only see some 30 centimetres ahead of me, and Foday confirmed after my attempt that it was indeed no use in the eyes under water. "We don't see fish, Memuna. We listen." Again, I attempted to follow his advice of "tuning out other sounds" from boat engines, and shouts from the fishing boats, but I could not hear anything. Just bubbles and indistinct noises. An outboard engine. I swam up to the net and held my breath. Nothing. Time passed, and I resurfaced. Went down again, nothing. Wait. Small ticks. Suddenly, as if out of nowhere, I heard weak, and quick *tick-tick* noises in the water. Herring!





Figure 24: Heading out to Yawri Bay

The global *gwangwa* trade

My *phoning* skills never went beyond listening to the fish that we had already caught in our net, or smaller types of reef fish I could watch and listen to while snorkelling at Banana Island or one of the other more touristy beach towns along the Peninsula. Only once did I hear the deep, guttural croaks of a *gwangwa*. And while I had fun listening to the herring FRTs, the main target for the *phonemen* is the *gwangwa*, known in English as bobo croaker¹⁰⁸. The *gwangwa* is a demersal fish, adult size around 30 cm long that lives in small populations on the muddy bottom or nearby rocks (Fishdata n.d.). It used to be a very common fish in Sierra Leone, so common that it rarely attracted any interest at the wharf. In Tombo, people told me things like “when our parents were young, they didn’t even bother to take it home,” and “it used to be the cheapest fish, now you will not even see it at the [local] market.”

In the following section, I trace the entanglements between the foreign actors, as manifested in the industrial trawlers and the Korean companies, and the artisanal boats in Tombo. Drawing on the discussions in the thesis introduction and Chapter 2, I elaborate on how the increasing competition between trawlers and artisanal boats have relegated the Sierra Leonean fishermen to a structurally marginalized position with little bargaining power. At the same time, the fishermen enter trade agreements with the foreign companies, to gain access to economic capital that is becoming less and less available in a resource exhausted, or *dri* to use the Krio word, local economy. These trade agreements centre on the *gwangwa*, and the *phonemen*’s capabilities in locating the talking fish, as elaborated above.

From the mid-2000s, local interest in the *gwangwa* rose in Sierra Leone, as Korean fish export companies established themselves along the Western Peninsula and began to trade with the local fishing boats. The *gwangwa*, like other croakers, are in high demand in Korea (Kim et.al. 2019, EJF 2018, Sei and Baio 2018)¹⁰⁹, where they are considered fine fish, often served for celebrations and to important guests. In Korea, it is especially the plate-sized fish that fetches a good prize, which, unfortunately for the *gwangwa* stocks, are still juvenile and have yet to start breeding (Fishdata n.d., interview with marine scientist dec. 2019). The Korean domestic market is increasingly reliant on import of croakers, as the East China Sea populations of small yellow croakers, as well as other

¹⁰⁸ Lat. *Pseudotolithus elongatus*

¹⁰⁹ The Korean demand is primarily for the Pacific-dwelling yellow croaker, however, as an EJF report from 2018 shows, much imported fish in Korean markets are mislabeled. Interestingly enough, the same report mistakenly reports Sierra Leonean croakers as yellow croakers instead of bobo croakers (EJF 2018).

croaker species, have been overfished and are reduced in number and fish size (Lin et.al. 2011, Lee and Rahman 2018, Wang et.al. 2020). The increasing competition in the East China Sea has led Korean fishing trawlers and companies to seek out other countries with high croaker populations (Darracq and Neville 2014), and Sierra Leone is one of them.

While many of the Korean fish companies have their own, or trade with, industrial trawlers, the trawlers are unable to fish in many of the shallow and rocky areas where the *gwangwa* thrive. Thus, the companies rely instead on the artisanal boats, and seek to secure a reliable supply of *gwangwa* through trade agreements with local boat owners. I will return to these in the final section of the chapter. Research from other West Africa countries indicate how Korean activities expand the whole coast (Belhabib et.al. 2012, EJF 2009, UNODC 2011, INTERPOL 2014), but the types of engagements between the Korean vessels and companies, and the local artisanal communities varies. For example, in Senegal it is reported that Korean trawlers subcontract Senegalese artisanal boats (*pirogues*) and charter them down the coast to do coastal fishing in areas unavailable for the trawlers (Binet, Failler and Thorpe 2012).

In Ghana, a collapse of the small pelagic fish stocks in the mid-2000s led many local fish traders to search for alternative ways to access fish, which they found in the industrial trawlers and their bycatch (Overå 2002, Lucht 2015, EJF and Hen Mpoano 2019). In short, bycatch refers to the fish and marine beings that are not targeted specifically by the fishing boats. Through what is known as *saiko* (or *seiko*) fishing, the trawlers sell their bycatch to the local, mainly female, fish processors, who buy the fish frozen at a cheaper rate than what the artisanal canoes can supply (if they even can supply fish). Overå's (2002) study on the gendered trade relations shows how the female entrepreneurs in Moree, Ghana, were able to capitalize on the *Saiko* trade, expanding their trade network by selling frozen fish to other processors on credit. As the sector expanded, and more money became available, some of the wealthy female entrepreneurs began to build their own fishing boats, and to lend money to other boat owners for outboard engines and other equipment. These credit relations, including also the increasing competition between the women, resemble the gendered trade relations in Tombo as well, however, the relationship between the industrial trawlers and the artisanal sector is reversed, as in Tombo it is the local fleet who sell their catch rather than the opposite. *Seiko*-fishing did not exist in Sierra Leone in 2019. A potential reason could be that while Ghana export a lot of their fish to European markets, leading to higher control of the export trade, most of the exported fish from Sierra Leone goes directly to Asian markets, is transhipped directly at sea, or is transported through informal channels (UNODC 2011, INTERPOL 2014, Seto et.al. 2017). What is labelled non-exportable bycatch in Ghana may thus potentially be

exported in Sierra Leone.

There were many discussion in Tombo about trawler activities, including the bycatch. Beyond the direct competition over catch, many people saw the trawler activities as manifesting global, material inequalities, and it was especially the trawler bycatch that symbolized the difference between the African fishing activities and the foreign ones¹¹⁰. Among Tombo fishermen, it was talked of in Krio as *throwaway fish*, and as *Africa fish*. *Throwaway fish*, a possibly self-explanatory name indicating fish thrown over board and away, was used to morally condemn the trawlers. “Their big nets catch all things in the sea, and anything they don’t want, is just *throwaway*,” Joseph on board *Family First* explained one morning while we were heading out to the fishing grounds. We had just passed Eobu, the biggest Korean company, where three *Chingichoga* boats were docked and unloaded as we drove by. Now, our attention had drifted towards the horizon, where another two dots; two more semi-industrial trawlers, were visible. “The kind of fish we want, all day we spend at sea, to them it is just *throwaway fish*,” Pa Ibrahim sighed. “This *throwaway fish*, is a problem to our fisheries.” Joseph nodded, and continued:

The trawlers want that Europe fish, so they can go and sell to London, China, America. There used to be big schools of herring, so big! You found one school, and it was enough to fill three boats to the brim, so you had to call your friends to come and help. Now, one trawler can catch all that in one go and just throw it out because they do not want it. They only want the big kini, shienose, big pollock, shrimps¹¹¹. African fish is sold here, Europe fish we never see on our plates.

The discussion on board *Family First* indicate how the fishermen clearly know where they rank in the global economic hierarchy. There were times when the question was raised as to why trawlers didn’t give, or sell, their bycatch to the local fishing communities, but those who knew of the *saiko* practice in Ghana were deeply sceptical. Mr. A, rightly so, criticised the Ghanaian government of not wanting to control the trawlers’ catch of especially juvenile fish, because so many fish processors now relied on *saiko*. “The Ghanaians [fishermen] suffer!” I was sometimes told by fishermen in Tombo, who knew of the collapsing fish stocks in Ghana, pushing many of the fishermen and artisanal boat owners out of the business (see also Lucht 2015, 2010). Thus, few saw a copying of the Ghanaian *saiko* model as a solution to the problem of trawler bycatch. Instead, meeting *African throwaway fish* floating at sea symbolized precisely what was wrong with the current international

¹¹⁰ See Drakopoulos (2020) for a new materialist study of bycatch as a scientific phenomenon in US fisheries

¹¹¹ English common names: Juvenile barracuda, lesser African threadfin, mackerel in the Jack family, tiger prawns

(capitalist) economy. Still, the fishermen did not riot. They did not sabotage the trawler activities, or the companies. Instead, they traded with them. Or rather, they *hustled* in these uncertain and unequal socio-economic relations. Like Thieme, Ference and van Stapele theorize from urban Kenya, hustling grows “out of and in resistance to persistent racial capitalism - a system that has systematically generated wealth and profit through modes of racialized labour exploitation and resource extraction” (2021:8-9). As I will elaborate in the final section, the trade agreements the fishermen enter with the companies, should be considered as a form of *hustle*, as the fishermen seek to profit from trade relations with the companies, while also juggling contractual breaks, and critiquing the overall activities of the foreign actors. But before I do so, let me return to the talking *gwangwa* and the *phonemen*.

Phoning as socio-material navigation

There are two key figures in the relationship between the Korean companies and the artisanal fishing boats. The talking *gwangwa*, as the valuable price the artisanal boats seek to catch, and the diving *phoneman* who use their specialized skills to locate the *gwangwa*. As shown earlier in the chapter, the *phoneman* occupation grew from the end of the war as the foreign companies established themselves along the Peninsula, and local boats sought to capitalize upon the new demand for *gwangwa*. To localize the *gwangwa*, the artisanal boats make use of the listening skills of the *phonemen*. In this section, I show how *phoning* for fish is a two-sided process: while the skills required to *phone* should be understood in relation to the environmentally attuned *transcorporeal* body (Alaimo 2012) of the *phonemen*, *phoning* is valued and understood through the socio-economic relations they are entangled with. Tracing the relations between the *phonemen* and the submarine environment where few other fishermen have access, I show how the *phonemen's* bodies, and thus valued embodied skills, are co-constituted in their relation with a more-than-human environment. Secondly, while *phoning* is an individual, embodied skill, the *phonemen* are simultaneously embedded within the socio-economic networks on board the fishing boats, where they have to convince the *bossman* and other fishermen to trust their submarine knowledge, and that they are, indeed, valuable *phonemen*, and not just ‘phony’ con-men.

When I first learnt about *phoning for fish*, I thought the fishermen were playing me. Something about the story of listening to fish sounded, well, phony, deceptive. Had I not later experienced the sound of talking fish myself, through my own body, I might have accepted Helmreich’s assertion

that “the underwater world is not immediately a soundscape for humans because it does not have the textured spatiality of a landscape” (2007:624). The practices of the Sierra Leonean *phonemen* challenge this form of terra-centred thinking, and move us towards acknowledging the plasticity of the human body, and its adaptability to a variety of material environments and mediums.

The *phonemen* have learned to listen through the underwater medium, and de-tangle the different sources of sounds that muddy together in the waterbody. The fishermen become *phonemen* as they learn to dive and listen under the water, to discern the talking *gwangwa* from the FRTs of the herring, and to locate the various sounds of fish through a soundscape polluted by human activities, as roaring outboard engines from the forty-or-so other artisanal boats, alongside trawler diesel engines in the distance, compact the sonic impressions below the sea. The *phonemen* use their body in the water medium as a tool, asserting control over the human urge to ascend and stay above the water surface. To *phone*, they must remain calm and submerged for enough time, preferably several minutes, to learn the various sounds present. But the *phoneman* body is more than a tool, used to gather tactically valuable information. *Phonemen* are trans-corporeal beings, to borrow from Stacy Alaimo (2010, 2012) and it is their immanent transcorporeality, that allows them to make a life from the sea. Alaimo’s concept of transcorporeality emphasises how human bodies are “substantially and perpetually interconnected with the flows of substances and the agencies of environments” (2012:476). As a post-humanist critique of the (neoliberal) ideology of bounded individuals, Alaimo’s thinking allows for extending thinking on how fishermen’s bodies – and thus embodied knowledges - are co-constituted through the material and more-than-human surrounds.

Phoning for fish foregrounds the sonic material and sonic labour that is involved in a successful fishing venture. Through sounds, talking *gwangwa* and listening *phonemen* entangle. To borrow from Donna Haraway (2008), the *phonemen become with* the talking *gwangwa*. This sonic material, and the bodily attuning of the labouring *phonemen to and through* the oceanic environment, for an understanding of the navigational practices of Sierra Leone fishermen that moves beyond the socio-political and the individually cognitive, to involve the material environment and more-than-human relations that co-produce the socio-economically valuable practices of the *phonemen*. That said, this analysis, like the rest of the thesis, remains with the Anthropos, the human fishermen and fisherwomen, focusing on their experiences and actions in the world. I do not know what the *gwangwa* fish were talking about when the fishing net interrupted their day. We do not know what the fish feel when we haul them out the water. My analysis of the fish-fishermen relation still privilege the fishermen’s experience, and the socio-material relations that shape their experience.

The work-worlds of the Sierra Leonean fishermen are made through the more-than-human relationships with fish, waterbodies, and technologies. The talking *gwangwa*, the trawler nets and boat engines, the muddy Yawri Bay waters, and the labouring bodies of the *phonemen* are all active participants, co-producing the relations they are entangled in. As such, the waterbodies that the *gwangwa* and the herring, sharks, shrimp and plankton, live in, are fundamentally shaped by human activities, just as the submarine life, and the oceanic environment, affect the fishermen. The *phonemen's* embodied skills are environmentally attuned forms of knowledge, in a constantly shifting antropocenic environment, following Swanson's assertion of the Anthropocene as an analytical term that aims to "draw attention to the proliferation of environmental damage" (2017:16). One day, the school of fish is there, the next day, the fishing net only yields spiky sea urchins and plastic waste. Under water, the *phonemen* listen for talking *gwangwa*, knowing how to differentiate its *gluurp* from other types of fish noises, and human signs, like the high-pitched, screeching outboard engines the artisanal boats use, the rhythmic drumming on the *Sarakassa* boats, and the deep *bonk-bonk-bonk* from the trawler- and semi-industrial diesel engines.

Phoning is situated within the global economic relations that demands *gwangwa* and other croaker-fish from West African waters. It is valued as a(n increasingly) needed skill in the process of locating fish and capturing the fish, adding information about where to cast the heavy fishing net, in a waterbody that holds less fish, and 'scattered' fish schools. The *phonemen* are valued because they have learned to attune their bodied to the changing anthropocenic oceanic environments. At the same time, *phoning* is also produced through the social relations between *phonemen* and the other crewmembers and *bossmen* on board the artisanal boats. There are daily discussions of the capacities of the *phonemen*, and whether they tell the truth from below the sea or not. Quite often, *phonemen* do not find fish, and they have to make use of their social skills to justify their continued presence. Sometimes, they fail to do so, as happened a week in late November on *Surprise*, when Captain M left Foday and Kabir, the two *phonemen* he had employed, ashore for a week. They were "only playing us," he said when I asked why we did not have *phonemen* on board.

Mamadu, a neighbour from the extended compound where I lived, was one of the first boatowner's to re-employ *phonemen* on his boat following the rainy season. One afternoon in October, the family swarmed around him as he came back from the wharf, greeting him on the good catches we had just heard news of. "Papa, you did well, oh," Faisatu, his niece, said affectionately. Mamadu's wife demanded in a stern voice to know where 'her own fish' was, as was common when fishermen returned from the wharf. "Tsk," Mamadu sighed, and continued "I'm thankful for the fish God provided, but we sold all of it to Eobu." Later in the evening, Mamadu's wife sent their son to the

wharf to buy herring for the evening *plassas* instead, with some of the money from the day's catch. The day after, I met Brima, one of the *phonemen* Mamadu had working on his boat, at the wharf. They had decided not to go to sea that day, because the fishing net needed repairs. We had a break in the sun, and I asked him about the catch from the day before. "It was a good catch, we needed it," Brima said.

We dove once, twice for the fish, nothing, then the third time we heard it. Quickly, up [to tell the fishermen on board the boat], so they could drop the chain [fishing net] and round the fish. Fifteen bafis was what we caught, mostly gwangwa and catfish, and we went direct to Eobu. That day, we were lucky, all the other boats had gone to Poké¹¹² to fish. Only we got a good catch.

Brima continued to say that Mamadu had grumbled, because although the one-day catch was good, they had just done three weeks without profit. "Fishing is not easy, oh," he sighed conclusively. Brima's comments about their boat being the only one in that area got me curious, and I decided to follow up on it the next time I went fishing with a boat with *phonemen* on board. A month passed, partly because there were still few boats with *phonemen* on board in October, and partly because the beginning of November had me engaged in a development project on smoke ovens, which is the focus in Chapter Six. On November 17, my fieldnotes read

I wait by the petrol station at 6.15. Audu arrives to get petrol, and we walk down to the wharf at 6.30. [...] By 7am some boats have left the wharf, we are waiting for some crewmembers coming from right outside Tombo, Captain is trying to reach them. We leave around 7.30 [...] We are fishing Out Plantain¹¹³ with nineteen fishermen and two phonemen on board. I count twenty-six boats around us from Tombo heading in the same direction. [...]

At 11am we have set and drawn the first net, after searching for fish for two hours. Our phonemen jumped four times in the water. They pointed in different directions, seemed somewhat certain the last time? Our first net only gave us some size bonga and a few swit-wata. There are about sixty boats surrounding us now, kind of a crazy experience seeing so many boats searching for no fish. [...]

I ask the phonemen if they are bothered by the engines when they phone, and Kabir replies that the sound is there, but you have to focus. "Like anything you do, it just takes focus," he

¹¹² Fishing grounds just north of Plantain Island

¹¹³ Fishing grounds on deeper waters north-west of Plantain Island, considered good for bonga and gwangwa

*says with a smile. The rest of the mid-day, they jumped in the water many times, but heard little. They spend a lot of time in the water, and I wonder if it is possible to hear anything because of all the other sounds in the water. Maybe they can hear what types of fish that are close by, and how close something is. But to say they can hear from hundreds of metres away, I doubt. Maybe it has something to do with the other fishermen not being able to swim under water?*¹¹⁴

Clearly, I was not fully convinced of the *phonemen*'s abilities, and as evident by Captain M's actions two weeks later when he decided to leave the *phonemen* on land, the fishermen also had qualms about accepting everything the *phonemen* conveyed from below the surface. I do not know what form of sonic access the *phonemen* on board *Surprise* had on the above described day, or any other day, for that matter. They did not find much fish, and we ended up throwing the fishing net in the water around 3pm, only to haul out a small *baff* of *swit-wata*, and lots of sea urchins. But, I also find any "observable" answer of less interest to the *phonemen*'s practices. No doubt they often do hear, and find fish, and to what extent they can do so through a polluted soundscape (Roburn 2013), is always up for evaluation. *Social* evaluation, that is, by the other fishermen on board the boats. In other words, *phoning for fish* is more than an environmentally attuned skill, it is also a form of social navigation (Vigh 2006, 2009) as the *phonemen* opportunistically adjust their stories from below the sea to the mood among the other fishermen on board the boat and to the information available from above.

The *phonemen* have exclusive access to the underwater world. To humans, water is existentially a barrier. However, when thinking about water, there is a tendency of presenting it as a space, contrasted with land. This land-water binary has been problematized in much of the blue humanities research (see for example Neimanis 2016, Krause 2022), but as media theorist Melody Jue (2020) points out, water is also a *medium*. Unlike the medium of air, that the human body is adapted to breathing, seeing and listening in, water is a medium inaccessible to most humans. In Sierra Leone, the majority of the fishermen do not know how to swim. Out of the estimated third or so who does, there is only a fraction that are comfortable with swimming *under* water, let alone staying down several minutes to listen for talking fish. Thus the *phonemen* act as messengers from the underwater world, but are also in full control over what messages they bring. At times, they have nothing to bring, either because there is no fish, because it is difficult to determine direction of sounds, or because the waters are so polluted with other noises, particularly the boat engines. This

¹¹⁴ Fieldnotes translated from Norwegian and Krio

form of environmental access control, or environmental brokerage, is an essential component of the navigational practices that I consider overlooked in the West African context. The *phonemen* negotiate their position, and their usefulness on board the fishing boats, through their control over the messages they bring back from the underwater environments.

That being said, when the *phonemen* resurface with information from below, they are navigating both underwater environments as well as social environments on board the boats that are constantly in flux. “[...]when navigating we are aware that we might be repositioned by shifting terrains and circumstances,” Vigh (2006:14) writes, and elaborates:

As we seek to move within a turbulent and unstable socio-political environment we are at the same time being moved by currents, shifts and tides, requiring that we constantly have to attune our action and trajectory to the movement of the environment we move through. (Vigh 2006:14)

While the oceanic metaphors indeed fit aptly in a Yawri Bay context, it is the shifting (social) environment I want to emphasize. When the *phonemen* resurface, they do not know what the mood and activities are on board the fishing boats. Sometimes, they are watched intently by curious fishermen who wait for information from below, ready to accept and trust what the *phonemen* share. “Nothing here, let’s go further,” Foday would sometimes emerge swimming full speed towards *Surprise*. Sometimes, Captain M or Ishmael immediately threw a buoy and rope towards him, to quickly drag him back towards and into the boat. Other times they shouted back “the other boats are hauling,” indicating that they believed there were fish to be found. One time, Audu and Ishmael complained that Foday and Kabir were just leading us in circles, after the two *phonemen* had been in the water for about half an hour, pointing in directions differing almost 180 degrees. When they had dried off on board the boat, a discussion followed and Kabir claimed that the many other boats around us had scattered the fish so they were not able to hear them talk. He did not successfully convince the two senior fishermen at the time, but later, when Captain M had decided to search for bonga instead of *gwangwa*, the lack of surface shadows and ‘*knacking*’ fish schools was an opportunity for the *phonemen* to redeem themselves of any responsibility. “See what we said, the fish has scattered,” Foday translated to me in Krio, after he had indicated the same to Audu in Temne.

These forms of back and forth, of adjusting to opportunities that arise on board, as the fishermen themselves draw conclusions about the presence of fish based on surface information, highlights the navigational practice of the *phonemen*. As such, I consider the *phonemen* as experts in a form of

socio-material navigation, as they continuously make use of both the material environment present, and of the social setting on board the fishing boats to justify their continued work on board the boats. Given the decreasing catches of the Yawri Bay fishing fleet, the *phonemen* are likely becoming more reliant on the social skills to maintain their status as valuable workers on board the boats. In the next section, I follow with this larger view on the reduction of fish stocks, but instead of remaining on board the fishing boats, I go back to the relations between the artisanal *gwangwa* fishermen and their customers, namely the Korean fish companies.

Fishing and hustling in an unequal global economy

The *phonemen* and other Sierra Leonean fishermen labour in a shifting eco-political context, now characterized by ecological degradation and mass extinction of species on a global scale (Sodikoff 2012, Chen, MacLeod, and Neimanis 2013), while a neoliberal economic ideology still shapes political projects, including conservation projects, vetted on progress and economic growth. The *gwangwa* fisheries of Sierra Leone are part of a global, and unequal, commodity chain. In a different context, Anna Tsing writes about the Matsutake mushroom, that although the mushroom makes “a substantial contribution to livelihood wherever they are picked” (2015:5), the commerce does not promote substantial economic change, as foragers continue to live without economic security. Similarly, the artisanal *gwangwa* fisheries and trade with the Korean companies do not have large-scale socio-economic impacts on life in coastal Sierra Leone. It does not decrease the marginalization of fishing communities, nor improve the health of the marine ecosystems. Nevertheless, as Tsing argues, attention in her case to the Matsutake mushroom, and in mine to talking *gwangwa* fish, enable new insights into global economic life, without assuming growth or progress inherent in all processes. Following the *gwangwa* indicates how the fishermen themselves experience the trade relations, and their own position in these relations. Finally, it illustrates the forms of ecological knowledge produced through the *phonemens'* engagement with a shifting material environment, knowledge that may impact fisheries management in new directions.

Let me return to the episode recounted above from *Family First*, when Joseph and Pa Ibrahim told me about *throwaway fish* and *Africa fish*. Later in the afternoon, and after two poor hauls, our conversation on board the boat drifted back to the morning's observations of the foreign actor, but this time, the fishermen sought to make use of the Korean companies to make a small profit. As a *Sarakassa* type of boat, *Family First* is mainly fishing for adult bonga, but the four-finger size

(roughly four centimetres) meshed fishing net will also gill other medium-size fish. In our second haul, we had caught two *ladyfish*, a type of croaker larger than the *gwangwa*. The Korean companies buy all types of croakers, and the crewmembers were discussing if they should sell it to a company. “The fish mummies don’t *give price*,” Pa Koroma sighed, referring to the female fish mongers on *Small Wharf*. “I know the person at *Green Box*¹¹⁵, I can call him and ask if he is at *Small Wharf*,” one of the younger crewmembers said. Like the other foreign companies along the Western Peninsula, *Green Box* had agents at the different wharfs to buy fish the companies want.

The Korean companies buy fish through sales agents. All the agents I met, were Sierra Leoneans, who lived in different communities around the peninsula. The agent’s role is to build relations with fishing boats owners and crew in their own, and nearby, communities, while also buying opportunistically from boats willing to sell fish on the spot. They target specific types of fish that the companies are searching for, and buy at a set price that the companies have agreed upon in between themselves. “It is a syndicate, they are all together on fixing the price,” the fishermen often grumbled, when questions of the fish prize were raised. 10.000 Leones per kilo, about one dollar. That was the going rate for adult *gwangwa* and certain other targeted fish species in 2019. Most fishermen agreed it was an unfair prize, given how it had not changed in the last five years (some said longer), whereas the price of fishing equipment and fuel had increased¹¹⁶. Still, the fishermen kept selling fish to the companies throughout 2019. One of the reasons were the stability of a sure sale at the, although low, but nevertheless, stable price. At the local wharfs, fish prices can dip very low on days when the catches have been good, and there capacity of the fish processors and their *bandas* are filled¹¹⁷. More common than the idea of a sure sale, however, were *obligations* to sell to the companies.

I first learnt about these obligations during a meeting with Tombo’s Harbour Master, a politically appointed position with responsibilities for solving harbour disputes and (irregularly) collecting small daily fishing fees (called *manifest*). Given the increasing capital-intensive fishing ventures, many of the boat owners in Tombo had entered contractual agreements with companies to sell their (valuable and wanted) fish to the company, as payback for loans they had taken. These loans could be for boat repairs, or to buy new or replacement gear like outboard engines and fishing nets.

¹¹⁵ Pseudonym

¹¹⁶ Data from the IMF and World Bank indicate that the consumer price index more than doubled between 2010 and 2019 (IMF 2020, World Bank 2021).

¹¹⁷ This will be discussed further in the next chapter. Although there are always *bandas* available in Tombo, the amount of catch from the Tombo fleet at large still affects the fish price.

The loans, at least the ones I heard about or saw contracts of, ranged in size from one million to forty million Leones. All the contracts included the stipulation that the boat owner was required to sell all their caught *gwangwa* to one company, to the agreed upon prize of 10.000Le/kg.

In many ways, these contracts could be likened to the local *kostament* contracts, that will be the focus in the next thesis chapter. Although the *kostament* contracts were rarely formalized on paper, they were considered as binding as signed papers. When I asked the boat owners why they had signed contracts with the companies, they always emphasized the need for capital. “My engine was broken, and I needed money to fix it,” Mami Kamara told me about her *Ice box* boat. “We only have imported fishing nets in this country, they come from Guinea. And now the price is up [has gone up] again, what can I do?” Mr. Idriss complained one day we were seated at Jameela’s corner stall. While he remained loyal to his local *kostament* relations, several of his colleagues had taken loans from the Korean companies. It seems, thus, the shift from the local *kostament* relations to the industrial companies was premised on the local fishing economy being short of available capital needed for boat maintenance and gear imports. In short, the female fish mongers no longer had enough capital to support the (male) boat owners. There are several reasons for this, of which decreasing profits from smoked fish, decreasing fish stocks, and increasing costs of imported goods needed in the boat operation (like fuel, nets, and engines) seem the most significant. Furthermore, with the shift to taking company loans, it also follows that the profits from the fishing ventures move: from the local fishing communities, where even the biggest fishing tycoons in the 1970s and 80s still circulated their profits through local and regional socioeconomic networks, to the globally orientated companies.

The inequality of these trade relations is stark, as the fishermen and boat owners have little influence on the fish price, and few opportunities to find other wealthy patrons that could help them with capital to buy new gear or do boat maintenance. As of 2019, it seemed many boatowners in Tombo had indeed become dependent on the Korean companies. Several boatowners I spoke with remained indebted to the companies as the fish price was so low, and the catches so poor, that they had been unable to pay the loans back several years in a row. At the same time, while the boatowners were acutely aware of their precarious position, they continued to juggle different opportunities in a way that resembles how Thieme, Ference and van Stapele (2021) describe *hustling*. Hustlers “position themselves as very much alive despite the odds stacked against them,” they write (2021:2). While the fishermen I met rarely described themselves as hustlers, or, as *dreg-men* to employ a Krio word with similar connotations (see Introduction), their activities vis-à-vis the Korean companies indicate a similar experience of subversion and struggle against someone

more powerful. This is also where I see the main difference between hustling and social navigation (Vigh 2009), which Thieme, Ference and van Stapele (2021, see also Thieme 2017) also briefly reference. While they consider, similar to Vigh (2009, 2006), the temporal overlap between ‘making do’ and ‘making a living’, I consider the two concepts distinguished by their political connotations. While social navigation emphasize the individual, agential capacities and the embodied skills amassed through historical trajectories of living in a volatile environment, hustling connotes also the political struggle and resistance against the dominant forms.

The fishermen know that they are politically and economically marginalized in the global fishing economy, and the smaller part to the trade agreements with the Korean companies. Nevertheless, they seek to profit in the ways they can from these agreements, primarily by gaining access to capital through loans. The loan agreements stipulate that the fishermen are only to take loan with one company, and exclusively sell their fish to that one company. That said, not all, if even the majority, of the fishermen actually follow these stipulations. Instead, many juggle several loans from different companies, seeking both to spread the risk of having smaller loans from different companies, and to “assert their agency to cope with and work through a constellation of economic, political and social barriers,” to borrow from Thieme, Ference and van Stapele (2021:7). “Me? I have four,” one active community member proudly grinned when I asked if whether he had loans with the Korean companies for his two *Sarakassa* boats. “Four?!” I exclaimed, “I thought one company could demand all your fish?” “Well, I am too smart for them,” he laughed, and continued to explain how he had scouts at the main wharfs in Tombo. “*Mi padi* (my friends) look for the agents, and if only one is there, and I want to sell, we go (come) quickly, no one (else) will ever know!”

Other boatowners told me of similar strategies, saying they would sometimes travel directly to the fishing company itself, especially if they had a good catch. Other times, if they wanted to sell their fish to the local markets instead of the companies, they would wait for nightfall and hope that the company agents had gone home for the evening. “But if one [agent] is there, hah! You must know how to talk,” Mr. Idriss friend, who had two company loans, told me. During a conversation at Jameela’s corner stall, he elaborated he juggled various contracts, often by playing upon the sympathy and pity of the agents, the majority of them being local Tomborians or from one of the other coastal towns themselves. “My mama’s business has been difficult, allow me to sell one small *baff* (rubber basket) to her,” he imitated. “Or ‘my child is sick,’” Mr. Idriss added another possible excuse. Sometimes it worked, other times the fishermen would be accused of contractual breaks. This could sometimes involve the police, and the fishermen’s union was regularly involved in dispute cases between boatowners or fishermen and their trade partners.

As such, I want to show how the fishermen did not immediately accept a subordinate position, but instead continued to hustle shifting opportunities and emerging constraints. This indicates the strategic work involved in resourceful hustling (cf. Thieme 2021, Thieme, Ference and van Staple 2021), and how the fishermen continually juggled profiting from status quo with critiquing it. Let me now in the final section follow up on the fishermen's critique of the foreign companies, by tracing how the ecological knowledge of the fishermen clashed with the increasing human presence, evident in increasing fishing pressure and in the audible sound pollution, in Yawri Bay.

"When I was young, fishermen would *flop the boat* [fill to the brim], many times in a year. In the high season, every week, we would see boats coming back to the wharf with so much fish that there was no room for fishermen [on board]," Umaru said, and gave a resigned chuckle when I asked him about the catches on his *sarakassa*-boat this year. "Fishing is difficult, it has been too long [since a great catch]." Umaru's experience was not unique. Throughout 2019, there was not a single day when even one out of the over 250 boats came back filled to the brim with fish. There were good days, indeed, even some good weeks, but most of the young fishermen I engaged with had only heard stories of the old days when one could *flop the boat* in a day of fishing. Although there is managerial uncertainty about the fish biomass in Sierra Leonean waters, the Tomborian fishermen tell stories of a degraded ecosystem, of an exhausted Gulf of Guinea. At national level, the health of the oceans ecosystems, and how to handle them, were a continual site for political contestation. Both pro-conservation and pro-use actors argued that Sierra Leone needed proper stock assessments of the fish biomass, before developing a comprehensive fisheries management plan, which by extension also sets the limit on the fish quota and licenses available. Other times, the lack of said stock assessments was simply a poor excuse, primarily so according to international consultants, that the government used to continue issuing licenses to a fisheries that most assumed were fully exploited or already overfished. In Tombo, the fishermen cared less about stock assessments – in their experience, the fish biomass was by all measures low, and the fishing pressure, as evident in the number of boats fishing nearby one's own boat, and all the sound pollution from engines, small and large, that disturb the fish.

The final point on sound pollution hints to the complex ecological knowledge the fishermen have. One of the last times I went fishing with *Surprise*, we agreed to meet at 4.30am the next day, an hour before we ordinarily gathered at *Big Wharf*. "All these boat engines, and especially those *chingichoga* we saw today *scatter* the fish," Captain M said. "Let us try to beat them tomorrow." Captain M's comment illustrates the form of ecological knowledge the fishermen have, and operate based on. Referring back to the earlier discussions on trawler bycatch, or *throwaway fish*, fishermen

often commented that fish “didn’t like” to see other dead fish. “They will run when they smell dead fish,” Joseph on board *Family First* told me. Similarly, the fishermen knew fish reacted to sounds and sound pollution. When a fishing ground was crowded with many boats, or we had seen semi-industrial trawlers (*chingichoga*), they would grumble that all the boats scattered (dispersed) the fish. “It is the noise, Memuna,” Ishmael explained one afternoon after our first haul, while we sat in the mid-day sun and watched the other 56 artisanal boats around us. “Fish don’t like too much noise.” In other words, while the fishermen’s business rely on capturing and extracting fish from the sea as a resource and commodity, they nevertheless employ a form of care and respect for the fish and life conditions of fish, knowing that their own fishing business and daily profit is deeply dependent on how the fish was faring.

The *phoneman* profession would most likely change, if there were more people on board the boats with the ability to listen for fish under water. However, what else could change, if more people were given the abilities to access the underwater worlds? Hear not only the fish, but also the myriad of engine noises, weak and high frequent from afar above the surface but deep rumbling and overpowering under water, and experience the murky waters once a fish net has been dragged through it? The destruction of habitats, species extinction, and pollution, witnessed across the globe today, is the product of *some* humans, as Kathryn Yusoff persuasively argues in her book *A billion black Anthropocenes – or none* (2018). Or rather, in Yusoff’s words,

If the Anthropocene proclaims a sudden concern with the exposures of environmental harm to white liberal communities, it does so in the wake of histories in which these harms have been knowingly exported to black and brown communities under the rubric of civilization, progress, modernization, and capitalism. (2018:12)

The international calls for fish stock assessments in Sierra Leone, and donor supported developments of fisheries management plans, are premised on the idea of the fisheries sector in Sierra Leone contributing to economic *growth*. The WARFP documents trace how the programme is envisioned to promote inclusive growth, and facilitate pro-poor growth (World Bank 2016, 2017a). Sierra Leones Poverty Reduction Strategies Paper (GoSL 2008, 2013), alongside President Bio’s parliament opening address (Bio 2019), and many of the government representatives I met throughout 2019 considered economic growth in fisheries as vital to improving life in Sierra Leone. I imagine few of the fishermen, *phonemen*, or fisher-women in Tombo would disagree. However, the scientific fish stock assessments are given a central position in this process, based on a positivist assumption that the fish stocks can be *known*, counted, and managed (cf. Drakopoulos 2020, Barad

2007, Mol 2002). With Yusoff's words in mind, considering how there are great portions of the world's population that would prefer *dismantling*, instead of preserving, the current world order, one may wonder what fisheries management would look like if the *phonemen's* embodied skills and the fishermen's ecological knowledge at large, was taken seriously, not simply as a socio-economic practice, but also as a way of managing *human* activities in more-than-human environments. As the *phonemen* navigate in the patchy, anthropocentric environments of Yawri Bay, managing the sonic pollution from human activities could play a role in ensuring the renewed liveability of both *gwangwa*, herring, and fishermen.

Concluding remarks

This chapter has illustrated how the oceanic environments the Sierra Leonean fishermen labour in shift in response to shifting human activity, from both foreign trawlers and from the local artisanal fishing boats. In addition, other factors like plastic pollution, weather patterns, and climate change, has not been dealt with, but influence oceanic environments globally, and Yawri Bay fishing grounds like *Poké* and *Out Plantain*. Fishing in these environments in motion, under uncertain conditions, means that the boats at times require *phonemen*, other times, their skills are not of use. But the *phonemen* always require the job. They need to legitimize their presence on board, by claiming a position and role in the successful operations, without taking full responsibility over the conditions, and an environment, that they cannot control. As Vigh argues with regards to social navigation, departing from a positivist mapping of a landscape, I consider *phoning for fish* an opportunistic use of environmental instability, alongside a social positioning vis-à-vis the other fishermen. Furthermore, the *gwangwa* trade and, thus, *phonemen* practices, are embedded within both local and global trade relations, the latter especially highly unequal. The fishermen continually 'hustle' these relations through "rhythms of resourcefulness, diverse adaptations and contingency plans in the face of constant interruptions, uncertain returns, potential breakdown and marginalization" (Thieme 2021:37), and as such, manage to simultaneously critique the status quo, while also seeking to profit from it.



Figure 25: Entering Tombo Big Wharf from the sea

CHAPTER 5

Slippery trust, rotting relations

Fish, debt and gendered relations in Tombo's fish economy



Figure 26: A banda smoking house made with planks from fishing boats

Chapter prelude

Surprise slides in between the many other Ghanaboats that have already reached Big Wharf. Captain M shouts to his brother on shore that he should call for a *totman*, a porter. A minute later, a tall and slender-looking but muscular man makes his way out to our boat, and we pour our herring into his *baff*, the omnipresent wide plastic basins used for carrying and containing pretty much anything. With the heavy *baff* on his head, the *totman* walks confidently along the wet gunwales of the other docked boats. His balanced body keeps all of our slippery herring inside the *baff*, losing none to the sea. Only once ashore, and the *baff* turned on its head, does the fish slide in all directions onto a tarpaulin spread out on the concrete shoreline. Our small school of herring, a total of 70 dozen fish, turned out to be two different types: *trangaback* and *bompy-eye*.

With all our fish on the tarpaulin, Mami Mariatu comes over; she is smoking *trangaback*-herring today, and asks the price. 1200 a dozen, Abibu answers, while keeping a watchful eye on the crowd around the tarpaulin. "Same price as the others," Abibu continues, seeing Mami Mariatu hesitating. "But feel this fish, it is too limp!" she argues, trying to get a cheaper deal. Abibu counters by saying the sun was indeed harsh today, but the fish is fresh and if she doesn't like it, she can buy elsewhere. She buys our 38 dozen *trangaback*, leaving the 32 dozen *bompy-eye* for another customer, and holds onto her money while attentively inspecting the counting of her fish. The *kontman*, the fish counter, works fast. So fast, it is difficult to see whether he actually grabs two in each hand, (making four), adding a fish to a different pile for every third count of four (which equals 12), or not. Mami Mariatu is a professional fish processor – and buyer – and watches the *kontman* with eagle eyes. She also has her own tricks. "Ah, you only counted three! Add one!" she accuses him. Did he count wrong? Or is she trying to gain an extra fish? Or maybe she tries to make him forget the count, so he has to ask where he stopped and give Mariatu the upper hand. The *kontman* blames the slippery fish. Mami Mariatu calls it a bad excuse. "What type of trick is this?" she scoffs, not impressed with the excuse.

Mami Mariatu buys a total of 186 dozen *trangaback* herring for her nightly business: our 38 and the other 148 from a boat with better luck at sea today. She has no *kostament* boats, but there is enough fish at Big Wharf today. Paying for the herring, she brings a thick stack of money out from a knot in her *lappa* waistcloth. The notes are worn and dirty from all the previous transactions between hands wet with fish oils and salt water. Folding the stack of money around her middle finger, she

quickly counts the Le10,000 notes by flipping them up with her thumb. She pays Captain M four big notes, then eighteen to the other fishing boat, a total of 220,000 Leones.

A new *totman* carries the fish to Mami Mariatu's banda in central Tombo. He walks hurriedly, almost running, with a straight back and a bend in the knees to keep the heavy *baff* stable on his head. Mami Mariatu and I have to make some stops along the way. Leaving Big Wharf, we stop to discuss the evenings fish price with Chairlady Aisha and Mami Konima. On the corner of the wharf entrance, Mami Mariatu's auntie serves rice and stew. Along the market road we meet Yeabu, who wants to know about the latest development project she has heard of, and a bit further up the road, Mami Mariatu stops to greet some of the market traders. Once we arrive at her banda, her son is already elbow deep in a baff full of water and fish. The water is brownish, with millions of shiny speckles from the oil that the flesh of the herring contains. After washing the herring, Mami Mariatu's son stacks the fish neatly onto the wire mesh of the smoke oven. Meanwhile, smoke from the neighbouring *bandas* sieves into Mami Mariatu's compound, reminding us that we are far from the only ones processing fish this evening. The smoke is harsh for our eyes, especially in the beginning of the smoking process when the wet wood is lit with kerosene. The oily water from the herring contributes to the smoke, as it drips down onto the rising flames, its body not yet receptive to the smoke.

Over the last four days, Mami Mariatu has filled large wicker baskets with herring. In between the possibly 5 or 600 dozen other herring, *Surprise's* 38 dozen *trangaback* herring will be put in after the nightly smoke run. Once the fire is lit, Mami Mariatu picks up her phone to call her *kostament*, her business associate, 150 kilometres away. "I have a big basket ready for you," she says. "It is very good quality". They discuss for another minute, before she hangs up the phone. Tomorrow is market day in Tombo, and she will arrange transport to her business associate in Makeni with one of the *poda podas*, the mini vans travelling the roads of Sierra Leone and beyond.



Figure 27: A banda smoke oven

Introduction

The first two ethnographic chapters of this thesis – chapter 3 considering *handfailure* and working relations, and chapter 4 on the *phonemen* and Korean fish companies – were focused on the young men working on the fishing boats and the capture of fish at sea. This chapter follows the fish onto land, and explores the wider gendered and generational relations that the fishermen and fisherwomen are embedded within. The buying and selling of fish is the main focus of this chapter, particularly on how the material qualities of the fish themselves shape the relations, and especially forms of trust, between men and women. Focusing specifically on the fish body, and its qualities of being slippery in the handling process, and easily deteriorating when left alone, I show how fishermen and fisherwomen come to *be* with certain qualities and morals, through the material qualities of the fish they trade.

The fishing economy is more than the social and economic processes centred on human livelihoods and liveability. It also entails objects like boats, smoke ovens, *baffs*, and smoke, as well as other-than-human-beings like the fish itself, and the associated material qualities of these “beings” and “things”. I use the quotation marks deliberately, because this chapter, like the thesis, is based on the premise of how “material forms have consequences for people that are autonomous from human agency, [thus] they may be said to possess the agency that causes these effects” (Miller 2005:11). As Vanessa Watts (2013) has argued, colonial epistemology-ontologies removed agency from the non-human, creating a hierarchy in perception, with the mind over body, and a hierarchy of beings, with humans (white and male) on top (see also Haraway 2008). This chapter understands fish, and their associated material forms, as actants in the socio-economic networks that make up the fishing economy, and I show how both the fish and the people involved – the fishermen, the wharf labourers, and the female fish processors – are made and remade both materially and socially through their relatedness. Thus, I seek to bring a “sensibility to the messy practices of relationality and materiality” (Law 2009:142) that allows for a deeper understanding of how fisherman, fisherwomen, and fish, *become* through their material relations. That fishermen and fisherwomen become *fishermen* and *fisherwomen* through engaging with fish may be self-evident, but following Law and Lien’s (2012; 2014) STS-approach to salmon-human enactments, people and fish come to *be*, in specific moral and material ways, through their relational practices. They argue how the “qualities or *textures*” shape the relations between people and salmon, as well as what person and fish “*is made to be*, relationally”, an approach I follow to analyse how fish qualities, whether slippery or rotten, shape how fishermen and fisherwomen, through their relationship with fish, come to be

to each other.

This chapter also builds on Jennifer Diggins' (2018) formative analysis of the fishing economy in Tissana wharf, where she explored how gendered relations and the material economy shape people's moral evaluations of their community and relations. Her research provides detailed descriptions of everyday life in a Sierra Leonean fishing town south of Tombo, much of which could also be written about Tomborian life. Furthermore, her analysis is novel in that it combines a focus on the entanglements of the material world and a moral economy where gendered practices, relations of debt and (dis)loyalty, and transactions between the material and immaterial shape peoples' investment strategies, as well as their experience of belonging and relatedness. My research similarly focuses on the material objects and material 'precariousness' of modern-day fishing economies in Sierra Leone, but departs from Diggins' analysis in two key aspects. First, as will become evident in this chapter, I bring the material *quality* of objects, subjects, and environments to the fore in a new materialist perspective, exploring how fishermen and fisherwomen also *become with* materials and other-than-human beings (Haraway 2008; 2016, Tsing 2015, Drakopoulos 2020). Secondly, given the material infrastructure of Tombo, and its location, Tombo affords different opportunities to the men and women engaged in the fishing sector than the more isolated Tissana does for the people working there. Similar to Tissana, there was no electricity in Tombo in 2019 to freeze fish; however, the high number of *bandas*, alongside access to Freetown markets and foreign fish processing companies, provides different opportunities in a fishing sector where the volume of catches are highly volatile.

In this chapter, I focus on relations of trade between the fishermen and fisherwomen who process fish, and how these relations are shaped by, and shape, trust. Maintaining relations and trust, as argued earlier in the thesis, must be shown materially in Tombo, and in this chapter I analyse how people build, and navigate, *kostament* relations through "*trɔs*-trust". *Trɔs*-trust is a material form of credit-gift, which establishes a debt to be repaid over time, but also a productive relation where the parties involved come to learn about each other, and whether they actually can, in fact, "trust" the other. The chapter opens with a section outlining women's work in Tombo's fishing sector, complementing the two previous chapters' focus on men's work. From there, I show how men and women relate through the fish trade, before I return to the object of the transactions, namely the fish, and material qualities associated with them. Drawing on Law and Lien's (2012; 2014) analysis of salmon, I show how the fish trade in Tombo is enacted through practice, which is at times as slippery, and also as rotten, in ways that reflect back upon the human parts to the relation, making

people also “slippery” or “rotten”. This impacts the feelings of trust, as the uncertainties associated with quality of the fish become associated with the morals of the person that sells or gifts them.

Women’s work in the fishing economy

Once the fish is landed at one of the five wharfs in Tombo, it is sold to fishmongers, sometimes called fish mammals, or directly to the fish processors, often called *banda* women or fisherwomen, as described in the chapter prelude where Mami Mariatu buys from *Surprise*. While Michael Jackson’s 1977 assertion of the dichotomy of male/female as “structuring all social relations” among the Kuranko in northern Sierra Leone (1977:81, see also Coulter 2006:28) seems dated and out of place from a 2019 Tomborian perspective, male and female are still the most prominent categories through which people categorise social practice, and make social relations. In the Sierra Leone fishing economy, fishing is an exclusively male activity, whereas fish processing and fish sale is dominated by women, although men also participate. In the following section, I outline the roles and positions of women in the fishing economy, how women acquire fish through *kostament* relations with fishermen and boat owners, and the gendered relations involved in the construction of *banda* smoke ovens and *banda* houses.

In 2019 Tombo, women ranging in age from their early twenties to their late seventies were processing fish. Some were married as first wives, like Mami Mariatu, who was in her early forties and is the first wife of a market trader. Others were married but later divorced, like Yeabu, who had not remarried after her divorce, and supported her two sons through her fish processing business. Some of the elderly women I worked with, like Mami Zainab in my own compound, processed at irregular intervals when prices were good, and with the help of younger family members, whereas several younger processors, who I met mainly through the CMA meetings, were junior wives who capitalised on the opportunities afforded by Tombo’s large fishing sector. Many of the women had built their own *banda*, either on land they owned or that they rented for a yearly sum. It was also quite common to rent *bandas* from neighbouring compounds where the owners themselves had stopped processing. Tombo also has a few commercial ovens that are rented out per smoke run, many of which were built with development funding¹¹⁸.

¹¹⁸ I focus on ovens and development interventions in the next chapter.

The construction of *bandas* entangle men and women across generations, as many of the ovens have been built with money given by husbands or parents as a way to enable women to contribute to the family economy, or to “do something for themselves”, as Yeabu described the money she had received from her ex-husband. In the compound where I lived, two of the *bandas* had been built by the late wife of a son of the first family who settled on this plot of land, after migrating from the north in the 1950s. The woman had built up savings through fish marketing in Konakridi, and when her husband brought her to Tombo, she constructed the ovens with profits over a decade. In 2019, it was Mami Zainab, her sister-in-law, and her son’s wife Mbalu who used the ovens. Many of the other *bandas*, especially in the central area known as Gborloh¹¹⁹, were of much more recent origin, built either following a particularly good fishing season, which had allowed the owner to save money from fish processing on a rented oven, or with money from development projects and micro-credit schemes. These funding schemes had intensified following the war, when post-conflict reconstruction funding targeted young people’s economic opportunities in an effort to calm the “restless” and “dangerous” youth (Peters 2011b, Bangura 2016, Enria 2018).

Historically, both the fish processors and the fishmongers were the wives of the most successful boat owners, and to a certain extent this remains the case today. Before the commercialisation of fisheries, which more or less occurred in the 1970s, fishing was primarily a family venture, with the husband going out to sea and the wife (or wives) entitled to smoke the fish he landed. With the increased commercialisation, the male and the female parts of the fishing enterprise were increasingly separated, and people began to choose more strategically who to enter into business relationships with. In Krabacher’s study from Katta in the 1980s, a fisherman’s senior wife still had the first claim to the husband’s fish (1988:140), whereas the junior wives traded with the labouring, often unmarried, crewmembers instead. The main change recorded in his study was the introduction of cash payments for the fish between a fisherman and his senior wife (Krabacher 1988: 138-140).

In 2019, fish processing was no longer a safe way to profit from the fish trade in Tombo. Many did profit, on average, and at times even made quite substantial surpluses. There seemed to be a general feeling, however, that profits were decreasing, and that an increasing number of the smoke runs were done with losses. Processing fish is expensive, partly because the costs of the inputs were rising, and partly because the town infrastructure adds costs. In addition to the primary cost of fish, there was the cost of firewood, kerosene to light the fire, payments to the porter (which depended

¹¹⁹ Meaning field in the Sherbro language.

on the distance from the wharf), packaging materials and labour, transport cost to the market, and market fees. Many of those who processed fish in central Tombo also lacked access to fresh water to clean the fish. If they had not had the time to collect water from communal hand pumps, which were usually only open a few hours in the morning before they ran out of water, they had to buy additional jerry-cans from street sellers. As Auntie Aisatu explained during a community meeting with development donors

From the time you see fish come to the wharf, you will spend money until you go to Freetown [with the fish]. Even after! You will go back home to the house, and count your losses.

Many of the women who process or trade fish do so by buying fish from their *kostaments*. As described in the introduction and chapter 2, *kostament* relations are (ideally) long term business associations between fishermen, especially boat owners, and fisherwomen, who provide capital they have accumulated from fish processing and then buy fish at a good rate in return. The relation entails mutual obligations of support, and *kostaments* are ideally meant to keep the relation alive by engaging the other in their own business, as Mr. Idriss explained with regards to his boat being built *half-half* (see page 78). And, while *kostament* relations rarely operate in practice as they are ideally described, they still establish continued forms of invested relations between the genders and between generations, which nuance scholarly debates about the Sierra Leonean youth, and especially the young men, who seek to detach themselves from patrimonial ties and elderly control (cf. Fanthorpe and Maconachie 2010, Gberie 2005, Murphy 2010, Richards 1996).

This is not to refute Diggins' (2018, 2015) argument that many young people who migrate to the coast do so to find economic and social freedom, away from familial obligations and labour exploitation. Similarly in Tombo, many of the younger fishermen told me how they had left *upline* (inland Sierra Leone) because *betteh no dae* (there were no opportunities for 'betterment'), or because they did not have land, or money to invest in trading or a business. However, while they readily critiqued politicians and other publicly visible Big men, people continually sought to link themselves with others considered Big and successful in the fishing sector. Proudly pronouncing a *kostament* relation, which also involved publicising one's debt, or announcing someone to be one's *bra* or *sissi*, which is Krio slang for male and female benefactor, was common. What is significant here is the element of choice: whereas the patronage relations and obligations many had left their hometown to escape were based on kinship and familial relations, the *kostament* relations and business support networks that fishermen and women entered into in Tombo involved a higher degree of choice, and an individual assessment of the other's skills and capacities.

Finally, there is a distinct difference between the gender relations as described by anthropologists working in Northern Sierra Leone, and how many of the Tomborian women I interacted with participated in, and co-produced the political and economic scene in everyday Tombo. For example, in Coulter's PhD study of Kuranko women following the civil war, women are said to rarely own land, and she quotes Ferme's (2001) research among the Mende, stating how "women cannot *be* for herself; she is always of or *for* someone else" (Coulter 2006:115). In Tombo, this could accurately describe some of the relations between young women, especially unmarried teenagers and some junior wives, and their parents or husbands. The adult women, however, can instead be understood by an apt quote delivered by Chairlady Aisha, one of the more active women in the CMA, during a community meeting:

It is us [women] who feed the men. A man may bring food one day, then the next day he will be gone – sometimes for months!

Her statement was an answer to a foreign consultant, who had asked how development projects could empower women in the fishing economy. Although many of the women would strategically use gender discourses from the development world to get additional support and help, they would often resist victimisation and being reduced to some sort of 'addition' to a male-dominated fishing economy. In a migratory fishing economy, Aisha's statement is not an exaggeration, and it has political and economic implications beyond the practical task of serving food. The fishermen would leave with the boats, sometimes for months at a time. Several of the fishermen I worked with on board *Surprise* told me how they had wives and children in their hometowns in inland Sierra Leone or in Guinea. Furthermore, not only were the *men* out of sight, but so was the fish, and thus the fishermen's profit. Especially in the rainy season, there could be weeks or months between the occasions when the man of the house brings fish back to the household. During these periods, but also throughout the rest of the year, it is the women and their processing businesses, alongside other small-scale activities, that provide a sense of stability and continuity, by putting food on the table and running the household. While there are many costs involved in processing, the costs begin the moment a processor decides to buy fish to process. If too few boats come back with fish, she can simply decide to 'hold her money' and wait until their catches are better. This is in contradistinction with the men's work out at sea: they have to spend money to "find money" at sea. For a Ghanaboat, the price of fuel and oil was on average Le 200,000 per day of fishing, which meant days without catches quickly added up. The boat owners (responsible for the running costs) have to carefully decide based on the weather and seasonal projections whether it is worthwhile spending money to go out to sea. Fish processors, on the other hand, can decide more opportunistically once fish is

landed at the wharfs. In the next section, I focus on these wharf transactions of fish, and the *kostament* relations between boat owners and fish processors.

Considering fish transactions and *kostament* relations

Once the fish is hauled out of the sea, the biological process of decomposition begins in the body of the fish. To halt it, the fish is taken to *banda* smoke houses to be dried and smoked over open fires, a form of processing and preservation that is often done by women. I will return to the *bandas* more below, and in the next chapter will focus in more detail on the smoking process. However, it is worth noting how the *banda* infrastructure of Tombo affects the gendered trade relations in Tombo's fishing economy. Tombo is known as the 'banda-capital' of Sierra Leone, always with the scent of smoked fish in the air, as emphasised by my Freetown taxi driver upon my arrival in Sierra Leone (see page 53). The abundance of fish processors and *bandas* means that there is always enough room for fish to be smoked, which is not the case in other communities. For example, as mentioned earlier in the thesis introduction (see page 12), Goderich did not have enough smoke ovens on days with good catches. Given Goderich's location close to Freetown, land has become so valuable that most of the areas where there used be *bandas* have been sold and developed into residential housing. Similarly, from Tissana in southern Yawri Bay, Diggins (2018) notes how, during earlier years of good catches¹²⁰, the lack of smoking ovens made the price of fish drop until it was eventually simply given away, or just left to rot on the beach because every *banda* was full. This was never the case in Tombo in 2019, where fresh fish always had a buyer.

The high volume of smoking capacity in the *bandas*, in combination with Tombo's strategic location nearby large consumer and export markets, means that fresh fish is almost always exchanged for money in Tombo. Like Sorie, a fisherman in his thirties on board *Family First*, put it: "any other place, you have to *trɔs* the fish. But in Tombo, people always buy fish. They [fishermen] don't *trɔs* fish in Tombo, so that made me want to come [and settle] here." Other fishermen confirmed the same story, how in smaller fishing towns on Bonthe and Shenge further south, fishermen often had to *trɔs* the fish to the fish processors, and wait for payment until the processor had sold the fish. This is described in detail in Diggins' (2018, 2019) research from Tissana, and makes for an interesting comparative case with the Tomborian fishing sector. In both Tissana in 2010, and Tombo in 2019, the profits from both fishing and processing are dwindling, as the fish stocks in Yawri Bay and the Gulf of Guinea at large are on the decrease. With increasing scarcity of fish, there

¹²⁰ See especially Diggins (2018: 98-101) for historical accounts from her interlocutors.

are parts of the fishing season when catches are so low that female fish processors end up competing for fish, often by attaching themselves to fishermen through gifts, loans, and various ritual practices and food. Diggins provides a detailed account of these practices, locating the fishermen's "anxieties of entrapment" (2019) in a history of bonded labour and domestic slavery, and showing how people long for more impersonal, monetised transactions. In Tombo, based on Sorie's description, the more impersonal transactions could be said to be the norm, as money always changes hand with fish. "Whoever had money could buy," to borrow the nostalgic phrase of Diggins' interlocutor Pa Yannie (Diggins 2018:104), was 'still' common wharf practice in Tombo. However, this had less to do with there being more fish in the sea, and more to do with the *banda* infrastructure of Tombo, as well as the town's location close to Freetown and to foreign fish processing companies, to which I will return in the final section. That said, the fact that fish changed hands for money did not mean that fish transactions were without social obligations.

While fishermen do not *trɔs* fish in Tombo, fish transactions from boat and fisherman to processor and fisherwoman do not happen without substantial social labour and moral implications. As outlined earlier in the thesis, the *kostament* relations are the basis for fish transactions on the Tombo wharfs. *Kostament* relations are often based on existing familial relations, but they can also develop over time as two previously unrelated people start to trade. While people juggle many different *kostaments*, with varying loyalty and dependence attached to each one, the person considered one's "real" *kostament* is someone to build a long-term relationship with, and who is there to help with larger investments through loans. These "real" *kostament* relations entail mutual respect, and a recognition that my success is dependent on your success. One example is how Mr. Idriss considered his *kostament* for every investment he sought to undertake, as shown in chapter 2 regarding building a boat *half-half*. People who are considered too selfish or greedy, or too isolated from a wider network of support, are rarely considered as stable *kostament* partners. Beyond actively seeking out people for *kostament* relations, there is a performative quality to showcasing the benefits one has gotten from one's *kostaments*. For example, as Fatu once told me when she had renovated a wall on her *banda* smoking house with planks from her *kostament's* boat, "my *kostament* confirmed me". Despite the boards she obtained looking old and tattered, including some heavily worm-infested ones (which she herself pointed out), the focus was on the relationship that had brought her the boards. "My *kostament* helped me with these," she proudly pronounced to the group of women I was sitting together with one evening. The boards were a material manifestation of the business relation she had with an owner of a *sarakassa* type of fishing boat.

“My big brother sent me money from overseas, and then my *kostament* helped me with other items to build my boat,” Sento, one of the fish processor chairladies in Tombo, narrated during an interview. She focused on the generosity of the *kostament*, a senior woman in Tombo who Sento had been working with for almost twenty years:

My *kostament* has been my help since my husband brought me from Freetown. She saw me then and said ‘eh my child, I will help you with nails, lead, cork and rope¹²¹’. She saw my potential, and later also helped finding [and paying for] labourers to build the boat. After pushing¹²² the boat, I paid her back with fish, *small-small*. She liked me, so when I had problems, she would *trɔs* me something as help.

I have kept the original *trɔs* and *small-small* in Krio, because they retain the local emphasis on the relationships and how they are negotiated, enacted, and experienced. *Small-small* is similar to the *half-half* method explained by Mr. Idriss in the thesis introduction. *Small-small*, and *half-half* even more so, indicate how debts are paid back through dividing, or sharing, the profits: Half for my debtor, half for me. Profits from a fishing business are rarely stable, and the *half-half* method ensures that good relations are kept through sharing the profits, as well as the risks. *Small-small* and *half-half* thus indicates a form of trust between the associates, as the indebted trusts his or her *kostament* to provide support when needed, and not to demand repayment at a difficult time. On the other side, the creditor trusts – by material *trɔssing* – that her or his *kostament* will share the profits when he or she is rewarded with a good catch or a good sale.

Some *kostament* relations are long-term, with binding loan agreements between fisherwoman and boat owner. At other times, people seek to opportunistically make use of *kostament*-labels to gain a favour, but also to get to know someone. For example, following a fishing trip with *Surprise*, I had been challenged by the fishermen to count fish (see the chapter prelude on fish counting, which I will also return to below, considering slippery fish). They gave me a quart jerry can of herring, which I later counted to be 21 dozen fish. When I entered the wharf with the fish, a young woman who ordinarily traded with one of the junior fishermen on board *Surprise*, came over and asked if I was selling the fish. We argued a bit back and forth about the price of the herring, which on this day ranged from Le900 to Le1200 per dozen. She convinced me to sell at Le1000 per dozen, and once I had counted the fish, she gave me two notes of Le10,000. “[You] left [out] one thousand,” I smiled,

¹²¹ Nails are used to build the boat; the others are for the fishing net.

¹²² Launching.

as we both knew she had gotten a good deal on the price. These were large herring, and, as I had expected, Captain M later confirmed that he had sold his lot for Le1200 per dozen. “My pocket has no Le1000 note, but you will get it. Now you are my *kostament*! Any time you bring fish, sell it to me,” she convinced me with a cheeky smile. When I told the crew on *Surprise* the day after, they all laughed. “That woman *get mind*¹²³, oh!” Abibu said. “She can even *turn-turn* women!” *Turn-turn* is a Krio expression connoting flirtatious trickery, as Diggins also notes from Tissana (2018: 106). Men are often considered easy to manipulate into making poor deals by trickster-women, but tricking another woman clearly said something about my new *kostament*’s skills. I met the woman a few more times throughout the year, and she always greeted me with an “ah my *kostament*, when will you bring fish for me again?” There was no expectation in this formulation, however, and the phrase was a public recognition of our affiliation.

While there was no expectation, there was potential, and publicly performing a *kostament* relation, whether through calling someone a *kostament*, or by displaying the gifts obtained through the relation, were how people strategically assessed how trustworthy other people were. In the highly commoditised fishing sector of Tombo, people expect others to be in it for the money, as much as they themselves are. On the basis of an inherent mistrust, which I will also return to in the next section, both men and women know that their trade partners will use every trick possible to get a good deal, a good sale, or an extra gift out of a trade relation. I argue that this turns the tables on the significance of the material gifts employed in *kostament* relations, as beyond establishing monetary relations of debt and social obligations, gifting and *trɔssing* also creates an opportunity to get to know others. In Krio, the wooden boards Fatu received, and similar gifts, would be called *trɔs*, which, as shown in the thesis’ introduction and chapter 2, may be translated to trust in English, but with an emphasis on the material objects that circulate through people’s entrusted relations. *Trɔssing* someone wooden planks, a good price on fish at the wharf, or other favours, as well as pronouncing someone as a *kostament*, are actively used to get to know people and strategically establish new relations, as well as to establish oneself as a “trustworthy”, moral person. To *trɔs* establishes debt, allowing a relationship through the gift, but it is furthermore used strategically by people to navigate in an uncertain environment, where both things and people are associated with uncertainty and unknowability. Through *trɔs*, and subdued relation-making, people amass not just “wealth-in-people” as assets but also “wealth-in-knowledge” about others, as Guyer and Eno Belinga (1995) have argued. This form of knowledge is continually used in people’s navigational

¹²³ Cleverly stubborn.

practices in a social setting that is otherwise saturated with mistrust (Meinert 2015, Carey 2017). In the next section, I continue tracing *trɔs*-trust practices as navigating through uncertainties, showing how the relations made through fish transactions are shaped socially and materially by the fish body, and how the materiality of the fish gives these relations certain experiences that reflect back onto the trading partners' relation and trust.

Relating through *trɔs*-trust and slippery fish

While boat-owners used to be fairly wealthy, in recent years they start off indebted even before they go to sea¹²⁴. "Fishing was better five years ago, no doubt," Mamadu, a neighbouring boat owner, once explained to me. "Fish don't *get price*, even when the fish is scarce." Fish processors, on the other hand, would complain of selfish fishermen, who wanted too high a price for their fish, also emphasising how there used to be more solidarity and support between fishermen and women 'before'. "Before fishermen would *trɔs* fish, now there is no fish, so we have to pay up front, even when the market has been poor," Yeabu once interjected in a conversation about fish price. Getting fish on credit, as *trɔs*, indicated to Yeabu a form of trust-feeling, which many other *banda*-women also attested to. Furthermore, there had been a historical change in how seriously people took the *kostament* label on business relations. Mami Mariatu often laughed at her market customers in Freetown, where she sold smoked fish from her *banda*: "If there is plenty fish on the market, they [the customers] say 'ah this is Freetown, we don't have *kostament*'. But if there is not plenty fish, they will come 'oh my *kostament*, my *kostament*!'"

Even though the more stable *kostament* relations have an institutional quality to them, and one can indeed be sanctioned by the traditional family court if one breaks a loan agreement, there is a high degree of choice involved in establishing and maintaining these relations over time. The *kostaments* have responsibility for each other, and although people tend to keep track of the amount of money they lend out or pay back, the loans between *kostaments* are only demanded to be paid back in full when one of the partners wishes to terminate relations. Good and trustworthy *kostaments* are the

¹²⁴ Both MacCormack's work from the 1970s (MacCormack 1978) and Krabacher's research from the 1980s (Krabacher 1990) indicate how profits in the sector were already dwindling when they conducted their research. However, it is not unlikely that the profits in the artisanal sector were better some five years earlier, and then again some twenty years earlier. Both during the Ebola epidemic, and in the latter years of the civil war, many of the foreign industrial vessels left the country, which both immediately gave the artisanal fleet a better chance, and possibly allowed some of the fish stocks to recover from overfishing.

ones who pay back loans in parts, or who prioritise selling fish to their *kostament* as payback, and thus maintain their supportive relation. Trustworthy – also in the material sense – *kostament* relations between fishermen and women are created over time: when a boat is new, the owner tends to have saved up enough money to buy fuel out of his own pocket, and depend on future fishing activities to remain independent from fishmongers. This is partly out of necessity, because many fish mammies will refuse loans to a new boat owner who has yet to establish his (or her) reputation as a skilled fisherman (or boat owner). At the same time, the temporal establishment of trust through *trɔs* of money for fuel, boat repairs, and fishing gear, are part of the skilled repertoire people use to navigate in the resource-scarce fishing economy, establishing themselves as trustworthy to others, and assessing other's through a piecemeal material approach.

Given the centrality of the materials, the material quality of the objects that move between fishermen and fisherwomen shape the relationship between the two, as the quality of the object reflects back onto the person selling it. In this section, I trace how men and women built trade relations through *trɔs*-trust, and how the material quality of the fish as being *slippery* shapes the relation, which again shapes the forms of trust between men and women. I merge perspectives from gendered material culture studies (Ferne 2001, Diggins 2018, MacCormack 1982, Bledsoe 1990; 2002), where the gendered differences between fisherman and fisherwoman are produced through their practices with certain tools and objects, with an STS-perspective (Law and Lien 2012; 2014, Drakopoulos 2020) insisting that objects and subject “come to *be* in a relational, multiple, fluid, and more or less unordered and indeterminate (set of) specific and provisional practices” (Law and Lien 2012:365).

Many of the fishermen, as well as the fish processors, juggle several loans and *kostament* relations, and keeping the peace between the different creditors takes diplomatic skills. Mr. Daniel, a *Sarakassa* boat owner who had worked out of Tombo for most of his adult life, explained it like this:

Say that one fishmonger cannot give you enough loan to do the required maintenance. So you take a three million loan from one, then another five from that woman, and again eight million from that man. Then, if God rewards me with a good catch, everyone will hear it and come to take their part. Problem oh! You have to know how to talk¹²⁵. So I will give you *half-half*, and you agree, so I go to the next one and finish the five million [pay it all]. Then I talk

¹²⁵ In Krio: *pas yu sabi tok*.

to the last man, talk fiine, ask him to wait a little while¹²⁶. But if we don't have good catches, ai, fisherman will suffer!

Mr. Daniel's example was not plucked out of thin air. He himself had several millions Leones in loans from two different *kostaments*, and many of the other boat owners I knew juggled similar situations. When *Surprise* was launched brand new in April 2019, the crew fished several months without a *kostament* in Tombo, until the end of the rainy season, when Captain M began to run out of favours with his family. By then, he had acquired a loan for fuel from his brother in Freetown, and a smaller loan from Mr. A in Tombo, both of which he hoped to pay back once the fishing season began to pick up. However, the catches remained low throughout the autumn, and by October 2019 Captain M found himself having to take short-term loans from different fish mammies, in return for a good price on the fish *Surprise* brought in. "Just now, I had to ask my brother's wife again, and she *trossed* me money for one bundle fishing net I have to replace," he explained in early December, when I met him and the crew of *Surprise* on land one midday. "We are going to make repairs, it is time. But the catches have been low," Abibu added, standing behind Audu and the rest of the crew lined up with a section of the fishing net in their hands, mending small holes and patches. I asked Captain M if she was considered a *kostament*, which he confirmed, and added "she has helped me greatly. Some people are not honest, and they will cheat you anyhow."

While *kostament*-relations are built and negotiated through a form of *trɔs*-trust, there are also deep sentiments of mistrust between *kostaments*, and between fishermen and fisherwomen in general in Tombo. Mistrust, as Carey (2017) has argued, is not simply the opposite of trust, and is a corrosive force that breaks down social bonds. It "describes a general sense of the unreliability of a person or a thing" (Carey 2017:8), which resonates well with the Sierra Leonean notions of personhood and secrecy (Ferme 2001, Shaw 2000). Furthermore, I find the quote from Carey particularly apt, as he also allocates uncertainty and unreliability to things, which allows me to return to the main object of exchange in the fishing sector, namely the fish. In the chapter prelude, where Mami Mariatu bought fish from *Surprise*, the *kontman* sought to use the slipperiness of fish to count too few, or at least Mami Mariatu accused him of doing so. The connection between 'slippery fish' and trust is not exactly novel. In English, being 'a slippery fish' is rarely a compliment, and is often used to denote someone's untrustworthy character¹²⁷. Diggins' PhD thesis, similarly, is entitled 'slippery fish,

¹²⁶ In Krio: *bia smol*

¹²⁷ Also evident in how Carey dedicates his book on mistrust to his friend and teacher, "the slipperiest of fishes" (2017).

material words', and considers how women do not trust the fishermen they employ on board their boats, knowing "the slippery, strategic economic games" the men were playing (2014:182). But beyond being a metaphor for trust and mistrust, *slippery* also denotes an existential experience with a material quality, which I miss in Diggins' (2018)¹²⁸ otherwise nuanced reading of materials in the fishing sector.

Law and Lien's (2012; 2014) research on Atlantic salmon farms shows how slippery as a material *texture* orders the relational enactments between humans and salmon, which again shapes what salmon come to be, as "different salmon are done in different practices" (2012:365). In Tombo, people experience fish as slippery. On board the fishing boats, the slippery quality of fish is often highly debated during and after *handfailure* competitions, and is particularly evident in cases where several fishermen reach for a fish caught in the net, release it from the net, only to lose it's slippery body back into the sea. At the wharfs, the *totmen* (porters) take care to balance the heavily loaded *baff* so that no slick fish slides over the edge and onto the beach or concrete wharf (making it free game for anyone to snatch). Fish are slippery, and the slipperiness as an attribute, or material quality, of the fish body inserts itself into and shapes the relation between the fisherman, fisherwoman, and the fish. The slippery encounter is transformative, and contaminative, to borrow from Tsing (2015: 28-46), and shapes what fisherman, fisherwoman and fish *are*.

Slipperiness is a material quality with sensorial impacts beyond the visible: it is felt with the hands, as the slippery fish requires a firm grip, preferably around the gills, and even then it may, well, slip away. Engaging with the fish – and thus also one's buyer – is to discipline one's body to the material form and qualities of the fish, an embodied experience that is at its most intense when counting them. I learnt how to count fish by watching and later imitating how the *kontmen* counted the fish, grabbing two in each hand, moving the four to a new pile of counted fish, and for every third time, placing a separate fish in a third pile to keep track of the number of dozens counted ($4 \times 3 = 12$). Similar to how Müller (2000; 2004), who worked in a Bergen shipyard, has described how she internalised the knowledge needed to weld, I internalised the feeling for the slippery fish in my hand, knowing exactly how many fish I grabbed each time. The knowledge transmission was place-bound, and tied with practice, and not codified in language. Müller draws attention to the transmission of tacit knowledge as a process where the novice draws upon her or his personal semiotic pool drawn from other experiences; in Müller's case, she likened the appearance of

¹²⁸ In the 2018 book based on Diggins' 2014 PhD thesis, 'slippery' no longer features in the title. Although the text remains largely the same, including the two quotes from the thesis, I did not read her book as an analytical engagement with 'slippery'. My own use of slippery draws mainly on Law and Lien's (2012) STS analysis.

melting metal during welding to boiling an egg, and what the water looks like right before it boils. Counting slippery fish also depends on an embodied 'feel' for the work, but here I move away from the semiotic focus on knowledge transmission in Müller's analysis, focusing instead on how, through disciplining one's hands to the slippery fish body, the fish itself comes to be known as a slippery thing.

Beyond the fish, the slipperiness of the fish contaminates the relation, and thus also the fishermen and fisherwomen involved. To have a fish slip out of one's hand is to be controlled by the fish, to follow Latour (1996) and Miller's (2005) reading of non-human agency that resists a reduction to being "a mere epiphenomenon of the social" (Miller 2005:12). But the social consequences are substantial, as the 'slipperiness' of the fish, reverberates back to the relationship between the fish-seller (the fisherman) and the fish-buyer (the fisherwoman), denoting the embodied experience of a relation qualified by the unknown and uncertain things part to the relation. Going back again to the episode with Mami Mariatu in the chapter prelude, she questions the honesty of the *kontman*, who works on behalf of Captain M. He in return blames the slippery fish, which we all know may indeed be true. But, far from excusing him, the slippery experience signifies the morals and intentions of the human parties to the relation. Did the *kontman*, and fishermen, intend to cheat Mami Mariatu out of all the fish she ended up paying for?

"Counting wrong" was omnipresent in Tombo. "I paid for 230 dozen at the wharf," Sento said one morning I met her outside her *banda*, ready to go to the market. "But now that I packed the smoked fish to go to the market, I only see 205 dozen." She sighed, "oh fishermen." The slipperiness of fish is an embodied experience of a material quality with socioeconomic consequences. Just like a fish can slip from the hand, so can the profit, relations, and trust between people. In the final section of this chapter, I follow up on the material quality of fish and how the relational practices between men, woman, and fish shape relations of trust. This time, it is no longer the slippery fish, but the rotten one that is in focus. When fresh fish caught from the sea stays too long in the hands of a fisherman or boat owner, it rots. To avoid fish – and, by extension, profits – from rotting, the fish is taken to the *banda* smoke houses for preservation. To set the scene, I move from the wharfs as described in the chapter's prelude, and into the *banda* smoke houses in the next section, showing the material environment of the women's processing work, and the role of the *bandas* in shaping Tombo's environment and infrastructure.





Figure 28: Smoked fish on a banda oven

Entering the *banda*: Women's work in smoky environments

Pounding noises open the afternoon in Tombo. Muffled *dunk, dunk, dunk* noises spread throughout the neighbourhoods as people start to prepare for the evening meals by pounding onions, chili pepper and spices in wooden mortars. Accompanying the pounding noises are the first hints of smoke in the air. In the fishing high season, the town fills with smoke as the sun sets. Those uncertain as to how the fishermen have fared at sea need only smell the evening air to know whether the Tomborian fleet has had a good catch or not. The distinct smell of burning wood is at first faint, but as the evening darkens it is as if a lid of smoke has been placed upon the central neighbourhoods of Tombo. In central Tombo, most compounds have a *banda* or two, and even when there are no activities in one's own, the smoke from the neighbouring *bandas* flows through the narrow alleyways and over walls, making it impossible to escape from it. It can be suffocatingly heavy, making it difficult to sleep at night, but a night of no smoke in the high season is worse, as it means a day of poor catches.

The smoke seeps out from the town's *bandas*, the fish processing houses that contain the smoke ovens. *Banda* is the name used interchangeably for both the houses that hold smoke ovens and for the smoke oven itself, but the main feature, or rather the essence of the *banda*-house is the *banda*-smoke oven. The *banda*-houses are usually constructed with makeshift materials like corrugated metal sheets, tarpaulins or rice-bags, and old boards from demolished fishing boats. The size and layout of the *bandas* varies, with some barely having room for a small mud-block oven, with an uneven dirt floor and a ceiling so low that even children have to bend down to avoid hitting their heads. Others are large and spacious, containing several rooms for storing food and cooking supplies, some cardboard or a mattress for late night work, and large stacks of wood that attest to the regularity of smoking activities.

Most *bandas* are run by a female processor, or several women in collaboration. Male household members, neighbours, and relatives often take part in activities there, whether directly related to fish smoking, or because the *bandas* are social and inclusive places, especially in the evening. Some *bandas* are also male owned and run, or run by both a man and a woman in collaboration. That said, the majority of the *bandas* are run, used and maintained by women, and the female processors have sole claim to the inputs and the profits they make from their *banda*-activities. During the day, *bandas* can appear strangely empty in an otherwise packed town. Once the fish smoked during the night has been removed in the early morning, the *banda* is left empty for the better part of the day,

until late afternoon. This is when the *bandas* fill with activity, as the owner of the smoke oven begins her preparations for the fish to arrive at her banda, and a junior co-wife or daughter starts to cook the evening meal. During these evening hours, Tombo is filled with life, and the activities in the neighbouring compounds can be easily followed despite the evening darkness. Voices, greetings heard, a torchlight passing by all tell of people coming and going between the *bandas*. Market traders tell stories from the day's sales, people comment on the news from the radio crackling in the background, someone shoos a goat away from the baskets of fish dried the night before.

Walking into a *banda*-house, the contrasts between the everyday male and female worlds stand out. Whereas fishermen spend most of their time out at sea, in the open breeze and under the harsh sun, the female fish processors spend large portions of their day and night inside these relatively dark and smoky rooms. There are no light sources or windows in the *banda*-house, except the daylight that flows through the doorway. At night they are mainly lit by small kerosene lamps made from old milk tins, or cheap China-produced torchlights. The use of the ovens literally colours the inside of the *banda*-house, as the walls and ceiling are blackened with fine-grained soot, produced through many years of smoking fish over open fires. The ovens' material features tell stories of past processing and profits. A smoke oven in regular use, when not filled with fish, is kept uncovered and uncluttered. The wire-mesh is blackened with soot and fish oil, but is nevertheless fairly neat when seen from above. Underneath the wire mesh, the years of fish smoking have created a thick layer of grimy oil which, if touched, leaves one's fingers smelling like fish for days. The ovens that are only used intermittently, however, often double as storage space for *baffs*, pots and other household items. Other times, they are laid with cardboard or thin mattresses, demonstrating how they double as sleeping places by younger family members. In the rainy season, the wire mesh of the *banda*-oven becomes covered by greyish-green mould, which insatiably grows in the damp conditions, fed by the oily substrates and fish debris.

The majority of the *bandas* in Tombo are female dominated spaces, with women controlling the main activities and shaping the space with their work. However, this does not mean that men are excluded from the *bandas*, as is evident in an excerpt from my fieldnotes, describing an evening in Mbalu's *banda*:

Mbalu stood relaxed by the smoke oven, having just spread out the hot coals underneath the fish she was processing. Half listening to the conversation while working, she now turned to her niece, who was processing on one of the other eight ovens in the banda. "The Waterloo market is better these days, my auntie was there yesterday selling [smoked fish]," she said, and

the two processors, joined by two of the other women who were washing and sorting fish for Mbalu, discussed back and forth about the fish markets in Waterloo, Freetown, and Masiaka¹²⁹. Mbalu's eldest daughter was sitting on a thick firewood log, showing a music video from a phone to her sister and the two other young girls who also live in our compound. The girls had helped Mbalu during different stages of the process, by fetching more water or firewood and watching the fire, but it seemed like the main reason they were there was more to keep each other company, to share stories and information. At one point, Mr. A dropped into the banda. He greeted Mbalu, and told me that he wanted me to come along to a union meeting the next day. While he was talking, Mbalu's sister readied another baff filled with mixed fish, and Mr. A noticed a kini-fish in the baff. "Ai, sister, give me that one kini, my wife needs them for her family next week!" He reached for the kini, but Mbalu's sister gave his hand a light slap: "Tsk, what did you do for your sister today to come and demand like that?" He feigned indignation, and left with an 'oh fisherwomen!' When he was gone, Mbalu turned to me and shook her head. "Eh, do you see, Memuna? All day, all night, we are here doing this hard labour. And the men, all they do is sleep, and then they come here and demand from us!"

As can be seen in the above episode, Mbalu's *banda* is dominated by the work of the female processors. Unlike like the fishing boats, where women rarely enter, men are part of *banda* places, and often try to negotiate access to the fish or other assets based on kinship ties, neighbourly relations, or other loyalties. As such, *bandas* assemble people, fish, materials, generations, and genders, as people come together around the processing work and place. Now that I have introduced the women's work environment, I will return to the process of smoking fish in the next chapter. In the final section of this chapter, I keep the focus on the (mis)trust and uncertainty associated with people and things, experienced through the material qualities of fish. *Bandas* are sites of transformation, where a fresh fish becomes a smoked, more preserved fish. If something goes wrong, the fish rots quickly in the tropical temperatures. The final section focuses on rotting fish, and by extension, 'rotten' *trɔs*-trust as profits in the artisanal fishing sector decline.

¹²⁹ All of the markets are considered close to Tombo, and prime sites for lightly smoked fish. See chapter 6 on different types of smoking.

Rotting *trɔs*-trust and new trade relations

As outlined earlier in the thesis, fish stocks in the Gulf of Guinea are on the decline, impacting profits in the artisanal fishing sector. For the fishermen, the competition with industrial trawlers in particular demonstrates their own marginalisation, as they encounter trawlers at sea, hear the diesel engines underwater, find dead *throwaway* fish floating in the trawler's water trail, and haul out more sea urchins than fish from Yawri Bay. For the female fish processors, less fish available at the wharfs means higher prices for the fresh fish they buy to smoke, in a simple supply-and-demand logic. However, the economic logic is shaped by the local infrastructural conditions, political frameworks and social obligations. In Ghana, as studied by Overå (2002) and outlined in chapter 4 (see page 151), women began to buy frozen bycatch from the trawlers when the prices from the artisanal boats rose as catches fell, which, at least for some period of time, increased their incomes substantially. In Sierra Leone, this practice did not exist in 2019; however, there was talk in Tombo of starting to trade in frozen herring from a fish processing company in Jui, closer to Freetown. Whether or not this was true, I was unable to ascertain. In Kissy, eastern Freetown, there are long-standing trade relations between the Sierra Fisheries company, run by a Sierra Leonean-Lebanese family, and local fish processors, who buy both valuable fish and small pelagics from the company's trawlers. However, as of 2019, there were no similar trade relations between processors in Tombo and the surrounding foreign companies.

It was more common for the women to "follow" the artisanal boats when the fishing was poor in Tombo. The Western Peninsula has a good road network, and when news of good catches at other wharf towns reached Tombo, many processors travelled there in *poda-poda* minivans or even taxis to buy fish, which they would then bring back to Tombo to smoke. For example, when boats travelled from Tombo to Portee in July¹³⁰ to fish for herring, several of the most active fish processors in Tombo followed along. This included Mami Konima, an active fish processor who lived close to my compound. She travelled there six times over four weeks to buy fish to process, before she found the transportation costs too high and stopped. "Also, the fish is not fine," she said, showing me a basket of dried herring one afternoon when I stopped by her *banda* to escape a rain shower. She picked up a fish, and pressed her thumb softly down on its body, indicating she was not

¹³⁰ See thesis introduction, page 29.

happy with the quality¹³¹. “I am smoking this for my *kostament*, she asked me for fish. It is not rotten, but I worry she will say so,” Konima sighed. I’ll return to her observation below.

The infrastructure and location of Tombo affords it different terms for the wharf transactions than those in smaller, more isolated fishing towns and villages. At Diggins’ (2018) field site, the volatility in catches at times lead to fish being given away in large quantities, when there was a lack of *bandas* and fisherwomen to process the large catches. On other days, the tables were turned, as the fisherwomen, whose only income¹³² comes from fish processing, have to make use of every trick they know to even acquire fish to smoke from the fishermen’s meagre catch. In Tombo, there are enough *bandas* to process record catches, and the short distance to the large markets of Waterloo and Freetown means the processors can do a short, light smoke (called *pull-and-wash*, which I will return to in the next chapter), instead of the longer, heavier drying process that women in rural areas have to do to preserve the fish. This increases the capacity of a *banda*. Furthermore, the surrounding foreign fish companies are all keen on buying fish from the artisanal fleet, as detailed in chapter three. I will also return to this below, as it affects the overall profit, as well as the profit shares between fishermen and fisherwomen, in the artisanal sector. Here it suffices to say that the presence of the foreign fish companies adds capital, and a new market for the fishermen’s fish, on days when there are good catches. On days with low catches, many of the *banda* women in Tombo simply do not process fish. For several, processing fish is a part time business, done alongside other economic activities. Some are boat owners, whereas others have small convenience stores or market stalls. Others still are engaged in community politics or development projects, while they run a *banda* processing business on the side with the help of younger family members. Thus, the material and socio-economic infrastructure in Tombo allows fishermen and women a wider range of options to respond to the volatility of fish catches.

That said, as argued in the previous chapter, the presence of foreign fish processing companies has also had a detrimental effect on the artisanal fishing economy, as fish processors see the more valuable fish being sold out of Tombo to the companies, leaving them to process bony herring and oily bonga. While the former chapter focused on how the boat owners and fishermen juggled new loan agreements with these companies, based on their experience that the local *kostament* relations no longer could supply (*trɔs*) larger loans for the capital intensive fishing activities, the rest of this chapter focuses on the fish processors’ side of the story, and how the poor quality of fish that

¹³¹ I will return to “fine fish” and evaluation markers in the next chapter.

¹³² As it is presented in Diggins’ research.

remains to be traded within the artisanal sector affects the economic profits for the women, as well as the relations of trust between fisherman and fisherwoman. I will illustrate this using an example from one of the commercial *bandas* in Tombo, where processors pay a nightly fee to rent an oven for their fish:

One evening in September, I met Mami Haja removing fish from one of the smoking ovens in the union *banda*. She was a small-scale fish processor, who mainly smoked herring and bonga overnight and sold at the markets in nearby Waterloo the next day. As she was lifting the bonga from the oven's wire mesh, I noticed how the fish flesh crumbled into pieces between her fingers; a clear sign of rotten fish. Asking her what had happened, she told me that there hadn't been enough firewood to smoke the fish properly, so it had rotted on the smoking oven during the night. "I hadn't planned on smoking fish this week, there was not enough money to buy firewood and kerosene. But my uncle [a respectful term used for a senior male family member] *trossed* me this fish, now look at my problem," she sighed, as she took one of the smoked fish from the wire mesh, and opened the fleshy side to show me the quality. The white meat underneath the smoky, golden skin looked mealy, almost brittle, and it had a clearly rotten smell to it. Mami Haja then told me how it was her sister's husband who had given her fish on credit, instead of asking for payback on a previous loan of Le300,000. He had an *ice-box* boat, a three person canoe that carry a large box of ice to preserve fish for two or three days while they stayed out at sea. "Then, I could give him the profit from my sales, *small-small* to pay back the loan. But look at the fish now," she sighed.

There are two aspects of the case that are interesting to note. First, it refutes Sorie's claim that fishermen don't *trɔs* fish in Tombo, as I stated and analysed above. While some money is almost always exchanged for a quantity of fish at the Tombo wharfs and market, as argued above, a common exception is *trɔssing* fish to *encourage* someone; to give them a way to start up a small business, or generate some funds to pay back a loan, as was the case when Mami Haja's in-law *trossed* her fish. However, *trɔssing* fish is rarely considered ideal for either the fisherman or the processor, as it publicises how neither debtor nor receiver have enough material surplus to properly help one another. As opposed to how, for example, Sento's husband had helped her to build a *banda* by acquiring and gifting construction materials, *trɔssing* fish is in Tombo something of a last resort. Furthermore, accepting *trossed* fish is not without danger, as the case with Mami Haja shows.





Figure 29: Visiting a large banda in the rainy season

Ordinarily, her in-law would not give fish on credit, and Mami Haja continued to speculate on whether he had given her this fish because he knew it wouldn't otherwise sell at the market. "I wonder if the fish was already spoilt at sea," she concluded. This brings me to the second important observation from the case, namely the possibility that Mami Haja was dealing not only with rotten fish, but also with a "rotten" trading partner. Rotten fish is a big worry for the fish processors, because it means they no longer have a product to sell¹³³. In a tropical climate, fish rots fast. While it is easy to single out fish that already is rotten, it is more difficult to ascertain how far along in the rotting process a seemingly fine, fresh fish is. Even fish bodies that feel firm, with red gills and shiny eyes, can be far along in the process of decomposition. The opposite may also hold true, namely that fish, especially smoked fish, which may feel limp and soft, may not necessarily be bad quality, but because these are signs associated with rot, people are sceptical of buying these fish products. Just as Mami Konima worried that her *kostament* would complain about the quality of the fish product she had smoked with fish from Portee, Mami Haja similarly expressed uncertainty about the quality of fish she had received from her in-law. As recent anthropological research on toxicity and human-chemical relations has shown, uncertainties associated with what we cannot ascertain through our senses or technologies have social consequences (Murphy 2006, Geissler and Prince 2020). For example, Biehl has shown how the uncertainties associated with detecting aflatoxins in maize in Kenya have wide-ranging consequences for the trust between producers and consumers, and between both of these and the government regulatory boards, who are accused of using aflatoxin scandals to enrich themselves (Biehl 2021, personal communication).

The uncertainty associated with rotting fish comes to qualify the relation between the fish seller and the fish buyer, as with the case of 'slippery fish' earlier in the chapter. Rot is not only a metaphor, but also refers to an embodied experience. Rot is the material and relational security dwindling in one's hands, as the fish crumbles into small pieces, smells foul, and tastes, well, rotten. This can be understood as an experiential matter of relational world making (cf. Haraway 2016). Whether it is fish, cooked rice, bread, or vegetables, the slimy texture of molecules sticking – almost imploding – together, while also crumbling apart, and the sour, mouldy taste all indicate that something is not right. But what happens before the rot is detected? The uncertainty afforded by the quality of the fish makes people speculate whether their trading partners have *trossed* them bad fish, which again feeds people's mistrust of their trading partners.

¹³³ Some, however, process the rotten fish into pounded fish spice, or sell it as animal fodder.

I later spoke to Mr. A about Mami Haja's case, as the *banda* oven Mami Haja was renting belonged to the fishermen's union where Mr. A works. He had already heard of the rotten fish from his nephew, who worked as a fish handler in the *banda*, and told me he was not surprised. "I don't trust that man one bit," he said about Mami Haja's in-law. "Just the other day he came to *bluff* (brag) with all the money he made from a sale to Eobu [the biggest Korean company]," Mr. A continued. While he did not claim that the in-law had sold his *good* fish to the foreign company, and given the *bad* fish to Mami Haja, he did make a negative connection between sales to the companies and sales to the local market, a connection I heard made several times. As the conversation with Pa Ibrahim and Captain Joseph about Africa fish and Europe fish recounted in the previous chapter (see page 152) illustrates, people are conscious that much of the larger, more valuable and nutritious fish are being exported out of Sierra Leone, and thus never reach the local *plassas* sauce. However, sales to the foreign companies before processing also mean that the fish processors no longer have the opportunity to make money from processing more highly-priced fish species. Furthermore, as the fishermen take loans with the fish companies, they often have to juggle several different loans, as described in chapter 4, and above with regards to managing different *kostament* loans. In cases when the fishermen have both *kostament* loans and company loans, the *kostaments* often get the shortest straw, and are left buying the poorer quality fish that the companies do not want. Sometimes, this means the fish sold to *kostament* relations are rotten. When embedded in social networks where the majority of the people involved struggle to deal with the precarious conditions they find themselves in, favours may be a curse in disguise. Channelling rotting fish into the local dependency networks puts a strain on both local economies and the solidarities upon which businesses depends, which again affects the trust between trading partners.

Concluding remarks

Historically, it has been the surplus from the fish processing businesses that has enabled the *half-half* method of boat building, and thus the fishing ventures, in Tombo and the Yawri Bay area. As women entrust men with parts of their profits to find fish, and resell their fish at a good rate, they build *kostament* relations that enable further economic activities. With increasing resource scarcity, and new trade partners as evidenced by the foreign fish processing companies, the profits in the artisanal sector are dwindling, affecting the amount of, and types of, materials that circulate through the local *kostament* and trade networks. *Half-half* is dependent on trust in one's partner, as

the creditor must trust in the fisherman's ability to locate and find fish out at sea, enabling them to pay back the loan *half-half*. By building relations of *trɔs*-trust over time, the fish processor and fisherman come to know each other's skills and abilities, as well as their trustworthiness with handling their own resources. Given the ecological degradation of the Yawri Bay fisheries, the skills used to locate fish are rarely enough anymore, as fishermen increasingly find only sea urchins and some meagre *baffs* of herring and *swit-wata*. The uncertainty associated with the ecological decline means even skilled fishermen and trustworthy *kostaments* come back with little to sell. As profits decline for both fisherman and fish processor, there is less of a surplus to circulate through the *kostament* networks, again affecting the relations of *trɔs*-trust.

To increase their own profits, the fish processors, just like the fishermen, rely on their professional skills. Their intimate knowledge of their *banda* smoking ovens enable them to adjust the smoking processes, and thus the smoked product, to their satisfaction, stabilising some of the uncertainties associated with the fish quality. This process is the focus in the next chapter, where I elaborate on how women make use of the smoke from the ovens to produce "fine fish". However, while the processors have intimate knowledge of their *banda* smoke ovens, these ovens are also associated with high running costs, high fuel consumption, and several health problems connected with smoking on open fires. This has caused development donors to focus on "improving" the smoke technologies and smoke ovens, and in the next chapter, I trace how a project focused on a new smoke oven struggled to consider the role of *smoke* as an essential part of the knowledge involved in the women's process of making a fine, sellable fish product.



Figure 30: Fish processors by the new Mátis style smoke oven

CHAPTER 6

Trössing ovens to make fine fish

Development projects meet socio-material navigation



Figure 31: Pull an was smoked fish

Chapter prelude

The one hundred and eighty two dozen herring are tightly stacked, belly down, in neat rows on top of the several layers of wire-mesh of Mami Zainab's *banda* oven. It is not enough fish to fill the whole oven, so Zainab uses a sooty piece of sheet metal to cover the rest of the open wire. Inside the oven, her grandson has stacked firewood and twigs in two piles, and poured half a litre of kerosene on the wood to make sure it ignites. Satisfied with the wooden piles, Mami Zainab bends down and climbs under the wire mesh herself to light the fire. The wet wood produces smoke instantaneously, but it takes a few minutes before it fills the whole *banda* and overpowers everything. Even Mami Zainab coughs and rubs her eyes as we walk out of the *banda* to wait for the smoke to clear.

"All this smoke!" Lisa exclaims. Lisa and David are visiting consultants leading the World Bank WARFP funded project on improved smoke technologies, and they have come to Tombo to develop a pilot study with the help of Mr. A and Maria from the fishermen's union, with myself as the on-site team manager¹³⁴. Maria, a primary school teacher living in upper Tombo, and thus away from much of the daily smoking activities, remarks how the female processors are tough. "Me, I could not do it," she says, and the rest of us nod, and cough. I ask Zainab, who does not follow our conversation in English, if she is bothered by the smoke. "When I was young, yes, but now I'm used to it," she says. In the next half hour, Zainab peers into the *banda* once in a while, staying low to get out of the worst of the smoke. She may say she is used to it, but perhaps this is because she only spends a few short seconds inside the *banda* in the first part of the smoking process. She is very calm, and seems satisfied with the process so far. David and Lisa have more work to do, and come out of the *banda* coughing and with runny eyes. We have placed temperature probes inside the fish, which have to be checked every five minutes to record the temperature curve of the smoking process. "A good oven will smoke, but not cook the fish," David comments at one point, when he is worried the temperature is too high.

As the intense smoke slowly disperses, we are able to spend minutes at a time inside Mami Zainab's *banda*. At this point, Zainab herself is sitting on a plank inside the *banda*, watching the fire as it increases in strength. She seems equally fascinated by David and Lisa's approach to the fish and fish smoking as they are about hers, watching David as he instructs Mr. A and Maria in how to use the thermometer probes. At one point, Mr. A says to her in Temne that the thermometer probes record

¹³⁴ As explained in chapter 1, I had a secondment contract with the World Bank funded West Africa Regional Fisheries Programme during my fieldwork.

the heat inside the fish, and Mami Zainab nods, knowing the importance of the right amount of heat at the right time in the process. She uses her hand, holding it about ten centimetres above the surface of the fish, feeling how the heat and smoke travels through the small cracks between the tightly stacked fish. If the heat is too high, or too low, in a certain area, she uses a long wooden stick to shift around some of the wood and coals inside the oven to even out the temperatures.

After about forty-five minutes of smoking, we record the highest temperatures on our thermometers. Some five minutes earlier, Mami Zainab had added the final logs of wood on the fire. This is the most intense period of the smoking process, as she has to continuously watch the fire. Processors like Zainab don't use scales to weigh the wood; instead they feel the weight in their hand and know the burning quality of the many different types of wood sold at the wood market. The boy we sent to buy wood for our study had bought the cheap kind, which burns quickly, with a high, hot flame that requires extra supervision. Sitting inside the *banda* next to the oven, Mami Zainab splashes water onto the fire at irregular intervals when it seems to grow too strong so as to avoid burning the fish, and to make sure that there is enough smoke to make *fine*, smoked fish. Watching the fire at this stage is a hot and exhausting task, and Zainab regularly has to step out of the *banda* for fresh air. David is watching Mami Zainab working with a deep fascination. He takes a special interest in how the firewood is stacked, and how especially how the size and placement of the stacks of wood help increase air flow through the oven. "Look at this," he says with fascination several times. "Watch how the air is moving." This point had completely escaped me, and I am fascinated, too, both by Zainab's practice, and by David's attentiveness to the details he knows so well from his own work on fish smoking and processing.

As the clock nears 8 PM, the neighbouring mosque is calling people to come for the *isha* evening prayers. Sounds of people passing through the compound are audible through the stick-and-iron-sheet building walls of Mami Zainab's *banda*, which is otherwise calm and quiet now that the burning wood has been reduced to hot coals. Only small, sporadic sizzles can be heard when a drop of watery oil drips from the fish down onto the now yellow glowing coals. Mami Zainab comes in for a final check on the fish after having done her ritual wash outside the *banda*. She takes a quick look at the heap of glowing coal, before fetching the long stick she uses to move them around with. As she bends down to spread the coals, her headscarf comes loose and unwraps itself, falling down around her neck. She casually throws the scarf over her shoulder with one hand, remaining bent down, back straight, and uses the stick in the other hand to move the coal around. Her movements are carefree, relaxed. Slowly, the coal shifts to a more orange-red colour, indicating lowering temperature. Once satisfied with the colour, Zainab stands up straight, and holds a hand over the

fish for a final check of the temperature. Satisfied, she leans the long stick back up against the *banda* wall, reties her headscarf, and walks out of the *banda* to join the *isha* prayers in the mosque. There is calmness and routine in her every move, as she trusts the signs she has read from the *banda* to keep her fish safe while she is praying.



Figure 32: Dark and smoky bandas are not the ideal working environments for fish processors, consultants, or cameras!

Introduction

In Tombo in 2019, there were two large-scale development interventions focused on fish processing and preservation through smoke. One was part of the larger World Bank funded West Africa Regional Fisheries Program (WARFP) that I was seconded to¹³⁵, and the other part of a project funded by the Icelandic Ministry of Foreign Affairs in collaboration with the food research company Mátis¹³⁶, developed as a partnership with WARFP. I will refer to these as the WARFP and Mátis smoke oven projects, respectively, or just “smoke oven projects”, as this was the term used in everyday language by both Sierra Leoneans and foreign development consultants. I focus mainly on the WARFP team, but include elements from the Mátis oven and the trainings they provided to the local processors, which were more extensive than those we conducted in the WARFP team. In reports and more official meetings between the consultants or funders, and government officials, smoke ovens were often spoken of as a primitive, yet socio-materially appropriate technology that could help reduce post-harvest losses. Smoke ovens are the essential technology for fish preservation in Tombo, but they are also locally associated with several health problems because of the open fire and smoke, and they use a lot of firewood. “All the time, we have to get drip [intravenous saline solution] at the clinic because of this smoke,” was a common complaint among fish processors in Tombo.

The WARFP smoke oven project began with a pilot study on the efficiency of local smoke ovens, which included observations of the processes and scientific measurements of things like temperature and smoke, as detailed in the chapter prelude. In addition, we constructed an *Ahotor* oven, which was originally designed by USAID in Ghana. This oven was considered superior to the local *banda* style ovens, because it was said to use less firewood, and distance the processors from the harmful smoke. The oven was built to enable a comparison in our pilot study. “Can you believe that even with decades of development investments in improved smoke technologies, which ovens make the best fish has never actually been pinned down objectively?” David talked passionately about the pilot study we were planning in the WARFP team. “We hope this study can provide a benchmark, against which all other studies are measured,” he continued, and gave me a brief summary of some of the other studies done on fish smoking technologies across West Africa.

¹³⁵See thesis introduction and chapter 1.

¹³⁶See MFA-GI Iceland (2019a).

Although there had indeed been many others studying fish processing and smoking¹³⁷, David was concerned that many of these studies were done in laboratories, and thus not grounded in how fish smoking was practiced by local processors. Himself a food safety scientist with decades of experience working on fish quality assessments and studies on chemical processes of fish preservation, David held what I considered to be a reassuringly holistic view of fish smoking. In the pilot study we developed, there were both biochemical and technical components following the changes in the fish body and the work environment, alongside socio-economic aspects like working hours, costs, and the number of people involved in a smoke run. However, as I will argue in this chapter, although we collected the sale price post-processing to calculate profit, our study was unable to capture the assessment procedure the fish processor herself used to assess whether or not, or to what extent, her work was going to turn the fresh fish into *fine fish*. As part of the WARFP team, myself and the rest of the team had overlooked the skills and knowledge the processors make use of to fine-tune the smoking process, and the adaptable, “fluid” (de Laet and Mol 2000) qualities of the local *banda* smoking ovens. The development interventions’ “superior” oven technologies did not take into consideration the fish processors’ relations with their ovens; a material relation built on acquired skills over time that enabled a form of *trös-trust* to the oven; instead it considered only the new technology’s potential of reducing post-harvest losses according to an economic waste-logic.

In this chapter, I trace how both the development consultants – including myself – and the fish processors in Tombo sought to improve the processing of fish through smoke. While there were several shared concerns, we came at the question of ‘what constitutes a fish processing business’ from different angles, which also impacted how we envisioned solutions to the business problems the local processors faced. This chapter deals with how the two development projects in Tombo in 2019 dealt with the “improved smoke ovens” as a question of reducing post-harvest losses and health problems by focusing on controlling the smoke and firewood consumption of the smoke ovens. Post-harvest loss is a technical concept that transforms any form of unused potential, sub-optimal trade balance, or any sort of harmful residues resulting from the process, into a calculable loss. By distancing the processor from the smoke, and promoting two new types of ovens that were more energy efficient than the traditional *banda* ovens, both the WARFP team and the Mátis team

¹³⁷ See for example Akande and Diei-Ouadi (2010), FAO (1971), Kotnik (1981), Chan, Toledo and Deng (1975), Kwarteng (2016), Adeyeye and Olewole (2016), Kwarteng et al. (2017), and Buadi (1992).

envisioned that the processors would be able to increase their profits from their business, and reduce post-harvest loss.

The fish processors in Tombo, on the other hand, did not begin with loss and waste. They were concerned instead with their end product: the smoked fish. “As long as it makes *fine fish*,” was an all-too-common answer among the processors, when asked whether they would like to have new smoke ovens in their banda-houses. They were happy to hear that the new ovens used less wood, and would reduce smoke exposure, but their main concern was that the ovens could make – or rather, as I will argue in this chapter, that they could *trɔs*-trust the ovens to make fine, profitable fish. Continuing the former chapter’s focus on the emic term *trɔs*, I show how fish processing involves a material entrustment of a precious and expensive resource, namely fish, to a smoke oven. Focusing on how women *trɔs*-trust fish to their ovens, entrusting the ovens and their own skills with valuable fresh fish, skilfully tweaking the ovens based on interpreting the smoke and heat, I show that the precarious economic situation is mitigated by their embodied knowledge of how to use their smoke ovens to make *fine fish*.

This chapter deals with a development intervention focused on technology transfer that did not lead to the intended outcome (as is quite common). As such, I situate my research within the anthropological literature on development and modernisation through technology transfer (Crewe and Harrison 1998, Fischer 2007, Li 2005, Derbyshire 2019, Overå 2011), of the social construction of divisions between “indigenous” or “local” and “scientific” knowledge (Fairhead and Leach 1996, Pottier 2003, Gupta 1989, Richards 2016, Mitchell 2002, Long 2001, Agrawal 1995, Sillitoe 2000), and of the complex links between anthropology, development, and the “application” of cultural knowledge (Escobar 1991, Ferguson 1997, Arce and Long 2000, Crewe and Axelby 2013, Strathern and Stewart 2005, Borofsky and De Lauri 2019). Given the lack of interest in the new *Ahotor* oven in Tombo, one could label the WARFP pilot project a “failure”. This, however, says little about “how development works” (Mosse 2013:232). While Mosse (2013, 2004) encourage anthropologists to engage with aid policy through practice, I make use of an actor oriented analysis (Long 2001) that also involves the objects (fish, wood and smoke) and technologies (ovens) of the smoke process in question. I show how the developmentalist concern with post-harvest losses and oven efficiency has engendered a specific vision of the smoke ovens, while disregarding others. The ovens came to be “inefficient” and “not healthy” through our embodied meeting with the smoke. For the fish processors, the smoke was indeed troublesome, but it also provided a way to read what the smoke oven was *doing* to their fish. By distancing the processor from the smoke, they no longer trusted

that the new ovens produced *fine fish*; fish they knew and trusted to sell to their customers and *kostaments*.

The chapter opens with the developmentalist concern with improving coastal livelihoods through a technical solution to post-harvest losses, namely improving the inefficient *banda* smoke ovens. I then outline the local economic conditions of fish processing, focusing on how the uncertainties of the fish quality and of the volatile prices of both fresh and processed fish lead the processors towards flexibility and adaptability, making use of the fluid qualities of their smoke ovens (cf. de Laet and Mol 2000). This leads to a longer section, where I trace two of the objects that enter the smoke oven process, namely the wood and the smoke, and how the processors make use of their knowledge of these materials to assess how the smoke process is going. They develop trust in the quality of their product, by continually adapting the smoke process to the heat and smoke they observe and experience during the process. The two new ovens, the Ahotor and the Mátis ovens, distanced the processors from the heat and smoke, which improved the working environment, but also led to an uncertainty about the final product – could they really make *fine fish*? In the final section, I show how the processors’ trust in their smoked fish product allows them to better navigate the uncertainties of the fish market, establish and maintain *kostament* relations, and assess the trustworthiness of others through their own knowledge of the *fine fish* that they themselves had made.

Livelihoods, efficiency and post-harvest losses

FAO estimates that 10 percent of fish catches are lost globally due to lack of proper handling, processing, and storage facilities (Ward and Signa 2014, Zelasney et al. 2020). There are no national estimates for Sierra Leone, but a World Bank WARFP project document states that the post-harvest loss in Guinea, Liberia and Sierra Leone’s artisanal sectors amount to 50 percent (World Bank 2016). This means for every two fish caught, one is “lost” in quantity or quality before it reaches the consumer. The project document provides no evidence or references, but based on my observations in Tombo, the number seems very high. However, I am not going to assess whether this is a correct estimate. Instead, I will take it as a discursive claim that can “frame and justify particular kinds of development interventions” (Cornwall and Brock 2005:1043). The focus on post-harvest losses is again shaped by the neoliberal ideology of the World Bank donors, where ensuring market efficiency, profit maximisation, and exploiting comparative advantages dominate (Cramer, Sender and Oqubay 2020, Surkhe, Villanger and Woodward 2005, Kleinman 2009, Dolan 2012). But

beyond ideologically shaped policies lies the complex entanglements of pragmatic practices and knowledge interfaces developed between development consultants and project workers, and people in the recipient communities (Mosse 2004, Long 2001). The following section outlines the policy-stated concern of post-harvest losses, before I use an episode from a stakeholder meeting to show how the consultant team I was part of interacted with the local group of fish processors. The episode illustrates how the women's stories as shared during the stakeholder meeting confirmed our team's theory that the current smoke ovens in use were associated with high running costs and several health problems, which again justified to our team the need for new ovens.

Post-harvest loss is defined quantitatively as the amount of caught (harvested) fish that, for various reasons, does not make it into a consumer's evening *plassas* sauce, including the scaled degradation of fish quality in terms of loss of nutrients, negative biochemical changes in the flesh, or monetary value (Ward and Signa 2014; WorldFish 2016, Kiaya 2014). In an FAO¹³⁸ workshop report from March 2020 in Accra, Ghana, post-harvest loss is listed as a key challenge across West Africa, hindering food security and sustainable livelihood generation (FAO 2021). Furthermore, the FAO's Small-Scale Fisheries Guidelines (SSF) states

All parties should avoid post-harvest losses and waste and seek ways to create value addition, building also on existing traditional and local cost-efficient technologies, local innovations and culturally appropriate technology transfers (FAO 2015:11).

Beyond being considered locally appropriate and the current main form of fish preservation in Sierra Leone and West Africa at large, prioritising improved smoke ovens, and thus reduction of post-harvest losses, was shaped by wider political considerations within the World Bank funding structure. Many fisheries regulatory policies promoted by development funders, especially defining access rights and reducing (or establishing) fish quotas based on fish biomass surveys, are considered politically sensitive¹³⁹, and require considerable political work, often involving economic incentives. Reducing post-harvest loss, on the other hand, rarely involves difficult political debates at national or international levels. Post-harvest losses are relegated to

¹³⁸ The FAO has, since the late 1960s, played a key role in artisanal, or small-scale fisheries, through development funding, piloting technology, and doing extensive data collection on fish stocks (FAO 1993; 2022). Since I never directly engaged with FAO during my fieldwork, I will not deal with them in-depth in this thesis. I tried to establish contact with both their local and international offices, but never received replies. In November 2019, they came on a brief and unplanned visit to Tombo, where I was told they were shown around by some local political players. Neither the fishermen's Union or active CMA administration members met with their team, and I was told about it later by a World Bank consultant.

¹³⁹ See thesis introduction, page 20-24.

technological failures, underdeveloped infrastructure, and simply lack of skills, as evident in the widespread focus on training and “improving knowledge in handling, processing and marketing” (FAO 2020:12). Since reducing post-harvest loss does not entail reducing access or rights to marine resources, it is considered a less politically sensitive form of intervention. Instead, the latent potential in arresting the natural process of biodegradation (rotting) may increase income (World Bank 2017b), and thus help to “unlock growth” of the ocean’s marine resources, to borrow from UNCTAD Secretary General Mukhisa Kituyi (UNCTAD 2017). In other words, development interventions focusing on post-harvest losses are a prime examples of what Li (2011, 2007), drawing on Ferguson (1994), analyse as rendering political and economic problems technical, which “limits and shapes what improvement [here: of economic return to the local fishing economy] becomes” (Li 2007: 8).

The pilot study that David, Lisa, and I, developed in collaboration with Mr. A and Maria as the local enumerators, which provided a baseline for development investment in improved technology, was as much founded on political concerns as on the scientific method and the data gathered from the study. In development circles, improved smoke ovens are positioned as potential agents of socio-economic change, and presented as locally appropriate technical solutions. For example, the ovens are gendered through labelling fish processing as “traditionally carried out by women” and as “the main economic activity of women”, as a public USAID report from Ghana states (Avega and Tibu 2017:2). This understanding, which is by no means wrong, was also prominent among the consultants and World Bank project managers in Sierra Leone. While women dominate fish smoking and marketing in Sierra Leone, the gendered nature of fish processing and thus the technologies involved, makes it a convenient project to “sell” to development funders. Women’s empowerment was used as a framing buzzword (Cornwall and Brock 2005) that justified investment in new smoking technology. For example, during a team meeting, a senior World Bank employee told the WARFP team how the World Bank had no interest in fisheries governance in Sierra Leone per se. “They want to see micro-entrepreneurship, jobs, income generation, and women empowerment. Really, women and jobs, those are big words at the Bank. Artisanal fisheries mean nothing to these people,” she said about the Washington-based project evaluators. Having smoke oven investments as a larger component was thus a convenient way of directly ‘empowering

women' who were processors, as well as, with some creative re-writing, making the women into microentrepreneurs, with an improved income and safer job¹⁴⁰.

Post-harvest losses operated as a discursive frame (Goffman 1974, Auteserre 2009, Long 2001), shaping the way our consultancy team interacted with the fish processors and the following "facts" we produced about fish processing in Tombo. Beyond providing a justification for the investment, the frame of post-harvest losses shaped the data collection process, and thus also the recommendations that followed, from our pilot study on fish processing in Tombo. In our study, we sought to establish how efficient the traditional ovens were by measuring the weight loss of the fish compared with the amount of firewood used to smoke the fish. This would provide an efficiency baseline for the improved ovens, showing the donors how much less firewood the new ovens used compared with the old. Furthermore, we noted the amount of time it took to process the fish, and the number of people involved in the process. We recorded fish temperatures throughout the process, as David was concerned that the fish would be cooked rather than smoked. Finally, we used a particle metre to record the amount of smoke in the air, related to health concerns for both processors and PAH levels in the fish flesh. All these indicators helped us to have overview as to what degree, and how efficiently, the smoke oven affected fish quality (and quantity, in case some fish were burnt or rotten), and what impact the smoke process had for the processors in terms of their health and finances.

Framing the development intervention in terms of loss and waste, our interaction with the women, both during the stakeholder meetings and in the data collection from smoke runs like the one outlined with Mami Zainab in the chapter prelude, was geared towards locating that loss, and finding ways to improve the process by reducing said loss. Thus, we asked questions about money to find out the extra costs involved in using traditional *banda* ovens, discussed health problems associated with the use of the *banda* ovens to understand the calculable health risks involved in the women's labour, and calculated the efficiency of the ovens using a ratio of the amount of wood used to dry the fish. Below is a vignette from the first stakeholder meeting we arranged to learn from the fish processors:

It was mid-June and the sandy ground of the Fishery Boat Yard was starting to see small, green dots of grass, feeding off the increasing nightly rains of the approaching rainy season. On the roofed platform outside the CMA offices, around 25 women were seated on neat

¹⁴⁰ See Dolan (2012), Ghezzi (2005), Roy (2010) and Dolan and Johnstone-Lewis (2011) on poverty and micro-entrepreneurship.

rows of colourful plastic chairs. David opened the meeting by explaining to the women that the World Bank had funded a fish smoking study, and was going to build some ovens following the study, based on the study findings of which ovens were “the best”. The women, used to participating in stakeholder meetings, waited quietly while David spoke, and answered some occasional direct questions. David was well-versed in conducting community meeting for fisheries projects, and spoke to the group with a soft voice, indicating curiosity and openness. Wanting to create an open atmosphere for information sharing and inclusion, he repeatedly encouraged the women to participate in the study, because the more we (the consultancy team) learned about their hard work, the better solutions we could provide, he said. Several times during his introductory speech, he used phrases like “every one of you are *businesswomen*”, and “we have come to learn from you”, as if he sought to convey his respect for their work and knowledge.

During the following focus group discussions, David’s tone may have had an impact, because many of the women indeed spoke openly, and more so than during other consultant visits I participated in. They elaborated about how they processed fish, and what types of wood and other things they needed for the smoking process, about their business economics, about social and market relations, and about their health problems using open fire smoke ovens. “These ovens we have given us smoke problems, my eyes always hurt,” Auntie Aisatu said responding a question about health problems. “Yes, Mami, the eyes, all the time I use eye drops,” Chairlady Aisha added. Many of the other women nodded. The fish processors were clear that it was the smoke and smoky working environments that contributed to their health problems. “If the World Bank brings new ovens, we will be happy,” Chairlady Aisha added, and the others clapped, as was common during stakeholder meetings to show agreeance. Mami Konima added that her own oven was the same oven her mother had built after the war, but it was too costly to run. “It uses too much wood. My mother did not benefit, so me, I want to see change,” she encouraged our team.

All in all, the focus group discussions seemed to confirm our combined team assumption that the traditional ovens used in Tombo could be improved or replaced by new smoke ovens. In addition, my months of ethnographic observation in Tombo thus far had also given me a similar impression, as I had observed some parts of the draining smoking process, collected price information about fish, wood, and kerosene, as well as felt my own body react to the continuous exposure to smoke, at times covering the whole of central Tombo. In April and early May, during the high season for fishing, I had a constant dry cough, and often woke up during the night with sore, runny eyes, as

smoke from the neighbouring *bandas* seeped into my room. Finally, while we were conscious about the “tyranny of participation” (Cooke and Kothari 2001), having considered the internal power dynamics within the stakeholder groups (Cornwall 2003), and diverging interests and abilities to participate (White 1996, Green 2000), we came to believe that the women who participated in the meeting did indeed share real concerns about their ovens. While there were some diverging opinions in the group, and we knew there was a selection bias (those interested in new ovens were more likely to participate), we nevertheless came to the conclusion that ovens that used less wood, and resulted in less exposure to harmful smoke, would be beneficial for the processors.

Although the women were considered to run fish processing businesses, as David’s statement from the stakeholder meeting evidenced, we forgot in our interaction with the women the key component in the women’s business: the sellable fish product. Speaking for myself, and looking back at my own fieldnotes on how the other development consultants approached the Tomborian fish processors, it becomes clear that this was not an intended omission, nor a lack of interest or curiosity to learn from the local practices. Our team sought to develop our pilot study based on the concerns the women put forward in the stakeholder meeting. Furthermore, in our team, we all shared a concern about former development interventions, both in the broader fishing sector and in Tombo specifically, which had not taken local conditions and concerns into account. In Tombo, the starkest example was a fish landing site constructed with a government loan from the African Development Bank in the early 2000s (AFDB 2010). It was built on the rocky shore in Newtown, away from the main fishing activities, and with a two meter high landing pier unsuitable for artisanal canoes. In Sierra Leone, another three sites were built, none of which ever became functional and available to the local fishing communities. The empty landing site, with a sun-bleached placard of an NGO who had later tried (and failed) to operate the site, were material reminders of the history of development’s “white elephants” (Appel 2012, Cramer, Sender and Oqubay 2020). But despite our joint team’s engagement with debates about ‘expert’ knowledge and power (Ferguson 1990, Foucault 1982, Spivak 1988), and critical consciousness around the complex relationship between development policy, practice, and politics (Mosse 2004, Duffield 2001, Li 2011), we ended up disregarding a vital aspect of the fish processing business the women run, namely the sellable *fine* fish product.





Figure 33: Four fish processors observe the new the Ahotor oven

In the next two sections, I return to the women processors, and to the fish. As argued earlier in this thesis, fish easily deteriorates in the warm climate of Sierra Leone. This makes it an ‘unstable’ thing associated with uncertainty. But, as I show throughout this thesis, uncertainty can also be productive (cf. Cooper and Pratten 2015). Given how many of the female fish processors in Tombo are relatively wealthy and successful according to the socio-cultural norms in Sierra Leone, their activities should not be likened to the young fishermen’s *hustling* (see chapter 3 and 4). While the labouring fishermen have little money and few material resources, the women operate with several hundred thousand Leones every day. In addition, many of them are married with children, own houses, land and *bandas*. At the same time, they are embedded within a political economy where volatility and instability seem to be the norm, and within socioeconomic networks where the majority of people have to navigate on the margins to make ends meet (cf. Vigh 2006, Guyer 2004). In the next two sections, I elaborate on how the women’s fish processing businesses are associated with economic uncertainties, which the women navigate by developing a form of *trɔs*-trust relation with their *banda* smoke oven.

The uncertain economics of making *fine fish*

Fine fish is fish that sells at the market, and that makes customers and *kostaments* come back to buy again. While there are many factors that affect the profitability of fish processing that go beyond the fish processor’s smoking skills, fish processors nevertheless highlight how their smoking process enables them to get a good sale on their fish. “People know me, they like my fish,” Mami Konima told me one *louma* day I met her at Pepeh wharf market. When I asked if she only had regular customers on a busy market day like today, she explained that, for big bulk sales, she mainly sold to *kostaments*. For any other “small-small” sales, she said “I know my fish.” In an uncertain market, where the fish prices are volatile, and the fish processors have to balance the need to make profit with the need to get rid of an easily deteriorating product, knowing one’s customers is important. But, just as important, is knowing one’s product, its quality and price in relation to that of the others and in relation to one’s own product on other days. Did Mami Konima have *fine fish* on sale that day, was it already beginning to rot, or was it over-smoked and burnt?

Fish processing in Tombo, like fishing, is commercially oriented, and often involves large sums of money. The margins for failure are narrow, as the women rarely have enough capital to have several batches of fresh fish fail in the smoking process. As elaborated in the former chapter on rotten fish, the quality of the fish, both fresh and processed, has economic and social consequences

in Tombo. Those who process do so based on knowledge that is developed through repeated engagements with the technology available (the ovens), with the materials available (the fish, firewood and kerosene), and with their *kostament* relations and customer base at the market. While many fish processors have learnt the practical steps involved in smoking from their parents or relatives from a young age, the embodied knowledge base develops over time through an iterative process involving new materials, and changing customer tastes and preferences. The process of smoking *fine fish* is continually evolving, both because individual processors have their preferred methods for smoking, and because market conditions are unpredictably changing. In this section, I trace the economic opportunities and challenges involved in fish smoking, focusing on the types of fish involved and the different smoking grades used in Tombo.

The processors in Tombo rarely kept track of all the expenditures along the way, but the majority did, over time, establish whether their processing business was running with surplus or not, and what economic potentials each type of fish were associated with. While every processor I worked with told me they would smoke “any type of fish”, there was in practice a general division between those who primarily processed small pelagic fish like herring, bonga and *swit wata* mixed fish, and those who processed so-called *good fish*, namely larger fish like shark, barracuda, groupers and skates. This was based on the *kostament* relations the processors had, both at the wharf (who they bought fish from) and at the market (who they sold their fish to), and the amount of money they had available to buy fish. *Good fish* was on average much more expensive, as a single large fish could go for several hundred thousand Leones at the wharf. Of the pelagic fish, bonga involved higher investment costs and had a more stable profit, whereas herring was associated with less profit and higher uncertainties, according to the women. The data collected in smoke runs for the World Bank project’s pilot study¹⁴¹, done by Mr. A, Marie, and I, indicated the same. Based on data from eleven smoke runs with bonga, and ten smoke runs with herring, the bonga processors had around double the investment cost in fish compared with the herring processors (Le 800,000 compared with Le 450,000 on average), but both smoked around the same weight in fish (on average 150kg). The bonga processors had a more stable, and higher, profit, with the average profit on the eleven runs

¹⁴¹ The chapter prelude details the initial smoke run trial; based on this, we developed a study guideline that we followed throughout the rest of the study. All these smoke runs were conducted with regular fish processors, who all either had customers at regional markets who they traded with wholesale, or who sold several days a week at Waterloo and Freetown fish markets. The study was focused only on the “small pelagics” of herring and bonga, disregarding *good fish*, to limit the number of variables in the small scale pilot study.

being Le 104,000. Among the herring processors, the profit was a mere 15,000 on average, with a high variance between a profit of Le 70,000 and a loss of Le 116,000.

Both herring and bonga were popular fish, and, as described in chapter 5, fish is never left to rot on the wharf in Tombo, so all landed fish was processed, sold fresh to nearby markets or the foreign companies, or consumed the same evening. Herring was popular both because it was cheap to buy, and because it was considered to taste good. “Herring is more *sweet* than bonga,” Auntie Aisatu once explained during a stakeholder meeting with development consultants from the Iceland-funded smoke oven project. Aisatu was a well-spoken processor who had participated in many development-funded trainings on fish processing, sanitation, and marketing. “Bonga is more profitable than herring, but herring is so *sweet*,” she explained, continuing: “Herring has no profit, but we will smoke it [nevertheless]!” This was indeed the case, and it illustrates how not all decisions made by fish processors fit into neoliberal economic logics concerning efficiency and waste. I consider herring processing a combination of the processors speculating on potential profits, as one *could* potentially process and sell herring with a net profit, and the importance placed on *taste*. Like World Bank consultant Peter Griffiths (2003: 103-104) also discovered during his evaluation of Sierra Leone’s food policy in the 1980s, food – in his case rice – has properties beyond its price (surprise!). Even the poorest segment of the country’s population value the quality and taste of their staple food products, like rice and fish, and the market demand for ‘sweet herring’ and upland grown rice with the right taste and texture, does not follow simple economic supply and demand logics based on price, or profit, alone.

While the processors have to make a final choice on which fish to smoke at the wharf, the type of smoking they give the fish can be changed based on how the materials come together in the smoke oven, and what the market demands the following day are. The type of smoke varies, to a degree, both the colour and the amount of dehydration, as the heat from the fire evaporates water from the fish. In Tombo, the processors operate with three main smoking grade categories, and most processors process one type of fish, again based on their *kostament* relations and trade network. The lightest form of preservation, done mostly for the smoky taste, is called *pull an was* (pull and wash). The name comes from a different place and profession, namely the diamond industry. As described in chapter 2, many of the people in Tombo migrated from the rural inlands during or following the civil war, especially from the diamond rich areas controlled by the RUF. “We call the process pull and wash, because like with the diamonds you just pull and wash from the river, it is not so much work and you have the money right there,” Pa Santigi explained one afternoon. The pull and wash process is associated with quick profits, but can easily go wrong. If the fish is given

too little smoke, it will do little to preserve the fish, and one risks finding rotten fish on the *banda* oven in the morning. As Mami Haja speculated in the former chapter, it was possible she had used too little wood to smoke the fish, resulting in under-smoked and rotten fish. On the other hand, if one gives *pull an was* fish too much smoke, it is simply a waste of resources, as the price of firewood goes up with no increase in the price of the fish to the market customer.

Pull an was the most recent innovation in smoking, having developed with increasing population pressure, and thus market demand for food, on the Western Peninsula following the civil war. Tombo is ideally situated for producing this relatively fresh type of smoked fish, because it does little to preserve the fish quality, and thus needs to reach the consumers within a short time span. In other areas of Sierra Leone, the more common type of smoke grade, which is also done in Tombo, is called *roba-dri* (rubber dry). The name comes from the texture of the surface of the fish, which becomes similar to plastic or rubber; hard but still flexible, “just like rubber”, Yeabu explained to me one of the first times we processed fish together. *Roba-dri* was also smoked over night, but rarely delivered to a market the next morning. Instead, it was processed like *pull an was*, but then left with a very small, smouldering fire underneath for a longer time. After the fire dies out and cools, anything between 4 to 16 hours, it is given a brief re-smoke, which adds more flavour and ensures it does not begin to rot. This final step can be done several times over one to three days, and by controlling the amount of heat and smoke, the processor can ensure that her *roba-dri* product is ready for market day (*louma*). The final type of smoke grade is called either *Liberia-dri* or *export*. This was the most dehydrated type of fish, intended for long term storage and long travels to its destination market, commonly Liberia¹⁴² (thus the name), but also other neighbouring countries, or far inland in Sierra Leone. None of my close interlocutors smoked *Liberia-dri* fish, and thus I focus this section on *pull an was* and *roba-dri*.

While *pull an was* required less firewood and time than *roba-dri*, the latter added flexibility for the processors. This flexibility was essential for the fish processors, as it allowed them to adjust to shifts in the market, and material changes of the fish. “There are too many sellers here,” Chairlady Sento said one midday when I met her at the central fish market in Tombo. It was *louma* market

¹⁴² There is some uncertainty about this, as I was never able to trace any of these bulks to their regional markets or final destinations. None of my closest interlocutors smoked *Liberia-dri*, so I mostly encountered it in conversations, and only once as a final product already packed into baskets waiting to be picked up by a truck. Given that Liberia also has a long coastline and processes their own fish, it is not unlikely that much of the *Liberia-dri* fish from Sierra Leone is actually destined for further inland and to landlocked countries. At the same time, Liberia’s artisanal sector is much less productive than in neighbouring Sierra Leone, partly because Liberia has a very narrow continental shelf, on which the pelagic school fish, which the artisanal boats catch, come to feed and spawn.

day, and the market was overflowing with smoked fish of all drying grades, from both Tombo's *bandas* and from fish processors coming from Bonthe and Shenge. "Everyone wants to sell in Tombo, but there is *no market*," Sento sighed, meaning there were few customers and little money going around. Just the day before, I had met her by Pepeh wharf, walking back to her *banda* with a *totman* carrying three fresh *shovelnose* fish¹⁴³. "I bought from three different boats, I will give them a fine dry (smoke) for tomorrow's *louma*," she had told me. I looked at the smoked pieces of *shovelnose* fish she had on display, and asked what she would do if she could not get a good price for them. "Well, I know what to do with my fish," Sento smiled and continued. "If there is no market, I will decide in maybe two, three hours, and bring the fish back to my *banda*. Then I will give it fire again." By returning the fish to the *banda* and give it another round of smoke, Chairlady Sento knew she could halt the biodegradation of the fish, and preserve it for longer. "My *kostament upline* will want the fish, but the price is not as good as for *louma*, so I try here first," she concluded before a potential customer walked up to inspect her fish.

Giving fish "fire again" was a pragmatic way the women adapted the smoking grade to the possibilities afforded by the market. At times, like with Chairlady Sento, it happened following an attempt to sell the fish at the bi-weekly *louma* market in Tombo or Waterloo. At other times, it was a decision based on information from *kostament* relations upline, or from news spreading from other fish processors in Tombo who had recently gone to the market. For example, one evening when I was processing fish with Yeabu, Mami Mariatu passed by and stopped for a brief talk. She told us she was coming from Waterloo, where she had sold her *pull an was* herring for Le 1500 per dozen fish. When she left, Yeabu immediately called for her son to buy another two piles of firewood. "Memuna, you hear? Fish don't get price in Waterloo, so I will add fire and make *roba-dri* for Tombo instead, it sells for Le 2000," she smiled, happy about the new information. Apart from these cases when information about the market and customers informed the processor's decision, the smoking grade was also adapted based on assessing the fish, and how it changed in the smoke oven depending on the type of wood used, the weather and climate, and the quality of the fish itself. In the next section, I go into detail on the iterative process between a fish processor, her oven, and the materials that come together to make *fine fish*, and how this process produces a form of trust between the processors and their ovens.

¹⁴³ English: Guitarfish, latin: *Rhinobatos productus*.

Fine fish, fluid ovens and *trɔs*-trust

Throughout my year in Tombo, I was rarely able to get women or market customers to talk at length about fish quality or their assessment criteria for assessing whether a fish was *fine* or not. A few times during stakeholder meetings with development consultants, the most well-articulated women, who regularly participated in meetings with foreigners and *technical man-dem*¹⁴⁴, would state that a golden brown colour was the primary indicator of a *fine fish*. In my everyday interactions with my other fish processor interlocutors, however, the most common response was simply ‘just come and look at the fish’. To me, there seemed to be an implicit understanding of what a *fine fish* was, dependent on a form of tacit knowledge (Müller 2000) developed and experienced through practical work with fish and smoke. Similarly, from the market customers’ point of view, the quality of the fish was based on criteria developed through their experience with buying and cooking fish, based simply on what good fish looked like, smelled like, and felt like when touched at the market. Taste, through sampling, was rarely available at the market to the ordinary consumer buying for the household¹⁴⁵, but it did provide a basis for future sales, as satisfied customers would come back.

In the following section, I trace not the words used to describe *fine fish*, but rather how *fine fish* was produced through a coming together of materials in the smoke ovens. I focus on two of the objects involved in the process, namely wood and smoke, and trace how women’s sensorial skills – interpreting the material signs of heat, scent, smoke, and weight – allow them to assess, throughout the whole process of smoking, what sort of smoked fish they are making. In the process of continually interpreting the material signs of the ovens, the women learn to know the smoked fish they are making, developing a form of trust through *trɔssing* valuable fish to the oven. While the processors never used the word *trɔs* about their ovens, I sometimes heard Mami Mariatu and Chairlady Sento, two active fish processors, say things like “*na misef a dae trɔs*” (it is me/myself I trust), during discussions about shared responsibilities for fish processing. That said, my analysis is not founded in language, but rather in the material practice of the fish processors and how they use their ovens to make *fine fish*. *Fine fish* is a product they know and trust is sellable at the market, in a way that reduces their uncertainty about fish quality, and subsequently allows them to counter

¹⁴⁴ Scientist in Krio, often used in speeches by Ministry officials in community meetings to describe foreign consultants working on technical aspects of the maritime sector, like fish stock assessments and food safety procedures.

¹⁴⁵ Customers with a bigger budget, however, would sometimes buy samples for tasting, if they were to buy a large quantity of fish outside their *kostament*-network (if they had any).

claims and tricks used by customers to get a better deal. Fish quality is associated with uncertainty, both because the climate and handling procedures on the boats affect it, and because the women know fishermen sometimes knowingly sell poor quality fish. As I have shown earlier in the thesis, mistrust and uncertainties about other people's honesty and intentions is all too common in Sierra Leone, and the fish processors often criticise the fishermen for trying to sell them poor quality fish. The same applies to the market customers, who are inclined to mistrust the quality of the processed fish, expecting some kind of trick from the women selling the smoked fish. I will return to this in the final section of this chapter, arguing that the processors navigate the margins of the market transaction through the trust they have developed in their product quality (the *fine fish*) through the smoking process.

Reading the signs of the oven, the processors adapt the oven itself to the material objects of the process, thus making use of the ovens' fluidity (De Laet and Mol 2000) to process *fine fish*. In the pilot study for the WARFP project, based on the feedback from the stakeholders, we considered the exposure to harmful smoke and an inefficient use of firewood as the key problems with the *banda* smoke ovens. For the processors, however, smoke and firewood were two of the key components through which they assessed how the smoking process was going. I begin with the latter in the *banda* smoke ovens, before moving on to the reactions to smoke in the test runs with the two different development funded ovens, the Ahotor from the WARFP project, and the Mátis from the Icelandic funded project. While some may argue this makes for a problematic comparison, I do not seek to compare the two ovens, but instead show how the processors' reactions to the different types of smoke the ovens emitted, geared my attention as an ethnographer towards the importance of the women's knowledge in reading the material smoke signs.

Firewood

While fresh fish is the highest cost among the smoke process inputs, the price of firewood made up around 7% of the total cost, the average cost for the 21 smoke runs monitored being 47,000 Leones per smoke run. The price of a dozen sticks of mixed wood fluctuated depending on the amount available at the wood market, but saw a stable rise from around Le6500/dozen in the spring to Le8000/dozen towards the end of 2019, largely related to the rising price of petrol, and thus transportation of the wood. Aside from the price, the processors considered the material quality of the wood an important indicator as to how profitable the smoke run would be, and how the fish would turn out. Although most of the wood sold at the Tombo wood market was a mixture from different tree species, most processors I spoke with agreed that the best wood was the harder, denser type. This required a bit more kerosene to ignite because it was so dense, but once lit, this

heavy wood was considered to give a nice, stable flame that was easy to control and burnt for a long time. Some of the regular, large-scale processors, like Mami Mariatu, stored wood in their *banda*, bought at the bi-weekly *louma* market or from travelling wood trucks. “We will not buy wood if it’s only *plum tik*, it burns too fast. But mixed [batches including *plum tik*] we accept,” Mariatu’s husband explained one evening when Mr. A and I were joining Mariatu in the smoke process. Inside their *banda*, which doubled as the family home, they had stacked an impressive wall with firewood of different types, and as Mami Mariatu began to wash the fish, her eldest son picked out sticks of wood from the tall pile. Mariatu’s fish processing business had a high turnover, and with the security of always having family in or near the *banda* (the best deterrent against thieves), Mariatu considered bulk-buying wood as a way to save money. Furthermore, and just as important, was how having a storage allowed her to choose the types of wood needed. “If you go to the wood market, one day you will find only *black tumbula*¹⁴⁶. Every day, for maybe two weeks, *black tumbula*,” she said when I asked why she preferred having so much wood in her *banda*. “Here [in the *banda*], I get what I need.” *Plum tik* and *black tumbula* were two of the least desirable types of wood, because they burnt too fast. “They have no weight,” as Mariatu’s husband put it, making the connection between what in the natural sciences is called the density of the wood and its calorific value (Cline-Cole 1987, Kwarteng 2016).

Similar to my interlocutors in Tombo, geographer Cline-Cole (1984; 1987; 1998, Cline-Cole, Main and Nichol 1990) has analysed how people in the greater Freetown region choose the appropriate type of firewood based on its known qualities and properties combined with the activity it will be used for. Apart from the measurable properties like weight, density, and calorific value¹⁴⁷, Cline-Cole details how fuel wood users considered the amount and type of smoke the wood emitted, the intensity of the heat and the time interval and stability of the combustion of the wood, and finally how the seasonal weather changes affected the quality of different types of wood. All these factors were valued differently depending on the type of end use, which in Cline-Cole’s study included roasting/smoking, general cooking, and baking. For example, a type of firewood that emits a lot of smoke works well for smoking and roasting, but may damage baked goods.

¹⁴⁶ Lat. *Dialium guineense*, Eng. Velvet Tamarind. Lebbie (2001) notes how this is commonly used in boat building. Cline-Cole (1987) reports that it is easy for the wood cutters to split and cut, and Richards (1986) reports that his farmer interlocutors prefer it in fallow regrowth, because it “burns especially fiercely” (1986:48, also in Cline-Cole 1987:477).

¹⁴⁷ Total energy released as heat per unit mass or volume during combustion, measured with a bomb calorimeter.

In Tombo, as exemplified by Mami Mariatu's choice of wood, the ones with access to, and knowledge of, the quality of different types of wood used these differences as elements to control the smoke process. That said, not every fish processor had the opportunity to buy large quantities of wood to store. Others still had less knowledge of different wood types, and simply labelled all types of wood as *banda-tik* (banda stick), which was the common name at the wood market for mixed bundles of wood used for fish smoking. In these cases, a successful smoking operation was dependent on the processors ability to read the signs of smoke and heat during the smoking process. This was the case with Yeabu. Although she smoked fish on a regular basis, her *banda* was too small to store large quantities of wood, and she did not have the capital to buy it, so she bought wood every night from the wood market. She never spoke about wood types or wood quality, but on nights when the wood was less heavy, she spent longer inside the *banda*, including during the initial phase with heavy smoke. One time when I joined her for fish processing she commented how the wood she had bought had no "strength", indicating weight and burn time, and that she had to be 'very careful' not to burn the fish that night.

Most wood sold in Tombo is relatively freshly cut, and thus contains a lot of moisture. This makes the wood 'fizzle', as moisture inside the wood seeks to escape. This moisture again produces smoke, which seeps into the fish body, darkens the colour of the fish skin and gives it the desired smoky taste. Auntie Aisatu, who had participated in many development-funded training sessions and was fairly good at articulating her concerns and considerations, was the only one I was able to speak to directly about the process of watching the wood, fire, smoke and fish. "Our fish, especially the bonga, is very oily!" she explained with enthusiasm one afternoon I met her outside Chairlady Aisha's shop. She continued by talking of how the oil from the fish drips down onto the fire as the fish heats up, and if the wood was too dry, it would simply become too hot. "Oil burns too good," she said, and Aisha added an anecdote about fires from the ovens sometimes spreading to the fish, or even the *banda* itself, if one did not watch them closely. With wet wood, Auntie Aisatu continued to explain, the oil would instead combine with the wetness to create a "fine smoke".

Smoke

Smoke is the other key component in the process of smoking fish, but smoke is not just smoke. It has different smells, densities and heat, and it varies over time. As described in the chapter prelude, once the fish is laid on the mesh and the wood stacked in piles, the processor, or one of her helpers, light the fire underneath the wire mesh with fish. They use kerosene to light the wood, which is often wet, and aim for a high, strong flame. At this point, the fish is so wet, and contains so much moisture, that burns are unlikely, and the processors focus on getting the fire going. Since the very

initial part of the process is very smoky, many processors exit the *banda* and wait outside while the wood catches on fire. Dense, thick smoke is a good sign, but if it lasts too long, a processor will have to spend extra time inside the *banda* to find out why the wood is not burning properly. After about half an hour, the smoke ordinarily gradually disperses, as the kerosene is fully combusted and most of the wood has caught on fire. This is when the processors spend more time inside the *banda*, looking at the height and colour of the fire, and the amount of smoke, which indicates how much heat is on the fish.

The *banda* smoke ovens are relatively open, with the fire underneath a wire mesh. This means the processor is continually exposed to the smoke, but it also allows her to read the smoke and interpret the process along the way. The two new ovens introduced to Tombo in 2019, the Ahotor oven built by us in the WARFP-team, and the Mátis oven built with funds from Iceland, both had separate fire chambers, and trays stacked on top of each other or in a cabinet. Both of the ovens were designed to increase processor control of the fire/heat versus the smoke by separating the fish from the open fire. By enclosing the fish and smoke in a cabinet or under a hood, they would also reduce the amount of smoke that seeped out into the locale and into human bodies, instead of fish bodies.

During training sessions involving the Mátis oven, the distance from the smoke was a source of both appreciation and worry. While the women were happy they could sit in the *banda* without being affected by the smoke, they looked for signs that could lead them to interpret how the fish was faring inside the oven. Any hint of a burnt smell caused worry. Several times, the women asked the consultants to open the cabinet, but were stopped. “We don’t open the doors until the thermometers show the correct temperature, and the two hours have passed,” one of the consultants tried to calm the women, explaining (again) the processing procedure, and that the fish could not burn in these ovens. “There is no fire on the fish, it cannot burn,” he continued. This, however, did not calm the women present, who knew the smell of burnt fish oil. In the *banda* smoke oven, the smell of burnt fish may not be a problem per se, as it can just indicate fish oil dripping down onto the fire, and a processor will simply look at the fish, and the smoke in the room, to see whether the fire is too hot and is burning the fish. The Mátis oven, on the other hand, was a black box. It hid the fish, and produced no visible smoke other than the occasional burnt smell, which, as it turned out, was from fish oil dripping down onto the metal plate that separated the hot fire chamber from the smoky compartment with the fish trays. Thus, while the final fish product was not burnt, the smoking process was associated with uncertainty rather than trust, which I will argue in the final section of this chapter is necessary to navigate the market sale.

Similar to the Mátis oven, the Ahotor oven also hid the fish and smoke from the processors. The data I have here is preliminary because we never did trainings with several processors on the Ahotor, and only had visitors come by throughout the trial processes. Instead, I will describe what happened after we had processed the fish. To help sell processed fish at the market, we engaged two of Mr. A's aunts, who have their own processing businesses and often sell fish in Tombo and Waterloo. It turned out to be a pitiful affair, as no one wanted to buy the fish. By looking at our fish, and comparing with the other piles of smoked bonga available at the market, the differences were subtle, but still easily readable by the trained eyes of the market customers. In the consultancy team, we unfortunately did not do a market survey or interview key stakeholders on the fish product post-processing (which, given the global multi-billion dollar industry marketing is internationally, one may find surprising). This section is thus based on my own brief fieldnotes from the day, and comparing these with other days I interacted with people at the market selling their own fish.

"Some say it is not really smoked," Mr. A was the first to bring us bad news from the market, while David, Maria, and I were still back in the *banda* cleaning up after the first Ahotor trial run. We discussed a bit back and forth, with David saying that people here "like burnt fish", but that the fish we processed was much healthier. "The Ahotor makes a much better smoked product," he continued. While this may be the case, it was still a product our two saleswomen struggled to sell, so I followed Mr. A over to the market to talk with them. Our fish was displayed on a tarp, in piles of six, as was common. The two fish on top looked fairly similar to the fish displayed by other processors on the neighbouring tarps, but the other four fish stacked underneath looked different. Some had spots and stripes, which came from how they had been laid out on the mesh trays. Others had no burnt areas, and less colour, which could indeed indicate that they had not been properly smoked. It was a common market trick to display the best fish on top, or on the visible outer edges of a basket, but in our case, there were just too many different looking fish. In addition, as it turns out, Mr. A's aunts were uncertain as to how to sell the new product. "We don't know this fish," one of them told me. At the time, I did not think much of it, and related it instead to what David had said earlier about people liking burnt fish. Now, it seems to me that the problem was rather that the two women we had engaged to sell the fish did not know how it had been processed, and thus did not have any good arguments to use as to why the fish looked the way it did. Compare this with what Mami Konima told me about her fish when I met her at the *louma* market. "I know my fish," she had stated, relating this knowledge to how she was going to make a good sale. This knowledge, developed through a material engagement with the fish, smoke oven, smoke, and firewood, was the

basis for the trust she had in the quality of her fish, a quality she knew she could guarantee to customers that she wanted to come back to her and buy fish in the future.

Socio-material navigation with untrustworthy fish

Trik na smok, i no de ayd.

A trick is [like] smoke, it will not hide. Krio proverb

“My *kostaments* they know me, they know my fish as the best quality. *Ohlman* (everyone) at the market likes my fish,” Mami Mariatu said, when I asked how she sold all her fish. She had just lit the fire underneath her oven, and we were now seated right outside her *banda*, waiting for the smoke to calm down. This was in June, and was my very first time smoking with Mariatu. Since she had already told me about her *kostaments* earlier, I was more curious about the last part of her statement: everyone at the market knows.

How do they know? I asked.

They know me, and the fish I make, she repeated.

Given how Tombo had recently been visited by the Mátis team, who at this point was getting ready to construct their new smoke ovens, I asked Mami Mariatu if she had problems with her smoke oven, and if she would like to see any changes to it. “The price of firewood is too much,” she said after a minute of consideration, but added again “people know the *fine fish* I make”. I was still curious, and asked again if she would like to try the new ovens that were under construction. “I am waiting to see the fish,” she answered. “If the fish is *fine*, no problem, people will like it.”

Fine fish is a product the fish processors know and trust is sellable at the market, in a way that reduces their uncertainty about fish quality, and subsequently allows them to counter claims and tricks used by customers to get a better deal. After both the Ahotor oven and the Mátis ovens were launched in Tombo by the end of November 2019, I asked Mami Mariatu again what she thought of the ovens. She had not participated in the Mátis trainings, but had come to see the Ahotor ovens a few times. “For me, I don’t think that small fire will give the fish enough heat,” she simply said. When I asked her to elaborate, she told me how the fish sometimes require a lot of smoke and heat. “Sometimes, a small fire is ok,” she continued, and added “you have to watch that smoke and fish.” When I had observed Mami Mariatu in her *banda*, she was continually attending the fish and smoke during the processing, adjusting things like the type and amount of firewood, shifting wood and coals around inside the oven, and adding water when there was too much heat or not enough

smoke. The new ovens operated like black boxes. Although they improved the working environment, given how they enclosed the smoke inside the cabinet or under a hood, they did not allow the processors to read the signs of the smoke and the heat during the process of fish smoking. In other words, while a new oven still required the same amount of *trɔs*ed fish, they did not engender trust in the processing while the fish was inside.

The processors in Tombo often spend several hundred thousand Leones on fresh fish at the wharf, which they hope to transform into a more valuable smoked product that will help them make a profit both today, and in the future. The latter is essential here, because the processors not only build *trɔs*-trust with their smoke ovens, but also with their customers and *kostaments* through their products. Given the uncertainty associated with fish quality, the fish processors have their processing skills at hand to shape the final *fine fish* that they sell onwards. If they have done their part correctly, they trust their final smoked product is good, and sell it onwards with a good conscience. That is not to say there are no tricks in the fish trade. There are many possibilities for ‘tricking’ one’s customers, and *kostaments*, into thinking they’re buying better quality fish than what is in the basket, especially when the fish is sold in bulk. When the fish is sold in bulk, it is stacked in neat rings, with the best fish visible on the outside, and the poorer quality fish in the middle. This is well-known by both seller and buyer, and even long-term *kostament* relations are known to trick each other out of profit. Both used the common knowledge of the material instability of smoked fish to try to gain the upper hand in the monetized trade. Yeabu, for example, had a *kostament* relation in Makeni, who she at times sent *roba-dri lati*¹⁴⁸, a small fish in the herring family. One time she got off the phone after a longer phone conversation with her *kostament*, and sighed “ai, that woman will not pay me, she says the fish is broken!” She continued to explain how her *kostament* had insisted that she put the basket in a back of a *poda-poda* bus because the transport was cheaper, but the rough handling had caused many of the fish to break into smaller pieces, which significantly reduces the price. “But she is saying the fish was already poor quality, so she will not pay.” Yeabu was frustrated, and added “I won’t *trɔs* that woman again, it’s a lie!”

In an untrustworthy environment, knowing what one sells may be the only way to assess one’s customers and *kostaments*. If a *kostament* relation claims the fish is poor quality, as in Yeabu’s case, one may not want to risk a good relation by calling them a liar, as there is indeed a lot of poor quality fish going around. But a skilled fish processor knows that tricks are like smoke – they will not hide. A fish processor who tries to fool her *kostaments* with poor quality fish will be exposed,

¹⁴⁸ Lat. *Ilisha Africana*, Eng. West African ilisha.

and similarly, a customer who tries to argue for a better price (or free fish) by claiming the quality of the fish has been bad, may in the end lose their supply of fish. The key to exposing an untrustworthy *kostament* lies in the smoke: a processor who knows that she read the signs of the smoke and fire during the fish processing and adjusted them accordingly trusts that she has reduced the uncertainty inherent in the fish quality. She trusts her product, and can thus use it to assess the trustworthiness of her customer. The smoked fish product thus enables the fish processors in their socio-material navigation. Given the widespread mistrust of others, volatile fish prices, and an unstable climate and environment that affects the fish quality from the moment the fish is hauled out of the sea, the women are “moving in an environment that is wavering and unsettled” (Vigh 2009:420). In addition, they navigate concerns that are both immediate – making a profit on the fish sale – but also in an imagined future, as the future prospects of maintaining *kostament* relations and building stable trading partners also relate to how they navigate the instabilities of today.

What happens, then, when the new “superior” smoke ovens funded by development projects hide the smoke? Accepting new technology is not always a gain. Apart from the investment cost in land and building materials, the use of the ovens requires an initial entrustment – or *trɔs* – of fish to the oven. For the individual processors, however, techno-scientific calculations on smoke oven efficiency were not enough to establish the necessary trust in the oven to *trɔs* it valuable fresh fish. When I left Tombo in December 2019¹⁴⁹, both of the development funded smoke ovens were still waiting to be taken into use. While the Mátis ovens still garnered a certain level of enthusiasm among those selected to participate, it was left unused because the stakeholders were uncertain about the quality of the ovens. They wanted metal trays instead of wooden framed trays, and metal doors, as they worried the wooden doors would not be heat resistant. The Ahotor oven that we built with WARFP funding was never put into use.

Concluding remarks

While the developmental focus on post-harvest loss provides an(other) example of development as an anti-politics machine (Ferguson 1990), where the technical solution of an “improved” ovens shifts focus away from how resource management and use are inherently political, this chapter has

¹⁴⁹ During the PhD thesis write up, I have been told that both the Mátis project and the WARFP project were put on hold because of Covid-19. In 2022, I was told by people in Tombo that the Ahotor oven had never been put into use, whereas a World Bank consultant shared that fish processors who ordinarily worked with an industrial fish company in Kissy were now using the Mátis oven to smoke fish for export to the US.

added to the anthropology of development by way of following the material relations. I have shown that the fish processors in Tombo reduce risk and uncertainties in their lives by tracing how the fish processors in Tombo come to *trɔs*-trust their smoke ovens, and make use of this trust as they navigate unstable materials and environments, uncertain business relations and social relations at the market. Whereas the new smoke ovens were considered by techno-scientific standards to be 'better', they nonetheless increased the uncertainties associated with fish processing, as the women could no longer trust the ovens or the final fish product. In the consultant team, we used thermometers to assess whether the fish was smoked or cooked, we used a smoke particle meter to measure how much smoke was in the air, and we required a laboratory analysis to ascertain the water content in the smoked fish, to calculate how efficient the ovens were in preserving fish. This is the established knowledge in food sciences but, just like the practical knowledge of the fish processors, it is situated in social processes, in institutions, and in relational practices (Crane 2014, Latour and Woolgar 1986, de la Cadena and Lien 2015). The type of fish considered *fine* in the food sciences was thus not the same type of fish considered *fine* to the Tombo fish processors and their customers.

In this chapter, I have shown how the smoke ovens are sites of transformation in both a practical and a very literal sense, but how they transform, and thus how they *are* (Law and Lien 2012), depends on how people relate to the ovens. In the development funded smoke oven projects, we did not consider how the processors related to their ovens, and instead focused only on how new smoke ovens could improve the economic profit from fish processing by reducing the post-harvest losses and health impacts from the smoke. This is not to deny that improving the oven's efficiency, and reducing harmful exposure to smoke, could improve the individual business economy. In addition, on a national level, even if the World Bank's (2016) estimate of up to 50 percent post-harvest losses in Sierra Leone may be exaggerated, it is not unlikely that Sierra Leone could increase its smoked fish supply significantly, if the fish processing supply chain was more efficient. Given how fish, mainly smoked fish, makes up 80 percent of animal protein intake at a national level (GoSL 2019, Seto et al. 2017), improving the quality of the fish could be essential to the country's food security and nutritional balance. However, by framing the question of fish processing in terms of post-harvest losses, we overlooked how the fish processors need to know and relate to their *banda* smoke ovens to process *fine fish*. The processors come to *trɔs*-trust their ovens by fine-tuning the smoke processing. By making use of the fluid capacities of the smoke ovens, they make sellable, *fine fish* adapted to both the *pull an was* fish demand on nearby markets, and the demands for more preserved *roba-dri* fish in inland Sierra Leone. As such, the fluid qualities of the *banda*

ovens, combined with the socio-material navigation of the processors, allow the women to reduce their own economic risk and send their *fine fish* to people all across Sierra Leone.



Figure 34: Instant repair

Conclusion



Figure 35: Sarakassaboat fishing

It was turning into a hot, sunny day in early December 2019, as we were scouting for bonga outside Mami River, close to York. There had been many boats following us out of Tombo, all hoping to get a share of the good catches that were reported at nearby John Obey the day before. On board *Family First*, Captain Joseph had decided to test the waters by the river first. “This time, bonga can come inside [the rivers] to breed,” he had explained. But now, two hours had passed without any sign of bonga. As Sorie turned the boat around, Joseph told us we should slowly make our way back towards Banana Island, where we had seen some other boats stop. As we passed two small *yele*-boats, Mahama shouted a “good morning”, and asked if they had seen any bonga. One of the young men on board the motorised boat told us of good catches the day before, confirming what we had heard in Tombo, but nothing today. The other boat had an old man and a young boy on board, with the man paddling slowly and the boy inspecting their net. When we had passed them, Sorie turned to me and said: “Memuna, you see the poverty in our country? An old Pa like that, they have no *machine* [engine], only paddles.” “When I’m old like that Pa,” Captain Joseph added. “I pray I won’t go to sea again.” “Why not, you don’t like to work at sea?” I asked with a smile, conscious of the increasing heat, and hiding fish.

If I go my whole life and strain [suffer, work hard] at sea, I hope God will grant me something for siddom [sitting down, retirement]. I have learned book [gone to school], but I saw how my father, who lost his job at the Ministry of Works when the NPRC¹⁵⁰ came, grew old. There was no job, no salary, no pension [for him], so I decided to go to sea instead. [...] I don’t have my own boat, but I am Captain, and if God give me the chance to get a boat, I will be happy.

Joseph was the main provider for his wife and three children, and regularly helped his other seven siblings and mother with money earned from the sea. In many ways, his story shows that artisanal fishing is a livelihood associated with hard work and little prestige, which many do because of the “poverty in our country”, as Sorie put it. Fishing activities in Sierra Leone could be relegated to a last resort activity, done for survival in an unstable economy where there are few other

¹⁵⁰ National Provisional Ruling Council, a military government established following the coup by Captain Valentine Strasser in 1992 (Peters 2011b).

opportunities. Such a perspective aligns with modernisation paradigms that insist people will transition towards “proper jobs” (Ferguson and Li 2018), which ultimately relegate people’s own choices, knowledges, and resources to a form of “making do”.

This thesis has illustrated how ‘making do’ is entangled with livelihood strategies, involving long-term investments, the build-up of embodied skills and knowledges, and the shaping of social and material environments both locally and globally. While many people in Tombo fish to survive, this thesis has focused on the *how* of fishing livelihoods: how people find and capture fish, how they shape and negotiate social relations through boat building, fish trade, and fish smoke, and how participation in coastal livelihoods shapes wider experiences of trust and support, as well as marginalisation and exploitation. With these guiding questions, I have approached coastal fishing in Sierra Leone as what Livingston calls an *animated ecology*, tracing the “living manifestation of myriad, ongoing historical relationships” (2019a:126), and the various ways that people develop, maintain, or contest the interconnectedness of different forms of lives. My approach has built on Diggins’ (2018) moral economy of the Tissana coast, following her nuanced tracing of materials of the fishing economy and people’s moral anxieties following increasing material scarcity. Similar to Diggins’ interlocutors, who employ strategies of dependency and moral obligations, while also critiquing these, people in Tombo have moral qualms about the demands their family and *kostament* relations place on them. At the same time, my thesis shows how people also use the uncertainties and precarities of their environment, and of the fish bodies they trade, to establish new forms of social engagement, even solidarity and trust. As such, peoples’ search for economic independence and individual freedom, is coupled with their investment in social relations, dependencies, and knowledge practices that aim to build trust and cohesion.

Many Sierra Leoneans, especially the youth, feel disenfranchised by the current socio-political regime, by the exploitation and lack of opportunities in the rural economy, and by corrupt politicians who pocket “all the money we get from the donors”, to paraphrase Drizilik’s Salone version of “This is America” (George 2018). Many try to leave, as Lucht (2012) has also detailed for Ghanaian fishing communities. “He went to Senegal, again, to find a boat [to the Canary Islands],” Jameela shrugged, one afternoon when I went to see her at the corner stall and asked about one of the taxi drivers who had been gone for a couple of weeks. Stories like these were many, but few ended in success. At the same time, the majority of people stay. They build meaningful lives, invest in social relations, and shape their material and social environment. By tracing the working relations on board the fishing boats, and how fishermen compete in *handfailure*, I have shown how

the fishing boats are social spaces that engender new, more flexible forms of trust that are not dependent on older patronage relations. Following the fish caught at sea back onto land, I have traced the material quality of fish in its various forms, showing how materials also qualify social relations, as people come to *be* 'slippery' or 'rotten' when trading fish. By exploring people's navigational practices in a material environment, animated by other-than-human beings with agential capacities (Watts 2013, Jackson 1989, see also Fairhead and Leach 1996), I have attended to the embodied skills and knowledge developed by the fishermen and fisherwomen through their work and livelihoods, which people make use of to build meaningful relations and act collectively.

Navigating unstable materials and exhausted ecologies

Fish and other oceanic beings across the globe are under heavy fishing pressure and are affected by human activities that expand the water bodies where they live. The herring, *gwangwa* and other fish of the Yawri Bay are likely being fished past a sustainable limit by both industrial trawlers and artisanal canoes, and are affected by noise pollution from engines, fishing nets scraping the bottom of the Bay, and the reduction of their breeding habitats as mangrove forests are cut down. The livelihoods of up to half a million Sierra Leoneans (MFMR 2021), and the food security of the country, are dependent upon the success of fishermen like Captain M, Sorie, and Ishmael in Tombo, and fisherwomen like Yeabu and Mami Mariatu who preserve the fish. But they are also dependent on there being enough fish.

People in Tombo know this, and make use of their ecological knowledge to assess how the fish of Yawri Bay are faring. A fishing net full of spiky sea urchins materialises the connection to past fishing efforts, and the fishermen question how much longer they will continue to catch fish. As such, fishing, as well as fish processing, is associated with high levels of uncertainty, both in the immediate time span, as the fishermen do not know if they will find and catch fish on a particular day, and in the longer horizon of possibilities, given the declining fish stocks. Uncertainty, as Cooper and Pratten write, "is fundamentally a product of social contingencies" (2015:2); however, by working through and with contingencies, people develop knowledge about the existential conditions of life; of their "lifeworlds" (Jackson 2013). In this thesis, I have traced the "particular contingency" (Cooper and Pratten 2015:5) associated with declining fish stocks, to understand how fishermen and fisherwomen develop new sensibilities towards their material and social environment.





Figure 36: Early evening fish market at Small Wharf

Throughout the thesis, I have analysed how people come to know each other, and the conditions of their lifeworlds, through materials and material qualities. Expanding upon the anthropological literature on the agency of marginalised youth in West Africa (Vigh 2006; 2009, Simone 2019, Utas 2012, Peters 2011b, Abdullah 2005), I employ the concept of socio-material navigation to the practices that people employ to make a living through uncertainty. Navigation, I argue, highlights how existential knowledge is not a question of appropriating a given quantity of abstract knowledge (Müller 2000), but is amassed through bodily practices in time and place. If social navigation, following Vigh, couples the “*interactivity* of practice and the *intermorphology* of motion” (2009:420), socio-material navigation thus expands attention to the material objects and qualities that people relate *through*, make use of, and are affected by. This is exemplified by chapter 5’s analysis of gendered relations of trust and debt through the trade of slippery, or rotten, fish, and the chapter 6 analysis of how fish processors build trust in their *kostaments* through knowledge of their own smoking process of smoked fish product.

The current livelihood practices in Tombo are historically situated in networks of debt and dependency, in gendered practices, and in extractive economies that expand the globe. Contextualising activities in Tombo in terms of the region’s maritime history (Hendrix 1983; 1984, Krabacher 1990; 1992, MacCormack 1978, Diggins 2018), and Sierra Leone’s history of political volatility and civil war (Peters 2011b, Murphy 2003, Abdullah 2002; 2020, Utas and Christensen 2016), I have shown how the gendered *kostament* relations in particular have changed as the profitability of fishing and fish processing has decreased. In Tombo, fisherwomen and fish processors have historically and contemporarily been considered the wealthier counterpart in the fish trade, as opposed to in Tissana, where Diggins (2018) quotes her male interlocutors taking pity on the poor fisherwomen by providing them with fish “gifts”. In Tombo, the infrastructure and geographical location affords the people with different opportunities – and different challenges – than in the more isolated Tissana, which again affect the socio-economic relations between men and women. While women still have the upper hand in relations of debt and economic dependency, and continue to sell smoked fish for a profit (albeit small and highly volatile) to the markets of the urbanised Western Peninsula, they are also affected by the influx of new actors into the local fishing economy. Female *kostaments* are now struggling to provide the loans that have historically facilitated the *half-half* method of boat building (see chapter 2), as fishermen are seeking new patrons outside the community, as is especially evident with the Korean fish trading companies (see chapter 4), which affects the circulation of money through the local fishing economy. At the same time, the presence of foreign companies has provided new opportunities, with an explosion in

the demand for *phonemen* who listen for talking fish. “Ten, fifteen years ago, we barely knew about *phonemen*,” Captain M told me, “but now, you will not find a Ghanaboat without!”

Understanding debts and trust in a coastal economy

As Diggins’ (2018) points out, anthropological understandings of social personhood and relationality in the Upper Guinea Coast have been associated with the rural inlands (Ferme 2001, Shaw 2002, Murphy 2010, Bledsoe 1980, Richards 1996), and her research has provided a novel account of coastal social life. Similarly, my research expands upon Diggins’ work to understand a different coastal experience, namely the more urban, globally connected Guinea coast, where decades of development interventions, daily encounters with industrial trawlers, and trade with foreign fish companies, as well as the political legacy of colonialism and direct colonial rule, continue to shape local socio-economic relations. In both coastal and inland West Africa, prosperity and status goes beyond material wealth to expand the social and political networks one can draw upon (Guyer and Eno Belinga 1995, Bolten 2014, Bledsoe 1990). Material gifts and debts have a particular position, as people nurture relations through material commitments (Bolten 2012). Debts, often called *trɔs* in Krio¹⁵¹, are generative in a fishing economy that is short on liquid capital, and people acknowledge the material value of debt as they build boats and *bandas*, feed their families, and pay medical bills through loans. Beyond the economic, debt establishes someone as a social person invested in relations, as it materially manifests those relations and one’s trustworthiness through *trɔssed* money, planks, or other objects, thus acting as a form of social capital (Bourdieu 1986, Bürge 2018).

Tracing material *trɔs* relations, I have illustrated how the material form of debts matter. In Tombo, fish, which easily deteriorates, was not considered a good form of *trɔs* as it publicly announced how both the borrower and lender lived equally precarious lives. Good *kostament* partners, on the other hand, would *trɔs* money or building materials in ways that materialised a longer commitment to each other’s business, not necessarily repaying debts immediately. This provides a different reading of temporality and debt than the politics of delayed reciprocities, as analysed in a setting of electoral violence by Utas and Christensen (2016). It also expands upon notions of debt, dependency, and subjectivity. Challenging liberal notions of individual freedom, James Ferguson

¹⁵¹ For example: *I don trɔs mi moni foh go buy bod* (s/he *trɔssed*/lent me money to buy planks)

(2013, 2015) has argued that in Southern Africa, people, especially those who are poor, continue to 'declare their dependence' as a means to assert their socio-political belonging. By taking a *subject* identity, they avoid *abjection*, Ferguson argues (2013:231), building an analysis on how these declarations have become more common as people are in *surplus*, instead of in demand as in pre-colonial rural agricultural economies. The notion of surplus population groups resonates with certain narratives from the Sierra Leonean civil war, where a high level of youth unemployment was considered the root cause of political violence, which has in turn justified development investment in "livelihood opportunities" to stabilise the "restless youth". Many of these development programmes and interventions have ignored the social relations, as well as people's need for social belonging. That said, there is a fine line between 'people as wealth' and people as property (cf. Rodney 1970, Fanon 1961). Given the violent history of Sierra Leone, Diggins (2018) and Ferme (2001) show how people also have moral qualms and anxieties about both revealing their 'dependence', and that interpersonal relations are closely associated with exploitation and abuse.

In Tombo, people had similar moral anxieties about the moral obligations placed upon them by extended family relations and business "partners". At the same time, phrases like "Salone man is wicked!" were used both to denounce someone's claims upon their own resources, and to criticise selfish family members who refused to share their (most likely) meagre resources. Instead of following the moral argument, I have traced material practices in this thesis, showing how *trɔs*-trust, beyond establishing subject relations, also shapes embodied knowledge of relations, and thus of *others*. In Tombo's fishing economy, people use *trɔssed* materials as an incremental way to learn about each other, to study others, and to find out whether they, in fact, trust one another. *Trɔs*-trust is thus a form of navigational practice that people make use of in the uncertain and volatile coastal economy.

In a socio-material world considered untrustworthy and deceitful, where the true intentions of people and the true power of things are always masked and concealed (Shaw 2000, Ferme 2001), people in Tombo continually attempt to establish trust through small-scale *trɔs*. While mistrust was widespread, people also "miss trust", both as a social value and as the material *trɔs* support, as Bürge (2018) has also argued from Makeni. Matthew Carey has argued how mistrust "gives rise to social forms of its own" (2017:3), and that in the Moroccan High Atlas, people assume others are inherently unknowable and autonomous, and thus should be approached with a degree of mistrust, which he furthermore distinguishes from distrust, which is "based on a specific past experience"

2017:7. This partly aligns with my analysis of Sierra Leonean society, as people here also approach each other with a high degree of mistrust. However, as I have shown in this thesis, neither trust nor mistrust should be taken as structurally given. While mistrust may be the starting point (see also Meinert 2015), the existential knowledge developed by fishermen at sea, fisherwomen in their *banda* smoke houses, and relationally through the trade of fish at the wharfs and markets, shape new forms of flexible trust, which neither replace old patrimonial relations, nor negate the need for trust. Finally, it follows from here that, while my thesis has not considered political violence or solidarity bonds formed through shared feelings of exclusion and exploitations (cf. Peters 2011b, Keen 2002, Richards 2005), I do want to hint at the contribution that an analysis of socio-material navigation can add to the study of violent conflict. While the debate in the mid-2000s considered how West African conflicts were organised around “greed or grievances” (Richards 1996; 2005, Collier and Hoeffler 2012), a focus on trust through navigational practices can highlight how feelings of marginalisation can grow not only from being excluded from meaningful economic activity and access to resources, but also from being embedded in the socio-material relations through which both the world and others become intimately *known*, and thus, through which one may act.

Global oceans and “the view from the boat”

In this thesis, I have considered livelihood practices in coastal Sierra Leone, at a time when global attention is geared towards the ocean. Last year, in 2021, the United Nations’ “Ocean Decade” was launched to promote “ocean science solutions for sustainable development, connecting people and our ocean” (UNDOSSD 2022). The growing consciousness of a shared ocean space brings with it potentials for global collaborative efforts to manage the ‘anthropocenic’ impacts that have effects across the globe, like plastic pollution, climate change and ocean acidification, shifts in ecosystems, and marine species extinction. At the same time, the political questions of *who* gets a seat at the table of decisions, *how* priorities are decided in trade-offs between sustainability and growth, and what *knowledge* counts as scientific, remain. In addition, we may talk of an “ocean multiple”, to borrow from Mol’s “body multiple” (Mol 2002), given how the ocean itself materialises as many different oceans through different practices. The oceans come to be vast, “unknowable”, and insecure, as Danish frigates search for pirates (Danish Defence 2021), INTERPOL (2014) trace trafficking in drugs, humans, and fish, and development consultants and government statisticians claim that we don’t know what’s happening at sea because we don’t have statistics (Sei and Baio 2018). But the ocean is also bountiful, engendering employment and resource harvesting (AMCEN

2019), and providing ecosystem services like carbon storage (World Bank 2017b) and new genetic materials (Barbier 2017). *An Alien ocean*, Stefan Helmreich (2009) renames the product of these two tales, emphasising the ocean as unknown, and potentially dangerous, but also infused with life and agency.

In Yawri Bay, and Tombo, the embodied knowledge of life below the surface, and of connections to schools of fish, other fishing fleets and foreign interests beyond the hazy line on the horizon, shapes categories of engagement both at sea and on land. With a view “from land”, both the plentiful ocean and the dangerous ocean come to be a question of the “right regulations”, of ordering and collecting “more ocean data” (Brett et al. 2020, Elipot et al. 2022, Trice et al. 2021). Fisheries governance advocates labelling the fishermen who participate in *handfailure* as selfish and unruly, whereas development consultants lament how fish is sold in dozens and not kilograms, making it more difficult to collect statistics about fish catches (cf. Scott 1999). This image of the ocean rests on an assumption that nature is to be extracted and controlled by humans, preferably in a highly efficient manner. “Blue growth” and the Blue Economy currently dominates the political climate around the ocean and marine resources, both internationally and in Sierra Leone, but these are based on world-views centred around the primacy of humans (Watts 2013, Moore 2012, Nustad 2018), which prioritise economic growth over social and ecological sustainability (Okafor-Yarwood et al. 2020, Romain et al. 2017, Béné, Hersoug and Allison 2010).

With a “view from the boat”, I have aimed to nuance the one-sided narratives of linear growth, simplified notions of sustainability and conservation, and ideas of fisheries as a “last resort” for poor people. I show how people’s livelihood practices are more than individual tactics adapted to a resource-depleted environment in a post-civil-war social setting. Through navigating in a shifting social and ecological environment, people come to know each other through materials and other-than-human beings like fresh and smoked fish, and through this knowledge they engender new forms of flexible trust and solidarity. I have shown how the ecological knowledge that the fishermen and fisherwomen have depends not on biomass surveys conducted by scientists, but on their embodied relations with an other-than-human environment, relations they are acutely aware they depend on to make a living from the sea.



Figure 37: Juvenile fish kept over a small smoke for preservation

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