Crustacean Capitalism: Time, Labour, and Life in the Supply Chain of Brown Shrimp



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In memory of Frens Jonker

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No potential conflict of interest was reported by the author.

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Notes on Transliteration

Moroccan Arabic or Darija differs significantly from classic Arabic, and knows many regional variations. Most people text and write Darija in the European alphabet, using numbers to represent Arabic letters that do not have an equivalent in the European alphabet. To increase the readability of quotes and to stay close to the ways in which my interlocutors wrote, I have rendered quotes in Darija in the European alphabet here. I have followed the most common way of transcribing Darija, which means that the Arabic letter ح is denoted by '7', ع is denoted as '3', and ص is denoted as '9'.

Abstract

This thesis explores how the brown shrimp supply chain is produced through contested understandings of 'life' and the conditions for its reproduction. Drawing on ethnographic research with Dutch fishers, Moroccan shrimp peelers, and European corporate managers, it traces how labour practices and ethical subjectivities are shaped by attempts to make a living and to sustain particular 'forms of life'. Although the brown shrimp supply chain is frequently criticized for its exploitative labour relations and ecological unsustainability, the promise of making a living continues to bind diverse actors to its regimes of production. This thesis shows that the myriad forms of labour that sustain this supply chain are informed by distinct expressions of and aspirations for the future. In particular, the concepts of luck, destiny, and risk offer three analytic frames for understanding different modes of temporal reasoning employed in this supply chain. These temporal frames all articulate 'the future' as an 'imaginative horizon' that sustains diverse labour practices. Conceptualizing the brown shrimp supply chain as a 'machine for time', the thesis shows how infrastructures, discourses, and affects are assembled to cultivate particular dispositions oriented toward aspirational futures. At the same time, the lives and labours of both human and non-human actors exceed the organizing logics of the supply chain, revealing alternative ways of organizing life. In a moment of social and ecological crisis, the thesis argues that critiques of the brown shrimp supply chain must remain attentive to the diverse projects of making a living that animate its production regimes, since it is within these projects and their associated forms of life that the possibility of organizing the supply chain otherwise emerges.

Introduction

‘‘It seems like everyone who tries to make themselves useful in the Netherlands, is no longer welcome,’’ Simon said, ‘‘I really think that.’’ I was sitting in on a meeting at the fish auction in Lauwersoog, in the Northeast of the Netherlands, where fisher Simon was meeting with Cynthia, the director of the fish auction and Sanne, the chair of an interest group for fishers founded in Zoutkamp. It was August 2022, and the height of the farmers' demonstrations. Everywhere in the Netherlands, farmers were taking to the streets, protesting the planned nitrogen reductions that would mean the closure of many dairy farms. Fishers had declared their solidarity with farmers, and in July 2022 they blocked the entrance to many harbours in the Netherlands to protest the government’s nitrogen policies. These policies did not only affect farmers, but also required many fishers to install a SCR-catalyst (Selective Catalytic Reduction catalyst) on the motors of their fishing vessels (so-called *kotters* or ‘cutters’) which would convert nitrogen-oxides into nitrogen and water vapour. As fishers felt uncertain about the future of Dutch shrimp fisheries, they were hesitant to invest in a catalyst; measures such as the EU-mandated landing obligation (which requires fishers to land their bycatch), the closure of protected marine areas, and the construction of windmills in the North Sea had all restricted fisheries in one way or another in recent years, and in 2022, high diesel prices put further strain on fishers. Thus, fishers found themselves in a paradoxical situation: while their ships were technologically advanced and shrimp landings were higher than ever, they feared the uncertain future of fisheries, and many fishers even maintained that their way of life was ‘‘under threat’’ (*bedreigd*).

Zoutkamp is known as the ‘capital’ of brown shrimp in the Netherlands and most fishers from Zoutkamp primarily fish for shrimp. Brown shrimp are caught in the North Sea and Wadden Sea by Dutch, German and Danish fishers. Processing companies buy brown shrimp from fishers and truck them overland to Morocco where they are manually peeled by women in factories in cities such as Tangiers, Tétouan, and Taza. Shrimp are then trucked back to Europe where they are sold to wholesalers, restaurants and supermarkets. This thesis constitutes an ethnography of the brown shrimp supply chain from sea to supermarket, and attends to the global yet delicately articulated sites of production and circulation of brown shrimp. In 2022, shrimp fisheries landed 16.1 million kg of shrimp in the Netherlands, which yielded 73 million euros (Taal, 2024). This equated a profit of 5.5 million euros for shrimp fishers, who sold their catch to shrimp processing companies. These companies had much higher revenues than shrimp fishers, although it is unknown how much of their profit comes from brown shrimp, since processing companies processed a range of sea products in 2022. In 2017, the total revenues of

shrimp processing industries in the Netherlands were 516 million euros, of which 493 million euros was made by the two biggest shrimp processing companies (Hoekstra, 2019b).

Brown shrimp are especially popular in Belgium, where they are known as 'Flemish cultural heritage'. As Belgium does not have a significant fishing fleet, most shrimp are imported from the Netherlands. Approximately eighty percent of revenues for Dutch shrimp processing companies are generated from exporting shrimp to Belgium, Germany and other European countries (Hoekstra, 2019a). However, brown shrimp only constitute a very small percentage of Dutch exports: while the Netherlands was the second largest agricultural exporter in the world in 2022, trailing only the United States, fisheries only constitute around 0.1 percent of its GDP (Wageningen University and Research, 2025). Since most of the Dutch fleet runs on red diesel, fisheries contribute significantly to the emission of greenhouse gases: one manager of a shrimp processing company estimated that the carbon footprint of hundred grams of shrimp is ten times higher than the carbon footprint of a hundred grams of beef, when properly calculated (according to the foundation FoodFootprint, the production of hundred grams of brown shrimp produces about 1500 grams of CO^2, whereas hundred grams of beef produces about 3100 grams). Moreover, the Netherlands has the largest nitrogen emissions in Europe, more than four times the European average, and in 2022, the council of the state ruled that the nitrogen policy adopted by the government was invalid as it did not sufficiently reduce nitrogen emissions according to EU regulations. The court decreed that the Netherlands would have to cut its emissions at least by half by 2030, which meant that the government was legally required to reduce nitrogen emissions immediately, and the state took emergency measures to pause most construction projects and to reduce the maximum speed for vehicles on highways. Yet since almost 50 percent of nitrogen emissions come from agriculture (3.4 percent comes from fisheries), the state resolved that the most durable solution would be to decrease the intensity of fisheries and agriculture (Remkes, 2020). One of the main strategies for making this happen was buying out farmers and fishers. However, many fishers and farmers vehemently resisted these attempts as they did not want to give up their livelihood: ''It's not just a job,'' shrimp fisher Evert told me, ''it's your entire life they are asking you to give up.''

In the summer of 2022, agricultural fields everywhere in the Netherlands were full of banners stating ''no farmers, no food'' and ''never forget, farmers provide your food'' (*niet vergeten, boeren zorgen voor uw eten*). Farmers framed themselves as vital for sustaining 'Dutch' society, and while fishers did not have a similarly powerful lobby, most of them supported this argument and added that that they *too* played an important role in food provision. Fishers and farmers thereby did not justify their existence by referring to their global export market, or even to their economic relevance, but made a

specific claim to Dutch society and their role in nourishing and sustaining it. Fishers and farmers argued that urban consumers did not realize what it took to produce their food: ‘‘the divide between the *randstad* and the rest of the Netherlands is really enormous,’’ Thomas, a fisher from Zoutkamp told me in the summer of 2022, over a beer in his garden. ‘‘They don’t realize that over there. With all due respect, those urban environmentalists have no idea where their food comes from.’’ [1] Fishers, like farmers, depicted themselves as ‘hardworking’ and ‘grounded’ people, and often claimed that it was politicians who had ‘‘gone mad’’. However, their arguments often carried a somewhat nostalgic undertone, as they invoked the years after the second world war when the Dutch state invested huge resources in fisheries and agriculture to make the country food independent. ‘‘People respected us, and when we passed on the canal, they would always give us priority and open the bridges for us,’’ Hindrik, a retired fisher told me.

Making a Global Commodity: The Supply Chain of Brown Shrimp

The ways in which shrimp fishers like Hindrik invoke the history of Dutch food production obscures the ‘global’ nature of the brown shrimp supply chain. While brown shrimp have been fished for several centuries by Dutch fishers, fishing methods have changed significantly over the last decades. In 2022, shrimp fishers fish with so-called *kotters* (‘cutters’), ships between twelve and twenty-four meters long and with a motor capacity of up to 300hp. Since the 1960s, these boats use a fishing method called a ‘spool trawl’. This method relies on two levers on each side of the boat which are used to lower a steel beam with a net attached to it into the water. Attached to the net are rubber spools which roll over the seafloor, and which startles shrimp leading them to ‘jump’ into the net. Once the nets are full, they are hauled in by the levers, a fully automated process. The nets are then emptied into a large metal basin, and the catch is sifted by a sorting machine that lifts shrimp out of the basin and slowly spins them in a cylinder, filtering out crabs and fish. The brown shrimp are automatically dropped in a kettle that boils shrimp. Boiled shrimp, which have changed in colour from greyish-brown to pink, are emitted by the kettle into a basket, which fishers empty in large bags or crate and store in the haul of the ship, at a temperature of minus two degrees. Shrimp can be stored at this temperature for several days, as shrimp fishers might spend up to ten days at sea.

When fishers land their catch at an auction, they must report the details of their catch over an intercom before mooring their ships. Once docked, the shrimp are unloaded and sifted again; undersized shrimp are removed, while ‘sizable’ (*maatse*) shrimp are sorted into three different sizes. All shrimp

[1] The urban periphery in the West of the Netherlands, constituted by big cities such as Amsterdam, Rotterdam and the Hague, is often referred to as ‘the West’ or ‘the Randstad’ (the ‘edge city’).

fishers are under contract by a particular processing company, which collects shrimp from the auction and transports them to factories where they are checked, preserved, and subsequently frozen. Most processing companies then truck shrimp overland to Morocco, to factories in Tangiers, Tétouan, or Taza (although in 2022, some shrimp were machine-peeled in the local area: see the conclusion of this thesis). There, shrimp are defrosted and manually peeled by female factory workers in large factory halls. Workers are required to wear gloves, hair liners, and face masks to ensure optimal hygiene, and factory halls are kept at a chilly sixteen degrees to maintain freshness. In 2022, at least 10 000 women were employed in shrimp peeling factories in Morocco, with the largest factories employing up to 3000 women per day. Although there are small differences in production processes between factories, in most cases shrimp are treated with preservatives, packaged in large plastic sacks, and stored in cold rooms (kept cool but not frozen) after peeling.

Several times per week, trucks from the Netherlands collect the peeled shrimp and transport them back to processing factories in the Netherlands[2] Big processing companies like Gardema operate their own transport, owning their own trucks and hiring their own truck drivers. Managers in this processing companies also take care of the extensive paperwork required for shrimp to cross the border between Morocco and Spain. When shrimp arrive in the Netherlands after three or four days of driving, they are checked again, packaged, and labelled, processes that are now largely automated. However, processing companies still rely on human workers to operate machines, to clean the factory floor, to transport products from one place to another, and to monitor the conditions in the factory, such as the temperature and the humidity. While this work was long known as 'stable' and well-paid factory work, in 2022, these factories mostly rely on Polish and Eritrean migrant workers who are employed by recruitment agencies and often housed under decrepit circumstances in the countryside. From these processing factories, shrimp are distributed to supermarkets, restaurants, and wholesalers, mainly in Germany and Belgium.

While brown shrimp are often marketed as *Hollandse garnalen* ('Dutch shrimp'), Dutch fishers like Hindrik (but also, politicians, retailers, and even some NGOs) are notably quiet about the Moroccan labour force required to produce 'Dutch' shrimp. Whereas less than five hundred European fishers fish for shrimp, more than 10,000 women work in shrimp peeling factories in cities such as Tangiers, Tétouan, Nador, and Taza. Moroccan shrimp peelers usually work eight-, nine-, or ten-hour shifts and get paid a piece rate rather than an hourly wage. They receive around 1.75 euro per kilo of peeled shrimp (eighteen

[2] Processing companies often also pick up the shells of shrimp, discarded as peeling waste; at the moment, these shells are mostly destroyed or burnt. However, scientists are currently exploring the use of exoskeletons in the production of biodegradable films, nanomembranes and pharmaceuticals, since shrimp shells are rich in chitosan; see for instance: (Dickinson, 2026).

or nineteen Moroccan dirham at the 2022 exchange rate). Most women peeled around four kilo of shrimp per day on average, which meant they earned around six to seven euros per day, a wage well below Morocco's minimum wage. In addition to the shrimp peeling factories registered under Dutch ownership, there are a range of clandestine factories subcontracted by big processing companies. These factories are less well-monitored and labour conditions are generally assumed to be worse. There are no official numbers on how many women work in factories like these, but I heard one factory manager in Morocco estimate that the number might be as high as 40 000.

In this thesis, I will explore the ways in which the brown shrimp supply chain is made through highly uneven relations of production that rely on gendered and racial inequalities to create and sustain deeply unequal labour arrangements. Moreover, I show that brown shrimp are not produced *despite* moral and ethical constraints, but rather, that these arrangements are kept intact and reproduced through the articulation of distinct moral economies. For corporate actors, fishers, and shrimp peelers, the brown shrimp supply chain, as a material and a discursive formation, is closely related to specific aspirations for 'the future': fishers seek to protect their 'traditional' trade, corporate managers seek to innovate the shrimp industry, and shrimp peelers seek to establish a more secure life for their families. However, such future-oriented practices often entail tacit assumptions regarding to who can make a claim to what kind of future, and such assumptions are mediated and structured by the specific modes of production in the supply chain of brown shrimp. During five months of fieldwork in 2022 in and around Zoutkamp, a fishing village with a population of around 1200 people in the Northeast of the Netherlands, it became clear to me that fishing constitutes its own 'form of life' that extends beyond the practical activity of fishing for shrimp. The expression 'form of life' originates in Wittgenstein's writing and was introduced in anthropology by Veena Das (1998) (via Stanley Cavell) and Michael Fischer (1999). It captures the way in which ''we agree, or find ourselves agreeing, on the way in which we size up things or respond to what we encounter'' (Das, 1998, p. 170). However, the question of what exactly we are in agreement over often resists being straightforwardly uncovered: rather, the dynamic and 'pulsating' quality of life entails that such an agreement must be secured anew everyday through ordinary practices. I contend that the tradition of shrimp fishing in the village of Zoutkamp, carefully documented in local archives, and central to particular visions of the future premised on the continuation of this practice, constitutes a unique 'form of life', in which the liveliness of brown shrimp is closely entangled with the viability of social life. However, environmental NGOs concerned about the impact of shrimp fisheries on vulnerable ecologies articulate a very different vision for a 'viable' future, based in the drastic reduction of fisheries to ensure ecological wellbeing of the seas. Thus, the 'viability' (*levensvatbaarheid*) of shrimp fishing as a 'form of life' was highly contested by these NGOs. Moreover, the brown shrimp trade also depends on a large

female labour force that peels shrimp in factories in Morocco to secure a stable livelihood. In addition to five months of fieldwork in the Netherlands, I conducted seven months of fieldwork in and around shrimp peeling factories in Morocco to explore what drives women in Morocco to take up labour in a shrimp peeling factory. In this thesis I explore how 'life' and its conditions for reproduction are articulated and invoked in different ways along this supply chain. I argue that constructions of 'the past' and 'the future' are vital to the brown shrimp supply chain, since they sustain the particular forms of labour through which brown shrimp are produced.

The 'brown shrimp supply chain' is thus both a necessarily analytic abstraction and a concrete set of relations and material conditions, and is produced through diverse forms of life that have accreted around its sites of production and circulation. It is made through the long, articulating chain of locally specific contingencies that together constitute a 'global' supply chain. Much has been written about global supply chains, just-in-time production, and the broader effects of subcontracting and outsourcing in the last twenty years. The Covid-19 pandemic and the ensuing 'supply chain crisis' that erupted in 2020 dramatically revealed the fragility of the 'global' networks of production. The disruptions that unsettled these networks also affected the supply chain of brown shrimp: Morocco largely closed its borders and ordered (foreign-owned) factories to close or to operate at vastly reduced capacity, making it impossible for most Dutch processing companies to produce peeled shrimp, and leading some companies to outsource shrimp peeling to countries as far as Indonesia. Meanwhile, the spiking prices of diesel, an effect from the war in Ukraine, lead some shrimp fishers to remain anchored in the harbour and not go out at all, as the profits generated from shrimp fishing no longer weighed up against the costs of going out. Yet these events should be understood alongside more recurrent events, such as the common protests of shrimp fishers against the government, the protests of environmental NGOs against shrimp fishers, the disputes between shrimp peelers and factory management, and disagreements between shrimp processing companies and retailers about their contracts. In 2022, a factory manager from the biggest Dutch shrimp processing company told me: ''it's a small miracle this supply chain is still running. The brown shrimp trade is rotten through and through.''

Anthropologists have long shown that 'supply chains' are assembled out of heterogeneous practices, beliefs and values, and thus revealed the contingency of global systems of production (e.g. Yanagisako, 2003; Rofel & Yanagisako, 2019; Tsing, 2015) By showing contingency to be the norm rather than the exception in processes of industrial production and circulation, anthropologists have been critical of overtheorizing supply chains 'in general' (Tsing, 2009). Recent geopolitical events such as the Covid-19 pandemic, US-lead tariffs and trade barriers, and disruptions in the Suez and Panama Canal

have certainly affected many supply chains, yet the anthropological literature also attends to the 'local' sites and arrangements that constitute individual 'supply chains', that need to be stitched together and continuously maintained through the practices of differentially situated actors (e.g. Çalişkan, 2011; Rofel & Yanagisako, 2019). Ethnographies of early 21st century political economy have mostly attended to the forms of production and exchange that characterize 'neoliberal' or 'post-industrial' landscapes, in which capitalist modes of production seem to have reached the limits of human and planetary capacity, and in which the unintended effects of decades of industrial production are manifesting in unpredictable and uncanny ways (e.g. Tsing, 2015; Tsing, Swanson, Gan, & Bubandt, 2017; Fortun, 2012). Shrimp fisheries might be considered such a form of 'life in industrial ruins,' and in this thesis I explore how the brown shrimp supply chain carries marks of 'post-industrial' and 'hyper-industrial' production at the same time (Tsing, 2015; Ringel, 2020).

Brown shrimp thrive in ecologically depleted landscapes where many of its predators, such as cod and whiting have already been overfished. Sometimes called 'the weeds of the sea', the presence of brown shrimp populations does not necessarily signal healthy ecosystems: shrimp tend to flourish in nitrogen-rich waters, for instance in estuaries where rivers containing wastewater flow into the sea (Neal, 2008). Thus, shrimp fishers capitalise on the after-effects of decades of overfishing and industrial production. At the same time, processing factories in the Netherlands are continuously expanded and equipped with more innovative technologies for cooling, packing, and testing shrimp, and the large and 'hypermodern' factories in Morocco also seem to be a mark of high industrialism (Campbell, 2016). Anna Tsing (2015) and Alex Blanchette (2020) have highlighted that both 'post-industrialist' and 'hyper industrial' forms of capitalism mark the contemporary production processes of edible commodities. While Tsing has highlighted the 'patchiness' and contingency of the supply chain of Matsutake mushrooms, Blanchette has illustrated the 'hyper industrialized' context of pork production in Dixon, USA, where the model of 'vertical integration' means that companies are trying to squeeze out every potential profit by controlling more and more aspects of the production process (Tsing, 2015; Blanchette, 2020). In both supply chains, distinct articulations of race, gender, and citizenship are mobilized by corporate actors that deploy such hierarchies to extract more surplus value. Such hierarchies and their associated moral economies structure particular forms of 'worth', 'value', and 'belonging' in the brown shrimp supply chain as well, and have thereby come to be important sources for capitalist production.

Both Tsing and Blanchette also note how the 'liveliness' of 'nature', or non-human others, introduces both an element of unpredictability and unruliness into production processes, as well as a potential source of value. In their ethnographies, these moments are mobilized to counter narratives of

human mastery and control and illuminate how human and non-humans alike often resist in large or small ways to be reduced to a logistical problem. However, the anthropological record warns us to be cautious with how to interpret these moments and has taught us not to translate these events too quicky as 'resistance', with all of its 'liberal' associations. Thus, Tsing's and Blanchette's ethnographies both suggest that "lively" supply chains are "good to think", in Levi-Strauss's sense, but also raise questions about how best to study them in the 2020s, in a way that does not reduce these 'capitalist projects' to deterministic structures of power, but neither 'romanticizes' forms of resistance or individual agency within them.

The question of how to study the supply chain of brown shrimp without either reducing its production process to a deterministic logic of capitalism or uncritically celebrating forms of 'resistance' or 'contingency' as emancipatory concepts, is central to this thesis. In this introduction, I provide a brief overview of how anthropologists have thought about capitalism, resistance, and the potential for making the world-to-come differently. I explore these literatures to illustrate how I came to think about these questions, and to show why it is vital to explore the different ways in which 'the future' is imagined through distinct temporal modes of reasoning in this supply chain. It is crucial to explore the possibility for alternative social and political projects to endure and to take root within capitalist projects such as supply chains, yet the question of how to understand such social and political projects hinges on the question of how we understand the potential of the present for articulating different kind of futures. However, the potential to imagine or evoke a 'future' is by no means equally distributed. In the brown shrimp supply chain, actors understand the present through different temporal modalities that imply distinct possibilities and limitations for imagining 'the future'. Moreover, these temporal modalities have material effects on the ways in which infrastructures, technologies, and chemicals are produced, governed, and managed. In this thesis, I explore how luck, destiny, and risk offer three analytics frames for understanding different modes of temporal reasoning employed in this supply chain. These temporal frames all articulate 'the future' as an 'imaginative horizon' that sustains diverse labour practices; however, they do so in markedly different ways (Crapanzano, 2003). To examine the possibilities and limitations for making the supply chain of brown shrimp differently, it is essential to attend to the various social projects and forms of striving that have accreted along its diverse sites of production, circulation, and consumption.

Here I provide an overview of the different anthropological literatures that offer resources to think about temporal reckoning and political action. First, I introduce contemporary debates in feminist approaches to the economy in anthropology. I discern a disagreement in the literature over the extent to

which capitalist projects should be considered as contingent, and I suggest that this question matters since it has consequences for how to situate the capacity for political change. Then, I introduce anthropological debates around change, agency, and resistance, and suggest a way to think about political change beyond the liberal ideas around political action. The question of how to make the world differently should take into account the myriad ways of being immersed in the present and articulating something we might call 'the future'; however, such a question requires the critical scrutinization of anthropological debates of (modern) time, the future, and hope. In the third part of my literature review, I discuss these questions of temporality explicitly with regards to contemporary crises of ecological degradation and social inequality. I suggest that the supply chain of brown shrimp operates as a 'machine for time' that produces diverse modes of being immersed in the present and the unevenly distributed capacity to articulate a future.

The supply chain of brown shrimp is both critiqued for its 'exploitative' modes of production and for its 'unsustainability'. Moreover, such social and ecological harms have become entangled with various social projects of 'making a living' that suffuse the various forms of labour in this supply chain. However, the lives and labours of human and non-human actors in this supply chain also exceed its structuring powers and point to the possibility of organizing life otherwise. I end my literature review by exploring how the question of 'life' and its reproduction might be considered from both a social and an ecological perspective. By attending to the various projects for 'making a living' that have accreted along the distributed sites of the brown shrimp supply chain, I suggest that it might be possible to discern the capacity for change within these social projects and their associated forms of life. However, I start by situating these debates in my own fieldwork, which constituted the ground for these questions and led me to explore the curious process of producing brown shrimp as an edible commodity.

Tracing Shrimp from Zoutkamp to Tangiers and Back: a Year of Fieldwork

The project began when I met Youssef, the young director of a seafood processing company in 2020. I had just decided to write my MPhil dissertation on the brown shrimp supply chain, since I had read somewhere about the idiosyncratic production process of peeling shrimp in Morocco. When I discussed this idea in a bar with a friend, one of her friend's interrupted our conversation to tell me that he had a friend who owned a shrimp peeling factory. He introduced me to Youssef, whose father had set up a shrimp peeling company in 1986, and who had left Youssef in charge of the Dutch side of his business after permanently relocating to Morocco in 2015. Youssef's company, Casa Mare, was a subsidiary of his father's company Blue Taste in Morocco, and Youssef oversaw supplying seafood products for the Dutch

market. Every week, his company sent a supply of brown shrimp from the Netherlands to Morocco, and thanks to Youssef's generosity and support, I was allowed to visit his factory.

In February 2022, I flew to Casablanca. Casablanca is Morocco's industrial capital and housed the headquarters of Youssef's father's company Blue Taste. Their factory processed various species of fish for the Moroccan market and had a shrimp peeling hall where more than 800 women could be employed at a time. However, the company also had a smaller factory in Taza specifically designed for peeling shrimp, and since February was the low season, they sent most of their shrimp there. Taza is a small town with a population of around 150.000 in the northeast of Morocco, two hours from Fes. Taza does not have a significant industrial zone, but it is one of the larger cities bordering on the Rif mountains, and many Dutch-Moroccans are from or have lived in Taza. Thus, after conducting a few preliminary interviews with factory workers and managers in Casablanca, I relocated to Taza in early March. Taza is a small city in the Northeast of Morocco with a population of around 150.000, located between the Rif mountains and the Atlas Mountains. The Blue Taste factory was located in a small and largely vacated industrial zone, and upon my first visit I was received by Hamid, the quality manager of the factory. Hamid was closely engaged with the daily proceedings of the factory, and also spoke excellent English, making it possible for me to talk to him without a translator. I had in fact already met Hamid online, when I was conducting Zoom interviews for my MPhil thesis. Now, Hamid welcomed me warmly, and showed me around the factory on my first day.

The Blue Taste factory was a modern, white building in the industrial zone of Taza, which was otherwise rather quiet and abandoned. The building was divided in two different parts: an administrative building, where the management of the company worked, and the factory hall, where shrimp were peeled. They were separated by a lush and carefully maintained garden, through which a path decorated with intricate shrimp mosaics connected the two buildings (later I would learn that shrimp peelers always entered and left through the back entrance on the other side of the peeling hall). Hamid had a small office overlooking the peeling hall, which he shared with Ahmed, the production manager, and Hajar, Ahmed's assistant (and coincidentally, his younger sister). In addition to the large factory hall, where about 250 women sat at long tables peeling shrimp, this building housed the cold storage, preservation rooms, changing rooms and bathrooms which served a double function as praying rooms. The interior of the building was a lot sparser than its outsides, and the first thing I noticed upon entering was the gust of cold air (the factory hall was kept at 16 degrees at all times, to keep shrimp fresh), followed by the persistent smell of shrimp.

Hamid showed me the entire production process. Shrimp were brought in small batches from the cold storage into the factory hall, where they were left to defrost before being handed out by a worker who carefully weighed them in plastic baskets that should contain exactly one kilogram. Women cued in front of her and scanned their worker's cards before taking a full basket back to their table. They spilled its contents on the table, placed one empty basket on their laps and another one on the table. As they peeled with swift, quick hand movements, they deposited shrimp shells in the basket on their lap, whilst putting the peeled product in their other basket. When they were finished with their batch, they took it to a window at the front of the hall, where another worker waited to check shrimp for shells and irregularities and weighed their baskets. Women scanned their cards again, which registered the weight of the peeled shrimp and the time that it took to peel them; they then proceeded to the washing station, where they handed over their empty baskets before they joined the cue at the shrimp distribution point again.

On my first day in the factory, I asked Hamid if I could try peeling some shrimp myself. Dressed in white coat, gloves, face mask, hairnet, and shoe protectors, I could enter the factory hall after disinfecting my hands at an automated gate which only opened once it had sprayed my hands with alcohol. Hamid found me a spot at a table, brought me a basket of shrimp, and showed me how to peel them: he taught me to count the segments on the shells, to carefully bend the shrimp at the third segment where it breaks, and then to pull off the tail and squeeze its head whilst pulling out the soft flesh on the other side. It was quite a delicate task, and my fingers felt slow and clumsy as I tried to get the hang of it. As the women at my table kept handing me big shrimp which were easier to peel, I felt self-conscious and embarrassed since I had only picked up some basic phrases in Darija (Moroccan Arabic), not nearly enough to strike up a conversation. When I returned to the factory the next day, Hamid told me that the Human Resource Manager would not allow me to sit in the peeling hall anymore because of the liability concerns this might cause for the factory. It became clear to me that the management of the factory had expected that I would visit the factory once or twice and then go back to the Netherlands; however, I insisted that I wanted to stay for a longer period of time. Eventually, I agreed with the management that I could sit with Hamid in his office overlooking the shrimp peeling hall. I was no longer allowed to peel shrimp, but I could visit the factory as I pleased. For the next three months, I joined Hamid, Ahmed, and Hajar in their office most days, to experience the daily functioning of the factory. While this was not what I had imagined from my fieldwork, their stories and accounts of the factory were crucial for my understanding of it. Moreover, they generally had lots of free time during which they were more than happy to chat with me. At the end of the workday, I would usually walk back to the city centre, like most factory workers (and, not unimportantly, in contrast to most of the factory managers, who drove or took a

taxi). After four weeks, I met several workers outside of the factory who eventually invited me to their homes so that we could speak at ease.

In June 2022, I returned to the Netherlands, to attend Vlaggetjesdag, the annual village festival of Zoutkamp. While Zoutkamp is a small and rather remote village in the Northeast of the Netherlands, it is known as the Dutch 'capital' of brown shrimp. Every year, a secret committee nominates a young woman from Zoutkamp to be the annual 'shrimp queen', who represents shrimp fishers locally and nationally. During Pentecost, her identity is revealed to the public during a festive village festival for which all shrimp cutters are carefully decorated. The cheerful ambiance formed the perfect backdrop to speak to people in the village and was a spectacular initiation into the field. In the months that followed, I spoke to fishers, processing company managers, auction workers, students at fishing schools, environmental NGOs, fisher's unions, and policy makers to establish as many connections as possible. I began to volunteer on a weekly basis in Zoutkamp fishing museum, where retired fishers often aggregated, and spent long hours on the quays and the harbour of the village. Whereas many fishers were happy to talk to me about their trade, they were somewhat hesitant to take me on board; they often went to sea for at least five days at a time and did not always have room for an extra crewmember. Moreover, many fishers warned me about sea sickness and cautioned me that it would not be unlikely for me to be sick for the entire journey.

Eventually, Evert, a Wadden Sea fisher agreed to take me on board. Since he fished between the Dutch Wadden islands and the coast, the sea was usually calm, and because distances in the Wadden Sea are significantly smaller, he mostly went out for daytrips. When I went fishing with Evert, I arrived the night before to sleep on his cutter, so that we could get up to leave the harbour before the break of dawn. During my fishing trips with Evert I saw how shrimp were hauled in, released into a tank on board, being sieved and boiled, all automatically, an experience that illuminated the production process of shrimp for me. I experienced walking barefoot on deck, snacking on freshly boiled shrimp while watching the sunrise, and cooking meals in the small kitchen below deck. However, while I learned a lot from Evert and our trips together, it was volunteering in the fishing museum that brought me a sense of slowly getting to know the fishing community at large. When I came to Zoutkamp, I decided that volunteering here for one day per week would be a good immersion in the village; and from the start, the volunteers in the museum were very kind and cooperative. Not only did they share a wealth of resources from their archives with me, they also passed on their contagious passion for Zoutkamp's history and brought me in touch with many fishers. During the mornings and the afternoons, retired fishers often came to the backroom of the museum, where we as volunteers served coffee and cake. It was during these hours that I

came to understand more about the multi-layered affects and politics that characterized life in Zoutkamp. Different fishers often disagreed about certain questions or debates, for instance around environmentalism or buy-out schemes; it took many conversations with fishers and other community members to understand exactly where and how these different narratives diverged.

My fieldwork in Zoutkamp was also enriched by my conversations with Jacob, the quality manager of Gardema, the largest shrimp processing factory in the Netherlands. Jacob had worked at Gardema for twenty five years and told me much about the brown shrimp trade and its histories. He also forwarded many useful documents, such as those concerning hygiene protocols in the factory. Understanding the many forms of translational work he was engaged in gave me an idea of how something like a 'global supply chain' was assembled by the company through the linking of multiple practices and people. Speaking to some of the former directors of this company deepened my understanding of the emergence of this transnational company.

I returned to Morocco in late October 2022, and stayed until the end of that year. I had made the decision not to go back to Taza: while I cherished the connections I had built there over my previous period of fieldwork, I was worried I would not be welcomed back into the factory by the management. Moreover, during my time in the Netherlands I had met a documentary maker who had put me in touch with some shrimp peelers in Tangiers. I was eager to talk to factory workers in a slightly more unconstrained setting than in Taza, and I knew that I could be much more anonymous in Tangiers. Here I met Nadine, who was my translator for the interviews but also became a close friend and collaborator over time. Nadine engaged deeply with the women who we interviewed, and stayed in touch with many of them, helping them in small ways wherever she could. She taught me much about life in Tangiers and the challenges faced by many of the women we met. Jihane was another person that became very important to me during my time in Tangiers. I rented a room in her house, and since she worked from home, we spent a lot of time together. She was kind enough to invite me along when she went out with her friends, and she also introduced me to Aboubakr, a social activist who founded Attawasul, an NGO that has been promoting women's labour rights in Morocco for over 20 years. Aboubakr's impressive testimony of social activism in Morocco made a deep and lasting impression on me. Attawasul had collected a thick file on shrimp peeling factories which was nothing short of incredible; I felt deeply humbled by everyone in this organization putting so much time and effort in taking foreign factories to task and trying to improve conditions for working-class women. The news of Aboubakr's death in 2024, after a long period of illness, came as a shock to me, and I am still thinking about the right ways to engage

with the testimonies and information that his NGO had collected over the years and generously shared with me.

Between Contingency and Solidarity: Contemporary Capitalism and its Critics

While I set out with the intention to follow brown shrimp, at times I found it surprisingly hard to stay 'close' to the supply chain of brown shrimp. When I sat with Hamid, Ahmed, and Hajar in the office in Taza, Hamid was interested in talking about everything from dream interpretations to our childhoods to his plans to start a pet shop. When I went shrimp fishing in the Wadden Sea, fishers talked about their livelihood, of course, but also about the myriad concerns that they had around it, such as their relationships with their partners or children.

Of course, anthropologists have long considered forms of production and exchange to be 'total social facts', embedded in and entangled with other religious, spiritual, ethical, and political relations (Malinowski, 1922; Mauss, 1990). Therefore, it should not be surprising that staying 'close' to 'the economy' led me into the realms of family, religion, and social aspirations. However, anthropologists of capitalism have shown that under conditions of global capitalism, 'ordinary' life as the site of spiritual, social, and ethical being, is transformed in highly particular ways. For instance, the unequal distribution of resources and ownership under capitalism is necessarily deeply entangled with hierarchies of race, class, and gender. I have found particularly helpful two contemporary anthropological approaches to 'capitalism' which, even though they share similar commitments, diverge in important ways.

In the 2020s, anthropological approaches to capitalism do not only seek to make sense of the economic configurations that characterize processes of production, circulation, and consumption, but also of the underlying logics and possibilities for change entailed by it. One influential proposal to do so has been *Gens: A Feminist Manifesto for the Study of Capitalism* (2015), in which anthropologists Laura Bear, Karen Ho, Anna Tsing, and Sylvia Yanagisako propose that ''instead of taking capitalism a priori, as an already determining structure, logic, and trajectory, we ask how its social relations are generated out of divergent life projects.'' These scholars contend that 'capitalist relations' are ''heterogeneously made through processes of aligning multiple projects, converting them toward diverse ends that include (but are not limited to) the accumulation and distribution of capital.'' Whilst recognizing the 'influence and power' of capital, these scholars underscore the contingency and heterogeneity of relations and lifeways that have become entangled with, but are never reducible to, capitalist relations and its logics of reproduction. The contingency of the processes through which heterogeneous 'lifeways' become part of

capitalist systems is also what renders capitalism ultimately 'unstable', according to these scholars: while this approach therefore recognizes how forms of difference and 'non-economic' modes of relating can become productive for capitalism, it also considers these heterogeneous elements to be a potential weakness of capitalism through which its logics and violent modes of operation might be challenged.

As an ethnographic commitment, this approach draws attention to the idiosyncratic values, beliefs, and ways of being in the world through which capitalism is made. Anna Tsing (2015) showed for instance that mushroom pickers in Oregon do not just pick mushrooms for profit, or even consider their practices 'work'; rather, pickers consider themselves to be in the business of pursuing 'freedom' (Tsing, 2009; 2015). This constitutive ambiguity applies profoundly to the efforts of shrimp fishers in the North Sea who contend that fishing is not just a job, but their ''entire life''. An historiographically grounded understanding of how shrimp fishing came to define the identities of many shrimp fishers in Zoutkamp needs to account for the entangled histories of fishing, family, and the ecological transformations of the North Sea and Wadden Sea. Anna Tsing defines such ''conversions of stuff with other histories of social relations (human and not human) into capitalist wealth'' as 'salvage accumulation'. She contends that any study of 'capitalism' must be attuned to those histories, relations, and ways-of-being in the world that are often considered to be 'outside' of capitalism (Tsing, 2009).

Such an approach contrasts with scholarly work that argues that social relations defined by diverse histories of kinship, gender, and race do not have to be 'converted' into capitalist wealth, since they have mostly been *co-produced* by capitalist modes of organizing the world. Some anthropologists have proposed to draw on Social Reproduction Theory to better understand how racial capitalism is constitutive of various subject-effects and ways-of-being in the world (e.g. Weiss, 2022; Ferguson, 2020; Bhattacharya, 2017; Kasmir & Carbonella, 2014). Extending Marx's writing on the necessary reproduction of labour power, these critiques engaged with the practices, institutions, and values necessary to realize the 'social reproduction' of (capitalist) society. The term 'racial capitalism', coined by Cedric Robinson (1983) explicates that capitalist accumulation necessarily depends on the organization and perpetuation of racial inequality (Robinson, 1983). The reproduction of capitalism depends on the continuation of such highly uneven social relations, which are reproduced through the (re)production of labour, which is dependent on everyday forms sustenance and care, and on the long-term birthing and raising of children that can become a new generation of workers (Vogel, 1983). Building on these postcolonial and feminist critiques, postcolonial scholars have shown how the (unwaged) labour and resources of (former) colonies and subaltern populations are essential for the

reproduction of capitalism. Furthermore, ecological Marxists highlighted capitalism's dependence on the liveliness of non-human forms of life (Robinson, 1983; Besky & Blanchette, 2019; Moore, 2015).

While Social Reproduction Theory entails a wide array of different approaches, most proponents agree that the aim of social theory is not so much showing the contingency of capitalist processes, but rather ''creatively exposing the organic totality of capitalism as a system'' (Bhattacharya, 2017, p. 14). Asking ''how categories of oppression (such as gender, race, and ableism) are coproduced in simultaneity with the production of surplus value,'' these scholars seek to uncover how capitalism produces forms of (racial and gendered) difference that rely on semi-stable articulations of race, class, and gender. Under racial capitalism ''forms of humanity are separated (made "distinct") so that they may be "interconnected" in terms that feed capital,'' and therefore, the forms of 'diversity' and 'contingency' that characterize capitalist production do not necessarily entail emancipatory potential (Melamed, 2015, p. 78). These scholars also criticize the anthropological trend in which ''the local has increasingly come to mean resistance to the global,'' since 'the local' is ''produced, involving the often-violent breaking of political connections, alliances, and networks that developed over time and that afforded workers some measure of power'' (Kasmir & Carbonella, 2014, p. 21; see also Wolf, 1982).

Whereas the authors of Gens, wary of 'grand narratives', explore how life under capitalism is never fully determined by its modes of operation, authors such as Susana Narotzky, Sharryn Kasmir, and August Carbonella, consider such an approach too particularistic and localized, and continue to underline 'solidarity' and broad social movements as powerful initiatives that can address the harms and inequalities produced by capitalism. They contend that there might be a role for anthropology in contributing to such mobilizations by partaking in projects aiming to expose and resist the organization of relations of production, distribution, and consumption in highly unequal ways.

Therefore, even though both approaches build on feminist theory, they sharply diverge on the question of how to make the world or the economy differently.[3] This question held me captive during my fieldwork and long after. When I was conducting fieldwork, I constantly questioned how to attend to unequal dynamics of the supply chain of brown shrimp, and how to assume the right orientation towards and distance from (what I perceived as) forms of social and ecological harms. I worked with different stakeholders who often held decisively antagonistic positions. Some of my interlocutors were actively

[3] While I am aware I use 'SRT' and 'Gens' as a reductive binary that does not do justice to the wide variety of authors writing on contemporary capitalism, I evoke them here as a shorthand to point to what I see as two different approaches for thinking about the limits of 'capitalism'.

involved in attempts to reform and subvert the supply chain of brown shrimp, such as the activists of a labour rights NGOs in Tangiers who sought to mobilize factory workers to organize strikes and collective action. In the Netherlands, I spoke with environmental NGOs who sought to address the ecological harms produced by fishing. However, during my fieldwork I witnessed the challenges that these organizations faced in their attempts to effect durable change. In the case of the environmental NGOs, gathering political support was often fraught with challenges, whereas in the case of the women's labour rights NGO, the disavowal of official, state-backed organizations and forms of collaboration with other organizations led to the marginalization of the NGO. At the same time, I also had interlocutors who actively tried to sustain and perpetuate the supply chain of brown shrimp. Fishers seeking to continue fishing traditions and managers seeking to innovate the supply chain grounded their aspirations for producing the world-to-come in very different terms. Therefore, I often wondered what it would take for people to transform the supply chain of brown shrimp in some way, big or small. When I came back from fieldwork, I became increasingly interested in approaches that could help me to think about how to discern sites and moments with a potential for something like 'political action' in the supply chain of brown shrimp.

Of course, the question of how to understand the unequally distributed capacity to act in the world extends beyond questions of capitalist production. In the next paragraph, I discuss various approaches to 'agency', hope, and the understandings of time and the future in which these are embedded.

Beyond 'Resistance' and 'Humanitarianism': Situating the Potential for Making the World Differently

Questions around 'social change' are highly fraught in anthropology given the liberal legacy of terms like 'resistance' and 'agency'. Since the emergence of the discipline, anthropologists have been interested in the relation between social 'structure' and 'change' in societies, yet it was during the 1980s and 1990s that ethnographies concerned with 'resistance' rapidly gained ground (Comaroff, 1985; Ong, 1987; Scott, 1976). At that time, factories were being built by large corporations all over the globe, a form of global industrialization that was of course not entirely new but that was nevertheless unprecedented in scale and form. Critiques by the subaltern school and the emergence of 'practice theory' in the 1980s shifted anthropological interest from 'structure' to 'autonomy' and 'agency' (Guha, 1983; Bourdieu, 1977). From the 1970s and 1980s, anthropologists inspired by Pierre Bourdieu and Michel Foucault began to investigate 'power' and how people can engage in forms of 'resistance'.

Studies such as James Scott's (1976) ethnography of villagers in Malaysia or Aihwa Ong's (1987) work on Malaysian factory workers emerged alongside or in the wake of these traditions, and mostly attended to grassroot forms of resistance and disobedience. These studies were far-removed from those forms of collective political action that 'traditional' Marxists had often envisioned, and thereby constituted a critique of ethnocentric models for political action. Yet whilst attention to local forms of resistance were generally lauded in the discipline, scholars like Lila Abu-Lughod (1990) also warned against the 'romance of resistance': while anthropologists often sought to celebrate forms of resistance against hegemony, Abu-Lughod contended that these forms of resistance should be read as a diagnostic of power rather than an antidote to it. Inspired by Foucault, Abu-Lughod sought to draw attention to the ways in which 'power' is productive of a variety of practices and dispositions and warned anthropologists not to celebrate some forms of actions too readily over others (Abu-Lughod, 1990). Extending critiques of 'resistance' as the site of political 'agency' and subject formation, Saba Mahmood further criticized the liberal assumptions implicit in Euro-American conceptions of 'agency' defined as an individual's freedom from social norms and constraints and showed how forms of 'self-cultivation' can take the form of 'patience' and 'submission' just as they might take the form of 'resistance' (Mahmood, 2005). Such critiques are crucial to understanding the brown shrimp supply chain, since women in Morocco often rejected the emancipatory language of Marxist NGOs seeking to 'empower' them. While women did often engage in minor forms of protest or dissent, their actions would be misrepresented by the liberal vocabulary of 'resistance'.

More generally, the concept 'agency' and its presumed universality was critically undermined in the 1990s and early 2000s. This was partially because the supposedly unproblematic capacity to perceive and describe 'agency' on the part of the anthropologists was questioned in the aftermath of the *Writing Culture* movement, which underlined the opacity of the anthropologist and her intentions to herself (Clifford & Marcus, 1986). Moreover, processes of 'globalization' increasingly led anthropologists to exchange their bounded field sites for 'multi-sited fieldwork' (Marcus, 1995). Global networks of production and trade were increasingly understood as 'global assemblages' or constellations in which agency was distributed amongst a variety of actors, infrastructures, and technologies (e.g. Callon, 1998; Latour, 2005; Ong & Collier, 2005). Thus, while previous ethnographies of outsourced production focussed on hegemonic regimes of power and locally situated forms of resistance, in the early 2000s anthropologists began to explore how institutions, infrastructures, and actors came together to constitute a particular 'assemblage'. These approaches have deeply influenced this project, as my fieldwork was inherently multi-sited; moreover, they attuned me to the infrastructures, technologies, and non-human

actors that mediate how the potential for political and ethical action is unevenly distributed and organized in this 'supply chain'. Again, conceiving of 'the supply chain' as a unitary and stabilised abstraction is necessarily a shorthand for a range of actors, processes, infrastructures, and institutions.

However, discussions about multi-sited fieldwork and global assemblages should be understood in relation to the political landscape in the early 2000s, when processes of globalization and their associated forms of outsourcing, shipping, and trading, were premised on forms of social inequality that were becoming perhaps more apparent than ever before. Therefore, anthropologists did not only invent new concepts to describe these social worlds, they also developed novel critiques that sought to address and unveil the liberal logic underlying the transfiguration of the world. While some anthropologists insisted on the importance of developing a 'militant anthropology' (Scheper-Hughes, 1995), others criticized the emergence of what they called the 'suffering slot' in the 1990s (Robbins, 2013). The emergence of humanitarianism has famously been critiqued by Didier Fassin (2012), who contended that humanitarian discourses replace concepts such as inequality, justice, and violence with concepts such as suffering, compassion, and trauma, and thereby effectively render these phenomena 'apolitical', as responsibility is transferred from states towards humanitarian organizations and third-party NGOs (Fassin, 2012; however, see Levine, 2023 for a revival of humanitarianism).

Even as these literatures might seem slightly outdated in the 2020s, which saw the rapid transformation of the liberal world-order on which these critiques were premised, they remain relevant in relation to the supply chain of brown shrimp in 2022: the concept of 'corporate social responsibility' has gained traction amongst corporations like Gardema, the largest shrimp processing company in the Netherlands. Gardema claimed to engage in various forms of 'social responsibility', for instance by providing transport for its workers and operating a free nursery in its Moroccan factory. Other Dutch shrimp processing companies have provided literacy classes to their employees and set up various 'emancipatory programs'. Being a 'good' employer is increasingly seen as a marketable asset in the supply chain of brown shrimp. However, this supply chain is not only perpetuated through companies like Gardema, but also through the ordinary actions of fishers, auction members, truck drivers, shrimp peelers, and a range of other actors. To understand how global social inequality and ecological degradation are reproduced through the actions of differently situated actors, it is important to address the underlying logics and modes of government that produce these arrangements as 'normal' and 'unremarkable'.

Elizabeth Povinelli (2011) has attended to the social suffering and forms of abandonment produced by contemporary forms of governmentality that she calls 'late liberalism.' She has argued that

this ‘late liberal’ form of governance characterizes the early 2000s, and designates any social investment without clear market value to be an economic and moral failure (Povinelli, 2011, p.2). In the chapters that follow, I draw on her critiques to show how configurations of ‘social tense’ justify the marginalization of shrimp peelers and migrants in the Netherlands. Lauren Berlant’s work (2011) is in turn helpful to understand the affective dimensions of life in Zoutkamp. Berlant attends to the forms and structures of life that emerged in the aftermath of ‘Fordist’ forms of production, and is especially attuned to subjects in the global North who feel entitled to social security and upward mobility, but for whom the possibilities for reproducing social life are rapidly crumbling. She shows how the promise of the ‘good life’ entangled with ‘Fordist’ regimes of production continue to hold sway even though the means of achieving it are increasingly hard to come by. Attending to these ‘post-Fordist’ affects is productive in Zoutkamp, where social expectations of fishers and their communities are increasingly hard to realize, given the decline of state support for their livelihoods.

However, by paying attention to the ways in which people went about their work and talked about their labour under these conditions of ‘late liberalism’ or ‘post-Fordism’, it slowly became clear to me that the people I spoke to across various locations inhabited the present very differently. Shrimp peelers, corporate managers, and fishers all talked about their labour in relation to an aspirational future, yet the temporal modes through which they invoked their hopes and aspirations were strikingly different. Fishers often referred to ‘luck’ in relation to fishing, for instance, whereas shrimp peelers often contended that their futures were divinely decreed. Managers in processing companies instead relied on the notion of ‘risk’ to construct a vision of the future. Vernacular concepts of risk, destiny, and luck framed the ‘future’ in very different ways, and thereby also transfigured the forms that people’s ‘aspirations’ and ‘hopes’ for the future took.

Lauren Berlant (2011) has argued that there are multiple genres for describing ‘the activity of being reflective about a contemporary historicity as one lives it’ (Berlant, 2011, p.5). She contends that understanding these moods is important for locating the sites and forms of social critique, since she is critical of the redemptive qualities of ‘optimism’ or ‘hope’. Elizabeth Povinelli (2011) adds that not only different moods for understanding the present circulate, the present itself is also structured according to what she calls ‘‘social tenses’’: social tense assigns a sense of potentiality and future-orientedness only to some, and posits others in a ‘past perfect’ or an ‘already having been’, that implies that they can ‘never have a real future’. Thereby, she shows that ‘the future’ is highly unevenly distributed under conditions of late capitalism. However, Veena Das’s work (2007) led me to understand that it would be insufficient to address debates, tensions, and protests in the brown shrimp supply chain through a discussion of its

political economy only; her work powerfully shows that ‘the ordinary’ and ‘the everyday’ cannot be taken for granted as the ground for thought and action, since the everyday is a precarious achievement that must constantly be ‘stitched together’ by mundane gestures. According to Das, the task of anthropology is to attend to the particular puzzles that people’s lives give expression to, since it is in these puzzles that we might come to understand what it means for ‘the political’ to be enmeshed in the everyday (Das, 2007; 2022). Her work helped me to notice the mundane gestures and everyday practices through which people reproduced this supply chain, and the commitments and aspirations that were betrayed by such everyday forms of action.

At the same time, it is necessary to recognize that experiences of the future are changing under conditions of late capitalism: Jane Guyer (2007) has observed, for instance, how ‘the ‘near future’ has been evacuated in the United States; as conditions for the reproduction of social life are increasingly unstable, people are either concerned with the immediate future, punctuated by datable events such as debt repayment or contract terminations, or with utopian long-term future horizons, as articulated for instance in evangelical Christianity. Rather than ascribing this phenomenon to ‘general uncertainty’, she contends that there is ‘‘a historical specificity to uncertainty now’’ (Guyer, 2007, p. 418). Her work is valuable for considering how different ways of aspiring to the future are structured by political economies. For example, Ghassan Hage (2001) has shown how such temporal experiences can also have reverberating effects in society; he has described how feelings of ‘stuckness’ amongst white, working-class, and often disenfranchised Australians have culminated in racism towards migrants and non-white others, a phenomenon he ascribes amongst other things, to a ‘deficit of hope’ (Hage, 2001).

This work is particularly relevant to the supply chain of brown shrimp, where different actors do not only produce different ‘futures’; they also produce particular forms of exclusion and belonging by doing so. Managers in processing companies often contend that ‘‘corporations make the future’’, yet thereby seek to ‘dictate’ and ‘colonize’ the future. Fishers, in turn, could be said to face a ‘deficit’ of hope, and seek to make a claim to the future, despite accusations by NGOs that their methods are ‘outdated’. However, in their attempts to show their ‘right’ to the future, they deny precarious others like migrants a claim to the future. Shrimp peelers, in turn, seek to secure a position in which they can sustain their families amidst social marginalization and state neglect in Morocco. At a time when life is increasingly precarious, shrimp peelers often mobilize the notion of destiny, to understand their circumstances as divinely decreed and to justify particular forms of social action.

By attending to ‘the present’ and the different ways in which it structures modes of relating to ‘the future’, it might be possible to return to the question of what it would entail to make the supply chain of brown shrimp differently, without romanticizing forms of ‘liberal agency’ or ‘resistance’, but also without subsuming them within deterministic understandings of power and its modalities. However, an anthropology of time should proceed carefully in order to avoid projecting linear or empty modern time on alternative modes of being immersed in the present. Therefore, I outline different approaches to the question of time in anthropology, before returning to the question of how to understand the capacity for social or political change.

Hope and the Reproduction of Life in the Supply Chain of Brown Shrimp

In the supply chain of brown shrimp, experiences of ‘the present’ were mediated by different rhythms and temporalities conditioned by the material modes of production in the brown shrimp trade. In 2022, fishers were often at sea for five to ten days at a time, and their daily rhythms were characterized by the repetitive work of lowering and hauling in their nets, rinsing and inspecting catches, cleaning equipment and finding good fishing spots. Fishers often held that this was roughly what they had been doing for several generations and thereby characterized the practice of fishing as cyclical and continuous. In contrast, environmental NGOs contend that the linear process of technological innovation has made the practice of shrimp fishing progressively more harmful to marine ecologies. In their opinion, a stable ecological equilibrium in the Wadden Sea can only be reached when fishing intensity is reduced drastically, and they contend that something needs to change now in order to prevent drastic depletion of ecological landscapes, which might never be restored.

A different tension over the ‘correct’ temporal framing of the shrimp trade could be discerned amongst shrimp peelers and the processing companies for which they worked. Processing companies such as Gardema often imagined themselves as bringing ‘the future’ to cities in Morocco. Compared to many Moroccan businesses, its managers contended, the wages, safety regulations and labour conditions offered by the Dutch company were much better than those of Moroccan businesses, and therefore Gardema considered itself as decidedly more ‘modern’ and progressive. However, shrimp peelers often worked eight, nine, or ten hour shifts, during which they had few breaks. Most shrimp peelers I talked to considered their labour in the factory to be a strict necessity, and hoped that their employment there would only be a temporary occupation. While many shrimp peelers acknowledged that their work had opened up certain possibilities for them, nearly all factory workers I spoke to expressed the hope that their children would never need to work in a factory like this, and that their futures would not be determined by

the labour regimes to which they themselves had been exposed. Thus, whereas Gardema saw itself as the bringer of progress and modernity, Moroccan shrimp peelers rejected the idea that companies like Gardema formed a vital part of their future.

Given these 'conflicts' in temporal representations, it is helpful to revisit some of the debates about time and temporality in economic anthropology. Since Marx defined value in terms of 'socially necessary labour time', Marxist historians and anthropologists have long attended to the mediation of time across capitalist regimes of production. E.P. Thompson's (1967) influential essay on time-disciplining showed how clock-time spread slowly and unevenly throughout Europe prior to the industrial revolution yet set up the conditions for the forms of time-disciplining that emerged as an essential element of factory regimes and their structuration of wage labour. He showed how such forms of time-disciplining crush previous forms of time-reckoning, and led to the internalization of clock-time as 'real time' (Thompson, 1967). David Harvey (2000) has coined the term 'time-space compression' to develop Marx's observation that capitalism produces the 'annihilation of space by time' in attempts to reduce necessary time for production, for instance by reducing transportation time through investment in infrastructure, or by innovating the production process. As a result, Harvey contends, the world is effectively becoming smaller as it is increasingly interconnected, whilst the speed of social life is constantly accelerating. This argument has been criticized and nuanced by a number of scholars who have shown that the effects of distinct temporal regimes and their concurrent forms of time-disciplining spread unevenly and do not always produce acceleration; whereas acceleration is an effect of capitalism for some, others experience the temporalities of capitalism as waiting, stuckness, or feelings of 'belatedness' (May & Thrift, 2001).

In the supply chain of brown shrimp, different modes of experiencing the present are shaped by the rhythms and temporalities of capitalist production: shrimp fishers, shrimp peelers, and processing companies navigate ecological rhythms and the temporalities of supply and demand, which shape and structure their labour in different ways. At the same time, their experience of the present is not suffused by these temporalities. Anthropologists have long reckoned with the question of time, since Durkheim famously contended that time is 'socially produced' (Durkheim, 1995). Evans-Pritchard described forms of ecological, cyclical, and ancestral time amongst the Nuer, whereas Clifford Geertz noted that Balinese calendars produced a certain idea of 'timelessness' (Evans-Pritchard, 1939; Geertz, 1967). However, in the second half of the 20th century, Faubion (1983) and Wolf (1982) addressed the ethnocentric biases through which anthropologists positioned the 'temporal Other' in a static time different from 'our'

modern time: they showed that these temporal others were thereby effectively denied both 'history' and coevalness (Fabian, 2014).

Their work powerfully introduced concerns with positionality in the anthropology of time. Three ethnographies published in the 1990s consequently sought to engage with the question of how to render time and temporality ethnographically legible, given that anthropological understandings are always mediated by temporal understandings, representations, and durations. Nancy Munn (1992) attempted to solve this conundrum by positing that time is 'a symbolic process continually being produced in everyday practices' that can be apprehended or experienced 'via the various meaningful connectivities among persons, objects, and space continually being made in and through the everyday world' (Munn, 1992). Carol Greenhouse (1996), in turn considers certain representations of time to be politically produced by legal, state, and academic institutions. She argues that these representations selectively draw on notions of agency and accountability to create institutional legitimacy for themselves, promoting understandings of agency that bolster their authority (Greenhouse, 1996). Lastly, Alfred Gell (1991) took up the question of how 'phenomenal time' relates to 'physical time' (Gell, 2001). Gell distinguished between understandings of events as categorized from the flux of experience, labelling them as past-present-future (A-series), and understandings of events as 'datable' and mapped in relation to other events (B-series). Whilst acknowledging the relevance of phenomenological experiences of time, Gell ultimately considers 'B-series' to provide more accurate 'time-maps' to understand and navigate the world.

Laura Bear (2014) has drawn on Alfred Gell's work to propose an anthropology of 'modern time'. According to Bear, anthropology has thus far failed to engage comprehensively with the complexity of modern time, even though it has dealt with various representations and experiences of time. However, according to Bear, what is needed is an anthropology that can sift out these different temporalities and show how these are produced, synchronized, and transformed by institutions and political agents, as well as mediated by ordinary people through acts of labour. Moreover, it is necessary to connect these various representations and experiences of time to ecological rhythms and temporalities that continue to structure our experiences of time, even more so under conditions of climate crisis and ecological degradation. Therefore, Bear distinguishes between personal experiences of time, social forms of time, and natural or non-human forms of time (Bear, 2014).

Laura Bear's work is productive to think about the complexity of 'modern' time in the supply chain of brown shrimp, which is shaped by ecological, economic, seasonal, and social rhythms that converge around the sites of production and circulation of brown shrimp, as well as by different modes

through which people articulate and engage 'the present'. In recent years, heated debates around the question of how to 'tell time' have emerged especially between environmental activists and fishers, who disagree over the 'right' way to diagnose the present. At the same time, anthropological scholarship on climate change and ecological crisis has also attended to the complexities of 'time reckoning' under conditions of global climate change. Extreme weather events, rapidly declining biodiversity, and global warming point to human activity as 'a power of disturbance' and introduce a sense of emergency in scientists and in many anthropologists alike (Latour, Stengers, Tsing, & Bubandt, 2018; Knox, 2020). The coinage of the term 'Anthropocene' by Paul Crutzen in 2000 has been widely influential in drawing attention to the pervasive influence humans have had on the geological epoch.[4] Whereas there have been intense debates on the appropriate starting date of the Anthropocene (e.g. Swanson, 2016), and on whether the term should be replaced by alternatives such as 'Capitalocene', 'Plantationocene', or 'Cthulucene', there is no doubt that human influence reverberates on a planetary level (cf. Haraway, 2016; Moore, 2015). Anthropologists engaging with climate change have increasingly adopted the temporal orientations implied by these terms. Consequently, while previously anthropologists could be engaged with showcasing the diversity of temporal representations across different communities and institutions, environmental anthropologists instead have asked how to reckon with the temporal understandings of their interlocutors who ignore or outrightly deny 'climate crisis' and 'anthropogenic climate change'.

Anthropologists and other critical scholars often attributed these differences in temporal representation to a tension between 'experiential' time of lived experience and the 'planetary time of climate crisis (cf. Chakrabarty, 2012). Therefore, narratives about climate change are needed that can 'bridge' between experiential dimensions of time and the forms of planetary and 'deep' time with which climate scientists are concerned. Michelle Bastian (2012) has for instance argued that we need new devices for 'telling' time, more attuned to ecological rhythms, whereas Richard Irvine (2020) has proposed to attend to different practices that enable people to connect to 'deep time'. These debates are useful to situate the supply chain of brown shrimp, since tensions between fishers, environmental NGOs, and policymakers contest notions of 'ecological degradation' and 'climate change' at length. I contend that these debates are fundamentally tensions over time: while environmental NGOs contend that fishers 'deny' the realities of climate change and impending ecological disaster, fishers insist on the continuity and cyclicity of fishing, and contend that the 'tradition' of fishing is something that should be reproduced.

[4] Succinctly put, the concept of the Anthropocene entails the idea humans have influenced the planet to the extent that the stability of the earth systems has been fundamentally disrupted human influence.

While I am mindful of the realities of anthropogenic climate change, I felt uncomfortable with denouncing the temporal orientation of fishers simply as 'misplaced' or 'ignorant', in need of remedying. Rather, fishers' relation to the present was characterized by a particular modality of 'hope' that informed their articulations of the future. Environmental anthropologists are notably critical about the notion of 'hope', which is often equated with narratives of progress and utopian thinking (e.g. Haraway, 2016; Latour, Stengers, Tsing, & Bubandt, 2018). Donna Haraway (2016) contends that hope often defers 'response-ability', whereas Bruno Latour (2018) has attributed articulations of 'hope' in Euro-American societies eschatological modes of thinking. While not all anthropologists go as far as to denounce hope all together, many agree that the conditions of 'late industrialism' require a different way of working in and with the present and the ways in which ecological and social disruptions emerge in it (Fortun, 2012). Anna Tsing's concept of the 'arts of noticing' could be situated within these approaches, as a method that can make us more attentive to forms of industrial ruination but also to the forms of life that might emerge within them, and the 'polyphonic rhythms' by which they are characterized (Tsing, 2015).

However, while I am sympathetic to these approaches, I contend that situated expressions of 'hope' should not be denounced or critiqued from the start. Of course, 'hope' is a notoriously thorny issue in the anthropological literature, yet it should be noted that it is by no means always celebrated. In Lauren Berlant's 'cruel optimism', hope figures as ''a social relation that involves attachments that organize the present'' (Berlant, 2011, p. 14). While Berlant does not imbue such forms of optimism or hope with any feeling or emotion per se, she contends that optimistic attachments are nevertheless concerned with 'one's own or the world's continuity' and thereby 'makes life bearable' even amidst increasingly precarious and ambivalent conditions for sustaining or reproducing 'life'. The fantasy of 'the good life' thus continues to structure much of everyday life for Berlant, even as attachment to this fantasy can become an impediment for flourishing or well-being.

For Berlant, 'hope' is therefore a more or less inevitable condition of human sociality, whether it should be celebrated or not. In a more optimistic move, Hirokazu Miyazaki (2004), drawing on Ernest Bloch, has attempted to develop 'hope' as a method. According to Miyazaki, hope is capable of reorienting knowledge, from retrospective reflection on what has occurred and how to make sense of it, to prospective engagement with the future. Engaging with the productive indeterminacy of the present, and the persuasiveness of a sense of 'not-yet', might lead both anthropologists' interlocutors and social scholars themselves to design and act on the 'unfinishedness' of the world and its potential for being different. Various anthropologists have drawn on Miyazaki's method to investigate the shape that hopeful

engagements with the future might take and have shown how the work of hope might materialize in 'endurance', 'defiant optimism', or practical engagements with destiny (e.g. Elliot, 2016; Pedersen, 2012; Ringel, 2020).

These ethnographies draw attention to the various ways in which people continue to hold hopeful attachments towards the future despite the conditions of 'ecological crisis', 'post industrialism', or 'late industrialism', which make it increasingly challenging to access and sustain the conditions necessary for ''sustaining life across generations''. In their proposal to 'rethink' the economy from the vantage point of 'everyday realities' of 'ordinary people', Susana Narotzky and Niko Besnier (2014) contend that 'hope' is inevitably entangled with economic practices since these have by definition a ''clear temporal orientation towards horizons of expectation'' (Narozky & Besnier, 2014, p.S10). Their work is particularly relevant to the supply chain of brown shrimp, since various actors in Morocco endure, persist, or promote their labour practices through their hopeful attachments. While various forms of hope may serve to reproduce harmful social projects, in other circumstances, hope is a precious resource to hold on to. For shrimp peelers in Morocco, who laboured under highly challenging and increasingly precarious circumstances, the vision of a better or different life was essential to endure in the factory environment. Therefore, I contend that articulations of 'hope' should not simply be 'deconstructed' or critiqued. Certain articulations of hope might drive new mobilizations and political projects aimed at struggling for and stabilizing new political forms under which life is worth living. Recently, Narotzky (2022) has underlined that it is essential that critical scholars remain attuned to the ways in which humans resist the structures and projects that render them 'worthless' and continue to struggle to ''make a life''.

Susana Narotzky's work largely focusses on the social inequalities wrought by capitalism, whereas environmental anthropologists like Anna Tsing (2015) consider how ecological and social harms are co-produced and deeply entangled. For Anna Tsing, it is vital to attend to the ways in which ecologies and forms of sociality are produced together, since life can only be sustained by 'more-than-human flourishing'. Despite their obvious differences, the work of both Anna Tsing and Susana Narotzky is therefore deeply concerned with a notion of 'life' and the conditions for its reproduction. According to Tsing, the reproduction of life is always grounded in multispecies entanglements. Rather than assuming we can articulate the conditions for the reproduction of life in advance, it is necessary to learn to 'notice' multispecies worlds and their polyphonic rhythms (Tsing, 2015). Whereas Narotzky shares Tsing's concern with life and its conditions for reproduction, she seeks to draw attention to the ways in which capitalist projects around the world increasingly devalue forms of social reproductive labour to increase surplus value, a development that effectively entails ''a direct dispossession of life-making''. Therefore,

Narotzky's focus is on the struggle for life under conditions of capitalism, which increasingly produces ''devalued ungrievable populations'' (Narotzky, 2022) Rather than cultivating curiosity about the forms of life that might emerge in 'capitalist ruins', Narotzky contends that we should attend to the rapidly receding conditions for the reproduction of social life.

Both these concerns are vital to understand how 'life' is sustained and perpetuated in the supply chain of brown shrimp. Fishers, environmental NGOs, shrimp peelers, and workers employed in managerial positions were in their own ways concerned with the question of how to sustain life amidst social and ecological instabilities and formulated different ideas about how to retain or produce durable conditions for its reproduction. Fishers often underlined that fishing was not only a 'job', but a ''way of life'' that was under threat by the EU-regulations, policy makers, and environmental NGOs. Environmental NGOs feared the destruction of delicate marine ecologies by fishing techniques and made a claim for maintaining and protecting the 'vitality' of marine ecosystems. Fishers did not consider environmental policies to protect life but contended that these threatened to undo their form of life, and, by extension, an essential part of 'Dutch' society which is upheld and sustained by its fisheries. Fishers were afraid that their lives and livelihoods would be rendered 'redundant' or 'useless' to society, and therefore they engaged in vocal critiques to defend their existence and its practices. Many fishers could trace their fishing roots back several generations and hoped that their own children would one day take over their ships. Meanwhile, state neglect and social marginalization have made life and its reproduction increasingly precarious in Morocco. As most women had experienced such forms of marginalization first hand, they often considered factory labour offer an opportunity for 'making a living' in a context where opportunities to 'accumulate life' are dwindling.

These were all concerns related to ''sustaining life'' in one way or another; whether the 'life' at stake was a socio-cultural form of life linked to one's livelihood (as it was for fishers), or ecological life, (as it was for environmental NGOs), or family life and its promises for the future (as it was for shrimp peelers). Earlier in this introduction, I wrote that the key puzzle that the brown shrimp supply chain posed for me was the question of how to situate the potential for making it differently. I contend that an answer must come from close attendance to the diverse practices, technologies, and attachments through which actors in this supply chain seek to sustain, replenish, and reproduce 'life'. Rather than highlighting one particular project or effort to 'sustain life', I seek to engage with the various 'life-making' projects that constitute the economic practices through which brown shrimp are produced. The 'supply chain' of brown shrimp emerges through various practices of making a living and the diverse attachments to the future that are entangled with them. Whereas supply chains might be productively imagined as

assemblages in which various infrastructures, actors, technologies, and landscapes come together, I want to highlight the ways in which the 'supply chain of brown shrimp', as both an abstraction and a set of material arrangements, has to be constantly re-imagined and re-enacted to be sustained and reproduced over time.

Producing Horizons of Expectation: The Brown Shrimp Supply Chain as a Machine for Time

Diverse attempts to project life 'forwards', or into the future, suffuse the modes of production and their associated forms of labour in the brown shrimp supply chain. Since these various labour regimes activate particular attachments to the future, this supply chain could be thought of as a 'machine for time', an assemblage mobilizing various infrastructures, institutions, and affects to create particular dispositions in the present shaped by imagined and aspirational attachments to 'the future'. Different ways of imagining and enacting the supply chain produce for instance notions of 'traditionality' (for fishers, who seek to 'preserve' shrimp fishing as a practice) or 'innovativeness' (for corporate managers, who seek to 'modernize' shrimp processing as an industry). These temporal modes depend on materials such as chemicals, technologies, and fishing boats to materialize. Of course, such practices do not simply create experiences and representations of time anew, but rather seek to transfigure pre-existing modes of inhabiting the present and evoking the future. Thereby, the rhythms and temporalities of producing and circulating brown shrimp mediate and transfigure ecological, economic, and religious temporalities. While many of the conditions on which this supply chain rests are highly volatile, the temporal discourses, political projects and infrastructures on which its production process depends are also remarkably adaptable to global upheavals, and thereby endow the supply chain with a certain stability. The specific forms of labour that drive this supply chain have significantly changed over time, but the promise of 'making a living' continues to bind particular actors to these renewed configurations of labour. Fishers, peelers, and corporate managers alike are compelled to participate in and reproduce these labour regimes as they continue to promise a way to 'sustain life', whether sustaining life means barely getting by in an economy in which many are rendered 'surplus' and 'redundant', or whether sustaining life entails a comfortable office job that enables a lavish lifestyle supported by a generous salary.

Therefore, 'the supply chain of brown shrimp' as a 'machine for time' distributes, enables, and constrains particular articulations of 'the future'. This thesis explores the diverse 'modes of being immersed in the temporal' (Das, 2007) that characterize life and labour in this supply chain, and through which 'the future' is understood, discussed, and acted upon. However, as should be clear by now, the 'polyphonic assemblage' (Tsing, 2015) of rhythms and temporalities that characterize this supply chain

do not simply co-exist or harmoniously combine; rather, experiences of time and orientations towards the future are hierarchically ordered, often closely managed, and in some cases severely constrained. Moreover, as an anthropologist, I did not simply stand 'outside' the experiences of time that were voiced and expressed to me, as if I could document or describe them as a distant observer; rather, I came to realize that anthropological description carries its own modes of being immersed in the present, and its own affordances and limitations for understanding and expressing 'the future' as a domain of potentiality or aspiration. While acknowledging Laura Bear's contribution (2014) to the field, I depart here from her conviction that modern time should be demystified by untangling subjective experiences of time, social forms of time, and natural or non-human forms of time. Rather than producing a 'time-map' or an overview of different temporalities here, I seek to acknowledge the many modes in which people in this supply chain found themselves immersed in the present, the many forms of hope, aspiration, and calculation that emerged from those, and the ways in which these experiences and affects were enabled or constrained by social, political, or economic arrangements. The aim of my account is not to simply document these temporalities, but rather to begin the difficult task of creating conditions of possibility for imagining this supply chain 'otherwise'.

The argument of this thesis is that 'the future' and its related concepts of 'potentiality' and 'possibility' should not be treated as theoretical concepts that stand outside everyday life, but rather, that our understanding of these concepts should emerge through ethnographic description. While similar arguments have often been made with regards to concepts such as 'the economy' (e.g. Mitchell, 2005), 'the state' (Das, 2007), or 'religion' (Asad, 2003), I contend that 'the future' has often escaped such criticisms given anthropologists' investment in particular kinds of futures (and their denouncement of others). While I am sympathetic to the impulse to hold on to certain visions for change in the presence of widespread social suffering and ecological degradation, I contend with Elizabeth Povinelli that it is important to resist the urge to ''immediately produce a propositional otherwise'' (Povinelli, 2011, p.191), and rather to explore how alternative social projects are (still) enduring and existing in the present. Veena Das (2014) has written, ''there are no overlapping, transcendental categories standing over and above the flux of everyday life through which we might generate meaningful critique'', and she contends that meaningful theory (and critique) might be generated through ethnography. Privileging ethnography does not imply that our interlocutors are always innocent or right, and that we cannot critique the forms of social or ecological harms which they sometimes produce or perpetuate. Rather, a commitment to ethnography and means resisting the promise of theoretical proposals for alternative futures in favour of the forms of hoping and aspiring that might be found in the everyday. Sustained attention to these various

forms of 'wilful striving' (Povinelli, 2011) might help us to reimagine what social critique could look like in this moment of poly-crisis.

Thereby, this thesis contributes to anthropological debates on temporality, supply chains, and social and ecological crisis. While I build on Anna Tsing's (2015) masterful ethnography on the Matsutake mushroom supply chain, I seek to make central the implications for thinking about multiple temporalities and their interactions in a global supply chain. Rather than showing that the unified coordination of time is always imbued with polyphonic rhythms, I seek to illustrate how different ways of being immersed in the temporal are expressed, negotiated, and contested in the supply chain of brown shrimp. I draw on Susana Narotzky's work to understand how efforts to 'reproduce life across generations' is central to this supply chain, but I argue that we cannot assume in advance we know what 'life' is, and what it takes to be 'reproduced'. I draw on Elizabeth Povinelli's work (2011) on social tense to make sense of some of the ways in which 'the future' and its sense of possibility is understood and governed, yet I also seek to highlight how experiences of time can negate 'late liberal' techniques of social tense without being reduced to sheer endurance. Moreover, while I am attentive to the various ecological cycles, market temporalities, and political events that shaped diverse experiences of time in this supply chain, I highlight that such 'eventful' moments in time do not always translate into experiences of the present in straightforward ways. The modes of production in the brown shrimp supply chain do constrain, afford, enable, or constrict particular ways of giving expression to 'the future', yet people's experiences around how to project life 'forward' in time vary quite drastically along the different sites of the brown shrimp supply chain. Therefore, this thesis argues that in order to think about organizing this supply chain differently, we should not immediately think of ways in which social and ecological life might be sustained and replenished better, but also look at the different ways in which life is sustained and projected in the present, under conditions that are highly constraining for some. Rather than projecting a certain normative horizon for this supply chain, it is essential to look at the various ways in which such 'horizons' are continually constructed, contested, and remade within this supply chain. In the chapters that follow, I discuss the various forms of time that are produced at different sites of the supply chain, and the specific social projects and forms of striving they enable. Thereby, this thesis seeks to push forward debates around temporality, supply chains, and social and ecological crisis, by moving beyond diverse expressions of time as mere 'experiences' or 'affects'. This thesis argues that it is essential to attend to the temporal dimensions of supply chains in order to explore the conditions of possibility for making supply chains like the supply chain of brown shrimp differently.

Methods and Ethics

I conducted eleven months of fieldwork in total, six months in Morocco and five months in the Netherlands. Additionally, I made several return trips to visit my friends and interlocutors, and I stayed in touch with various fishers and other interlocutors. My fieldwork consisted of conducting participant observation, semi-structured interviews and one focus group. In addition, I conducted extensive archival research and shared my resources with several NGOs and a filmmaker. My research is deeply informed by my positionality as a white, Dutch middle-class woman with a Western university education, which shaped my access to field sites in Morocco and the Netherlands, and the kinds of relationships that I was able to build in both places. In the Netherlands, my nationality, race, and class often afforded me a degree of institutional legitimacy and ease of access, particularly in interactions with managers of shrimp processing companies, or environmental NGOs. Since my grandparents live in the province of Groningen, I also had some rapport with fishers and their networks in Zoutkamp. In contrast, in Morocco my position as a Dutch researcher and non-Muslim woman marked me as an outsider, affecting the ways in which I was received and the kinds of knowledge that were shared with me.

More generally, my fieldwork in Morocco was structured by a range of uneven power relations which shaped how I made sense of my experiences, and how my presence as a young, white woman was understood. I conducted six months of fieldwork in Morocco, four months from February 2022 to June 2022, and two months from November 2022 to the end of December 2022. I began my fieldwork in Casablanca in February 2022, but quickly relocated to Taza, where I lived with a host family and visited the small shrimp peeling factory of Blue Taste almost daily. Initially, my fieldwork mostly consisted in sitting in the offices of the ground floor managers of a shrimp peeling factory, where I spent the day with the quality manager, the production manager, and his assistant. I became friends with both Hamid, the quality manager, and Hajar, the production assistant with whom I spent numerous hours in the office. I also interviewed ten shrimp peelers, the entire ground floor management, the director of the factory, and other workers such as cleaners.

On top of these official interviews, I got to know several shrimp peelers with whom I walked home at the end of the workday and who eventually invited me to their homes. While I was happy at the chance to visit shrimp peelers in their home, and to talk to them in a more unrestrained setting, I struggled with the unevenness of these encounters, especially since women often prepared lavish meals for such visits. I sought to evade extractive research practices by being as transparent as possible, and by seeking to compensate women for their time and efforts in ways deemed appropriate by my translators and host

family; however, nevertheless I always felt a certain degree of discomfort at these meetings. My Darija skills were rudimental at best, so I always worked with a translator during interviews with shrimp peelers. The women who were my translators in Taza were usually students of my own age, and friends of my host family in Taza. While working with a translator of course introduced challenges, and impeded the naturalness of communication, I also found that the presence of these young women helped me to unpack specific remarks or crucial context. Often, my translators also helped me to gain access and to navigate social expectations. I understand translation as an interpretive and meaning-making practice, and my translators actively participated in my research. Some of the translators I worked with also became close friends, and it is only because they wish to remain anonymous that I do not list them here as my co-researchers. In addition, my host family in Taza also contributed invaluably to my research by introducing me to the city, teaching me about life in Taza, and helping me with my language learning attempts. Without their friendship and advice, I could never have completed my fieldwork here.

When I returned to Morocco in October 2022, I decided to stay in Tangiers rather than in Taza. Tangiers hosts multiple large shrimp peeling factories, and I was interested in exploring the differences in labour conditions between Taza and Tangiers. Moreover, a filmmaker I had met in the Netherlands introduced me to several women working in one of the largest shrimp peeling factories. This time, I did not engage with the factory management, but rather focussed on interviewing women working in shrimp peeling factories. I interviewed women in their home rather than in the factory, and this time I provided monetary compensation for their time. In addition, I worked with two labour rights NGOs in Tangiers who provided me with crucial information about labour circumstances, unions, and the position of working women in Morocco. In these encounters, I also sought to avoid extractive research practices by prioritising transparency and reciprocity. I also discussed most of my thoughts and findings with my participants.

While unequal global power relations shaped my engagement with actors in Morocco, my fieldwork in the Netherlands was structured by a different set of challenges. I conducted five months of fieldwork in the Netherlands, from June 2022 to November 2022. I stayed in the city of Groningen, in the Northeast of the Netherlands, from where I commuted to the fishing village of Zoutkamp. I volunteered one day per week in the village's fishing museum, and I conducted interviews with fishers, auctioneers, corporate managers, union leaders, interest groups, environmental activists, and fishing students. I went on several shrimp fishing trips, and visited auctions, fishing schools, and processing factories in the Netherlands. However, while I believed I was fairly familiar with the Netherlands and its histories, I found that I needed to bracket many of my beliefs to be more perceptive to life in and around Zoutkamp.

Fishers frequently interrogated me on my position or opinions, and I was often asked whether I was not ‘‘one of those Greens’’. Many people in Zoutkamp felt annoyed or betrayed by the ways in which they were depicted in national media and harboured a certain suspicion about researchers or outsiders. I was painfully aware that many of my initial beliefs confirmed their fears, and I can only be grateful for the ways in which fishers, volunteers, and students invited me into their lives regardless. Fishers and other people in Zoutkamp helped me to understand much more about fishing and about living in a small village which is both in a geographical and in a political sense a ‘periphery’. At the same time, I am aware that I remain differently situated from my interlocutors in a delicate set of questions and debates that were taking place in the Netherlands in 2022 and continue in 2025. To this day, I am unsure how to inhabit these dynamics, although it is my hope that the way in which I write about these challenges might be able to provide a shared ground for conversation and debate.

As these discussions should make clear, my positionality was highly relational and situational, given the multi-sited and multi-faceted nature of my fieldwork. However, I am aware that power asymmetries, rooted in race, class, nationality, and the colonial histories linking Europe and North Africa, shaped the production of knowledge in this project. For this project, I gained CUREC approval from the School of Anthropology and Museum Ethnography Research Ethics Committee (SAME REC) in accordance with the procedures laid down by the University for ethical approval of all research involving human participants. (Ref No.: SAME_C1A_20_086). Conforming to the Ethics Guidelines of the Association of Social Anthropologists, I informed my research participants of the aims of the research, the voluntary nature of participation, and their right to withdraw at any time without consequence. I obtained oral consent from all my interlocutors and given the long-term and ethnographic nature of the research, I treated consent as an ongoing and negotiated process rather than a single event. I stored my data in accordance with the GDPR guidelines for data privacy. All person names and company names have been pseudonymized in this research. I transcribed all interviews myself and kept my records on a protected Google Drive as well as a hard disk.

Chapters Overview

The following chapters show how ‘the supply chain of brown shrimp’, as a shorthand for a range of actors, processes, institutions, infrastructures, and practices, emerged as a ‘machine for time’ that distributes, enables, and restrains particular articulations of ‘the future’. Following brown shrimp, this thesis shows how various practices of ‘making a living’ emerged around the various processes through which brown shrimp were converted or translated from a lively species into an edible commodity.

My first chapter explores how the North Sea, Wadden Sea, and Mediterranean Sea emerged as vital 'timespaces' (May & Thrift, 2001) for the brown shrimp supply chain. I explore how these various seas are enacted through specific policies, knowledge practices and legal regimes and transformed into the grounds of brown shrimp production and circulation. Fishers and traders often consider the North Sea and Wadden Sea to be sites of 'unlimited potential' that enable growth and profits for the future. Meanwhile, the Mediterranean Sea is both enacted as a site of flow (of goods) and as a 'natural' border that denies many Moroccans with migration aspirations access to Europe. As 'timespaces', the North Sea, the Wadden Sea, and the Mediterranean Sea are not merely geographically dispersed sites, but also important 'multidimensional networks' that structure experiences of time in myriad and sometimes contradicting ways. I show how the organization and enactment of these seas effectively distributes 'potentiality' and 'the future' unevenly, as the enactment of the North Sea allows fishers and traders to make claims on the future, while the border regime of the Mediterranean denies Moroccan workers both access to Europe and a sense of coevalness. In the brown shrimp supply chain, profits are therefore not only produced through processes such as (spatial) outsourcing, but also through the structuration of time and temporal experience by infrastructural sites such as the North Sea, Wadden Sea, and Mediterranean Sea.

In Chapter 2, I move from the spatio-temporal environments of this supply chain to the more intimate dimensions of more-than-human sociality in the brown shrimp production process. I explore questions of social reproduction through particular ecological and socio-economic histories. While shrimp fishers in 2022 organize in family businesses, neither 'the family', nor 'brown shrimp' can be taken-for-granted as entities. I show how the Dutch state, the family, and Dutch fisheries emerged together from the 16th century onwards. Understanding these histories is vital to understand the highly moralized ways in which 'the family' is posed as essential to Dutch fisheries in 2022. In Morocco, the articulation of 'gender' and the production of a 'working-class' is deeply shaped by the colonial and political histories of the country. To understand how women were enrolled in factory labour on a large scale, I explore the particular socio-economic histories through which a precarious female working-class was produced. I also attend to the histories of migration and entrepreneurship that stitched the Netherlands and Morocco together, and that enabled shrimp processing companies to emerge in Northern Morocco. This Chapter thereby highlights what is at stake in the 'social reproduction' of this supply chain and its associated forms of life, and how attempts at 'social reproduction' necessarily entail forms of 'continuity' and 'change'.

In Chapter 3, I subsequently describe how these formations of labour and kinship were lived by my interlocutors. Whereas 'the family' is a highly politicized site in which forms of state power and economic concerns come together, lived experiences of family life are never reducible to political, ecological, and economic history. In Chapter 3, I explore the concrete challenges that relatedness and family life posed for my various interlocutors, and how concerns with family came to inform and sustain certain labour arrangements. Drawing on Marilyn Strathern's insight (1992a) that 'kinship' is central to how people know the world and imagine the future, I explore which aspirations were betrayed by people's understanding of family life and labour in the supply chain of brown shrimp. I explore what it is that people at various sites want to 'reproduce' when they seek to sustain certain forms of life over several generations, and which aspects of life they consider non-essential or accidental. Thereby, this chapter highlights how 'social reproduction' is never only about 'cloning' or 'reproducing' the old, but also about innovation, improvisation, and the 'cutting' of certain relations and attachments.

In Chapter 4, I turn to contemporary debates around the brown shrimp supply chain, to explore how concerns with 'sustainability' and 'social exploitation' are articulated and debated in this supply chain. However, rather than analysing the 'politics of knowledge' which characterize these debates, I suggest many disagreements actually have their roots in differently valued ways of 'not knowing'. Turning to the concept of 'reasonable doubt' in environmental debates in the Netherlands, and to the role of 'education' in labour movement organization in Morocco, I show how not knowing can hold cultural, affective, strategic, or political value for differently situated actors. Appraising the importance of ignorance is vital if we are to understand how different actors engage with 'uncertainty' more generally, especially when it comes to the uncertainty of the future. I show that the 'politics of ignorance' at stake in this supply chain reveals both considerable disagreement over how to inhabit the present, and hints at the different ways in which the uncertainty of the future is understood and acted on.

Chapter 5, 6, and 7 subsequently engage more specifically with the question of how different actors are differently oriented towards the future. In Chapter 5, I attend to articulations of 'luck' amongst fishers in Zoutkamp. Luck is often evoked by fishers in relation to the unpredictability of the outcome of their fishing practices; when no obvious factors can explain fishers' success or failure, fishers readily attribute their and others' successes to luck. Fishers also mobilize luck as 'a technology of anticipation' (da Col & Humphrey, 2012) that enables a hopeful orientation towards an uncertain future. However, I show that there is a distinct moral economy that prescribes tacit yet stringent rules for how to behave in accordance with luck. Moreover, this moral economy denies precarious subjects such as migrants the capacity to make a claim to the future. Thus, I show that luck is a vital part of the everyday practice of

shrimp fishing which is embedded in a social imaginary that sustains particular configurations of social tense and social life on which the shrimp trade depends.

In Chapter 6, I turn to the labour of shrimp peelers and managers in factories in Morocco, and 'the work in/of time' performed by their invocations of 'destiny'. Shrimp peelers and managers alike often invoke the notion of destiny in relation to their livelihood, especially when articulating certain hopes for the future. These invocations do not lead shrimp peelers or managers to adopt a fatalistic stance, however, but rather incite a careful mediation between action, patience, and reflection. As shrimp peelers and managers harbour certain hopes for the future, they try to 'read' the present for divine signs that might indicate the 'right' course of action. However, the ways in which people reflect on destiny are entangled with everyday responsibilities and concerns that have been significantly reconfigured by contemporary rearrangements of labour, kinship, and sociality. Therefore, it is important to consider how contemporary modes of production within the supply chain of brown shrimp have transformed the ways in which people articulate and reflect on their divinely preordained future, whilst also showcasing how the 'labour of hope' invoked by destiny is also productive of the everyday labour in and around shrimp peeling in Morocco.

In Chapter 7, I turn to the practices of shrimp processing factories to explore how a preoccupation with risk, and the particular concepts of temporality embedded in it, materialize in certain practices of producing and distributing shrimp. In 2022, food safety and biosecurity are prevalent concerns within shrimp processing factories. Distinct regimes of control and surveillance are in place to ensure safe production, and preservatives and testing equipment are continuously updated and renewed. The ways in which risk is understood and distributed, however, is embedded in a longer history of food safety management and regulation, which is linked to the particular trajectories and transformations of pathogens such as Salmonella, Lysteria, and Vibrio. This chapter tracks the history of food safety management in the Netherlands and shows how the privatization of risk management rendered it productive for processing companies, and enabled them to derive surplus value from pathogens like Salmonella and Vibrio. At the same time, risk management strategies acutely showcase the uneven distribution of risk; the practices that seek to protect consumers and companies alike often impose pressing constraints on those workers labouring in shrimp processing factories in the Netherlands and Morocco, and expose them to serious hazards. Therefore, risk management strategies illuminate how only certain lives are considered worthy of protection whilst other lives are exposed to hazardous chemicals and stringent regimes of control to make this protection possible.

In my conclusion, I bring together the varied concerns my interlocutors had with time and the future. I reflect on the ways in which temporalities are articulated and produced through notions such as luck, destiny, and risk, and how such temporalities are mediated by infrastructures and histories of relatedness. Within this global yet delicately situated supply chain, a multi-layered and complex form of 'modern time' is produced. These various productions of modern time are closely entangled with various aspirations and hopes entailed by particular articulations of 'the future'. Situated articulations of the future signal how the capacity for political action and ethical reflection is unequally distributed. Given the pressing ecological and social concerns that emerge in this supply chain, I contend that it is vital to gain a grounded understanding of how the discursive production of time and 'the future' surface in the various processes of fishing, peeling, and trading brown shrimp.

1. The Production of Semi-Porous Seas: Time-Spaces and Infrastructure in the Brown Shrimp Supply Chain

At 3am, the alarm sounded; I woke up startled, confused as to why I was in my sleeping bag. The air was saturated with the smell of gasoline. I heard a groan coming from the pitch-dark, then Evert switched on the light and I could see the walls of my narrow berth. As I sat up and rubbed my eyes, I heard Evert getting out of bed and moving around; a moment later, the engine of the boat started rumbling. The walls of the ship trembled softly. It was an oddly comforting experience. I wrestled myself out of my sleeping bag and stumbled through the cabin, up the narrow stairs that led to the wheelhouse. Evert was already standing behind the steering wheel and skilfully navigating us out of the harbour. ‘‘Morning,’’ he said chirpy, ‘‘ready for the day to start?’’ The bright headlights of the ship illuminated some buoys floating around on the waves; soon, we left the lights of the harbour behind us. It would be several hours before tourists and other holidaymakers would crowd the quays and board their sailing boats; the first ferry to Schiermonnikoog did not leave until 6.30am. The sea stretched out in front of us, vast, dark, and empty.

However, in this chapter I argue that the ‘emptiness’ of the sea is a construction that obscures how the Wadden Sea has been constituted as a seascape in the last fifty years. Political, economic, and ecological concerns inform how contemporary seascapes are managed and regulated, and through such regulatory practices, the North Sea, the Wadden Sea, and the Mediterranean Sea have emerged as vital infrastructures for the brown shrimp supply chain. It might seem unconventional to consider these seas as ‘infrastructures’ rather than as spaces in which infrastructures can be constructed. Usually, ‘infrastructure’ is understood to consist of technologies, installations and constructions that are built at sea, on the seafloor or the water surface. However, such accounts reinforce an image of the sea as an ‘empty space’ which is simply the ‘ground’ for infrastructure networks, an idea that has become increasingly contested in recent years (e.g. Helmreich, 2011; Hetherington, 2019). In this chapter, I follow Ashley Carse’s notion of ‘nature as infrastructure’ (Carse, 2012). In a seminal article, Carse describes how the Chagres River was turned into a valuable water source for the Panama Canal through various management practices, and thereby shows how nature is enacted as infrastructure. He holds that ‘‘infrastructure is not a specific class of artifact, but a process of relationship-building’’ (Carse, 2012, p. 556). Such a definition of infrastructure is grounded in a wider scholarly tradition that considers infrastructure to be primarily ‘relational’ (e.g. Star & Ruhleder, 1996). In an important contribution to this literature, Appel, Anand and Gupta argue that infrastructure is ‘‘an articulation of materialities with institutional actors, legal regimes, policies, and knowledge practices that is constantly in formation across space and time’’ (Anand, Gupta, & Appel, 2018, p. 12). I contend that the North Sea, Wadden Sea, and Mediterranean Sea have been

articulated as material entities through exactly the kind of legal regimes, policies, and knowledge practices that Anand, Gupta, and Appel describe.

However, infrastructures are not only in formation across space and time, but they also constitute and mediate space and time in important ways. ‘‘Infrastructures configure time, enable certain kinds of social time while disabling others, and make some temporalities possible while foreclosing alternatives,’’ Anand, Gupta, and Appel write (ibid, p. 15). By defining the North Sea, Wadden Sea, and Mediterranean Sea as infrastructures, I aim to show how these seas constitute distinct ‘timespaces’, or ‘multidimensional networks’ that structure experiences of time in myriad and sometimes contradicting ways (c.f. May & Thrift, 2001). Jon May and Nigel Thrift introduced the term ‘TimeSpace’ to illuminate both ‘the extent to which time is irrecoverably bound up with the spatial constitution of society’ and the extent to which TimeSpaces are heterogeneous and multiple (May & Thrift, 2001, p. 3). This chapter shows how the heterogeneity of timespaces in the brown shrimp supply chain. Practices of fishing, peeling, and trading shrimp are entwined with the temporalities of infrastructure, and specifically on the temporalities produced are enabled by semi-stable articulations of the North Sea, Wadden Sea, and Mediterranean Sea as infrastructures: shrimp fishers enact the North Sea and Wadden Sea as open seascapes that evoke a sense of ‘freedom’ and ‘potentiality’, whilst processing companies enact the sea as a resource for capitalist extraction that allows for the ever-increasing accumulation of capital. Meanwhile, both European and Moroccan institutions enact the Mediterranean Sea as a critical border that keeps Moroccan workers ‘in place’ and thereby constricts their mobility as well as their future aspirations. However, these different enactments of seas are also contingent on the brown shrimp as a lively species: the liveliness of brown shrimp is vital for making the North Sea and the Wadden Sea suitable for shrimp fishing. Attention to the ‘‘histories of social relations that shape the forms of bodies and landscapes’’ (Swanson, 2022, p. 7) can reveal how various seas came to produce brown shrimp whilst being transformed into infrastructures for the brown shrimp supply chain. This chapter thus shows how articulations of the Mediterranean as a ‘natural’ border and articulations of the North Sea and Wadden Sea as ‘natural resources’ ultimately mediate time and space, and produce the conditions for unevenly distributed senses of potentiality and ‘the future’.

Reclaiming the Land, Reclaiming the Sea: Tensions in an Intertidal Zone

‘‘Morning Schiermonnikoog, the LO5 here,’’ Evert reported over the radio, ‘‘We’re just leaving the harbour, heading towards the Engelsmanplaat. I have one passenger on board.’’ The radio crackled. ‘‘Noted,’’ a male voice answered, ‘‘safe voyage, Evert!’’ On a mild summer night in August 2022, I went

on my first-ever shrimp fishing trip with Evert, a 66-year-old shrimp fisher from a small village close to Zoutkamp. I had just woken up on his *kotter*, where I had spent the night; since shrimp fishers usually leave between 1am and 3am, depending on the tide, I had arrived the day before so that we could leave early in the morning. Evert's fishing vessel was a so-called *kotter* ('cutter'), a relatively small boat perfect for navigating the coastal waters of the Wadden Sea. Evert's *kotter* was one of the 440 shrimp *kotters* that constituted the North-European shrimp fishing fleet in 2022. Evert had been a shrimp fisher for over forty years and had been fishing with the same boat ever since.

For the first hour of our trip, we sailed in the dark without saying much. Evert was heading for a sandbank that he considered a good fishing spot since shrimp aggregated on its slanted sides. The sandbank was located somewhere between the coast of Groningen and the island of Schiermonnikoog: since Evert had a coastal waters permit, he only fished in the Wadden Sea. The Wadden Sea is a marginal sea that stretches from the Northwest of the Netherlands to Denmark, separated from the North Sea by a series of islands. The specific environment of the Wadden Sea started forming 8000 years ago, when the first Wadden islands emerged. The sea, which covers about 10.000km^2, is the largest unbroken intertidal zone in the world, characterized by sand banks, salt marshes and mud flats. It constitutes a unique ecosystem that is sometimes referred to as the 'nursery' of species such as fluke, plaice, and herring, which migrate to the shallow sea to hatch their eggs. The Wadden Sea is a Natura 2000 zone, and in 2009, the Wadden Sea was also awarded the status of UNESCO World Heritage Site. Therefore, the Wadden Sea is a much-treasured nature conservation site, and various environmental NGOs focus on protecting its wildlife and ecologies. At the same time, the Wadden Sea is also a hub of other activities, shaped by fisheries, ferry companies, and various cable networks. The Wadden Sea is especially suitable for shrimp fisheries, since brown shrimp mostly live in shallow coastal waters. Fishers have been navigating the Wadden Sea for centuries, yet in 2022, they do need an additional permit (*Wet Natuurbescherming Vergunning*, 'law nature protection permit') to fish in protected areas.

The Wadden Sea is therefore a valuable resource for both environmental NGOs and fishers. However, the Wadden Sea is not merely a 'natural' source of ecological and economic value, but needs to be continuously (re)created and (re)enacted as such. Human interventions have shaped the seascapes of the Wadden Sea for centuries through land reclamation projects that significantly changed the topography of the sea from the 12th century onwards; therefore, attempts to structure and construct the sea 'as' infrastructure are neither exceptional nor 'modern'. However, the Wadden Sea is not only constituted by 'infrastructuring practices', but also constitutive of fishing villages like Zoutkamp, that emerged in close proximity to the sea. I conducted most of my fieldwork with fishers in Zoutkamp, a fishing village in the

province of Groningen known as ‘the capital of brown shrimp’ in the Netherlands. The village has only around 1200 inhabitants, but its atmospheric harbour and historic centre have made it a popular tourist destination for German and Dutch holiday makers. Zoutkamp was established in the 15th century on the edge of an estuary on the Wadden Sea as a settlement for the production of salt (‘Zoutkamp’ literally means ‘salt camp’). In the 16th and 17th century, the settlement was used as a military fort, and in 1828 its first harbour was constructed. By 1840, around 720 people lived in the village which by then was mainly dependent on fishing. Fishers fished for a variety of species using small sailing boats and they sold their catch to local towns and even cities such as Hamburg and Amsterdam (Buursma, 2019). From the early 20th century, fishers began to fish primarily for shrimp, and in 2022, plaques, statues and ornamental anchors throughout Zoutkamp’s historic centre remind visitors of the village’s illustrious fishing histories.

However, while Zoutkamp’s fishing heritage was displayed throughout the village, in 2022, it no longer hosted a sizable harbour. In 1969, Zoutkamp was closed off from the Wadden Sea by a large seawall, which turned the estuary on which it was located into a freshwater lake. This was the third estuary on the Wadden Sea coast to be closed off from the sea, yet fishers were outraged by the state’s decision to close off their fishing grounds. The decision to build the seawall was made when the Dutch government sought to reassess the safety of seawalls in the entire country after the North Sea Floodings of 1953, which resulted in 1836 deaths in the South of the Netherlands. The seawalls near Zoutkamp were considered too weak, and therefore the government decided that either the current seawalls should be heightened or that the estuary on which Zoutkamp was located should be closed off from the sea through the construction of a new seawall. Initially, the government opted for the first option; however, the inhabitants of multiple villages struggling with frequent floodings intensely lobbied for a new seawall. Moreover, the municipality of Groningen saw significant advantages in the closure of the estuary: by closing off the estuary, more space would be created for agricultural land, and the freshwater lake created by the seawall could offer recreational opportunities. Therefore, the members of the municipality promoted the seawall as an intervention that would provide ‘‘safety, well-being and welfare for farmer and citizens alike’’ (Duijvendak, Feenstra, Hillenga, & Santing, 2009, p. 334).

Various other estuaries of the Wadden Sea had already undergone the same fate. Originally, the Dutch coast of the Wadden Sea was marked by four estuaries, but in the 12th century, farmers and monks began constructing dykes around the plots of land that fell dry around the Middelzee, an estuary in the North West of the Wadden Sea, to create more arable land. By 1505, the estuary was entirely closed off from the sea, and Jason Moore (2010a) has illustrated how land reclamation projects like these would

contribute to the world hegemony of the Low Countries in the long seventeenth century, as they were part of an agricultural revolution through which 'Cheap Nature' was produced (see Chapter 2, and Moore, 2017).[5]

The second, large-scale reclamation project in the Wadden Sea happened significantly quicker: between 1927 and 1932, a 32-kilometer seawall was constructed to separate the Zuiderzee (a large, inland sea) from the sea. The main incentive behind this project was the creation of more agricultural land required to feed the population of the Netherlands, which had exponentially grown over the second half of the 19th century; yet the project was also a major engineering feat that would eventually result in the creation of an entire new province.[6] Despite its fast-paced construction, the building of the seawall was not uncontroversial; Dutch notables had been complementing the land reclamation project since the late 19th century, yet only after large floodings in 1916 and famine riots in Amsterdam in 1918, it received a majority of the votes in parliament. Fishers and ecologists both protested its construction; the closure of the Zuiderzee (1932) significantly affected inshore fisheries, as ecosystems were severely disrupted, and various species rapidly declined (Wolff, 2004). Brown shrimp were also affected by the ecological changes resulting from this change; whereas shrimp could traditionally be fished in winter on the Wadden Sea, they were now prevalent in summer, when they spoilt quickly and when demand was low. As a result, the revenues of shrimp fisheries dropped sharply (van Ginkel, 2009).

As I mentioned above, the closure of the Lauwerszee, the estuary on which the village of Zoutkamp was located, was the third project of this kind. However, this land reclamation project did not only create more land, but also significantly 'restructured' the Wadden Sea, by prioritizing certain 'goods' (such as safety for land-based settlements and increased agricultural potential) over others (such as ecological diversity and securing fishers' livelihoods). The fishing community from Zoutkamp fervently opposed this proposal, since the closure of the bay made it unsuitable for shrimp fishing, as it was transformed into a freshwater lake. For fishers, to be cut off from the sea meant losing direct access to their livelihoods. A noteworthy attempt to create more attention to their cause was the invention of Vlaggetjesdag ('little flags day') in 1959, a festival that would become an annual holiday in the village. The local doctor in Zoutkamp had observed a festival called Vlaggetjesdag in the Western town of

[5] From 1540 onwards, large-scale drainage projects were undertaken in many areas of the Netherlands, which led to important innovations in agriculture, leading to increased urbanization and specialization in the Low Countries. See Chapter 2 and Moore, 2010a)

[6] When the *Afsluitdijk* ('closure dyke', the dyke closing the *Zuiderzee* from the sea) was finished in 1932, land reclamation projects were begun. The reclamation of two large polders took several decades, and in 1986, Flevoland was eventually inaugurated as the 12th province of the Netherlands (Wolffram, 1997).

Scheveningen, where it marked the first day that herring fishers went out to sea. The doctor adjusted the tradition to the context of shrimp fishing in Zoutkamp, by organizing a parade for shrimp fishers and selecting a young woman as a *garnalenkoninging* ('shrimp queen'). In 1959, the holiday was celebrated for the first time, and all fishers sailed their decorated boats into the harbour. One ship carried the shrimp queen, dressed in a princess-like attire, who read out a speech that publicly denounced the construction of the seawall to the community gathered on the shore. This ceremony was followed by many festivities, and thus sought to bring attention to the position of Zoutkamp's fishers (de Moor, 2025).

However, these efforts were to no avail; in 1963, the joint campaigns of the Frysians and the municipality of Groningen convinced the government to build the seawall. In 1969, the project was finished, and the bay was ceremonially closed off from the sea on what was meant to be a festive occasion. However, fishers in Zoutkamp still remembered this day as ''a black page in history'', and hung their flags half-mast to mourn the loss of the Lauwerszee. To this day, fishers regret the closure of the estuary, and in 2019, on the 50 years-anniversary of the event, many families in Zoutkamp hung their flags half-mast again. A local fishing museum recounts Zoutkamp's history as a thriving sea harbour for visitors, and its exhibitions reflect at length on the 'artificial' separation of Zoutkamp from the Wadden Sea.

Having lost its direct access to the sea, most of Zoutkamp's fishing activities were relocated to a sea harbour in Lauwersoog, a newly built village located directly on the seashore. In 2022, most fishers docked their ship in Lauwersoog or elsewhere, although they sometimes took their cutters through a series of locks to sail them to Zoutkamp, for instance when they wanted to do works or repairs on board. Zoutkamp still has a small, atmospheric harbour, and fishers from Zoutkamp usually continue to use the initials 'ZK' on their ships.[7] Moreover, fishers from Zoutkamp continue to live in the village, and in 2022, Zoutkamp was still highly significant for the brown shrimp industry: it hosts the largest shrimp processing company in the Netherlands, as well as the only Dutch auction specifically for shrimp. In 2021, there were twenty-one active cutters registered in the port of Zoutkamp, and at the fishing school in Urk, I met at least five boys from Zoutkamp (Hamon, et al., 2023). Moreover, in 2022, Vlaggetjesdag had grown into a three-day festival that attracted thousands of visitors every year.

[7] Fishing vessels in the Netherlands are registered by two letters that specify their harbour of origin (e.g. ZK for Zoutkamp, UK for Urk, WK for Wieringen, LO for Lauwersoog) and a number. Thus, the fleet of Lauwersoog will consist of the ships 'LO1', 'LO2,' 'LO3', et cetera. However, many fishers give their boats an additional name, usually a female name, referring to a mother, sister or daughter.

Therefore, Zoutkamp continues to play an important part in the global brown shrimp trade; however, the closure of the Lauwerszee has fuelled the distrust of fishers from Zoutkamp against the state and its 'modern' interventions. Rather than 'profiting' from the technological advances that made the building of the seawall possible, fisherfolk saw themselves as being 'cut off' from their natural environment. Whereas constructions like this seawall or the *Afsluitdijk* (the 32-km long dyke that closed the Zuiderzee from the Wadden Sea) enact the Wadden Sea as a site for 'innovative' engineering projects that generate value for the state (through the creation of arable land and safety), fishers continue to enact the Wadden Sea as their 'traditional' fishing grounds to which they have a certain right (see Chapter 4). The Wadden Sea might therefore be said to generate different temporalities for fishers and the Dutch state; whereas the state mostly considers the Wadden Sea in terms of its future potentiality, fishers consider the Wadden Sea as an 'ancient' and 'traditional' fishing ground. These temporalities, moreover, are closely interlinked with different forms of value that fishers and state actors seek to produce through the Wadden Sea. In Chapter 4, I will discuss how different ways of articulating and enacting the Wadden Sea informed some of the most intricate conflicts between fishers and the state in 2022. However, before turning to these debates, it is essential to outline in further detail the forms of governance and regulation that manage Dutch seascapes in 2022.

Fishy Frontiers and Expanding Horizons: The North Sea as a Sea of Possibilities

''I like being out at sea because it is calm,'' one of the adolescent men answered me. He shrugged, looking a little bit embarrassed. ''When I am at sea, I don't have to deal with my mum complaining, or with any other issues on the land. No one is nagging on about anything.'' The other boys agreed. ''No one tells you what to do at sea,'' another one answered. ''It is nice to have some peace and quiet.'' I was sitting with five aspiring shrimp fishers, four young men and one young woman aged 16 to 18 at the fishing school in Urk, one of the few fishing schools in the Netherlands. I just asked them about the appeal of shrimp fishing, and in response, they all evoked the 'tranquillity' (*rust*) of the sea, as well as the feeling that at sea they were free to do whatever they wanted in their own way.

Many professional shrimp fishers also underlined the importance of this ''freedom'' (*vrijheid*) at sea, which they often linked to being independent and not having to work for a boss. Therefore, it is not surprising that many shrimp fishers feel increasingly constricted in their practices. The emergence of nature reserves, windmill parks, and increasingly complex policies all have delimited fishing grounds in recent years, whilst rules and regulations for fishers are increasing. Demands for 'traceability' (*traceerbaarheid*) of seafood products require that fishers engage in meticulous bookkeeping and are

obligated to have tracking instruments like black boxes on board. Such policies often impinge on fishers' sense of 'freedom'. However, other actors, such as environmental NGO's and policymakers, insist on the controllability of (shrimp) fisheries, especially since Dutch fishers have a reputation for being ''quota busters'' (van Ginkel, 2009). I suggest that these adversary perspectives are closely linked to the ways in which the sea is enacted by fishers, policy makers, and environmental activists. Of course, the North Sea has been used for trading, fishing, and migrating for centuries, and the fleet of the Netherlands played a crucial role in the transatlantic slave trade and the colonial expansion of Europe. In Chapter 3, I further explore the history of the Dutch fleet, yet here I explore how the North Sea was drastically reconfigured as an economic resource, an environmental habitat and a network of international traffic in the course of barely 50 years (Pye, 2014).

These transformations were aptly summarized by the slogan of the Dutch management plan for the North Sea 2015, developed from 2005 onwards: ''healthy sea, safe sea and profitable sea'' (IDON, 2011). The management of the North Sea has brought into being a whole range of institutions and actors that are concerned with the development, realization, and compliance of marine-related policy. In the Netherlands, the Ministry of Infrastructure and Water Management has a special executive agency charged with the various aspects of the management of the North Sea. Within these units, the North Sea is configured as a space that can be represented in maps, graphs, and data. Policy making depends on the core belief that such maps reliably capture information about for instance the water quality status, fish stocks, natural resources, and spatial possibilities of the sea (Ministerie van Infrastructuur en Waterstaat, 2022).

Whereas I attend to the long history of the Dutch fleet in Chapter 2, here I show how the North Sea was turned into such a site of governance over the last few decades. After the second world war ended, nation-states in the global North began to explore the potential of the oceans and seas as resources for extraction, and rapidly advanced their activities at sea. In 1945, the United States had asserted its jurisdiction over the natural resources on the continental shelf contiguous to its coast in the Truman Proclamation as a means to meet its increased demand for petrol (Scharf, 2013). The proclamation was published at a time that saw a range of technological innovations which made it possible to utilize the sea in unprecedented ways more generally: many countries had started to explore their possibilities for offshore drilling, which resulted in the construction of large oil platforms. Moreover, the first containerships were being developed and taken into use in 1955, which made it possible to conduct large-scale freight transport over water. Various nation states, amongst which the Netherlands, also invested heavily in the fishing industry (see Chapter 6). At the same time, long-distance telephone cables were

being installed on the seafloor, whilst waterways had to be dredged for containerships. These developments required a new codification of the Law of the Sea and in 1949, the UN appointed a special commission of the International Law Commission to conjure a report which would form the basis for the first UN conference on the Law of the Sea held by the United Nations in 1958 (IILSS, 202; United Nations, Codification Division, Office of Legal Affairs, 2023).

Based on this report, it was decided to divide international seas in four distinct categories: territorial seas, contiguous zones, continental shelves, and high seas. Territorial seas were defined as extending twelve nautical miles from a nation's coastline and fell under the sovereignty of nation-states, even though innocent passage of foreign ships was always required. The contiguous zone was determined to be twelve miles further out and allowed a nation to enforce its laws on customs, taxation, immigration, and pollution. Nation states were also given the right to the natural resources on its continental shelf, which comprised the seabed and subsoil of the submarine areas up to two hundred miles beyond the territorial seas. Lastly, high seas were defined as open areas beyond national jurisdiction. These categorizations shaped how the North Sea could be enacted as a site of connection, transport, and resource extraction. Over the years, the United Nations and the EEC formed new, more detailed agreements such as the Bonn agreement (1969) which sought to facilitate cooperation in responding to oil spillage events, the MARPOL convention (1972) which aimed to prevent pollution from ships, and the adapted SOLAS convention (1960; 1974) which regarded the safety of human lives at sea (the original SOLAS convention was adopted in 1914, in relation to the Titanic disaster). The co-evolution of modern technologies and international conventions significantly shaped how nation states came to understand the North Sea as a particular field of possibility and informed the ways in which the sea was utilized; both formal agreements and emerging technologies structured what kind of activities nation states could undertake on sea and therefore had significant world-making effects (Kraska & Ryou-Ellison, 2025).

Technological interventions and new jurisdictions contributed to the emerging perception of the North Sea as 'a sea of possibilities' in the Netherlands (Raad voor de Leefomgeving en Infrastructuur, 2011). To tap into the perceived potential of the North Sea, the Dutch state invested heavily in the fishing industry during the 1960s and 1970s (see also: Chapter 2 & 7). During this period, a range of new technologies for fishing ships were being developed: sophisticated navigation instruments increased the precision of the fishing process, more powerful trawls increased the catches, and the introduction of nylon nets made it possible to haul in larger catches. Moreover, many ships were adapted with evermore powerful engines, which resulted in a direct and exponential increase in catches. Many fishers were concerned by this rapid modernization of the fleet and called for some form of government regulation of

the process; in 1972, the Dutch Fishermen's Union appealed to the state to introduce an upper limit for fishing vessel engines. However, the state refused this appeal, stating that they did 'not have any means to intervene' (minister Tienstra, quoted in van Ginkel, 2009, p.154).

In fact, the Dutch state favoured rapid modernization of the fishing fleet and promoted the modernization of the Dutch fishing fleet throughout the 1960s and 1970s through beneficial tax arrangements and subsidies. The Dutch state strived to develop an internationally competitive fleet and considered large catches and high profits to be in the interest of the national economy. The formation of the European Economic Community in 1957 had established free trade and a common market between six European countries, which significantly extended the sales market for Dutch fish. Thus, the Dutch state sought to increase its export through the fishing industry. As a result of the policies that favoured modernization, most fishers felt they had no choice but to 'participate in the horsepower race' (van Ginkel, 2009, p. 184). This meant that many fishers invested most of their revenues in their fishing vessels. From 1951 to 1971, the Dutch cutter fleet increased its engine capacity from 25,000HP to 250,000HP, and by 1975, the engine capacity had reached 380,000HP (van Ginkel, 2009). This resulted in an exponential increase in catches amongst Dutch fishers, that contributed to the idea of the North Sea as a space of 'unlimited potential'.

Shrimp fishers were deeply implicated in these developments. Fishers from Zoutkamp had made shrimp their primary target by the early 20th century, and in the 1950s, Zoutkamp's fleet was caught up in industrialization together with the rest of the Dutch fleet. In the 1960s, a new technique for shrimp fishing was introduced. This technology, called a 'shrimp trawl' or 'spool trawl' (*garnalenkor* or *rolkor*), was a variant on the traditional beam trawl, and makes use of a steel beam with a net attached to it that drags over the ocean floor. The net has rubber spools which roll over the seafloor, and when the net is lowered into the sea, it opens up like a bag. The spools which roll over the sea floor startle shrimp which 'jump' into the net. The cutter keeps sailing at a steady speed and special 'sieve nets' prevent other fish from entering the net or allow them to escape before the nets come up. Once the speed of the boat starts falling, the nets are full and ready to be hauled in. This fishing method rapidly increased the catches of shrimp fishers; the growth in engine power of shrimp cutters further contributed to this development (Rijnsdorp, et al., 2008).

In 1998, the unprecedented 'horserace for power' came to an end when the European Commission finally implemented a maximum of 300HP for engines of fishing vessels that operate within 12 miles of the coast. However, by then most shrimp cutters had engines that far exceeded this maximum.

As the European Commission did not actively enforce this regulation, most fishers kept on fishing with their cutters in spite of this regulation, until the Dutch government made an agreement with fishers' producer organizations to ensure that fishing vessels would abide by the EU regulations. This agreement led most fishers to restrict their engine power, although many fishers today state that many vessels still operate with engines more powerful than officially allowed.

In 2022, 440 shrimp cutters operated on the Wadden Sea and North Sea. These shrimp cutters are shallow draft vessels between twelve and twenty-four metres long and therefore much smaller than some other fishing vessels that operate in deeper waters. Some cutters are more than a hundred years old, whereas other fishers invest in brand-new models which they had built on request; generally, the Dutch fleet is much more modern than the German and Danish fleet. Usually, ships had two crew members, although ships that fish for shrimp as well as other fish might have up to six men on board. Whereas ultramodern ships generally have larger catches, smaller cutters only use around 1200 litre of gas oil (diesel) per week whereas newer ships might use up to 5000 litres. At a gasoline price of almost one euro per litre in the summer of 2022, fishers with technologically advanced ships need to catch significantly more in order to break-even. Fishers usually invest a large part of their profits in their ships and most shrimp cutters cost between 500.000 to 1.500,000 euros.

In Chapter 4, I discuss how powerful engines and 'modern' cutters have become a status symbol for many fishers and are essential for the production of 'masculinity'. However, the same technologies that are a source of pride for fishers are a concern for marine biologists and environmental NGOs. Research has pointed out that the bycatch of (shrimp) fisheries is significant, and since most species caught as bycatch do not survive their release back into the sea, (shrimp) fishing technologies might interfere with vulnerable species: therefore, fishers have been obligated to land their bycatch since 2019, so that these species can be taken into account in European fishing quotas. (Neitzel, et al., 2023). However, fishers are highly frustrated by this EU-implemented landing obligation, since bycatch is not sold for human consumption, and thus constitutes an economic loss for fishers; moreover, when bycatch is landed, it is detracted from the annual quota for a given species, so that the TAC (Total Allowable Catch) per species effectively decreases. To decrease the total amount of bycatch, shrimp fishers are obligated to use special sieve nets that allow other species to escape; yet since these nets slightly reduce overall catches, this is also an unpopular measure amongst shrimp fishers.

Thus, policies that attempt to manage the sea's 'ecological resources' are often lamented by fishers, who complain that fisheries are too closely monitored. When I was fishing with Evert, he had to

report his activities in an online log on his on-board computer, since in 2022, fishers had to register their exact fishing hours, as well as the volume of their catch and bycatch. Failure to do so can result in high fines or suspension of fishing permits; before fishers dock their ships, they need to report the weight of their catch to the auction over the intercom, and the auction will weigh their catch again to check this number. There is only a very small margin in which the catch is allowed to deviate from the number reported by fishers. Cynthia, the director of the fishing auction told me that, ‘‘we need to do meticulous bookkeeping here. There are hardly any industries that are as rigorously controlled as the fishing industries.’’

Fishers often try to mediate or evade some of the top-down implemented measures to which they are subjected. For instance, fishers routinely cheat the system through which shrimp are sorted: when shrimp are landed, they are sifted by a sorting machine into different categories. There are three different sizes of ‘sizable’ shrimp (*maatse garnalen*) for which fishers get paid different prices; however, shrimp with a width below 6.8 millimetres are classified as ‘undersized shrimp’ and are not accepted for human consumption (Van Opstal & Van Vlasselaer, 2023).[8] Undersized shrimp, known as ziftsel or ‘sievage’ is sold for a symbolic price of ten cent per kilo to a company which processes it into fishmeal. According to current environmental protocols, sievage cannot make up more than 15 percent of the total catch, or fishers will be fined. However, according to the director of the fish auction, sifting machines are often being tampered with. ‘‘Either people try to throw to much on the machine so that it cannot sift the shrimp properly, or they tamper with the installation. They always find some way to reduce their percentage of sievage,’’ she mentioned. The implementation of surveillance cameras or the presence of special controllers have not been able to change this practice. As different fish auctions in the Netherlands use slightly different sifting machines, there is little conformity across the supply chain. ‘‘All machines are being tampered with, all the time,’’ Evert told me later, ‘‘however, fish auctions are more or less obliged to let that happen. We are their clients, you see. If Lauwersoog doesn’t tamper with their machine, we will simply go to a different auction where they will. In order not to go bankrupt, they need to play the game.’’

Therefore, sifting machines are an important technology through which battles between fishers, policymakers and various intermediaries materialize. Policymakers acknowledged the concerns of marine biologists that high percentages of juvenile specimens indicate unsustainable fishing practices, and

[8] Shrimp need to have a carapax width of at least 6.5 millimetres (6.8 to classify as MSC) and a body length of 45 mm in order to qualify as suitable for human consumption, and 6.8 millimetres to classify as MSC.

therefore sought to implement measures that reduced the catch of immature shrimp. Shrimp fishers, however, contend that a percentage of 15 percent sievage is unrealistic, and consider themselves to be monitored too closely; through ‘‘tampering’’ with the machines they seek to reclaim a sense of ‘‘independence’’, a value held in high regard by most fishers I spoke to. The auctions in charge of sifting machines, meanwhile, find themselves in a double bind; all thirteen fish auctions in the Netherlands were privatized between 1988 and 2000, and therefore, need to make a profit. The auction in Lauwersoog was sold to fishers and processing companies in 1992, who subsequently became its stakeholders. Therefore, Evert is right that it is in the auction’s interest to attract fishers to their auction: even though the fishing auction in Lauwersoog employed only sixteen people, it was costly to run the cooling system in the storage, to operate the various sifting machines and to maintain the building in an acceptable state (in 2019, the total costs of the auction in Lauwersoog amounted to 1.3 million euros (Accon AVM Accountants B.V. 2019)). Fishers are the clients of the auction, since auctions charge fishers a small fee for renting storage crates and washing them upon their return. In addition, fishers pay mooring fees to the auctions where they dock their ships and auctions produce flake ice for fishers to cool their ship holds. Therefore, auctions often seek to cultivate a sense of ‘loyality’ amongst ‘their’ fishers. Yet the ways in which the minimum/maximum percentage of sievage is negotiated in fish auctions, has real implications for North Sea and Wadden Sea ecologies.

Practices of Protection: Permits, Quotas, and the Emergence of Marine Conservation

Ecological concerns about the North Sea and Wadden Sea have become central to policy-making and public debates around fishing in 2022: the landing obligation, the introduction of sieve nets, and the sievage quota discussed above are only a few examples of ecological measures that have emerged over the last decades. Concerns for the North Sea as a precious natural environment emerged at scale in the 1970s, when fish landings began to drop. Both fishers and scientists considered this to be the result of falling fish stocks, widely recognized as an effect of overfishing (Laursen, 2020). Moreover, scientists reported alarming rates of pollution in the waters of the North Sea. Therefore, the European Union began to draft policies to address emergent environmental concerns. In 1983, the Common Fisheries Policy was established, which outlined fishing quotas to which all European Union member states must adhere. This policy attempted to preserve fish stocks of species that were thought to be declining, such as cod, haddock, saithe, whiting, plaice, redfish, and mackerel.

Yet as Rob van Ginkel (2009) has documented, many Dutch fishers did not adhere to these quotas; the quota system was implemented top-down on fishers and ultimately clashed with the work

ethos of fishers, who took pride in working as hard as possible to optimize their catches (see Chapter 4). Fishers often contended it was more profitable to break the rules (at the risk of getting a fine) then sticking to their quotas. Brown shrimp, meanwhile, remained unquoted: sometimes called the 'weeds of the sea', brown shrimp thrive in overfished seascapes, especially in nitrogen-rich waters which could be found in estuaries where rivers with waste water flowed into the sea (Neal, 2008). Shrimp have a life cycle of less than two years, and females typically produce between 500.000 and 1 million eggs per year. Decades of overfishing have reduced the number of natural predators of shrimp, which further boosted its populations. Therefore, in 1983, many fishers chose to switch to shrimp fishing, as it meant they did not have to bother with quota regulations. While many forms of fishing became less intensive between 1983 and 1998, shrimp catches saw a sevenfold increase in the period 1960-2014 (Davidse, 2001)

Therefore, the Common Fisheries Policy effectively produced the North Sea as a fertile ground for shrimp fisheries. However, in the first years after its implementation, the CFP was widely considered a failure; fish stocks kept falling, and overfishing was widely considered to be a problem (Laursen, 2020). The EEC concluded that the established quotas were insufficient to regulate European fish stocks and considered alternative measurements for protecting marine environments. From the 1990s onwards, biologists and policymakers started to switch from species-directed policies towards a more 'ecosystem-based' approach; instead of protecting individual species, policies focussed on protecting habitats and ecosystems. One way in which the EEC attempted to do this, was by adopting a 'community system of fishing licenses' in 1995, which meant that all fishing vessels in Europe were obligated to acquire a licence, although individual countries could decide for themselves how they issued and licensed these permits.

The Netherlands introduced different licenses for different forms of fishing. For shrimp fishers, two kinds of permits were relevant; the 'Shrimp Permit Fishing Zone' (*Garnalenvergunning Visserijzone*, or 'GV') and the 'Shrimp Permit Coastal Zone' (*Garnalenvergunning Kustzone*, or 'GK'). Most fishers acquired either one of these permits; fishers who acquired a GV are allowed to fish in so-called 'fishing zones', which are designated areas in the North Sea outside of the Coastal Zones, which extend beyond the twelve mile zone. Fishers who have a permit to fish in Coastal Waters are also allowed to fish in certain coastal zones, mostly the Wadden Sea. In 2015, 87 fishers had a coastal waters permit (allowing them to fish in both the Wadden Sea and the North Sea), whereas 135 fishers had the more general fishing zones permit (allowing them to fish in the North Sea only); however, in the last 10 years, both the Wadden Association and the state have 'bought out' several shrimp fishers, so that only 68 fishers with coastal permits and 128 with more general permits were left in 2025 (Turenhout, Oostenbrugge, &

Beukers, 2015). As most shrimp fishers with coastal water permits use relatively small cutters that are not very well-suited for fishing on the North Sea, these fishers usually stay on the Wadden Sea. Since migration patterns of shrimp vary greatly, some periods might be better for shrimp fishers on the Wadden Sea, whereas in other times shrimp are primarily found in the North Sea. The Dutch government has stopped issuing new fishing permits, so that shrimp fishers cannot simply buy a permit from the government but need to trade in permits. This makes fishing permits much coveted assets; most permits are estimated to have a value between 475.000 and 680.000 euros (Zaalmink and Mol 2020).

In addition to implementing a permit system, the EEC adopted the Habitats Directive and the LIFE regulation in 1992. These regulations sought to protect 'natural' areas to ensure 'the long-term survival' of European species and habitats (European Climate, Infrastructure and Environment Executive Agency, 2023). In 1991, the Netherlands was the first European country to design a special 'environmental zone' in the North Sea that was to be protected from pollution and should contribute to the overall quality of the seawater (Trouw, 1992; Rijkswaterstaat Zee en Delta, 2021). The subsequent installation of various Natura 2000 zones in the North Sea aimed to extend such protected areas. However, that did not mean that fishing was completely banned from these areas; the state decided that, as long as fishers could demonstrate that their activities did not cause significant harm to the environment, they could apply for a permit that allows them to continue fishing in these areas. To qualify for such a 'law nature protection permit' (*Wetnatuurbeschermingsvergunning*, usually just called 'Wnb'), fishers need to provide an 'appropriate assessment' (*Passende Beoordeling*), which is a report that convincingly argues that no environmental harm is to be expected. The shrimp fishing industry collectively applies for such a permit, which must be renewed every five years.

In Chapter 4, I discuss how this permit became a longstanding source of contestation between fishers and environmental NGOs, as the category of 'no reasonable doubt' is differentially mobilized by activists, fishers, and policymakers. However, with regards to the logistical process of applying and acquiring for the permit, it is important to note that fishers do not deal with this bureaucratic process all by themselves. Fishers apply collectively, yet there is often a lot of confusion amongst fishers who are used to operating individually. Most fishers I met intensely disliked dealing with complicated legislations and regulations, and while the national fishers's union (*vissersbond*) and various fishing interests groups usually take the lead, their members also often struggle with the application process. In the past, shrimp processing companies such as Gardema, the largest shrimp processing company in the Netherlands, located in Zoutkamp, have helped fishers to acquire this permit and to lobby for shrimp fisheries. For instance, Gardema has appealed to the Council of the State to dispute claims regarding seabed

disturbance, which would cause some areas of the North Sea to be entirely closed to the fishing industry. Gardema also initiated the MSC label for the shrimp fishing industry and wrote hygiene codes for fishers to keep shrimp fisheries viable in the long term. As such, the company was deeply imbricated in the process of governing, negotiating, and representing the sea.

These might be considered strategies through which the company attempts to ensure an ongoing supply of shrimp (see Chapter 7). Processing companies are well-aware that they are dependent on fishers and their commitment to fishing as a 'traditional', 'unruled' practice; therefore, they navigate some of the policies, legislations, and rules on their behalf (see Chapter 3 and 7). Processing companies like Gardema therefore perform the sea as a logistical problem that must be solved so that fishers can continue to navigate the sea as a sites of 'freedom' and 'independence'. However, processing companies do not only mobilize the North Sea and the Wadden Sea as strategic infrastructures for the supply chain of brown shrimp; they also rely on the Mediterranean Sea as a 'semi-porous' border, which enables the flow of brown shrimp, technologies, and preservatives to Morocco, whilst keeping a precariously situated labour force firmly 'in place'.

Flows and Stops: The Mediterranean Sea as a Semi-Porous Border

''The Netherlands is so close for him,'' Samira mentioned, referring to Amin, a Dutch-Moroccan factory manager. ''He just travels there like I would travel to Casablanca.'' We were in a fish processing factory in Bouskoura, a small city in the suburbs of Casablanca. The factory processes various sorts of seafoods which are mostly sold to Moroccan retailers; however, when the supply of brown shrimp is high, the factory employs about eight hundred women who peel shrimp. Samira had been working here since 2004. She was divorced and had two sons aged twenty-one and twenty-three; the oldest one works in a factory, whereas her youngest son is a still student and supported by her. To increase his opportunities for finding a job, he would like to study in Ukraine, yet it is unlikely that he would ever get a visa. For Samira and her family, 'Europe' felt very far away.

Shrimp peeling factories in Morocco rely on a large workforce of women to peel shrimp: at least nine different factories employ between 10.000 and 15.000 women. This number is an estimate, however, since not all factories are registered; therefore, the actual number of shrimp peelers might be much higher. Once I heard a factory manager guess that around 40.000 women in Morocco are employed in the shrimp peeling business. Shrimp peelers get paid a piece rate rather than an hourly wage. In 2022, they usually received eighteen or nineteen dirham per kilo of peeled shrimp, which equals approximately 1,74 euro. As

women peeled four kilo of shrimp on average per day, they earned around six to seven euros for working eight, nine, or ten hour shifts in a factory. Often, money is still deducted from this salary to pay for insurance and transport to the factory (see Chapter 4 and Chapter 7). The first shrimp peeling factories emerged in the 1990s, and their emergence is closely related to 'fortress Europe' and the related enactment of the Mediterranean as a 'defensive moat' (Jacquemet, 2022).

Before the emergence of shrimp peeling factories, shrimp were peeled at home by the wives and family members of Dutch fishers. In 1950, the first shrimp processing company was founded by two families in Zoutkamp (see Chapter 2). The company bought shrimp from fishers at the auction and distributed them amongst various households in the area; additionally, the company established a small shrimp peeling station in the village, where women came together to peel shrimp. Zoutkamp was still relatively poor and shrimp peeling became a side activity for housewives and children through which many households could earn some extra money. However, by the 1970s, the supply of shrimp was so large that local home-peeling practices did not suffice anymore. Processing companies had to search for alternatives that would guarantee a secure supply of labour. Therefore, shrimp processing companies began to employ labour migrants, a relatively common strategy at the time.

In the 1960s, the Netherlands faced shortages of unskilled labour: after the Second World War, the Dutch government received a large share of Marshall aid, which was invested in public services and social welfare programs (van den Berk, 2020). As a result of its subsequent economic growth, many Dutch people were employed in service jobs, which effected a labour shortage in mines, green houses and textile factories (Bouras, 2022). Therefore, the Dutch government made various labour recruitment agreements with countries in Southern Europe, Yugoslavia, Morocco and Turkey. In 1969, the Dutch government sealed a formal agreement with the Moroccan ambassador, and between 1966 and 1972, Dutch recruiters hired more than 4000 men in Morocco. However, most Moroccan labour migrants came to the Netherlands prior to 1969, without a formal labour contract; Nadia Bouras (2012; 2022) has shown that most Moroccan migrants did not have the Netherlands as their initial destination in mind, and that most migration to the Netherlands happened through chain migration. 'Spontaneous' migrants were welcomed, however, since they were cheaper for their employers who could avoid arranging housing and completing complex and expensive paperwork. Most Moroccan migrants came from the Rif region, and by the early 1970s, around 20.000 Moroccan workers lived in the Netherlands.[9] In 1974, the Dutch

[9] Some scholars have argued that the Moroccan government deliberately sent Dutch recruiters to the Rif to decrease tensions in the area, since large-scale protests against the government took place in the Rif in 1957-1958 (see Chapter 2; de Haas, 2007). However, Nadia Bouras (2012) has refuted this hypothesis by showing that Dutch

government passed a law for family reunification, which meant that many Moroccan women and children came to the Netherlands too; around 170.000 Moroccans migrated to the Netherlands in the second half of the 20th century (Bouras, 2012).

Yet compared to labour migrants from other countries, Moroccan migrants arrived relatively 'late'; the Dutch government had already heavily recruited in Turkey, Italy, Yugoslavia, and Spain before they recruited in Morocco. Moroccans were often hired for industries that were known to be closing within a couple of years, such as the mines in the South of the Netherlands. Dutch workers therefore had the time to look for other forms of employment, while labour recruiters assumed that Moroccan workers would return to Morocco once jobs disappeared. This did not turn out to be the case, however; the 1973 oil crisis hit Morocco harder than most European countries, which meant that its economic situation was precarious. Morocco's political situation was also unstable, since King Hassan II had established an authoritarian rule characterized by widespread repression and persecution of dissidents, which was only solidified by several coup attempts in 1971 and 1973.[10] Therefore, Moroccan migrants thought their chances at employment would be better in the Netherlands than in Morocco; especially since they realized that it might be impossible to return to the Netherlands once they returned to their homeland, since the Netherlands tightened its immigration policies after 1973 (Bouras, 2012).

Whereas Moroccan migrants in the Netherlands were not severely affected by the 1973 oil crisis, in the 1980s, many Moroccans lost their job, as low-skilled labour was increasingly outsourced to low-wage countries. By 1984, half of all Moroccan 'guest workers' had become unemployed and since most Moroccan workers were unskilled workers, they did not have many alternative employment opportunities. Shrimp processing companies effectively deployed these high unemployment rates to outsource the peeling of shrimp to (the families of) labour migrants, and soon, home-based shrimp peeling was happening on a large scale; in the early 1980s, more than 10.000 Moroccan and Turkish families were involved in shrimp peeling (Schouten & Verhey, 2016).

recruiters were mostly based in big cities; yet since Germany and Belgium also had labour recruitment agreements with Morocco, many Riffians initially came to these other countries before settling in the Netherlands.

[10] Between the 1960s and 1980s, political dissidents and democratic activists were harshly persecuted in Morocco. This period has come to be known as 'the years of lead' in Moroccan history.

Nevertheless, in 1990, the Dutch Ministry of Agriculture, Nature and Food Quality prohibited this practice as they considered it unhygienic.[11] Processing companies had to find other ways to arrange the peeling of shrimp, and the first shrimp processing companies emerged in Tangier in 1990. The first factories were established by Dutch Moroccans who, on behalf of Dutch companies, oversaw the building and management of factories (see Chapter 2). Other companies soon followed their example, and in the 2020s, most shrimp are processed through this transnational circulation.

As I described above, at least 10 000 women are employed as shrimp peelers in such factories. In Chapter 2, I describe how Morocco became a 'low-cost' production country after the IMF-devised Structural Adjustment Program effected the flexibilization of labour market regulations and the abolition of the minimum wage in 1983. Whereas the SAP was essential for making labour 'cheap' in Morocco, Dutch shrimp processing factories also rely on strictly controlled border regimes that make it increasingly difficult for Moroccans to find employment abroad. Whereas many by European countries actively recruited Moroccan labourers in the 1960s, the oil crisis of 1973 led to rising unemployment rates throughout Europe, in response to which many countries to tighten their immigration policies (Wiesbrock, 2016). The creation of a common market in 1986, which enabled the free flow of people, goods, and services, subsequently became an incentive to create European-wide migration policies (Wiesbrock, 2016). Initially, there was much reluctance on the part of countires to make migration part of EU regulations; however, a sharp increase in asylum applications in the early 1990s contributed to the idea that European policies were needed to address the 'problem' of migration. Northern European states put pressure on Southern European states to adopt stricter migration policies, and from the 1990s onwards, Northern Africans were required to have a visa upon entering the EU (Andersson, 2016). In 1999, the Treaty of Amsterdam was created, which incorporated matters related to visa, immigration, and asylum; every five years, the EU publishes a program specifying its immigration laws and policies.

Ruben Andersson has shown how from the 1990s onwards, 'legal' routes of migration were therefore increasingly replaced by 'illegal' ones; in the 1990s the first boats with migrants arrived on the shores of Spain and Italy. These forms of 'illegal' migration in turn fuelled the idea that migration was one of the major 'challenges' or 'problems' Europe was facing. As a result, funding to combat illegal migration rapidly increased: in 2004, FRONTEX (European Agency for the Management of Operational Cooperation at the External Borders) was founded, and whereas the agency's budget was 143 million

[11] In December 1983, 13 people died in a retirement home after eating a contaminated 'shrimp cocktail'. Even though the shrimp in question were not brown shrimp, and even as the eventual cause turned out to be that the cook suffered from dysentery, home-peeling of shrimp was prohibited in the long aftermath of this event (See Chapter 7).

euros in 2015, by 2025, it had increased to 1.12 billion (Frontex, 2015; Frontex, 2025). Gregory Feldman (2011) has shown how a comprehensive 'migration apparatus' was created in Europe, whereas Ruben Andersson (2014) has highlighted that these policies and their associated border regimes work to create both borders and 'illegal migrants' as a profitable business 'that thrives on its own failure' (Feldman, 2011; Andersson, 2014).

Even though irregular migration by boat has contributed less than one percent to irregular migration into Europe, the European union attempted to enact the Mediterranean as a hard border, thereby actively drawing ''upon the Mediterranean and Atlantic waters with their ancient powers to both divide and unite'' (Andersson, 2014, p.67). However, the successful enactment of the Mediterranean Sea as uncrossable depends for a large extent on North African state like Morocco. Morocco's position as a 'transit state' provides it with much bargaining power, which the government has leveraged to demand financial resources, as well as recognition of its authority in the occupied Western Sahara and a recognition of its fishing rights on the coast of the Western Sahara from European countries.[12] In return, Morocco carries out extensive border patrols, deportations, and surveillance projects to prevent illegal migration to Europe, practices that have resulted in unlawful deportations and the criminalization of blackness in Morocco (Andersson, 2014, p.125). The Moroccan state has been rather successful in its negotiations, since the Spanish recognition of Moroccan authority in the Western Sahara in 2022 was a direct result of an agreement about border controls with Morocco, according to Ruben Andersson and David Keen (Andersson & Keen, 2023). This decision was crucial in the 2025 UN approval of Morocco's government plan of the Western Sahara, which effectively crushed the Sahrawi's hopes for a referendum regarding its independence.[13]

States like Morocco also strategically open and close their borders to exert pressure on European countries, and as one of Andersson's interlocutor observed: ''if migrants pass, it is because they [the

[12] Since 2012, Polisario has fought a legal battle to exclude the Western Sahara from the EU's trade liberalisation and fishery partnership agreements with Morocco: however, after an initial success in 2024, In 2025, the UN recognized Moroccan authority in the Sahara.

[13] The Western Sahara is sometimes called 'Africa's last colony'. The land, bordering on Morocco, Mauritania, and Algeria, was under Spanish occupation until 1976. In 1974, the Spanish government promised the local Sahrawi people a referendum to vote on its independence. However, both Morocco and Mauritania claimed the territory to be historically theirs, although the International Court of Justice ruled in 1975 that neither state could make a sufficient claim to prove their sovereignty in the region, and thus assigned the local nomadic population, the Sahrawi people, the right to self-determination. However, in November 1975, Morocco invaded the Western Sahara, mobilizing 350 000 of its citizens to occupy the territory during which what has become known as the Green March. Since then, the Sahrawi people have lived under continuous occupation, marked by systematic repression, forced displacement, and political arrests and disappearances.

Moroccan authorities] want them to pass'' (Andersson, 2016, p.10). When I was doing fieldwork in Tangiers, I also occasionally heard stories of people being recruited to partake in border crossings by boat, often because there was some political tension between Spain and Morocco. Thus, the Moroccan state is a key player in the enactment of the Mediterranean Sea as a 'semi-porous' boundary. The brown shrimp supply chain is directly dependent on this function, since for the supply chain to 'work', brown shrimp have to move freely across the border, whilst Moroccan shrimp peelers and factory managers have to be kept 'in place'.

Therefore, the supply chain of brown shrimp is also dependent on the Mediterranean Sea's enactment as a site of traffic and trade: shrimp peeling factories import brown shrimp, technologies, chemicals for preservation, and other materials from the Netherlands, and only rely on labour from Morocco to produce brown shrimp. The Mediterranean has long served as a vital site of traffic between North Africa and Europe, yet in the last two decades the Moroccan state has intensely invested in developing its strategic Mediterranean shoreline by building a port of global scale.[14] In 2007, the Tanger Med port was taken into use, a massive complex that comprises more than 3000 hectares, including a 345 hectare Free Zone (Bogaert, 2018, p. 81-82). Described as a 'megaproject', Tanger Med has grown out to be the largest port in Africa in 2024, and the 17th largest shipping port in the world (World Shipping Council, 2025). The capacity of Tanger Med far exceeds that of Algeciras, the largest Spanish port on the Mediterranean. Multiple trucks of shrimp travel each week from Algeciras to Tanger Med to be peeled in Tangiers, Tétouan, and Taza.

Thereby, the Mediterranean Sea is enacted through multiple (political) projects that produce the sea as an 'unfinished, performative outcome of palpable, living socio-political and material engagements.' (Ben-Yehoyada, Cabot, & Silverstein, 2020, p. 12). At the same time, the sea is not only enacted through human political projects, but also constituted by non-human actors. Morocco's fishing industry contributes significantly to its economy, as 2 to 3 percent of its GDP is generated by fisheries. However, the Western Saharan coastline constitutes one of the most fertile fishing grounds globally, and fishing rights in this part of the sea have figured as an important negotiation point between Europe and Morocco. 73 percent of the quantity of Morocco's coastal catches are from the Western Sahara, yet in 2024, the EU court of justice ruled that EU-Morocco trade and fisheries agreements cannot be applied in Western

[14] In fact, the Dutch Republic had been the first European country to sign a treaty of friendship and free commerce with the Moroccan sultanate in 1610. In return for safe passage through the Strait of Gibraltar, the Dutch republic the Dutch supplied weapons to the sultanate; however, this treaty also facilitated an exchange in scientific ideas and goods.

Sahara, since this was still considered occupied territory (Western Sahara Resource Watch, 2023; Cheng, 2023; Boltuc, 2025). In response, the Moroccan ministry of agriculture threatened to suspend its border regimes on the Mediterranean shore, thus leveraging European fears about migration (Cheng, 2023). Many have considered the 2025 UN endorsement of Morocco's plan for the Western Sahara to be directly related to Morocco's capacity to manage migration flows to Europe. Thus, the 'liveliness' of marine species in the Western Saharan coastline directly influences how rigidly or porously the Mediterranean Sea is enacted as a border.

Conclusion

The Mediterranean Sea, the North Sea, and the Wadden Sea are all mobilized as infrastructures in the supply chain of brown shrimp. The Mediterranean Sea is enacted as a semi-porous border that allows brown shrimp and Dutch managers to pass through, whilst restricting the movements of others like shrimp peelers. The Wadden Sea is both enacted as a precious ecological resource and a fertile fishing ground, whereas the North Sea is produced both through ecological, legalistic, and economic frameworks. Rather than considering the functions of these seas as 'natural' attributes, however, I have argued that it is essential to consider these three seas to be produced through meticulous governmental regimes, policies, and discourses. Moreover, rather than considering these infrastructures to be 'spatial' interventions, I contend that these seas are enacted as distinct 'timespaces' (May & Thrift, 2001).

As infrastructural 'timespaces', these seas structure experiences of time in myriad and sometimes competing ways. Whereas the 'Wadden Sea' and the 'North Sea' are enacted as spaces of 'unlimited potential' by governmental planners, they are enacted as 'traditional' fishing grounds by fishers, and as 'post-industrial' landscapes in need of 'restoration' by environmental NGOs. Meanwhile, the Mediterranean Sea is enacted as a 'border' to 'protect' a fantasy of 'modern' Europe, a project that simultaneously denies North Africa 'coevalness' with Europe (Fabian, 1983). The emergence of forms of marine governance has sometimes been termed 'the birth of the aquarium' (Pálsson, 1998). However, arguably, attempts to govern the seascape have only partially succeeded: for instance, efforts to restore fish stocks in the North Sea have often been thwarted by other projects seeking to make the sea more 'profitable', and as environmental activists and biologists have pointed out, marine ecologies in the Wadden Sea are under high pressure from various infrastructural projects. The various projects through which these seas are enacted often create unintended outcomes, such the flourishing of shrimp populations, which thrive in ecologically depleted areas. Meanwhile, most fishers persistently reject representations of the sea as a 'governable' space and continue to enact the sea as a space of 'boundless

freedom' that enables forms of independence. Ongoing tensions over the enactment of the seas can also be seen in the strategic 'opening' and 'closing' of the Mediterranean as a border by Moroccan authorities, and in the continual contestation of the Mediterranean border regime by others more generally. Thus, both the Mediterranean Sea, the North Sea, and the Wadden Sea are enacted as spatio-temporal infrastructures that are arguably 'more than one but less than many', and thick with politics (Mol, 2002). The ways in which these seascapes are enacted reveal distinct ways in which environmental NGOs, fishers, shrimp peelers, and processing companies imagine and invoke the future. It is to these ways of understanding, imagining, and enacting the future that I turn in the following chapters.

2. Making Fishers, Making Families: Kinship, The State, and the Emergence of the Brown Shrimp Trade

‘‘Fishing really runs in the family’’, Harry, a teacher from the fishing school in Urk, told me. ‘‘It’s a trade that’s passed on from generation to generation that doesn’t just revolve around money. However, the government doesn’t see the value in that.’’ Many fishers I met confirmed his view; ‘‘If you don’t have fisher’s blood, you can forget it. Fishing is something you do on feeling. That feeling you take from your dad or ancestors. (…) My family and my dad, they’re always with me when I am fishing,’’ a fisher from Zoutkamp reports in an interview in a recent book on fisheries in the Netherlands. Indeed, many of the fishers I met fish with their fathers (*vaders*), uncles (*ooms*), or brothers (broers); I even met one young fisher who fished with his granddad (*opa*). According to many fishers, this means they do not fish for profits alone: ‘‘When I see a net full of shrimp, I don’t see mere euro signs. I don’t think about the profits at all. Some days you might hardly catch anything, another day you find your nets completely full. You never know until you bring the nets in. But when you see your net full of wriggling shrimp that gives me a massive thrill. That’s what I do it for. I could not imagine doing anything else,’’ fisher Eddo told me.

The logic implied in these utterances points towards the idiosyncratic nature of modes of capitalist production in the supply chain of brown shrimp. The approximately 225 shrimp fishers that operated in the Netherlands in 2022 mostly owned their own ships and decided on their own *werktijden* (‘working times’); they were contracted by processing companies, yet they did not receive a wage, and were registered as independent businesses rather than as workers. Fishers would explain this arrangement by underlining both their independence and the centrality of ‘family ties’ to their fishing practices; as discussed in Chapter 1, fishers resented the idea of working for ‘a boss’, and often preferred to work with family members. In contrast, the two largest processing companies often underplayed the importance of ‘kin’ in the organization of their company, even though both these businesses were officially registered as ‘family businesses’. However, these companies marketed their present operations as ‘global, professional, and expert-led’, and contrasted these values to their ‘origins’ as a ‘small family business’ (*klein familiebedrijf*). The importance of close and intimate relations in the present was thereby actively deferred to the past by these companies. The technologically hyper-advanced factories which they operated in Morocco, however, were largely driven by a female labour force whose ideas and aspirations for ‘family life’ were deeply interlinked with their livelihood, as I will explore in this and the following chapter.

Different articulations of 'family ties' are therefore important for the supply chain of brown shrimp, whether these are actively mobilized to underline certain aspects of production (such as 'traditionality' and 'locality' in the case of shrimp fishers), or, in contrast, underplayed (as when processing companies refer to their enterprises as family businesses in the past tense). While Chapter 1 outlined the infrastructural histories of the supply chain of brown shrimp, this chapter attends to the social-environmental histories through which the 'supply chain of brown shrimp' emerged, and the ways in which it is reproduced through a range of different relations in 2022. The forms of 'social reproduction' on which this supply chain depends are closely intertwined with those forms of 'relatedness' anthropologists often call 'kinship'. Contemporary approaches to kinship often highlight 'relatedness' and 'family life' as sites of intimacy, experimentation and creative expression, but also continue to consider normative discourses around the family and its 'proper' expression to be central to projects of state-building (e.g. Carsten, 2003; Povinelli, 2006; Das, 2006). The supply chain of brown shrimp depends on the stabilization of categories such as kinship, gender, and race, that emerged alongside particular projects of state-formation. Nation-states such at the Netherlands seek to promote and discipline forms of family life that entail specific ideas about how society should be reproduced in the future, and people's aspirations for family life should be understood in relation to such projects of state-building.

To do justice to both the historical processes and forces through which contemporary modes of relating and belonging emerged in the brown shrimp supply chain, and to the ways in which experiences of belonging and relating always exceed the social forces and histories through which they came about, I will divide the question of relatedness and belonging over two chapters. In this chapter I will trace the various social, political, and ecological histories through which different concepts and organizations of 'the family' (*famila* or *3a-ila* in Morocco, *de familie* of *het gezin* in Dutch) took shape in respectively Morocco and the Netherlands, and the ways in which these concepts became intertwined with the gendered and racialized modes of production constitutive of the brown shrimp supply chain. In the next chapter, I will subsequently attend to how such forms of 'family life' and belonging were lived and experienced by my interlocutors and explore the concerns with 'the future' and its 'viability' entailed by them.

Kinship in the Economy

In 2022, fisheries, agriculture and forestry were by far the largest industries in the Netherlands dominated by 'family businesses' (*familiebedrijven*), with 73.9 percent of all jobs in a 'family business' (Centraal Bureau voor Statistiek, 2024). A 'family business' is defined by the central statistics office as 'a business

in which one family directly or indirectly has the majority of control (zeggenschap, literally: 'say-ship') (25 percent for listed companies)'. [15] Most shrimp fishers in Zoutkamp had their business recorded as a 'family businesses' and this is also true for other prominent Dutch (shrimp) fishing villages such as Urk, Den Oever, or Harlingen. In villages such as Zoutkamp and Urk, certain 'family names' are associated with traditional 'fishing families' which can trace their fishing roots back several generations. Most fishers I spoke to learnt to fish from either their father, uncle or grandfather, and often fishers' partners took active part in the world of shrimp fishing, by taking care of families and the administrative sides of the fishing business while fishers are at sea. Thus, *de familie* ('the family') is an important way of articulating particular forms of relatedness and belonging in Zoutkamp in 2022.

For instance, fisher Thomas is allegedly of the 13th or 14th generation of fishers. Thomas fishes with his father, and their joint business was a source of pride for the entire family: when they bought a new ship in 2021, they hosted a big party on it to which all their family members were invited. Other families in Zoutkamp owned multiple ships; Arjan's family owns three shrimp cutters in total, as his dad, granddad and brother are also fishers. Many fishers contrasted the 'traditionality' of their livelihood to forms of 'corporate capitalism' in which relations were anonymous, calculative, and all-together void of intimacy and warmth.

Economists, historians, and social scientists have long studied the intersection of 'economic activity' and 'the family', and economists often write about 'family businesses' as enterprises that mobilize the labour and resources of family members to produce surplus value by drawing on certain ideas of 'family loyalty' or 'family identity' (see for instance Chrisman, Fang, Vismara, & Wu, 2024); thereby, they frame 'family firms' as a particular kind of business. Anthropologists like Sylvia Yanagisako, Anna Tsing, and Susan McKinnon contend in contrast that 'family firms' are not exceptional for bringing 'family' into the 'economic realm' and reject the idea of a separation between the 'private' domain of the family and the 'public' domain of the economy altogether (Yanagisako, 2002; Tsing, 2009; McKinnon & Cannell, 2013). The importance of something like 'kinship' to 'economic production' is not a residue from the past, they argue, but still central to the reproduction of capitalism at large. Rob van Ginkel (2009) has studied fishers on the Dutch island of Texel and concludes in his ethnography that 'family firms' are highly modern institutions; ''the family firm is not an archaic form of social organization, but a well-adapted institution in the days of high capitalism'' (van Ginkel, 2009, p. 297).

[15] '*Een familiebedrijf is een bedrijf, waarbij één familie direct of indirect een meerderheid van zeggenschap heeft (bij beursgenoteerde bedrijven 25 procent). De familie moet formeel betrokken zijn bij het bestuur en het bedrijf moet ook juridisch overdraagbaar zijn.*' (Centraal Bureau voor Statistiek, 2024)

However, in van Ginkel's ethnography 'the family' and 'the family firm' are treated as self-evident concepts that require no explanation; moreover, van Ginkel implies that fishing was historically organized by kin relations by referring to the 'well-adapted' nature of 'family firms'. Such narratives can easily obscure the long history of fishing in the Netherlands, which for many decades was not small-scale and family-based at all.

Whereas many anthropologists have shown the importance of 'kinship' for (capitalist) forms of production and exchange, 'social reproduction theory' has perhaps gone the furthest in attempts to understand the historical co-emergence of labour relations, the state, and something like 'capitalism'. Social Reproduction Theory emerged in the 1970s, spurred by feminist critiques of economic theory and its oversight of the importance of unwaged housework and 'kinship' for the reproduction of contemporary (racial) capitalism (e.g. Vogel, 1983; Federici, 1974; Robinson, 1983). 'Social reproduction' refers to the logics and processes through which (capitalist) societies renew themselves over time and thereby establish some form of intergenerational continuity, and anthropologists studying social reproduction often explore the logics of kinship, gendered divisions of labour, and housework for the reproduction of 'capitalist societies' (Bhattacharya, 2017). Social Reproduction Theory is heavily inspired by Marx, who refers in *Capital* (1885) to the reproduction of labour power as one as the most important conditions for the accumulation of value and thus for the reproduction of capitalism at large (Marx, 1867; Marx, 1885). According to Marx, ''every social process of production is, at the same time, a process of reproduction'' (Marx, 1977, cited in Ferguson, 2017). According to many feminist Marxists, the importance of this observation cannot be understated, since this means that processes like child-rearing, cooking, and other domestic work are directly important to capitalism. However, despite Marx's recognition of the importance of the reproduction of labourers who can be 're-incorporated into capital', he paid scarce attention to the forms of domestic labour, care, and nurturing which effectively achieve the reproduction and sustenance of the labour force (although see for instance: Moore, 2015, Chapter 9, for a counter-argument). Building on this work, social reproduction theorists showed capitalist production to be intrinsically premised on the making of gendered hierarchies and divisions (Rubin, 1975; Vogel, 1983; Federici, 2004). Their arguments can be applied to the emergence of Dutch shrimp fisheries, which was contingent on both ecological circumstances and political transformations of the state and its gendered organization of family life.

Fish, Fleets, and Families: a Political-Ecological History of Shrimp Fishing in the Netherlands

The rise and the decline of the Dutch fisheries and their political and ecological effects have been described in detail by Jason Moore and Ad van der Woude & Jan de Vries (Moore, 2010a; Moore, 2010b; de Vries & van der Woude, 1997). According to these authors, the Dutch republic, which was established in 1588, was to a significant extent fuelled by the country's fishing industry.[16] The development of the 'herring buss', a new type of 'factory ship' in the 15th century allowed fishers to stay out at sea for months at a time, and salted herring became one of the republic's premier trade goods. The development of herring fisheries itself was made possible on the one hand by environmental factors, such as the cooling of the North Sea waters, causing fish to migrate southwards, and on the other hand by the surplus labour freed up by the rural to urban migration that occurred in the wake of widespread soil degradation caused by extensive peat mining in the 14th and 15th century. As a large proportion of the rural population moved to cities in pursuit of a livelihood not dependent on agriculture, an urban population specialized in trade and handyman crafts emerged, sustained by grain which the republic had begun to import from the Baltic states. This led to rapid innovations in ship building, a trade which was dependent on the import of Norwegian timber (Moore, 2010a).

In the 16th and 17th century, the Dutch fleet grew out to be 'the most closely managed and technologically advanced fishery of the world', with one fifth of the population depending directly or indirectly on fisheries (Holm, et al., 2019, p. 4; Moore, 2010). Sailors were wage labourers on herring busses, working in 'assembly line-like' conditions, and tens of thousands of men would be at sea at a given time. The profits generated through the herring trade provided much of the starting capital for the Dutch transatlantic trade, organized in the Dutch East-India Company (VOC) (1602-1799), and the Dutch West-Indies Company (WIC) (1621-1792), which was notorious for its significant role in the slave trade. However, over the course of the 17th century, the herring fisheries which had provided the Dutch republic with much of its start capital, began to decline due to the relative exhaustion resulting from the serial exploitation of several 'patches' of herring. Cod took over herring's place as Europe's most important fish species, and it was the United Kingdom and France that developed the most advanced cod and plaice fisheries (Moore, 2010; Poulsen, 2008).

[16] Whereas the Dutch republic existed from 1588-1795, the Dutch 'golden age' is usually considered to last from 1575-1675.

More generally, the industrial revolution in Britain and its subsequent development of a powerful naval fleet undermined the position of the Netherlands on the world market. The third and fourth Anglo-Dutch wars weakened the Dutch economy considerably, and the republic's political structure, organized by decentralized government, commercial and religious freedom, and consensus governance, led to slow and risk-averse decision-making and political instability, which imperilled the republic's capacity to adapt to the market. At the end of the 18th century, the VOC had gone bankrupt, the Dutch republic had effectively been taken over by the French, and fishing was transformed from a profitable business into a hard and uncertain livelihood (Poulsen, 2008).

However, the North-East of the Netherlands had never been part of the booming herring trade in the first place since it hosted no significant ports at the time. In Chapter 1, I described how fishers settled in Zoutkamp in the 17th century. Whereas several other fishing villages emerged on the shore of the Wadden Sea, Zoutkamp grew out to be the region's major port, and fishing was considered to be a relatively rewarding livelihood: fishers from Zoutkamp would catch plaice, flounder, sole, cod and brill in and around the Wadden Sea. Fishers caught shrimp in the shallow waters of the Lauwers Sea, although this was still a minor side business. Throughout the 19th century, fishers from Zoutkamp were able to make a moderate income, despite the fact that its fleet was not yet industrialized since the Netherlands was slow to catch up on processes of industrialization in Europe. Fishers in Zoutkamp had ownership over their ships and sold their catches at fish auctions where traders would take them to Groningen and beyond. Production was organized through local trade networks that favoured small-scale collaboration over large-scale investment (Buursma, 2019). Yet while Zoutkamp's fishing industry was slow to catch up on processes of industrialization, over the course of the 19th century, changes in the structure of social life could be felt in Zoutkamp as a result of the emergence of 'the Dutch nation state'.

Fishers and the Nation-State

During the 19th century, political structures in the Netherlands underwent significant transformations. After the Batavian revolution (1781-1795) the republic came under French influence, and in 1806, Napoleon installed the first monarch. In 1813-1815, the Netherlands became a constitutional monarchy (*Verenigd Koninkrijk der Nederlanden*), and in 1848, the Netherlands became a parliamentary democracy that introduced the right to vote for (a limited subset of) its citizens. These changes were accompanied by an increasing sense of 'nationalist' belonging. The governance of the country was centralized and saw many administrative reforms that introduced interventions such as a national population register (previously kept by the church) and important reforms in education that sought to make education

available to all children (Leerssen, 2006; van der Woud, 2021). Such changes also transformed social life in Zoutkamp, where the first school was founded in 1817.

Such new forms of state power, concerned with the regulation and disciplining of social life, have famously been studied by Jacques Donzelot and Michel Foucault (Donzelot, 1977; Foucault, 1978; 2004). According to scholars such as Donzelot and Foucault, emerging nation states had a particular stake in the production and regulation of 'the family' as a unit. Registering, regulating, and moralizing 'family life' characterized new forms of government that sought to render 'the family' a governable unit that would be productive of 'legitimate members of the political body'. Whereas social relations in the Netherlands had long been organized around something like 'the direct family', this model was transformed into a moral ideal over the course of the 19th century (de Vries & van der Woude, 1997; van Ussel, 1982). The proper socialization of children became a national concern, reflected in debates around child labour (which was severely curtailed by a law in 1874 (*het kinderwetje van van Houten*)). Meanwhile, a greater awareness of the spread of disease transformed 'the family' into a site where proper hygiene should be practiced, and where parents were responsible for the health and wellbeing of their offspring (see also Chapter 7). Over the course of the 19th century, premature children's deaths rapidly decreased, and during this period, the Dutch word for 'nuclear family' (*gezin*) acquired its contemporary meaning as 'conjugal couple with their children'. These developments all worked to cement the stability 'the nuclear family' (*het gezin*), and in Zoutkamp, such policies led to a steady increase of the population over the course of the 19th century (van Poppel, 2012).

These national concerns with the family indexed an increased concern with the reproduction of the state and projections of its future: whereas European states ruled by feudal relations were largely concerned with the reproduction of certain lineages, nation-states were concerned with the reproduction of national borders, national identity, and 'the body of the nation-state.' Veena Das (2006) has shown how 'the heterosexual family', as a moralized and naturalized institution, was crucial for nation-states to ensure their own legitimacy and reproduction. Building on both Michel Foucault and Talal Asad, she showed how modern, secular nation-states depend on the notion of 'paternity' and the institution of monogamous marriage to create legitimate citizens. Whereas the authority of monarchs or rulers of feudal states was based on theological arguments that placed the father at the head of the family and the ruler at the head of a nation, such hierarchies were transfigured in the early modern period to legitimize new forms of power under a secular guise. 'Modern' nation-states are not 'just' made up by a population consisting of individuals, according to Das, but rather consist of 'legitimate' citizens that constitute 'the body' of the state and are willing to die for it. The reproduction of 'legitimate citizens' depends on the

affirmed paternity of children, which in turn requires the monogamous institution of marriage, as well as the gendered division of labour which can provide the 'proper' socialization of children. Therefore, it is the notion of 'fatherhood' that enacts a distinction between 'nature' and 'the social', Das contends, since 'the monogamous family' is the site where offspring are transformed from a mere product of procreation into legitimate legal subjects that 'give life' to the state (Das, 2006).

Whereas such a transfiguration of 'the family' as a moral unit certainly applies to Zoutkamp, fishers' families have long been organized differently from 'traditional' families in the Netherlands, since men were often out at sea for several days at a time. Therefore, the gendered division of labour often looked slightly different in fishing families than in other families: women were often more autonomous and financially literate, since they often took care of household finances and bookkeeping in the absence of men. Male offspring would often join their fathers on board from the age of eleven or twelve, and would thus be initiated in the fishing trade. Nevertheless, the same norms of the heterosexual, nuclear family unit applied to fishing families as to other families, and as Das points out, the transfiguration of the nuclear family as the proper site for 'socialization' enacted a radical separation between the 'social' and the 'natural', through notions such as 'civilization', 'citizenship', and 'the family'. The project of 'family making' might therefore be considered analogous to the projects of the construction of 'nature'. During the 19th century, the Dutch nation-state increasingly sought to tame and control the unruliness of the countryside by developing its wastelands (*woeste gronden*, literally: fierce or wild grounds). Laws such as the *Markenwet* (1886) ordered the privatization of common grounds; land reclamation projects such as described in Chapter 1 also furthered the 'taming' of the land in order to make it 'usable' (*nuttig*) for agriculture. Whereas the Dutch countryside had been described as 'wild/fierce and empty' at the start of the 19th century, by the end of the 19th century, considerable areas of the land were developed, reclaimed, and cultivated (van der Woud, 2022).[17]

Such cultivation projects directly affected Zoutkamp, as the construction of an extensive network of canals made it easier to transport cod, haddock, turbot, and plaice from Zoutkamp to cities such as Amsterdam and Hamburg. At the same time, the fishing industry was not industrialized to the same extent as the agricultural industry, and fishing techniques in Zoutkamp changed little over the course of the 19th century. However, fishers came to feel the effects of industrialization elsewhere, since English steam

[17] These developments sparked a counterreaction in the form of the emergence of the first nature conservation societies that romanticized 'wilderness' (*wildernis*). These societies inscribed 'pristine' landscapes with aesthetic and moral qualities and lamented the cultivation of the land. However, whereas these organizations criticized large-scale land reclamation practices, they were less concerned with marine landscapes such as the North Sea and the Wadden Sea (van der Windt, 2024).

trawlers were using small-mazed nets that quickly exhausted North Sea fish stocks throughout Europe (Moore, 2010a). By the end of the 19th century, catches had rapidly declined in most European fisheries, and fishers from Zoutkamp began to fish primarily for shrimp. Since shrimp live in shallow, coastal waters, fishers could use old lifeboats converted into fishing vessels, which were swift and affordable to operate. Moreover, shrimp were one of the few species not in decline, since brown shrimp flourish in depleted seascapes where their natural predators have been overfished. The beginning of the 20th century also saw an increasing demand for shrimp, driven by the rapid modernization of the Dutch poultry industry from 1897 onwards: shrimp were dried and grounded into protein-rich fodder, which could sustain and stimulate the development of industrial poultry farms (Knibbe, 1995).[18]

The emergence of a flourishing shrimp trade was accompanied by various forms of state investment in Zoutkamp: in the 20th century, physical planning became central to national strategies to accommodate for population growth and to realize ideals for society (van der Woud, 2020). Zoutkamp was connected by railway, the port was extended and the 'fish hall' renewed. Specific forms of state-support for fishers also emerged, especially in relation to the closure of the Zuiderzee (van Ginkel, 2009, p. 108; see also Chapter 1). In addition, local fishers' organizations began to represent fishers' interests on a national level. While fishing activities were largely stalled during the second world war, after the end of the war, state-investment in the region continued. The Dutch state received a relatively large share of Marshall aid and began an intensive project to 'rebuild' the country. The old village centre of Zoutkamp was demolished to build new, modern houses, and the village was connected to running water in 1954. Healthcare services and other services also improved. As described in chapter 1, the Dutch fleet was rapidly industrialized, and from the 1950s and 1960s onwards, catches started to increase exponentially. At this time, a market of shrimp for human consumption had emerged, and shrimp catches generally flourished (Buursma, 2012).

However as discussed in chapter 1, the closure of the Lauwerszee in 1969 outraged the population of Zoutkamp and led fishers to distrust the state and most other official organizations. Even though infrastructural innovation and new communication technologies made Zoutkamp better connected to the rest of the country than ever, the closure of the Lauwerszee decisively contributed to a sense of political disenfranchisement in Zoutkamp, which fostered a sense of local solidarity. When the Dutch welfare state came increasingly under pressure in the 1970s, Zoutkamp suffered from the Dutch unemployment crisis

[18] The invention of the incubator gave rise to the first professional poultry farms, which relied on protein-rich fodder made from dried and ground shrimp (Knibbe, 1995).

and nation-wide budget cuts. As discussed in Chapter 1, from the 1980s onwards, the EEC also became more concerned with overfishing. The international regulation of fisheries through the Common Fisheries Policy (CFP) and Total Allowable Catches (TAC) affected the lives of fishers severely, and as discussed in Chapter 1, this meant that many fishers switched to shrimp fishing.

These regulations did not only affect the practices of shrimp fishing, but also indexed a change in its media portrayal; whereas fishers were often seen as 'feeders of the nation' in the years after the war, from the 1980s onwards, they were increasingly depicted as 'looters of the sea' (van Ginkel, 2009, p. 205). At the same time, the implementation of stricter quotas, different fishing licenses, and engine power regulations were often resented by fishers, who considered the state to have made a 180-degree turn from its former schemes of subsidization and expansion. Fishers complained that regulations 'changed overnight' (van Ginkel, 2009, p. 192) and that they were not sufficiently compensated for the financial losses they suffered as an effect of new policies. Fishers intensely disagreed whether they should respect state regulations or disobey them in solidarity, and as a result, they turned distrustful of both the state and each other. Fishing had always carried the status of being highly individualistic, (see Chapter 4 & van Ginkel, 2009), but during the 1970s, fishers were so polarized that the national fishers' union splintered into several regional and national fishers' associations. This polarization harmed fishers' representation on a national level, since the national fishers' union and the oppositional fishers federation often deliberately contradicted each other, and therefore, managed to reach no consensus with either policy makers or each other (van Ginkel, 2009, p. 196-197).

From the 1990s onwards, EU and state-driven policies began to advertise buyout schemes for fishers to reduce the ecological impact of their fisheries (European Parliament, 2025). Although it is hard to assess the concrete effects of these policies, from the 1990s onwards, the Dutch fleet began to decline, and its engine capacity steadily reduced (CBS, 2020). The Dutch fleet stayed significant on a European level, yet the number of fishing school students is suggested to go down over this period (Visserijnieuws, 2022).[19] According to fishers, this trend continues into the present. ''Today, it is very hard to find good deckhands,'' fisher Simon told me. ''At the moment, I have a different person on board almost every week''. Many fishers suggested that there was a 'deckhand crisis' in 2022, often attributed to the high levels of volatility and insecurity that characterized fisheries in 2022 that led many young people to see no future in fishing.

[19] In 2021, the Dutch fleet counted 837 fishing vessels and produced 8,7 percent of the gross tonnage of European fish.

Therefore, many fishers consider the labour of family members to be the most reliable source of labour; moreover, there are other practical advantages in having a 'family business'. In the face of changing regulations, new technologies, and ecological transformations that require sometimes risky forms of innovation or adaptation, family businesses are often more stable and resilient. Current legislation around fish quota has reinforced the value of family-organized fisheries, since fish quota can be passed on in the family, whereas new licenses are mostly no longer distributed (see Chapter 1). Thus, rather than being grounded 'merely' in tradition or 'cultural' values, fishing with one's family members has significant economic advantages. Rob van Ginkel (2014) has shown that many fishing firms on Texel are able to survive for multiple generations precisely because they organized as 'family firms'; by pooling their resources, family members were able to navigate uncertainty and sudden shifts in the precarious fishing industry. In good years, all family members would share in the profits of the company, whereas during 'bad' years, they share the losses of the company together.

Operating as a ''family business'' might have important advantages for shrimp fishers, yet in 2022, such family businesses are arguably less autonomous than they were thirty years ago. While fishers used to sell their catches on fish auctions, in 2022, all shrimp fishers are under contract by processing companies who guarantee to buy their catch. However, fishers are reluctant to 'work for a boss', and therefore, refuse to be wage labourers for these companies. Rather, processing companies decide on a kilo price for shrimp every week, based on the current supply and demand of shrimp, influenced by the overall catches of shrimp fisheries. When processing companies have collected the shrimp from all their contracted fishers, they send each fisher a payslip detailing how much they get paid for that week. This construction is highly specific to shrimp fisheries, and the history of this arrangement of price formation is deeply informative about the relations that constitute the brown shrimp trade. Therefore, I briefly recount the politics of price formation in the brown shrimp trade here, to showcase the knotty complexity of social relations in the supply chain of brown shrimp.

The Politics of Price Formation

''Oh, Gardema just emailed me!'' Simon remarked as he checked his phone. It was August 2022, and I was spending a day with shrimp fisher Simon, visiting the harbour and the workshop for fishing boats. ''Let's see how we did this week,'' he said, half to himself. It was a Friday afternoon and Simon's weekend had started; on Thursday morning he had landed his catch in Büsum, Germany, after which he drove back to Zoutkamp to spend the weekend there. We were just having a cup of coffee at his house

when his phone pinged. ‘‘5,72 per kilo, not bad,’’ Simon remarked. ‘‘That’s not bad at all.’’ He opened his calculator on his phone and quickly did the maths. Up until that moment, he did not know how much he made this week; he just knew how much he caught, around 3900 kilos of shrimp.

Simon was a shrimp fisher in his thirties, and he was under contract by Gardema, the largest shrimp processing company in the Netherlands. He supplied his entire catch to the company, and in return, Gardema emailed him every week announcing the weekly price for brown shrimp. This procedure is largely the same for all shrimp fishers, regardless of the processing company by which they are contracted. This arrangement is the outcome of a long and troubled history of price formation in the brown shrimp trade, which dates back to the beginning of the 20th century, when shrimp were sold at local auctions as soon as fishers came in. In the second half of the 20th century, the auctioneer was replaced by a clock that would be set at a certain starting price, and as the clock hand moved around the clock, companies could press a button to ‘stop’ the clock and place a bid on a batch of shrimp. This mechanism was supposed to balance out supply and demand, yet in practice it did not work that way: since shrimp catches rapidly increased from the 1960s onwards, there was often an oversupply of shrimp for which there was low demand. Even though it would have been to the advantage of shrimp fishers as a collective to catch less, it was still in the advantage of individual fishers to catch as much as possible, and since shrimp fishers were poorly organized, attempts to make sector-wide agreements were largely unsuccessful. Meanwhile, processing companies were effectively forced to buy an oversupply of shrimp, since they often had close relations with fishers, who would begrudge them if they refused to buy their catch. Many of the fishers I spoke to in Zoutkamp could still recall longstanding grudges and feuds their families had with certain processing companies. Since processing companies were afraid of jeopardizing supplies of shrimp in the long run, they often bought more than they needed. However, this was disadvantageous for both fishers and traders, as the first had to accept low prices, whilst the second were faced with a surplus of shrimp.

In the 1990s, processing companies therefore decided to intervene in the market; they made agreements with producer organizations to administer a fixed shrimp quota for all fishers. As long as fishers would observe this quota, companies guaranteed that they would buy their catch against a set price. This structure managed to stabilize the shrimp trade for some time, although these arrangements only existed ‘under the table’; officially, shrimp were still bought at auctions, where processing companies allegedly bought shrimp ‘on the clock.’ However, when the Dutch Competition Authority discovered the collusion in 2004, they concluded that this was a form of cartel formation that kept shrimp prices artificially high, which disadvantaged consumers. Therefore, they fined all involved stakeholders

4,4 million euros. For eight years, the involved parties fought this decision in court; they argued that the arrangement was beneficial for the environment and that it regulated the market in a 'healthy' way. However, in 2011, the court decided to prosecute the involved parties anyway. The largest sum of the fine was imposed on the two largest shrimp peeling factories, although producer organizations had to pay a significant sum too (Autoriteit Consument en Markt, 2011).

After the exposure of the cartel, the price of shrimp dropped to a historical low of 1,90 euro/kg in 2004. Producer organizations strongly advised fishers to catch no more than 1500 kilos of shrimp per week to prevent an oversupply. However, they did not manage to unite fisherfolk: some fishers ignored their advice and tried to catch as many shrimp as possible anyway. This did not sit well with other fishers who had followed the advice, and soon, the agreement was broken by all fishers. The introduction of official 'contracts' for fishers has been the most recent attempt of processing companies to control the market. Fishers have long resisted such contracts since they wanted to retain their 'independence' and did not want to bind themselves to a specific company. Since 2006, 'contract fishers' and 'clock fishers' co-existed, which meant that the price of shrimp was determined by 'clock fishers' who continued to sell their shrimp on auctions. Processing companies would adjust their prices to the prices that clock fishers received on the auction. This way, they guaranteed 'their' contracted fishers that they would not receive a lower price than their independent competitors. However, in 2021 shrimp yielded only 5,10 euro per kilo, whilst contracted fishers received between 6,30 euro and 6,70 euro for their shrimp. Moreover, contracted fishers often receive additional benefits; processing companies pay for the process of shrimp sifting at the port and sometimes they are willing to contribute financially to repairs of cutters. In May 2021, the last independent 'clock fishers' felt too much at a disadvantage, and therefore decided to resort to contract fishing as well. Thus, even if fishers contend that they do not work for a boss, and are strictly 'family businesses', they are formally bound to particular processing companies.

However, this history shows that processing companies maintain close relations with fishers and are not simply anonymous corporations operating at a distance from shrimp peelers. The two largest shrimp processing companies in the Netherlands originate in fishing villages and are often closely entangled with the lives and labours of fishers. Here, I will recount the history of two shrimp processing companies with which I conducted fieldwork, to show how kinship ties remain relevant for their operations, albeit in radically different ways.

Producing Professional Futures: The Emergence of Shrimp Processing Companies

As I discussed in Chapter 1, the first shrimp processing company, Gardema, was founded in 1950 when a family business specializing in fish meal merged with a local courier service. The two companies bought shrimp from fishers at the local auction in Zoutkamp and distributed them amongst households in the area, where fishers' wives and other women peeled them. The company also built a small shrimp peeling station in the village, and when catches began to increase from the 1960s onwards, Gardema expanded rapidly. According to many of its employees, this growth was made possible by the leadership of one exceptionally gifted businessman, who had originally been a shrimp fisher yet joined Gardema in the 1950s to work at the administration. He was promoted quickly, and eventually became one of the co-owners of the business. Under his leadership, Gardema grew out to be the world's leading supplier of brown shrimp. During the 1970s, 1980s, and 1990s, the entire board of the company consisted of people from Zoutkamp who knew most fishers from the region personally.

A strong sense of 'belonging' to the local village community therefore characterized the spirit of the company, according to ex-owner Geert.[20] This feeling of 'locality' characterized relations between fishers and the corporation, even as they could have intense disagreements or fights over the right price or supply of shrimp. Many fishers in the north of the Netherlands prefer to work with Gardema over other companies from 'the West', since Gardema was a 'local' company. Gardema carefully cultivated its image as a 'local family firm' over various decades. However, after a conflict in 1999 between the two co-owners of the company, it was decided to sell the company to a Swiss bank in 2000. In 2006, the company was sold on to a Dutch-Belgium investment company, which sold most stocks to private equity funds owned by Dutch banks in 2012. However, in 2014, the company was fined over 27 million euros after it was accused of 'cartel formation', as discussed above. The company was declared bankrupt and bought by another major Dutch shipping company.

The shipping company, Parlevliet & van der Plas, is a family business as well, and many fishers from Zoutkamp contended that it was a ''good thing'' that Gardema was taken over by another family firm with roots in the fishing industry. However, this company is hardly an 'artisanal' family business: in 2020, the company was the largest fishing company in Europe, mostly due to take-overs of many European fishing boats (and importantly, their associated fishing rights). The company has received quite some adverse media attention for its out-competing of local family businesses, for being involved in a large fraud scandal in Namibia, and for ignoring rules around sustainable fisheries (Logger and Weijnen

[20] In Zoutkamp, people often contrast themselves to people from nearby villages, and although it is not uncommon for people to move from one village to another, a strong sense of village identity characterizes the ways most people talk about Zoutkamp.

2020). The company has allowed Gardema to keep operating under its own name, and although kinship ties no longer determine who gets to be on its management board, the company cleverly uses certain kinship idioms when representing itself. On its website, for instance, Gardema alludes to its 'long and rich history' as a 'small family company in Zoutkamp'. At the same time, the company posits the significance of its identity as a family firm decidedly in the past: its origin as a local 'family firm' is contrasted with its current position as 'the leading shrimp supplier of Europe'. When I remarked to manager Jacob that it was remarkable that the company was managed yet again by another family business, he responded that ''they might be a family firm, but they are highly professional and capable. When I joined Gardema 25 years ago, the entire board consisted of 'Zoutkampers', but now I am the only one left who is still living in the village.''

Jacob's statement entailed a revealing assumption about kinship and family, however; Jacob framed family businesses as 'local' and small-scale and opposed these to 'professional business' and transnational trade. Narratives in which family relations are depicted as distinct from 'the economy' have of course been widely criticized by feminist scholars who have scrutinized how 'distance' and 'detachment' are enacted as markers of 'professionalism' (e.g. Yanagisako, 2002; Yanagisako & Rofel, 2018; see also: Harvey & Knox, 2015, and Cross, 2011 on 'detachment as a corporate ethic'). Jacob's position resembles what Sylvia Yanagisako has called ''the thesis of the inexorable decline in the significance of kinship and its displacement by modern institutions of governance'' (Yanagisako & Rofel, 2018, p.219), which is frequently perpetuated by corporate managers as well as social scientists. However, while Yanagisako critiqued the inaccurate representation of 'the economy' (as devoid of kinship ties), one might equally critique the notion of 'kinship' that is imagined and enacted in this narrative as 'naturally' tied to 'locality' and 'tradition.' Of course, kinship networks are no less transnational and innovative than something like 'global supply chains'. The story of a different shrimp processing company reveals how such kinship ties can come to be constitutive of a flourishing circulation in brown shrimp as a global commodity.

The shrimp peeling factory in Taza where I conducted three months of fieldwork, was built in 2015, and founded by Farrid, a forty-six year old man who lived in Casablanca. As explained in the introduction, I began my fieldwork here because I had met Farrid's son Youssef through a mutual friend. Youssef had taken over the Dutch subsidiary of the company which Farrid had founded after Farrid permanently relocated to Morocco in 2010. From Casablanca, Farrid ran the mother company of Blue Taste, which comprised a seafood processing factory in Bouskara as well as the shrimp peeling company in Taza. Farrid was born in the Rif mountains in 1968, at a time when many of his extended family

members migrated to Europe during the wave of labour migration described in Chapter 1. When Farrid was still very young, his father migrated to Paris, whilst Farrid was sent to school in Taza where he lived with his aunt. For several years, he did not see his family, but when he was 16, his sister and mother joined his father in Paris, and Farrid decided to move there too, in spite of his fathers' wish that he would finish school in Taza. Farrid's father grudgingly allowed him to stay on the condition that he would contribute to the household. Farrid's uncle, who lived in the Netherlands, found him a summer job at a Dutch fish processing company. When Farrid turned 18, he married one of his uncle's daughters and decided to settle in the Netherlands for good.

Farrid began to work full-time at the fish processing company, and found his family a house in the fishing village of Urk, where the company was located. ''If the other workers started at 6am, I would start at 5am. If the other workers took a lunchbreak, I kept on working, and if they went home to have dinner, I stayed, and had a sandwich at work,'' Farrid recounted. Urk is a strictly protestant village, considered the most quintessential bible belt village in the Netherlands, and Farrid and his wife were the first Moroccans to live there. Farrid's boss recognized his work ethic and made a proposal after three months: since fish caught on Friday were only processed on Monday, as the protestant population did not work on Sundays, Farrid's boss offered to double his wages (fifty cents per kilo rather than twenty-five) if he was willing to fillet this supply of fish over the weekend. Farrid readily agreed to do so. Seeing an opportunity for business, he began to recruit Moroccan acquaintances from neighbouring villages and proposed to pay them twenty-five cents per kilo of filleted fish. The processed fish Farrid sold back to his employer for fifty cents per kilo. This way, he began to double his salary; every weekend he earned about 500 guilder, and every weekend he made an extra 500 guilder. ''That was a lot of money for that time,'' Farrid affirms.

With the money he saved, Farrid started his own filleting company in 1986. With the help of his extended family, he rented a venue and began to fillet fish for external parties. They were very successful because the supply of fish was ever-increasing; moreover, lots of Moroccans were looking for work, as half of the initial labour migrants had lost their jobs by 1984 due to the closure of factories and mines (Bouras, 2022). Within a few months, the company had between 60 and 80 employees, and over the years, the business gradually expanded. Farrid and his wife had three children together at this time. However, in 1994, the fish processing market suddenly became ''cut-throat,'' as an English company began buying up large shares of the fish supply. Farrid decided then to invest in Morocco, and returned to Casablanca where he opened a fish processing factory.

Initially, the factory processed flatfish and plaice from the Netherlands, and since business flourished, Farrid decided to stay in Morocco: he bought a second house in Casablanca and married his second wife in 1999. Business rapidly expanded, and within a couple of years the company was importing fish from around the world. In 2008 however, one of their biggest Dutch clients went bankrupt. ‘‘At that point, the obvious thing to do was to start processing shrimp,’’ Farrid recalled, ‘‘the supply of shrimp was very high, so soon, we were employing 500 women peeling shrimp. In fact, the demand for peeled shrimp was so high, that we decided to build a second factory.’’ Farrid’s family still owned some land in Taza, and in 2015, he opened a second factory specifically built for shrimp peeling.

In 2022, Farrid’s son Youssef directed the Dutch branch of the company, and his daughter Hayat was his accountant. Farrid’s uncle ran the factory in Taza, and Farrid’s cousin was the general manager of the factory in Casablanca. ‘‘My son Abdul wants to work for the company too,’’ Farrid mentioned, ‘‘my dream is that we make our business world-famous together.’’ By employing family members, Farrid could be in close contact with his managers at any time of day, and reduced the risk of his own managers becoming future competitors; in Morocco, many shrimp peeling factories opened up in the last couple of years, most of them founded by Moroccans who had previously occupied a managerial position in an established factory.[21] Farrid’s business also benefitted from its ties to Morocco and the Netherlands. During the Covid-19 lockdown, many Dutch-owned shrimp processing factories in Morocco closed completely, while Farrid’s factory remained open at reduced capacity, thanks to Farrid’s ties with government officials. The company also cultivated ties with wealthy European clients, due to their presence in the Netherlands. Thus, the kinship networks that run though Farrid’s ‘family firm’ are a key aspect of its success.

While Farrid’s company and Gardema are very different companies, ‘kinship ties’ are constitutive of both, albeit in different ways. Farrid actively invokes his family’s devotion to the company, while Gardema attempts to obscure those relations which are deemed ‘too intimate’ and therefore, ‘unprofessional’.[22] Even as the history of the company as a ‘family firm’ provides a tinge of ‘authenticity’ to the company, the more close-knit relations that characterize the management today are deemed ‘unprofessional’. ‘‘Of course, it is not in our interest that our clients find out how the supply chain really works,’’ Jacob commented once. Through notions such as ‘expert knowledge’, ‘qualifications’, and

[21] A similar phenomenon is noted by Sylvia Yanagisako for non-kin managers in Italian firms (Yanagisako 2019).
[22] See also Rofel’s and Yanagisako’s ethnography, *Fabricating Transnational Capitalism* (2019), in which they describe how Italian family firms celebrate their family heritage, whereas Chinese managers generally avoid the overlap of family relations and professional relations.

‘international standards’, the company marked its distance from the messier realities constituted by informal relations between the company and its suppliers or employees, for instance as evidenced in its involvement with fishing licenses discussed in Chapter 1.

However, managers of Gardema are likely not aware that their shrimp peeling factories in Morocco are highly dependent on local organizations of and aspirations for family life. The next section will explore how transformations in the organization of gender and kinship in Morocco became entangled with the emergence of shrimp peeling factories.

Manufacturing Gender and Commodities: Shrimp Peeling Factories in Morocco

‘‘I felt like I was reborn,’’ Meriem mentioned, ‘‘it was such a beautiful time. For the first time in my life, I felt I could be myself.’’ She was telling me about her move to Tangier in 2004. Originally from the Rif mountains, Meriem had married at the age of 16, and lived with her in-law family for the first six years of her marriage. She described this time as extremely difficult and challenging; as a daughter-in-law, she was expected to do a range of chores, from collecting firewood to cooking for the entire extended family. ‘‘I was on my feet from dawn until night,’’ she described, ‘‘even when I was pregnant or ill.’’ Meriem gave birth to two children during this period. Over the course of six years, she continued to be chastised by her mother-in-law, and hardly was allowed to take a rest or spent some time with her children. When her husband found a job as a mechanic in Tangier, the couple moved with their two children to a small apartment in the suburbs, and Meriem described this as ‘‘the most beautiful time of her life’’(*Akter haja zwina f hyatha*). However, soon after their move, the company for which her husband was working closed, and her husband lost his job. ‘‘So we choose to figure things out together,’’ Meriem continued, ‘‘and I decided to start working; first, I was selling food products, until someone told me about the factory. It didn’t sound too bad; the managers were respectful, and it was possible to work flexible hours. Of course, there were days that I woke up and hated everything about the job. Yet still, it enabled us to stay in Tangiers.’’

Meriem’s story resonated with other stories I heard in and around shrimp peeling factories in Tangiers, Tétouan, and Taza; many of the women working in these factories were born in the Rif and lived with their ‘extended’ in-law families before moving to the city. They all migrated in the years or decades after 1983, when the IMF-devised Structural Adjustment Plan took effect in Morocco, which led foreign companies to set up factories in the industrial zones of Tangiers, Casablanca, and Fes. Here, I recount various political and economic histories of Morocco through which more than ten thousand

female factory workers came to labour in shrimp peeling factories like those of Gardema. While foreign factories have employed 'cheap' women's labour in many parts of the world since the 1990s (see Wright, 2007), the employment of women in shrimp peeling factories in Morocco is contingent on specific histories of gender, the state, and the economy.

Women's employment in factories drastically rose in Morocco after 1983, when the IMF-imposed Structural Adjustment Plan took effect. The Moroccan government had adopted the austerity package to regulate its state debt, which had rapidly accumulated after Morocco's independence. To boost its post-independence economy, characterized by low productivity and rising unemployment, the Moroccan government had installed several forms of welfare such as health insurance benefits, a minimum wage, and pensions for which they borrowed from the IMF. However, King Hasan II had also embraced a 'controlled liberal economic system' in which many state-held assets, plots of land, and enterprises were transferred to political allies of the monarchy (Miller, 2013; Cohen, 2003, p. 173). State debt had risen to over 11 trillion dollars when Morocco invaded the Western Sahara in 1975, and began to spend between forty and forty-five percent of its budget on its military (Suáres-Collado, 2023). When the Moroccan state applied for support from the World Bank, it had to adopt the IMF-proposed austerity measures to qualify for support. The austerity measures entailed the privatization of the economy and the downsizing of state bureaucracy, as well as the devaluation of the dirham and the flexibilization of labour regulations (El-Naggar, 1987; Rivlin, 2007). The abolition of the minimum wage and the withdrawal of social benefits turned Morocco into a low-cost production country, and many European companies took advantage of this by opening factories in cities such as Tangiers, Casablanca and Fes. Most factories sought to employ women, who could be paid lower wages and were seen as more complacent than men (Bourqia, 2002; Cairoli, 2011; Zemni & Bogaert, 2009).

However, similar to many other countries in the MENA region, women in Morocco were 'traditionally' associated with domestic spaces while men were associated with the 'public sphere'.[23] Even though sociologists like Fatima Mernissi (1984) have argued that ''non-productive secluded women only existed in Moroccan reality as very exceptional cases,'' (Mernissi, 1989, p. 2), working women were

[23] The family law that Morocco adopted in 1957 stated that 'every person provides for his needs through his own resources with the exception of the wife whose upkeep (*nafaqa*) is incumbent on her husband' (quoted from Mernissi, 1984). In Morocco, the term *bint al-zenqa* or a 'girl of the street' is still used as a pejorative term, whereas the term *bint al-dar* or 'girl of the house' is a colloquial term for a 'good' girl in Morocco. (Montgomery, 2015; Kapchan, 1996; Newcomb, 2017).

often highly stigmatized.[24] With the emergence of foreign factories in the 1980s onwards, female participation in Morocco's labour force rapidly increased (Bourqia, 2002). In 2022, at least 10 000 women worked in shrimp peeling factories alone.[25] While Laetitia Cairoli (2011) has noted that female factory workers in the 1990s were still highly stigmatized, the women I met often repeated that their work was ''no longer shameful [*hshuma*]''.

However, women did often reiterate that working in shrimp peeling factories was ''hard'' (*saib*) and physically exhausting. Still, many women like Meriem said they would choose working in a factory over not working at all, if that meant that they could continue to live with their 'direct' family. As I described above, Meriem considered her move to Tangiers as ''the most beautiful time of her life'', primarily because it enabled her to live with her husband and children alone. Many of the women I spoke to brought up similar aspirations to live with their 'direct' family, and contended that they were willing to work in a factory to sustain their families if necessary. The emergence of the gendered forms of labour on which shrimp peeling factories depend is therefore deeply intwined with the shifting formations of 'the family' (*famila*) and 'gender' in Morocco. As Laura Menin (2024) and Alice Elliot (2016) have noted, it is increasingly common for young couples to aspire to their own households, whereas in the past, women moved in with their husband's extended in-law family.

In recent years, several ethnographies of Morocco have shed light on the anxieties, challenges and hopes that underlay such demographic changes. By focussing on the topic of love (Menin, 2024), conjugal expectations (Elliot, 2021) and everyday life and reproduction (Newcombe, 2017), these ethnographies have explored the range of specific hopes and anxieties centred around marriage, kinship, and their associated articulations of and shifting ideals for '*famila*' (the family). Such ethnographies are helpful to make sense of Meriem's and other shrimp peelers' aspirations for family life, although the

[24] Women from poor families had long worked in small workshops or for rich families, for instance, while rural women often worked in the fields in special 'women crews' (Pennell, 1986). The gendered dynamics of work in Morocco has received much attention from anthropologists, who have documented women's experiences with work on 'the marketplace', (Kapchan, 1996) as an emerging middle-class workforce (Newcomb, 2009), or as illicit sex workers (Montgomery, 2015). Laetitia Cairoli's ethnography (2011) arguably comes closest to the context of shrimp peeling factories, since she has written about women working in garment factories in Fes during the 1990s. She describes how women sought to pre-empt suspicions about their work environment by exporting a kinship vocabulary to relations in the factory: by speaking of fellow workers as 'loyal sisters' and of male supervisors as 'concerned fathers or brothers', women sought to detonate the dangerous proximity to (male) strangers (Cairoli, 2011).

[25] In many ways, Morocco therefore followed a trajectory common to many countries in the 'global South', where the mushrooming of foreign factories entailed the widespread employment of women. Jason Moore has argued that ''the "disposable third world woman worker" became a pillar of Cheap Labor in the neoliberal era,' from the 1990s onwards (e.g. Nash, 1981; Wolf, 1992; Ong, 2010; Wright, 2007; Moore, 2015).

particular forms of family life to which women aspire are deeply informed by socio-economic class, ethnicity, and background. While a number of ethnographies has focussed on women's participation in middle-class jobs which are often considered to be 'emancipatory' and 'fulfilling', female factory labourers are often considered to be 'exploited', and to be working out of sheer necessity (Newcomb, 2017 p. 42; see also Sadiqi & Ennaji, 2006). To understand how notions of 'kinship' matter to women labouring in shrimp peeling factories, it therefore vital to explore how 'the family' has been historically produced, governed and transformed before attending to women's own expectations and articulations of 'family life'.

Patriarchal Tropes and Processual Forms of Power

While 'the family' emerged as a moralized institution in the Netherlands together with 'the secular nation-state', Morocco has a very different political-economic history. The Moroccan state apparatus is often referred to as the *Makhzen* or *makhzan* (literally meaning: 'box' or 'treasure chest'), which refers to the close circle of political allies of the monarchy that effectively rules the country (Scheele, 2022; see also; Hammoudi, 1997; Hibou & Tozy, 2025). In the pre-colonial Sharifian empire, which had been ruled by the 'Alawi dynasty since the 17th century, the sultan had an itinerant court that carried a *makhzen* or treasure box to collect taxes. The court travelled around since it typically did not have a geographically bounded regime of influence but rather exercised mobile and pluralistic forms of power. In many rural regions, largely inhabited by Amazigh communities (the 'indigenous' population of North Africa) the influence of the sultan waxed and waned. Regions could be under the sultan's 'religious-symbolic sphere of influence' even if he did not possess direct or administrative control of these regions (Wyrtzen, 2016, p. 19). However, the sultan was widely recognized as 'the commander of the faithful' (*Amir al-Mu'minin*). Family, marriage, and gender matters were largely organized through Shari'a courts in the centralized parts of the empire, while the *jma'a* or tribal assemblies practiced *'urf* or customary law in more rural areas, with different implications for the governance and regulation of marriage and gendered roles (Hibou & Tozy, 2025). Traditionally, the makhzen was primarily concerned with taxation and the (re)distribution of resources, and not so much with the governance of the population.

When France and Spain colonized the Moroccan sultanate in 1912, the organization of 'gender' and 'family' became central to debates over Morocco's national identity. Since Morocco was officially under French and Spanish 'protectorate', allegedly, parts of the Moroccan political structures were left intact whilst the country's natural resources and agricultural land were being developed. In practice, the French took over and reformed all political institutions, leaving Moroccan institutions to serve a mere

ceremonial and aesthetic function: the Sultan was allowed to remain the 'official' head of state, for instance whilst in practice all governance functions were taken up by the French. French understandings of 'Moroccan' institutions and practices were often based in crude classifications and binary oppositions that did not correspond to their complexity (Burke, 2014; Hibou & Tozy, 2025). [26] For instance, the French reduced the difference between Morocco's 'Berber' and 'Arab' population to a geographical and binary difference between urban, Islamic Arabs and rural, 'superficially religious' Berbers.

By mobilizing such crude representations in their rule, the French wanted to divide and polarize the Moroccan population. It was widely believed that the Amazigh, thought to be descendant from Europeans, were more amenable to French rule and practices. The divisive rule of the French underplayed the fact that Amazigh and Arabs had long lived in 'symbiosis', and that there had been significant cultural and material exchange between Arabs and Imazighen for centuries (Wyrtzen, 2016). However, the French approach backfired when the 'Berber decree' was issued in 1930, which sought to install 'legalistic pluralism' by recognizing customary law for Morocco's Amazigh populations whilst establishing Shari'a courts for the Arabic population.[27] Arab nationalists saw in this decree an attempt to divide the Moroccan people, and mobilized large-scale protests in response, which sparked the beginning of the Arab nationalist movement. In the struggle for independence, the position of women and the family emerged as primary topics to decide how to define and organize Morocco as a nation-state. Moroccan nationalists generally espoused monogamy and invoked an image of the modern Moroccan woman who was educated and would be a compassionate companion for her husband.[28] Mohammed V, the sultan of Morocco, supported the nationalist struggle, and his wife, Lalla Abla bint Tahar, became a symbol for Moroccan

[26] The way in which the influence of the sultan was distributed and processual, for example, was grossly misrepresented by the French, who mapped these spheres of influence onto static geographical division between Bled es-Siba ('land of dissidence') and Bled-el-Makhzen, (the land of government). the French put much effort into documenting the local customs and practices they observed (earning protectorate Morocco the title 'ethnographic state' (Burke, 2014).

[27] The decree was partially based in the conviction of the French that Amazigh women were more 'liberated' than Arab women, grounded in their observation that most Amazigh were monogamous and that Amazigh women often went around unveiled and worked in the fields. However, under customary law, customary law, Amazigh women received no inheritance rights, set no minimum marriage age, did not make permission of a female guardian a condition to conduct a marriage. For that reason, Arab nationalists considered Shari'a to be better suited to safeguard women's rights and position in society.

[28] As part of this project, many nationalists saw education for women as an important cause for their struggle. The French had opened the first schools for girls in Morocco, but rather than introducing the French system, they sought to install an education system that would allow for the reproduction 'of the type of Moroccan wife and mother that the French officials believed the Moroccan household needed' (Wyrtzen, 2015). Thus, schools for Moroccan girls mostly sought to provide training in handicraft, hygiene, and household tasks. Moroccan nationalists, in contrast, wanted girls to be receive an education in Islam and Arabic so that they would be educated in the same manner as boys. Allal al-Fassi wrote an extensive proposal for the reform of Moroccan society and family law, based on a 'modern' idea of conjugal unity and the nuclear family as the basis of Moroccan society.

women's rights, promoting women's education and advocating for women's pivotal role in Morocco's struggle for independence. In contrast, French colonial administrators were deeply worried that the 'demise' of the 'patriarchal family' would produce political unrest and unionization; therefore, the colonial project of the French involved the preservation and promotion of what they had defined (and invented) as 'the traditional Moroccan family' (Wyrtzen, 2016; Salime, 2020).

These struggles over the family entailed different articulations of Morocco's future: Arab nationalists sought to embrace 'modern' principles as the basis of an independent Moroccan nation-state, and the nationalist Allal al-Fassi wrote an extensive proposal for the reform of Moroccan society and family law, based on a 'modern' idea of conjugal unity and the nuclear family as the basis of Moroccan society. In contrast, the French sought to reproduce what they had defined as the 'traditional' Moroccan family and designed an educational system that meant to train girls to be 'the type of Moroccan wife and mother that the French officials believed the Moroccan household needed' (Wyrtzen, 2016). The French thereby ruled according to Chatterjee's 'rule of colonial difference' (1993), treating 'local customs and practices' as tokens of 'tradition' in need of protection, whilst considering 'modernity' to be their unique privilege.

However, after Morocco gained independence in 1956, King Mohammed V approved a conservative family law that adopted none of the ideas articulated by Al-Fassi or other nationalists. The new sultan-turned-king needed the political support of rural notables, who had long operated in relative independence and therefore were not keen on centralized forms of government. Mohammed V promised these notables to safeguard the continuity of rural patrilineages by installing a family law that effectively left the legal status of women unchanged and that 'showed the determination of the monarchy to safeguard kin-based social solidarities' (Charrad, 2001).[29] While Morocco's post-independence government officially promoted women's education and women's employment, it undertook little action to realize these goals.

[29] The code stated that a marriage contract should be sealed by the groom and a male tutor of the bride, and that the bride's consent was not necessary to solemnize a marriage. Additionally, women could not file for divorce by themselves, and the law set the legal age of marriage at 15 for women and at 18 for men. Moreover, the family law legitimised polygamy and limited the possibilities of inheritance for women (Charrad, 2001; Wuerth, 2005). The implementation of the family law had deep consequences for the role and place of women in post-independence Morocco.

Beatrice Hibou and Mohammed Tozy (2025) have argued that such forms of state power draw on different modes and techniques of government that combine what they call a 'nation-state' logic and an 'imperial' logic. While nation-state forms of governance are largely concerned with governing and disciplining populations, imperial modes of government want to 'govern at the least cost,' without extending biopolitical control over the entire population (Hibou & Tozy, 2025). Under an 'imperial logic', the state is concerned with taxation and distribution, but 'family matters' are largely left to external institutions, like *Shari'a* courts. According to its critics, the Moroccan state combines both forms of government, but interventions such as the promotion of women's employment and women's education, have been to large extents performative, and not really invested in governing and disciplining gender norms (e.g. Errazzouki, 2014; Elliott, 2015)

Rural areas often suffered the most under forms of state neglect and marginalization resulting from these forms of government. Almost all women I spoke to in and around shrimp peeling factories in Tangiers, Tétouan, and Taza grew up in the Rif, a mountain-range in the North-East of Morocco that has been marginalized for decades. In 2022, it was one of the poorest areas of the country, with little access to healthcare and education services, increasing soil infertility and ecological degradation, and dwindling opportunities for labour migration (Jebnoun, 2020). Often referred to as 'remote', or 'the countryside' (*l-rubiya*), it is in fact one of the most highly populated areas in Morocco, with a population of 1.5 million in 2014. However, the Rif is mostly inhabited by Amazigh communities, and it is often assumed that this region in Morocco has been deliberately 'underdeveloped'. After Morocco's independence, several revolts erupted in the Rif in 1957-1959, targeting the ruling, Arab-led Istiqlal party, which had implemented measures such as the criminalization of kif and contraband trafficking, and the (re)closure of the border with Algeria, an area on which many Riffians depended for labour migration.[30] However, the Rif revolt was harshly suppressed, and the region was put under strict militarization.

This situation led many Riffians to migrate to Belgium, France, and the Netherlands from the 1960s onwards (see Chapter 1). Those who stayed in the Rif were increasingly dependent on their remittances, since the state invested little in industry, infrastructure or services in the area. After the implementation of the Structural Adjustment Program, it became increasingly hard to subsist on

[30] In fact, the marginalization of the area had begun already during the colonial period; Riffians had firmly resisted colonization by the Spanish, and had even established their own autonomous republic, which lasted from 1921-1926. However, the Spanish commenced a ruthless war on the republic, using chemical weapons and mass violence. By 1926, the Spanish managed to dismantle the republic with help of the French, and subsequently the Spanish hardly invested in infrastructure in the North, whereas the French built many roads, railways and facilities in the rest of the country.

agricultural practices in the Rif, and in 1984, several 'bread riots' broke out in the region. Again, these revolts were harshly repressed, and to find better options for employment, many Riffians migrated to cities such as Tangiers, Taza, and Tétouan in the 1980s. Most female migrants from the Rif were largely uneducated and therefore had few other choices than to take up employment in a factory. The first shrimp peeling factories in Tangiers and Tétouan employed women from the Rif on a large scale, and continue to do so in 2022.

However, since the first shrimp peeling factories opened in the 1990s, much has changed with regards to the position of women in Morocco: when King Mohammed V came to power in 1999, he promoted a 'feminist' and 'emancipatory' agenda. He initiated the reform of Morocco's conservative family code, which took effect in 2004, raising the legal age of marriage to 18 for both sexes, limiting the possibilities for polygamy, and making it easier for women to file for divorce as well as granting women more autonomy in the negotiation of their marriage contracts (Cavatorta & Dalmasso, 2009; Menin, 2024).[31] The state has also actively promoted 'responsible' family planning, and has 'moralized' the small, nuclear families by portraying large families to be an 'irresponsible' choice, and a prime driver of poverty (Hughes, 2011).

Such changes are slow to reach rural areas like the Rif, where the reformed family law is often circumvented: judicial consent for marriages of girls younger than 18 are still frequently made and approved in approximately 81% of cases (UNICEF MENA, 2017). Birth rates are also much higher than the national average, while literacy rates are much lower (Haut-Commissariat au Plan du Maroc, 2025). The Rif continues to experience socio-political instability: in 2022, unemployment rates in the Rif were at almost the double of the national average, and in 2016 and 2017, several mass protests erupted in the region following the death of Mohammed Fikri, a fish monger who died in a garbage truck whilst attempting to rescue his confiscated wares. Protesters demanded more investment in infrastructure, healthcare and education for the region, as well as recognition for Amazigh language, customs and practices, and demilitarization of the area. However, most protests were met with state violence, and so far, few changes have been implemented. Most communities in the Rif still largely depend on subsistence agriculture, and while the state made a few promises for regional investments, the effects of these changes are slow to emerge. For those continuing to live in the Rif, life is still structured according to 'traditional' norms, even though decades of migration have impacted the fabric of social life (e.g. Hart, 1976; Crivello,

[31] This reform was not uncontroversial even amongst feminist organizations; prior to its implementation thousands of women took to the streets, with protestors both in favour and against the reform (Newcomb, 2009).

2003). Women commonly move in with their in-law family after they marry, and many of the shrimp peelers I spoke to had lived with their in-law families for several years before moving to the city.

Most shrimp peelers that had moved to urban areas were well-aware that the Rif was actively marginalized by the state and told me that they had moved to cities not only in search of work, but also to have access to better schools, hospitals and other services. Since they knew that they could not rely on the state to provide resources, protection, or welfare, they considered life in the city not only more desirable, but also a more responsible choice. Many women exalted the beauty of 'the countryside' (*l-rubiya*), and urged me to visit their families in the Rif, yet contended that their futures lay in the city. Their move to the city did therefore not simply involve a transition from a 'extended' family to a 'nuclear' family, since many women carefully cultivated ties to their families in 'the countryside'; rather, their move to the city was often fuelled by the conviction that life in the city was simply more 'practical' (*waqi3i*) and offered more opportunities to their families. As I will explore in Chapter 3, aspirations for sustainable forms of family life, that could offer opportunities to their children, mostly drove women to take up labour in a shrimp peeling factory.

Conclusion

The historical developments discussed in this chapter illuminate the anxieties about the reproduction of life that both fishers and shrimp peelers faced in 2022. Fishers are increasingly anxious about attempts to decrease fisheries by both governmental actors and environmental NGO and invoke 'the family' and 'family labour' as sites of relative stability and continuity. Moreover, as I will discuss in Chapter 3, fishers create an idea of 'the family' as a form of 'tradition' that should be preserved at a time of radical change and insecurity: thereby, their aspirations for 'family life' and 'community' entail a specific invention of 'the future', coded as 'traditionally Duch'. Meanwhile, shrimp peelers in Morocco sought to reinvent 'family life' in order to create a life viable for themselves and their children. Many shrimp peelers who grew up in the Rif contend that life in countryside was increasingly precarious and unattainable; and while they considered work in shrimp peeling factories to be physically hard and tiring, they hoped that their jobs would provide them and their families with more opportunities for the future than a rural lifestyle could offer. They often hoped that through their work in a shrimp peeling factory, they might open up different future possibilities for their children, as I will discuss in Chapter 3.

Processing companies arguably profit from these anxieties around social reproduction: women in Morocco often take up employment in a shrimp peeling factory even when the pay is low and the working

conditions are physically challenging in order to sustain their families. Moreover, because fishers organized in family firms often engage in forms of 'self-exploitation', they provide processing companies with a supply of shrimp even at times when shrimp fishing is not highly profitable or lucrative, for instance when fuel prices are high or when shrimp prices are low. At the same time, it would be a mistake to consider processing companies as simply feeding on such 'kinship ties', since processing companies are themselves 'shot through' with family relations and intimate connections. However, while this chapter attended with broad strokes to the histories of labour, gender, and the family that produced the brown shrimp supply chain, the ways in which these histories are lived often take unexpected and unpredictable forms. To understand what 'forms of life' have emerged in and around the brown shrimp supply chain, it is vital to attend to the ordinary ways in which family relations are lived and experienced, and which attachments to the future they betray. It is to these experiences that I turn in Chapter 3.

3. Relatedness and the Viability of Life

In Chapter 2, I showed how distinct socio-ecological histories in the Netherlands and Morocco produced novel formations of 'the family' which inform and sustain different aspects of the brown shrimp supply chain: in 2022, shrimp fisheries are largely organized in small-scale 'family firms' in the Netherlands, while shrimp peeling factories in Morocco rely on the labour of women seeking to sustain their 'direct' families in the city. Moreover, family businesses with transnational kinship networks, such as Farrid's, were crucial to stitching together the geographically separate sites of Morocco and the Netherlands. Yet while the histories recounted in Chapter 2 provide crucial context for understanding how particular formations of family life and relatedness emerged in Morocco and the Netherlands in relation to this supply chain, I have not yet explored how these forms of kinship are lived and experienced, and what forms of moral striving and aspirations of 'the future' they betray. The histories recounted in the previous chapter shape, but do not determine how fishers, shrimp peelers, and factory managers live 'family life'. In this chapter, I show that the ways in which people live and experience different forms of relatedness and belonging have important consequences for how they think about their position in this supply chain.

Therefore, this chapter attends to the experiences of both fishers in Zoutkamp and shrimp peelers in Taza and Tangiers to explore what 'forms of life' have accreted alongside the supply chain of brown shrimp. I explore how the political and ecological transformations described in Chapter 2 inform everyday life in Zoutkamp and Tangiers. However, the social histories described in Chapter 2 are not simply the 'background' or 'context' for this chapter; rather, the ways in which people 'live' these histories are unstable, conflicted, and always under discussion. In a similar way, intimate relations and family life are not simply organized according to a model or a structure. Instead, 'the family' is the site of aspiration, experimentation, and self-cultivation, as well as of doubt and scepticism. While the abstract, moralized concept of 'the family' is shaped by the state, religious institutions, and popular media, actual families are also defined by those concrete demands that arise from being or living together, from the imperative to respond to the other and to be claimed by the other, which makes 'family life' a site of moral striving and self-formation (Das, 2020). Far from simply 'embodying' societal and political changes, the ways in which shrimp peelers or fishers seek to carve out a life for themselves and their families involve active attempts to be present to one another. Such attempts are not purely 'individualistic', however, but also betray 'how people see and know the world' (Strathern, 1992a). As Marilyn Strathern has shown, kinship provides a potent model for conceptualizing the passage of time and for articulating visions of 'the future'. This chapter explores how variable concerns with 'viability' are articulated through fishers' and shrimp peelers' labour and its relation to 'family life'.

Fishers as Fathers: Family Life and Moral Striving in Zoutkamp

In Chapter 2, I described how the family became a moralized institution during the 19th century in the Netherlands, as the family was mobilized as an important part of the nation-state. State-building projects also involved investments in fishing technologies, infrastructure, and housing; however, such forms of state support were largely retracted from Zoutkamp in the late 20th century, when the welfare state declined. Shrimp fishing became the target of environmental critiques, and as environmental NGOs and policymakers collaborated to design buy-out schemes for fishers, fishers increasingly depended on family resources and family labour to ensure the continuity of their trade (van Ginkel, 2009).

Melinda Cooper (2017) has shown for the United States that the decline of the welfare state and its associated social, educational, and health care services, made 'the family' into a foundational element of the socio-economic order. The 'neoliberal' economic transformations which saw the rise of consumer credit and household debt, as well as asset inflation and its associated forms of private home ownership, implicitly relied on 'the family' as a site of shared responsibility and resource management. In the twenty-first century, 'the family' has taken over many of the roles that 'the state' fulfilled in the twentieth century, Cooper contends, and this is only possible because certain ideas about obligation and reciprocity have been naturalized as belonging to the domain of 'the family.' Thus, she challenges discourses that associate 'neoliberalism' with an increase in 'individualism', and rather contends that the 'fantasy' of the individual is ideologically embedded in the idea of 'the family' (Cooper, 2017). While the Netherlands never saw the same neoliberal transformations as the United States, the last decades of governance were also characterized by cuts in subsidies, welfare, and services. Moreover, the state's attempts to reduce fisheries have also decreased fishers' faith in the state as an actor that can provide protection and sustenance, and the negative portrayal of fishers in national media has arguably led fishers to rely on 'local' (imagined) communities. Such developments may have contributed to fishers' dependence on family ties in 2022, which seemed to share many of the dynamics outlined by Cooper.

However, while the importance of 'the family' and 'local community' featured in many stories that fishers told me, the sociological importance of 'the family' does not reflect how 'kinship' is lived in Zoutkamp. During my time in the fishing village, I found that fishers reflected quite self-critically about their behaviour towards their families. The importance of 'community' and 'the family' was continuously stressed, yet there seemed to exist a somewhat tense relationship between the responsibilities that came with being present to one's family and the responsibilities that came with being a fisherman. Simon, a

fisherman I met at the fish auction in Lauwersoog, expressed such concerns quite directly. ‘‘My last relationship ended because I was either at sea or busy organizing for the local fishers’ interest group’’ he told me. ‘‘I was always at sea or in meetings, so no wonder that the relationship did not work out.’’

When I visited Simon’s house for the first time in August 2022, I was impressed by how clean and organized everything looked; his house was large and stylishly decorated with a gleaming glass dining table, a suede brown sofa, and a large TV. Everything looked modern and very neat, although almost nothing bore marks of use; even the coffee machine looked shiny and brand new. When I commented on this, Simon told me that between January and May 2022, he had only spent 7 days in total in Zoutkamp. ‘‘I can easily spend 10 or 20 days at sea’’, he told me. ‘‘I really have a ‘fish mode’ and a ‘home mode’. When I get in my car to drive to my ship, I always dread to leave. However, as soon as I put the nets out, it’s like someone flips a switch. Then I don’t want to stop fishing anymore.’’ Simon usually docked his cutter in Büsum and spent the weekend there to avoid driving back for more than 4 hours to Zoutkamp. Recently, things had changed, however. ‘‘My new girlfriend wouldn’t like that. I used to stay at sea for months at a time. But since I met her, I come back way more frequently.’’

As Simon explained to me, he was careful not to ‘‘repeat the same pattern as before’’ in his new relationship. While he considered himself to be on the ‘‘fanatical’’ (*fanatiek*) side compared to most other fishers from Zoutkamp, he actively sought to make more time for his current partner, Fleur. For that reason, he decided to take on less responsibilities at the fishers’ interest organization, and attempted to come home most weekends, even if that involved driving for four hours straight. Simon never phrased these changes as driven by social norms or ideas about what a good partner should do, however; rather, he simply told me he wanted things ‘‘to work out’’ with Fleur. Of course, Simon’s actions were hardly dramatic, but I thought of the small changes he made as a mundane form of self-transformation. Simon’s vision of love and partnership was very much in line with prevalent ideas about dating in Zoutkamp (based on the idea of the monogamous, heterosexual couple), but in the ways in which he tried to make himself available to Fleur I discerned a form of ‘moral striving’ through which he tried to build something meaningful with her. I never spoke for long to his girlfriend, but in 2025, she and Simon were still together.

Anthropologies of Kinship: Relatedness, Affect, and Belonging

Political histories of the family do not suffice to understand Simon’s struggles and aspirations for intimacy, as recounted here. Marilyn Strathern (1992a; 1992b) has shown that ‘kinship’ or ‘relatedness’ is

not only a vital component for the organization of social life, but also an important domain through which people know the world and articulate visions of the future (Strathern, 1992a). Historically, anthropologists attributed this role primarily to non-Western kinship 'systems', as kinship was thought to provide social continuity in small-scale societies through 'descent' or 'alliance'. For instance, in the early 20th century, British anthropologists were largely interested in the question of 'descent', since they believed that lineages provided 'social structure' in (non-Western) societies in the absence of a state. Descent theory was shaped in important ways by anthropologists working in Morocco, who explored 'segmentary lineages' in rural communities in the Rif and the Atlas, consisting mostly of Amazigh people (Gellner, 1969; Hart, 1976).[32] However, their theories were contested by ethnographers who pointed to a range of social institutions and phenomena that could not be explained through such lineages (e.g. Munson, 1989) and by anthropologists who questioned the structuralist-functionalist foundations of their approaches at large (Geertz, Geertz, & Rosen, 1979). Descent theory was ultimately critiqued for producing ethnographic accounts that were too 'ahistorical' and could not account for contemporary forms of socio-political changes (Kuper, 1982).

Similar critiques were leveraged against alliance theory, which explored how exchange structured kinship organizations and social communities at large. Moreover, while both 'alliance' and 'descent' theories focussed on the organization of social life, they often did not attend to how such forms of kinship were experienced. From the 1970s onwards, feminist anthropologists highlighted the marginalization of women's lives and experiences in kinship studies, and pointed out that women were largely reduced to 'gifts' or 'conduits' in these theories (Rosaldo & Lamphere, 1974; Rubin, 1975). David Schneider (1968) also leveraged an important critique of kinship studies by showing that the concepts of 'descent' and 'alliance' are both based in false assumptions of 'naturalness'. Rather than privileging 'biological' descent as the basis of kinship, Schneider urged anthropologists to study how kinship is understood and created through a range of symbolic and cultural meanings (Schneider, 1980). Schneider's work invoked more attention to the discursive construction of 'gender', 'sex', and 'relatedness' (e.g. Strathern, 1988), although his proposed focus on cultural meaning alone could not account for the ways in which kinship and relatedness are also shaped by the state, political economies, and bureaucratic legislations. In the 1970s and 1980s, Marxist inspired anthropologists showed how 'naturalized' models of kinship do not simply showcase 'cultural' meaning, but rather, co-emerged with capitalist and political structures (e.g.

[32] Anthropologists such as Ernest Gellner (1969; working in the Atlas) and David Hart (1976; working in the Rif) considered social life to be organized by situationally defined 'segmentary units' based on the closeness or distance of two people in a patrilinear lineage. Different segments could be mobilized at particular times, but generally, patrilineal ties are 'egalitarian, in the sense that two positions characterized by similar distance to the patriarch are ascribed similar importance and value.

Rubin, 1975; Collier & Yanagisako, 1987); meanwhile, a focus on 'practice' and 'performance' showed that the discursive production of gendered personhood and kinship is mediated through (but not determined by) socio-political institutions and epistemologies (e.g. Butler, 1990; Bourdieu, 1977).

Marilyn Strathern (1992a; 1992b) further contributed to the 'denaturalization' of kinship by leveraging her work on personhood, gender, and kinship in Melanesia to unpack the historical construction of 'nature', 'individuality', and 'relatedness' in British society. In the United Kingdom, Strathern argues in *After Nature* (1992a), ideas about 'kinship' used to offer a theory about the relation between the 'natural' world and human society at large, in which the 'social relations' of kinship were thought to be constructed on the 'facts of nature'. 'Nature' functioned as a 'domain' that constituted a stable referent or background on which relations could be construed (for instance, family relations), or in which changes could occur (for instance, environmental changes). In a similar way, 'individuals' were thought to exist 'before' the social relations that connected them to others and the world around them, so that an individual could be described as 'part' of a larger web of relations, whilst remaining at the core unchanged by them. Since 'nature' was considered the 'background' of social relations, social life was ultimately infused with 'natural' time, which was seen as linear and flowing forward. Children embodied 'newness' and 'potentiality', in this model, and 'the future' was produced as a domain of infinite possibility. However, with the introduction of reproductive technologies (but also, with the eroding of 'society' and the awareness of climate change and the precarity of 'nature'), many of these assumptions became undone, as reproduction was 'denaturalized' and lost its grounding function. In place of a model where the 'social' facts of kinship were imagined as constructed on the 'biological' facts of nature, kinship came to be understood as a domain of creative expression and choice.

These changes occurred at the same time as 'new' kinship studies emerged in the 1990s, which shifted analytic attention to the processual and experiential nature of kinship; however, Strathern herself was rather critical of anthropologists who simply adopted a vocabulary of 'choice', 'expression' and 'process' without investigating the critical import of such transformations. Such approaches might mirror a social change in the ways that people talked about kinship in the 1990s, but she contended that the effects of this reconfiguration had not yet become manifest and warned that these might not be as 'emancipatory' as some anthropologists seemed to hope.

As Strathern forecasted, the 'undoing' of concepts like 'nature' and 'society' which gave rise to the prevalence of 'choice' and 'process', did not simply lead people to define and experience 'kinship' or 'relatedness' more 'freely'. Rather, since the 1990s, anthropologists working in various parts of the world

have explored how emerging discursive formations around kinship have delineated new categories of belonging and have redrawn lines of inclusivity and exclusivity. 'New' kinship studies often explore such formations through both contemporary experiences of kinship and through the particular ways in which kinship is enacted by states, the law, and/or religious institutions (Carsten, 2003). Considering questions around 'gender', 'personhood,' and 'the family' to be at the heart of political, economic, and social projects, such ethnographic studies have explored how people produce, imagine, repair, or undo forms relatedness in the face of state violence and repression, capitalist modes of production and reproduction, and new (reproductive) technologies and interventions (e.g. Borneman, 1997; Biehl, 2005; Povinelli, 2006; Das, 2007)

In an unpublished article, Sylvain Perdignon has argued that it is especially vital to understand what concepts of long-term 'viability' are implicit in models of kinship. Recent 'turns to life' have contributed to a renewed interest in vitality and vital processes of death and the production of life in anthropology (cf. Pina-Cabral, 2018; Fassin, 2018). Concerns with the capacity to sustain and reproduce life are also central to the concerns around 'surplus population' and the capacity to ''accumulate life'' voiced by Susana Narotzky (2022). Her recent work has focussed on what happens when former working-classes are increasingly discounted as ''socially necessary'' for the reproduction of (capitalist) society (Narotzky, 2022). As labour is increasingly outsourced or automated, working classes in the Global North often feel bereft of their former rights and privileges. For many subjects in the Global South, such crises are more 'ordinary'. Still, in many parts of the world opportunities to ''make a life worth living'' or even ''to make a living'' are becoming increasingly precarious. Susana Narotzky (2022) has characterized this as a ''crisis of reproduction'' that indicates the ''dispossession of life-making activities''. At the same time, she contends that despite attempts to render entire populations ''silent and out of sight'', people keep exploring ways to create ''the ability to accumulate life'' (Narotzky, 2022, p.13). Such concerns with viability are crucial to understand the brown shrimp supply chain and its conditions for reproduction, since the production of shrimp as an edible commodity hinges on the reproduction and regeneration of various processes of life, both in a 'social' and a 'ecological' sense.

This chapter explores 'kinship' both as a domain of intimate relatedness and as a domain on which societies construct ideas of reproduction and thereby, ideas of the future. As Marilyn Strathern has written, ''futures necessarily belong to the present: they are what we imagine for ourselves now'' (Strathern, 1992b, p.5). However, as described in the introduction, 'the future' is increasingly described as 'suspended', or as a 'scarce resource' (e.g. Hage, 2001; Guyer, 2007). This characterization is often associated with a widespread 'crisis of reproduction' which prevents people from pursuing certain

aspirations for the future (Narotzky, 2022). In the brown shrimp supply chain, the forms of human and non-human life that sustain this supply chain are often imagined to be 'in crisis'; fishers in Zoutkamp regularly voice the fear that their form of life is on the verge of disappearing due to national and international attempts to regulate and limit fisheries, while environmental NGOs in turn worry about the marine ecologies that constitute the sites in which shrimp are fished and warn for seas and oceans 'devoid of life'. Women labouring in shrimp peeling factories express anxiety over their ability to sustain family life under straining labour conditions, and for the forms of life that they can offer to their children. At the same time, these actors are all involved in the reproduction of the brown shrimp supply chain: as Sylvia Yanagisako has noted, capitalism has 'no reproductive powers of its own' (Yanagisako, 2003), and relies on forms of social reproduction, even if these are increasingly under pressure. Thus, while I attend to the imaginaries of relatedness and reproduction that informed concerns about 'kinship' in the supply chain of brown shrimp in 2022, I also show how such concerns in fact secured the reproduction of the brown shrimp supply chain.

The challenge that Simon outlined, of balancing life as a fisher with life as a partner or a family member, is familiar to most of the fishers I spoke to. The schedules and rhythms of shrimp fishing make a big demand of fishermen's lives. Except for the Wadden sea fishers who went out to sea for the day, most fishers leave for 5 to 10 days at a time, and only come back during the weekends. Fishers' partners have to put up with their absences, something that is not always easy, especially when they have a family. Fisher Arjan told me for instance how his attitude to fishing changed when he had children: ''We used to fish from Monday to Friday every week, but now we always try to be back on Thursday. I have a son that's four and a daughter that is four months old, and Jesse [his deckhand] has a son that's two and a half years old. We want to be able to see them grow up. Still, you end up missing a lot when you are at sea.''

Perhaps because of such strains, fishers' marriages and their family lives were a lively topic of conversation in Zoutkamp. Many fishers stressed they wanted to marry someone from Zoutkamp or its close surroundings, so that they could be sure their partner ''gets it''. In 2022, the fishing museum where I volunteered devoted an entire exhibition to fishers' wives. The exhibition featured a video in which women married to fishers recounted the hardest moments of their marriages. Some women told stories about incredible storms during which they lost all connection with their partner, while others recounted memories of important moments, like giving birth, which their partner missed because they were at sea. All women interviewed for the exhibition contended that it was not easy being married to a fisher, given that their partners were away for so long and so often. However, many of the older interviewees mentioned that the development of communication technologies made things significantly easier since

this allowed fishers to be present in family life in a different way, for instance by reading bedtime stories over the phone or on Skype.

However, navigating family life required continuous efforts from both fishers and their partners, and the prevalence of phones or emails hardly made up for missing a son's first steps, or a daughter's end-of-year musical. Fishers were aware of this and often sought to make small adjustments in their lives to be more present to their families, for instance by fishing only four days a week, as Arjan and Jesse did, or by taking one's family on a sailing trip during the weekend or the holidays. However, the obvious difficulties that fishers faced in balancing 'fishing' and 'family', struck me as somewhat at odds with the ways in which 'the fishing family' is often promoted as a stable and traditional unit in the literature on fisheries. While for instance van Ginkel is right to list 'the family' as an important institution in a place like Zoutkamp, the complicated lived reality of family life led me to wonder about the relationship between something like 'kinship' and something like 'the supply chain.' Rather than stating *that* kinship is important for the operation of the brown shrimp trade (which it obviously is), I would like to ask how the ordinary, lived realities of family life are entangled with the production of the ''brown shrimp supply chain''.

Veena Das's writing attuned me to subtle ways in which 'communal life' and its associated forms of kinship was achieved and maintained in Zoutkamp and Tangiers. For Veena Das, ''everyday life is the site in which the life of the other is engaged.'' As such, everyday life is also the site of 'moral striving' which stems from ''attention to the concrete specificity of the other'' (Das, 2010). Everyday life, in other words, cannot be taken for granted as the backdrop of life, but must be 'rescued' from the threats the forms of rupture that might undo it at any point. Efforts to maintain 'family life' are not simply marked by attempts to live up to certain 'moral ideals', for instance by attempting to realize family life as an idyllic site of emotional support and domesticity; they are also marked by the concrete efforts people make to be present and attentive to the particular 'others' that they share a life with. That does not mean that people are not influenced by normative ideas about the family, or that they do not attempt to realize some conjugal or familial 'ideal'; rather, Das' point is that the 'texture' of ordinary life as lived, and the forms of ethical life that are imbricated in it, can easily elude us if we solely focus on how people embrace or challenge 'family values' and 'social norms'. The mundane experience of family life cannot be taken for granted as a given, or as a microcosm of social ideas about the family at large, but must be seen as a precarious achievement that can never be stabilized for once and for all. The question of how to live a life together must therefore be reinvented over and over, and during my time in Zoutkamp, I often felt that fishers and their families were deeply engaged in such efforts.

Complex Families around the Factory: Aspirations for Family life and the Future

Yet an exploration of how 'family life' matters in the supply chain of brown shrimp cannot be limited to Zoutkamp. In Morocco, different forms of life have accrued along the supply chain. In Chapter 2, I explored how precarious conditions in the Rif drove many women to cities like Tangiers; however, while such forms of rural-urban migration often occurred out of economic hardship, they were not necessarily lived this way. I described how Meriem attested that the experience of moving to Tangiers was ''the most beautiful time of her life'' (*Akter haja zwina f hyatha*). I was struck by how many women narrated their move to the city in a similar way, and underlined how happy they were about the transformation in their family organization that such a move entailed.

For instance, Aziza's story is remarkably reminiscent of Meriem's. A thirty-one year old woman from a small village in the Rif mountains, Aziza met her husband at a wedding in her natal village when she was eighteen. He asked for her hand in marriage, and only fifteen days later the couple married. ''When we moved to Tangiers, we married for real, however'' she told me as she poured me some freshly brewed mint tea. For the first of years of their marriage, the couple lived with the extended family of Aziza's husband in a different village in the Rif mountains. ''Back then, I hardly got to spend time with my husband,'' she recalled, ''because my husband's brother's wife ran the family like a tyrant. Every morning I had to wake up early to collect firewood, to make tea, and to prepare breakfast. Then I'd spend the whole day taking out the goats, collecting water, and preparing food. Sometimes, she would even wake me in the middle of the night to do chores.'' Aziza lived with her in-law family for seven years and gave birth to three sons during that time. ''However, only when we moved here, I got to know my husband properly. Since we live here, we became a lot closer. I am lucky; he gives me a lot of freedom and allows me to do whatever I want.''

To an extent, Meriem's and Aziza's stories reiterated a traditional narrative in Morocco, which depicts the transition from being a girl to being a married woman as a ''painful fracture'' (Menin, 2024, p. 52). Moreover, stories about daughters-in-law being castigated by their husband's mother or sister circulate widely and form the basis of many stories and jokes. In Morocco, in-marrying girls traditionally occupied the lowest position in a new household, and only gradually acquired social status as a wife and mother, especially by giving birth to sons (e.g. Maher, 1974; Davis, 1983; Mernissi, 1975). In 2022, most married couples established their own household within the first years of their marriage (see: Newcombe, 2017; Menin, 2024). However, in rural areas like the Rif, such trends are less pronounced, and Meriem

and Aziza both experienced their departure to the city as a significant break from their 'extended' families, even though they continued to cultivate relations with their families in the countryside and thus by no means 'cut' their ties altogether.

Darija or Moroccan Arabic does not have separate terms for the 'nuclear' and the 'extended' family, and my translator told me that she would translate these terms as *famila sghira* (small family) and *famila kbira* (big family). However, the terms 'nuclear' and 'extended' are still used as analytic shorthands to refer to different styles of living together, and in the anthropological literature on Morocco, it is frequently noted that the shift to a 'nuclear' living arrangement is ''often the first step toward major independence from both birth family and in-laws'' for young women (Elliot, 2021, p. 82). As explained in Chapter 2, women are in many ways structurally disadvantaged under the Moroccan law, yet in 2022, many young women consider 'love' and 'family life' as sites that can offer opportunities for a meaningful and fulfilling life (see Menin, 2024).

However, any exploration of 'the family' as a site of experimentation and aspiration, should adopt a critical awareness of the historical weight of kinship terms in Morocco. Colonial anthropologists in Morocco were fascinated by the 'patriarchal family' which they saw as the heart of 'traditional' Moroccan society (see Chapter 2). Segmentary theory, developed in the second half of the 20th century by Ernest Gellner and David Hart, drew on the work of French colonial ethnographers to explore how patrilineages provided 'social continuity' in rural communities. Yet while the 'extended' family has traditionally fascinated anthropologists, Zakia Salime (2020) has argued that the 'nuclear' family is not a 'modern' or 'recent' phenomenon in Morocco. By drawing on archival research, she illustrates that colonial anthropologists and sociologists in the 1920s were already concerned with the effects of industrialization on family structures, when the first large-scale rural-to-urban migration occurred (Salime, 2020). These studies often reported the 'disintegration' of 'traditional' and 'patriarchal' family structures in alarmist language, as they feared such a development to have dangerous effects on the stability of colonial rule in Morocco (Montagne, 1951). Such studies actively contributed to the creation of an 'ahistorical and decontextualized patriarchal family' as an 'ideal type' (Chekroun, 1988, quoted in Salime, 2020), and Mohammed Chekroun has outlined how such binary approaches have obscured the continuity of family-based networks in urban settings.

Therefore, Moroccan anthropologists and sociologists have often been highly critical of binaries such as nuclear-extended, rural-urban, and traditional-modern (Ghemires, 1992; Chekroun, 1988). Zakia Salime introduces Naima Ghemires' (1992) idea of the 'complex' family as an alternative to the

nuclear/extended binary to account for the intricacies of family life under conditions of globalization, (transnational) migration, and transforming labour regimes (Ghemires, 1992).[33] Many contemporary ethnographies of Morocco have noted that it is common for women to rely on extensive kin networks for emotional and financial support, even in situations where living arrangements have shifted towards more nuclear forms (e.g. Maher, 1974; Kapchan, 1996; Newcomb, 2009). Keeping Strathern's invocations in mind, such observations raise the question of what ideas of the passage of time and visions of the future underlie such configurations of 'kinship' and family life.

Most of the women I spoke to, continued to cultivate extensive relations with their natal communities in the countryside: they regularly visited their home villages in the Rif, if time and money allowed it, and women often had long phone conversations with their family members. At the same time, it is also important to acknowledge the new forms of sociality that their lives in the city offered. While most women I spoke to grew up in relatively small communities, shrimp peeling factories employ up to 3000 women at a time. ''The first time I came to the factory, I was completely overwhelmed'', Selwa, a shrimp peeler from Tangiers told me in November 2022, when I visited her on her day off from the factory. ''I had never seen so many people together.'' Many women underlined that they had made friends in the factory, or could work together with their sisters or aunts. Still, it was often hard for women to combine their work with their family life. Aziza's story illustrated this vividly, since she had already worked in a shrimp peeling factory before she was married: her father passed away when she was sixteen, so she moved with her mother and sister to a small room in Tangier. Aziza started working in a shrimp peeling factory to provide for them yet maintained that it was ''easy'' (*sehla*): ''I had no responsibilities, and my mother was always cooking for us. If you did your work well, you would not have any difficulties, you could talk with your friends and you would always get paid.'' Aziza moved back to the countryside when she married, however, and stayed there for the first seven years of her marriage. When she moved back to Tangiers with her husband, she took up her old job in the shrimp peeling factory but discovered that this work was much more difficult now that she had her own family. ''When I work in the factory, I am worried until I get home,'' she mentioned. ''I am constantly afraid something will happen. Once, when I was not in the house, a small fire broke out. Since then, I only work when I really need to.''

[33] In fact, some critiques of 'segmentary theory' proposed a similar alternative. Clifford Geertz, Hildred Geertz, and Lawrence Rosen, contended that segmentary theory is 'too rigid' to make sense of the messiness and complexity of social life and argue that patrilineal ties are not more important than other social relationships, composed of dyadic ties between individuals. Attempts to bridge segmentary theory and interpretative approaches, such as those by (Combs-Schilling, 1985), have emphasized the short-term importance of dyadic alliances whilst underlining the long-term importance of patrilineal kin. As patrilineal ties are considered 'natural' and given, they do not need to be constantly reinforced, whereas many dyadic ties need to be actively maintained. Thus, it is easy to oversee patrilineal ties, as they do not readily appear in day-to-day life, but rather 'make[s] itself felt in the long term'.

Fortunately for Aziza, her family was not dependent on her income; her husband worked in construction, and despite his unstable income, he could mostly provide for the family so that she only had to work when she and her husband really needed the money.

Divorce, Death, and the Undoing of Sociality

However, many other women did not have that luxury, and struggled with balancing their jobs with domestic responsibilities such as cleaning, cooking, and looking after one's children. Fadila, a shrimp peeler from Taza in her forties, told me that she was so tired when she came home, that her daughter sometimes had to help her get undressed. Still, many women underlined that they would choose working in a shrimp peeling factory if that allowed them to live life in the city with their 'direct' family over living in the countryside with their extended family, even though they considered their work in the factory to be tiring and exhausting. Fadila had managed to buy an apartment with her husband, of which she was very proud: moreover, her daughter was going to university in Taza, something that would have been impossible in the countryside. When I visited Fadila and her family in May 2022, she gave me a tour through the apartment, and when I complimented her living room, she smiled, and responded: ''yes, it is wonderful. Now all I need is more time to be at home so I can enjoy it.''

However, some women less fortunate than Fadila worked in shrimp peeling factories out of sheer necessity, as Selwa's story made vividly clear to me. A woman in her thirties, Selwa lived on the outskirts of Tangiers, close to Aziza. Her house was a simple concrete structure on the edge of an informal neighbourhood in Tangiers, consisting of a small space provisionally divided into a bedroom and a living room. Not connected to either electricity or running water, the dwelling was much sparser than Aziza's or Meriem's apartments. Built for her by her uncle, the house was a makeshift construction meant to set her up when she first came to Tangiers. In contrast to Meriem and Aziza, Selwa had never planned to come to Tangiers. She loved her natal village close to Chefchaouen, in the Rif mountains, and was happy to live with her family. However, when she was 25, her sister married, and her husband insisted that Selwa married his friend. Even though Selwa did not want to, her father eventually agreed as the man kept bringing gifts to the family. As soon as they were married, however, Selwa's husband showed a drastically different face; the couple moved to his father's home in a village nearby, and although Selwa got on well with his father and his wife, her husband became irritable and violent. Unemployed, he resented the fact that his father refused to give him money. Eventually, he left to Tangiers where his mother was living with her new husband.

According to Selwa, her husband fell in with the wrong people; his mother's partner's sons drank a lot and engaged in petty crime, and soon her husband did the same things. He summoned Selwa to Tangiers where they lived for a while at his mother's address; by then, Selwa was pregnant, and she gave birth to her baby not much later. However, her husband was arrested and sentenced to a year in jail, and it turned out he had another mistress. Selwa's husband ordered his mother to send her back to her family. Back in her natal village, she faced the social stigma that came with being a single mother. Although her parents were supportive, her brother's wife made her life unbearable, and she decided it would be better to leave. She left her young daughter in her parents' custody and was taken in by her uncle and his wife who lived in Tangiers. Here, Selwa started working in a shrimp peeling factory, and after a year, her uncle built her a house, as he felt it was better for her to have her own space. In 2022, she was living here with her younger brother who sought a job in Tangiers. Every month, she sent half her salary home to her parents, who were taking care of her eight year old daughter. Selwa missed her daughter terribly, and her biggest hope was that her daughter could come and live with her once she was old enough.

Even as I was deeply affected by Selwa's story, what happened to her was not entirely exceptional. According to Hamid, the quality manager in the shrimp peeling factory in Taza where I conducted fieldwork, twenty percent of the women working there were divorced. Ninety percent of these women had children, and often worked in shrimp peeling factories out of sheer necessity. Being divorced still carries strong social stigma in Morocco, yet since the family law reform of 2004 (see Chapter 2), divorce rates have increased drastically, from 7,213 in 2004 to 67,556 in 2023 (HESPRESS English, 2025; Newcombe, 2017). Even though this increase is largely attributed to women filing for divorce, divorced women generally still face social prejudice and economic hardship. In Morocco, I often heard people express their concern about the country's high divorce rates. Hajar, the production assistant in the shrimp peeling factory in Taza, was for instance convinced that the increase in divorce rate in Morocco could be attributed to the fact that people married later in life. ''When you marry when you are young, you grow up together,'' she told me once. ''You know each other so well, and that creates a special bond. However, now, when people marry later, or when older men marry a younger girl, they don't know the person they marry at all.''

Such a comment could be read as a critique of the state-initiated family law reforms that heightened the minimum age of marriage. Morocco's 2004 family law reform sparked much controversy, and protesters in favour and against the reform took to the streets in large numbers. While many women supported the reform, there were also many female protestors against the reform, which they considered to be too 'Western' (see Elliott, 2015; Newcombe, 2017). However, Hajar did not necessarily critique the

fact that the minimum age of marriage was raised for women, but rather pointed out that young men generally married later in life, as they struggle to put together the financial assets necessary to get married. Over the last decades, the average age of marriage has consistently gone up, from 24 in 1960 to 32.4 in 2024 for men, and from 17.5 in 1960 to 24.6 in 2024 for women (HESPRESS English, 2025). In Morocco, men usually need to wait to get married until they have financial security, as they are expected to pay a bride price (*sadaq*), and/or to provide a (furnished) house or apartment (Newcomb, 2017). In 2023, the unemployment rates for men between 15 and 24 were estimated at 22.5 percent by the International Labour Organization (International Labour Organization, 2024). Such high employment rates, in combination with the rises in bride price effected by returning migrants who come to Morocco to find a bride (see Elliot, 2021, p. 61), have led many Moroccan men to marry later in life. However, as evidenced by the statistics above, men often prefer to marry a relatively young woman, so that the age-gap between genders has been widening. According to Hajar, people from earlier generations would marry someone from the village with whom they grew up, and such shared origins would often form the basis of an affective and happy marriage.

However, Hajar arguably painted a somewhat romantic fiction of the past, and not all women I met agreed with that statement. For instance, in a factory in Bouskara, I met Samira, who had married when she was relatively young. When I cautiously asked her for the reasons of her divorce, she answered me promptly: ‘‘my husband did nothing but sit around. He had inherited some land, but he did nothing with it. I was patient for three years, then I decided to leave.’’ Samira had been working in this shrimp peeling factory since 2002, as she needed to support her two children on her salary. In an ideal world, she told me, she would not work at all, yet she preferred to work in the factory as a divorced woman over being married to her former husband. Other women saw their employment in a factory as a practical response to a social situation in which men could no longer provide for their family by themselves. Farah, a shrimp peeler from Tangiers, told me for instance that she saw the expansion of Tangiers as a good thing. ‘‘More factories means more work,’’ she summarized soberly, ‘‘and that’s what allows us to live here’’ (*hadshi li kaykhallina n3ishu hna*). Other women were ambivalent about the emergence of foreign factories and women’s widespread employment: ‘‘Of course it is a good thing when a husband and wife can share the burden of working. Yet, in that case, men need to contribute to the household too. Sometimes, men just sleep all day when a woman goes to work and asks for money to go to the café when she’s back,’’ contended Meriem. ‘‘It really depends on the family’’ (*3la hsab l 3a-ila*).

Many women also linked the necessity of factory work to the increasing infeasibility of making a living in the countryside (*f l rubiya*). ‘‘Things have changed! (*Tbddlat lwqt*!)’’ Selwa told me, ‘‘When I

was young, our family could live off the land; we would harvest our own wheat, potatoes, fruits and vegetables, and we had plenty of sheep and chickens. Around the Eid, we would sell some of lambs and the money would be enough to afford clothes and other essentials for the rest of the year. However, now 200 dirham is nothing; everything is getting way more expensive. Life is getting seriously difficult in the countryside.'' (*lhayat kats3ab f-lrubiya*). Fadila confirmed her story: ''when I was young, my family was not poor at all. My father owned a lot of land and a lot of sheep. He took a second wife, so he had a lot of children too. However, when people started leaving the countryside for the city, my dad did nothing [*madar walu*]. He did not sell the land. He did not invest. He wanted to stay. But there was no one left to work the land. That's why me and my sisters are in this situation now; that's why we are poor.''

Initially, this remark led me to think that Fadila was quite critical of her father. Fadila lived with her husband and her daughter in ''a clean, white apartment'' of which she was very proud. She was a cheerful, self-assured woman, and she had often reiterated to me how happy she was with her house and with her daughter who studied at the local university. When I visited her, she asked me whether it was okay with me if her husband stayed home with us, something that was slightly unusual, as women's husbands often left to a café whenever I visited. However, Fadila and her husband seemed to have an affectionate and warm relation, and I often thought that she preferred life in the city over life in the countryside. Therefore, I was quite surprised when she told me a story that showcased the primacy of her on-going ties to the countryside.

''When I heard the first cases of Covid had been found in Casablanca, I was so scared,'' she told me when I visited her. ''I did not dare to go to work. I did not even dare to go to the market. In the end, I hardly left the house. I was terrified [*kaykhl3*] of dying alone'' (*Tmut wa7dani*). On the second of March 2020, Morocco's first Covid case was detected in Casablanca, and on the thirteenth of March there were nineteen confirmed cases. The Moroccan government reacted quickly and suspended all international flights from the fifteenth of March. On the twentieth of March, when the number of Covid cases had risen to seventy-nine, a national lockdown took effect, which meant that no-one could leave their home without state authorization. ''Right now, I am not scared anymore, but back then, we did not know what was happening [*ma3fnash shnu waqe3*]'' Fadila explained. ''I thought: if I get the virus I will die. I went a bit crazy. I was disinfecting the house all the time.'' In the end, Fadila went back to her family in the countryside. ''I was scared to be amongst people, and I did not want to die far away from my family. I felt safer there,'' she explained. For several months she stayed with her father in the Rif mountains. ''However, when I finally received the vaccine, I was reassured, and I decided to come home again.''

Fadila's statement that she was afraid to 'die alone' (*Tmut wa7dani*) puzzled me, as she seemed very happy in her everyday life with her husband and her daughter. I was surprised by her story about her return to the countryside, which made me wonder about her enduring ties to the Rif that were not readily visible in everyday life. Earlier in this chapter, I wrote that women often cultivated ties with their extended families, even as their daily 'family lives' were increasingly organized in 'nuclear' households. However, Fadila's fear of dying might illuminate her visions of kinship and belonging beyond everyday experiences of family life. Marilyn Strathern (1992a) has argued that any model of kinship should account for how 'death' is understood to affect relations and personhood, since 'death' is as important for the making and un-making of sociality as 'kinship' is.[34] 'Kinship' is not only a way of organizing relatedness and reproduction, but also involves particular conditions for the right way of undoing relations. Yousra Sbaihi (2023) has argued that the Covid-19 pandemic changed 'discourses of death' in Morocco, as death was framed as an 'immediate' possibility rather than a 'natural event in the distant future' (Sbaihi, 2023, p.446). The outbreak of the Covid-19 pandemic caused a 'moral panic' in Morocco, Sbaihi argues, especially since rumours circulated on the internet that corpses were being burned by hospitals to prevent the risk of contamination (Sbaihi, 2023, p. 436).

The moral panic that this rumour caused relates to the prohibition of the cremation of bodies in Islam, which requires that bodies of the deceased are ritually washed and buried facing Mecca (Dieste, 2012). Therefore, the rumour of cremated bodies caused moral outrage and widespread fear of catching Covid-19. In addition, Sbaihi argues, dying from Covid-19 was often considered an 'undignified death, characterized by *al-aar* or shame,' (ibid, 438) especially for precarious working-classes for whom a sudden death could cause economic distress. While the timing of death is considered to be divinely decreed and known by God alone (see Chapter 6), there are clear cultural examples of 'good deaths' and 'bad deaths', according to Sbaihi.

Thus, Fadila's return to her family in 'the countryside' might be understood as resulting from a fear to die a 'bad death'. In Morocco, the recitation of prayers by kin on one's deathbed, the washing of the corpse, and a proper burial ceremony are all important rituals that mark the departure of a person from this world and ensure the proper passage of the soul towards the next world (Dieste, 2012). Fadila's fear of 'dying alone' might therefore be understood as a fear of not dying a 'proper' death, as a legitimate social person. Lawrence Rosen (1984) famously noted that personhood in Morocco is constituted through

[34] See also: John Borneman (1996), who argued that anthropologists interested in kinship have historically paid too much attention to 'marriage' and relatedness, and too little to 'death' and the work it does on relationships (Borneman, 1996).

social relations, and that one's birthplace is not only ''a point of origin- it is to have those social roots those human attachments, that are distinctive to the kind of social person one is'' (Rosen, 1984, p. 23). Katherine Hoffman (2008) described how in the Anti-Atlas mountains, *tamazirt* or the (rural) homeland is considered to be the origin of one's roots (*asl*) and moral personhood; while she contends that *tamazirt* does not denote a specific geographical location, she describes that *tamazirt* is generally considered to be the opposite of 'the city'. All shrimp peelers I met continued to cultivate their ties to their families and communities in the countryside, despite their moves to the city. The on-going cultivation of these ties does not only point to their affection towards their extended family, however, but also indexes how women think of 'personhood' and 'belonging'; natal communities were not only the site of one's family and origin, but also the place most constitutive of one's personhood, and the right place to return to at the time of death. While their demanding urban lifestyles sometimes worked to render such relationships invisible, the threat of 'death' powerfully brought to light the enduring kinship ties that constituted ideas of 'relatedness' and 'belonging'.

However, as in other parts of the world, the politics around Covid-19 starkly brought to light the unequal valuation of lives (e.g. Blanchette, 2021). In Morocco, shrimp peeling factories were largely closed, or required to introduce strict social distancing measures, and workers registered with social security received compensation from the government.[35] No matter how minimal the protection of these factory workers was, their official employment in factories rendered their lives more 'valuable' for the government than the lives of those employed in the informal economy or of those unemployed. Yousra Sbaihi (2023) contends that food sellers, hamam workers, and parking attendants were affected the hardest by the pandemic, and she quotes a fruit seller stating that ''I am already dead. Do not confine me.'' (Sbaihi, 2023, p. 447).

Women in shrimp peeling factories were highly aware of how precarious those without employment were, especially during the pandemic. In Chapter 2, I described how forms of state neglect and marginalization have increasingly affected large parts of the population, especially in rural areas like the Rif; many women working in shrimp peeling factories had experienced the effects of this state marginalization first-hand. However, during the Covid-19 pandemic, shrimp peelers could often make a claim to minimal forms of recognition and compensation, in contrast to many other informal workers. Thereby, their employment in a shrimp peeling factory enabled them to 'make a living' in some way, even if it was still under highly precarious circumstances. As testified by Selwa, life in the countryside

[35] However, as I discuss in Chapter 4, many factories failed to register their workers with social security, which made shrimp peelers decisively more precarious during the Covid-19 pandemic.

was ‘getting seriously difficult’ for many people in 2022. Women often named access to health care and schools as important reasons to live in the city, as many rural communities in the Rif continue to have limited access to education and medical care. Thus, for many shrimp peelers, life in the city was not only more desirable, but also more ‘practical’ (*waqi3i*). As I will discuss in Chapter 6, many women especially hoped that their life in the city and their labour in a shrimp peeling factory, could open up opportunities or chances for their own children.

However, while women’s lives in the city with their ‘direct’ or ‘nuclear’ family marked an important change in the organization and experiential dimensions of family life, such changes should not be considered as complete breaks or ruptures in the organization of ‘kinship’. Rather, by seeking out more opportunities for their own children, women attempted to ‘‘sustain life across generations’’, and effort that might be understood in light of Morocco’s increasing economic precarity and marginalization and its ensuing ‘crisis of reproduction’. Shrimp peeling factories were not necessarily seen as a durable institution around which to arrange life, yet they enabled women to sustain their families, and to foster the hope that their children might have different opportunities in life (see Chapter 6). However, the distinct temporal modes through which women thought about life and its conditions for reproduction were not saturated by economic and political temporalities, but also infused with a religious temporality that folded the idea of divine predestination into the temporalities of brown shrimp production. In Chapter 6, I will explore how ‘destiny’ informed women’s aspirations in brown shrimp processing factories, and how its temporalities became inseparable from the production process of brown shrimp.

Returning to Zoutkamp: Kinship and The Regeneration of Life

What struck me about the organization of family life in Zoutkamp was that it was both highly valued yet also marked by forms of distance and ‘detachment’. Perhaps the reason for my puzzlement was that my intuition to think of ‘kinship’ in terms of ‘relatedness’ led me to search for ‘closeness’ (see also Strathern, 1992a, for a critique of such an association). Rather, fisher families often led relatively separated lives; and most fishers underlined that while they highly valued their families, they also enjoyed the long, solitary stretches of time they spent at sea. Fisher Thomas told me for instance: ‘‘I can’t sit at home for too long, I find it boring. I am the happiest on the water. And if I come home on Thursday, I’ll go to the quay on Friday to work on my ship for a bit. My wife doesn’t always like that, but what can I do. I just don’t like being at home doing nothing.’’ According to Martijn, head of the fishermen’s union, many fishers disclosed very little about their fishing activities to their families: ‘‘You could write an entire

thesis about fishers' marriages,'' he told me once. ''Fishers do not talk about their business with their wives much. Fishers bring in the money, but they don't discuss their visions for the fishing industry.''[36]

As I discuss in Chapter 4, fishers were often depicted as 'rugged individuals', and 'individualism' was frequently mentioned as one of the core characteristics of fishermen. However, this individualism existed alongside a strong family ethic: family-orientedness was important for fishers both as a 'value' and as an organizational element of social life, yet the cultivation of a strongly individualistic work ethic did not contradict this. Echoing Marilyn Strathern's discussion of English kinship, 'family relations' do not 'make up' or define fishers in Zoutkamp; rather, ''if you look inside any one kinsperson, you find an individual'' (Strathern, 1992a, p. 79). While this view of 'kinship' or relatedness seems obvious for both fishers and Euro-Americans more broadly, according to Strathern, such a view intimately related to ''how people see and know the world'' (Strathern, 1992a, p.22). More specifically, thinking about relatedness and procreation always implies a certain 'model' for conceptualizing the future and how it comes or is brought about. Here, I show that the ways of thinking about family and relatedness in the fishing community of Zoutkamp carry important implications for ways of thinking about fishing and the conditions for its social and ecological reproduction at large.

At the beginning of this chapter, I discussed Marilyn Strathern's analysis of 'English kinship' and its implications for seeing and knowing the world. According to Strathern, these forms of kinship are based in what she calls 'merographic relations'. Merographic relations imply that ''anything may be part of something else'', since something that is thought of as a self-contained whole in one sense, can always be redescribed as part of a another whole in a different sense. Different 'views' or 'perspectives' can always put something in context so that nothing is ever simply part of a single whole. Rather, anything can be redescribed and thereby 'illuminated' from a different domain. This way of accounting for the world always constructs a certain (temporal) 'before' and an 'after', according to Strathern, as 'context' always comes 'before' those things that occur in it. For instance, the English consider 'kinship' to be the 'construction' of social relations on 'the facts of nature'. 'Nature' here functions as a 'domain' that constitutes a stable referent or background, on which things can be construed (such as kinship) or in which changes can occur (for instance environmental changes). In a similar way, 'individuals' exist 'before' the social relations that connect them to others and the world around them, so that an individual might be described as 'part' of a larger web of relations, whilst remaining at the core unchanged by them.

[36] This assertion is contradicted by van Ginkel (2009), however, who in contrasts highlights the involvement of fishers' wives in fishers' family firms at Texel, the Netherlands.

Forms of knowledge production, in this model, consist in 'illuminating' or 'contextualizing' things or phenomena from a different 'context' or 'angle', so that something new might be learned about it. One might for instance study shrimp fisheries from an environmental or ecological perspective and learn a great deal of things about them; yet whenever one shifts to a socio-cultural perspective, a whole new side of these fisheries appears. Therefore, no single angle can ever provide an exhaustive account, and any explanation is therefore marked by incompleteness, as providing a different perspective or viewpoint is always possible.

However, at the time when Strathern wrote her book *After Nature* (1992a), she considered merographic relations to be in demise; the 'domains' that classically provided context for social explanations could no longer be considered a stable 'before'. 'Nature' itself, for instance, was exposed as radically contingent and dependent on its protection by society, and therefore could no longer be posited as the unchanging 'background' on which society was constructed. Reproductive technologies, as well as genetic manipulation and aesthetic enhancement, have in turn undermined the idea of the 'individual' as a stable category on which social relations could be constructed. And 'society' no longer served as a recognized domain of explanation, as evidenced in Margaret Thather's statement that ''there is no such thing as society'' (Strathern, 1992a, p. 144). These changes, she argued, did not make the categories of nature, culture, or individual disappear, but rather, deprived them of their 'grounding function'. Rather than being accepted in and of itself, ''one is in fact choosing what to consider natural.'' This transformation has far-reaching consequences for how people see and know the world, which is evidenced in the prevalence of concepts like 'experience' and 'process', which seek to express the fluid and voluntary nature of accounts of the world which can no longer be grounded in an unchanging context. ''Family has become only natural for some,'' Strathern argues, and the question of whether one chooses to ''opt-in for a family life-style'' has ultimately become a political choice.

As I described earlier in this chapter, in Zoutkamp, family is highly important, and often considered to be the context for social life. In the last chapter, I considered the central place of the family in Zoutkamp to be contingent on a particular history of the state; here, I would like to add that such political constructs might continue to rely on an imaginary of 'merographic relations', even if its logics have been in decline for decades in many Euro-American societies. However, fishers cultivate a merographic understanding of the world that implies that ''inside any one kinsperson, you find an individual''. Moreover, a merographic way of thinking about the world continued to inform fishers' conceptualization of 'nature' and their 'place' in it. At a time when environmental activists and NGO's

express deep concerns about the Wadden Sea and North Sea ecologies, fishers often easily dismissed these concerns.

In the Netherlands, environmental NGOs and various activist groups have warned for decades that the ecosystems of the Wadden Sea and North Sea are witnessing high rates of ecological degradation, which might entail long-term effects for the viability of marine life and life-at-large, given the importance of 'healthy oceans' for life on earth (see Chapter 4). However, while environmental NGOs call for the 'protection' and 'conservation' of marine ecosystems, fishers continue to evoke the sea as the stable background for their practices. As I will discuss in Chapter 4, fishers often consider environmental NGOs too 'alarmist', and even if there is quite a lot of disagreement amongst fishers on the 'right' way to fish sustainably, the general sentiment of fishers was that environmental NGOs should 'calm down'. Whereas all fishers I met avowed to 'love nature', they often quite explicitly distanced themselves from sea creatures or other species. This did not merely show an absence of close relations, however, but rather indexed a normative ideal for how to cultivate the 'correct' sort of relations with the 'natural world'.

Thomas, for instance, considered that it was important to be not too sentimental about other species. ''I absolutely consider myself a nature person,'' he told me, ''yet if I see a deer somewhere, I can't help but think; if I had a shotgun, then… Scientists and the like are often vegetarians, whereas I think, well, that [other species] could be food, too.'' I heard similar statements more often, and I soon learned that some fishers really do practice hunting as a hobby. More broadly, many fishers criticized what they considered the extensive protection of grey and common seals in the Wadden Sea, which have proliferated in the last 70 years. ''Seals eat about fifty kilos of fish per week, yet no one thinks to blame the proliferation of the seal population for dwindling fish stocks,'' one fisher summarized for me. ''Of course, the ecosystem needs to be in balance,'' Thomas mentioned, ''but balance means humans should be able to eat too. We can't all live of soybeans.'' Such statements should not be taken to indicate that fishers do not care about marine life; rather, according to Cynthia, the director of the fish auction in Lauwersoog, fishers consider fisheries to be an essential part of the ecosystems of the North Sea and Wadden Sea. ''Fishers consider themselves 'part of nature,''' she told me. ''When someone mentions protecting the environment, the fishers' reaction will be: 'but what about us? We are part of the environment too''.

Being part of these environments did not mean that the relations within these were mostly shaped by affective concern and care, however. Rather, a logic of sustenance and survival seemed to underlie fishers' mode of engagement with their environments. A remark I often overheard in Zoutkamp was

‘‘everyone doing something useful in the Netherlands is being bullied away’’ (see Introduction). Both fishers and farmers considered themselves to be ‘ostracized’ by environmental NGOs and ‘green’ activists, even though they claimed that ‘‘it is fishers and farmers that feed society.’’ In Chapter 4, I will further unpack the debates between fishers and environmental NGOs through an analysis of the politics of knowing (and not knowing). However, here I would like to point to the implications that the statement that ‘‘fishers feed society’’ entails for fishers’ ideas about the regeneration of life. For fishers like Thomas, the viability of society at large depended on fishers like him to provide food security; therefore, claims of environmental NGOs about the protection of ‘life’ infuriated him, because they posited fishers as ‘‘destructive’’. In contrast, for Thomas and other fishers, it is practices like fishing that are vital for the reproduction of human life, which is inescapably dependent on the death of other forms of life. As such, the practice of fishing is intimately related to the regeneration of life, which must be brought about by producing certain forms of death (see also: Strathern, 2024). The reproduction of social and biological life depends on the continuity of such a cycle, which is expressed through the mundane rhythms of fishing, as well as in their articulations ‘family tradition’ and ‘history’.

Thus, fishers link certain ideas of ‘social reproduction’ to ‘regeneration’ to explain and justify the vitality of their fishing practices for society. Whereas environmental scholarship has long focussed on the flourishing of life, biodiversity, and ecological abundance, fishers critique the unbridled celebration of ‘life’ by specifying the necessity of producing ‘death’ to reproduce life (see also: (Strathern, 2024), for a critique of the idea that the production of death would require less work than the production of life). Whereas the specific claims that fishers made (such as that beam trawls produce ‘beneficial’ forms of seafloor disturbance) might be challenged, their demand for making explicit and debatable the conditions for the ‘proper’ production of death might be important to keep in mind.

According to fishers in Zoutkamp, their long (family) histories of fishing legitimize their occupation as fishers (and as the legitimate ‘producers’ of death). Fisheries were often posited as a form of ‘socio-cultural heritage’ that should be ‘preserved’ in the future. In mobilizing ‘the past’ and ‘tradition’, fishers did not so much deny as underplay instances of ‘innovation’ and ‘newness’. Whereas environmental NGOs often point out that increased motor capacity, enhanced technologies, and refined fishing nets have increased catches to the point of being unsustainable, fishers prefer to dwell on the practices and spaces that connect them to the past, such as their family heritage or the historical origins of the village. Yet it should be clear by now that the evocation of ‘the traditional family’ as an idyllic cornerstone of fisheries, does not do justice to the complexity of sustaining family life as a fisher. The everyday realities of fishing families were often characterized by negotiations, compromises, and difficult

decisions, as I showed in this chapter. However, perhaps these everyday negotiations and the forms of 'moral striving' that they entail, could point to the possibility of organizing fisheries otherwise.

Anthropologists have long argued that 'kinship' should be understood both in its mundane and everyday manifestations, and as a more abstract concern with reproduction and viability, since to think about kinship is to think about life and its reproduction. In her ethnography of family firms in Italy, Sylvia Yanagisako argued that capitalism always depends on forms and practices of kinship since it has ''no reproductive powers of its own'' (Yanagisako, 2003). Her observation raises the question of how kinship is attached to, folded in, or entangled with various processes of producing brown shrimp as a 'lively' commodity. I contend that a vital part of the answer is related to the question of social reproduction. What needs to be reproduced in this supply chain is the brown shrimp itself, the modes of production through which it is produced as an 'edible commodity', and the forms of labour necessary to uphold these modes of production. Such forms of labour are always embedded in forms of life that foster distinct ideas about viability and regeneration. Therefore, the reproduction of the brown shrimp supply chain is also dependent on the projection of life into 'the future'. This makes the question of how the future, as a particular discursive construct, is imagined and enacted (and what kind of temporal modes of inhabiting the world are betrayed by these attachments) central to the brown shrimp supply chain. This question will be the topic of subsequent chapters.

4. Politics of Ignorance

‘‘I won’t deny that fishers have some unique knowledge of the sea,’’ Willem told me on the phone, ‘‘of course, they are at sea every day. But to be honest, I am a bit done with the narrative that all fishers have this unique, wonderful ecological knowledge. I have been fishing with a bunch of shrimp fishers over the years, and often they don’t know the name of half the species in their nets. And it’s not like they are particularly interested in learning about them either.’’ I was having a call with Willem, a marine biologist working for an NGO committed to protecting the unique ecosystems of the Wadden Sea. Willem has taken part in multiple covenants on shrimp fisheries on behalf of the NGO. He has a passion for the sea and is invested in several projects that seek to protect and preserve marine life in the Wadden Sea. In general, he was empathetic towards fishers and expressed his understanding and support for their situation. However, when it came to their knowledge of the sea, he was a bit sceptical. ‘‘Of course, we should listen to fishers, and we should be open to the possibility that we can learn from them. On the other hand, there is still a lot I can teach fishers as well,’’ he concluded.

The politics of knowledge around shrimp fishing are complex. In 2022, scientists, fishers, corporate actors, and policymakers made competing claims about the status of the Wadden Sea, about the effects of beam trawling on the seafloor and about the environmental footprint of shrimp fishing. Marine biologists and environmental scientists were increasingly concerned about dwindling fish stocks and the rise in sea water temperature, whilst social scientists and anthropologists highlighted the social and cultural value of fishing communities. Engineers developing new fishing methods made contested claims about the effects of their technologies on the seafloor, whilst environmental NGOs drew on their own experts to raise concerns around conservation. Over the last decades, a variety of experts and stakeholders have made divergent arguments about the impacts and futures of shrimp fishing. The validity of certain statements is constantly questioned and contested by different stakeholders and claims to ‘knowledge’ are grounded in different practices and standpoints. To understand how brown shrimp are produced in 2022, it is vital to attend to these knowledge politics. However, whereas anthropologists often carefully attend to the multiple forms of knowledge at stake in such debates, there has been relatively little analysis of the multiple forms of ‘ignorance’ that underpin contemporary ‘knowledge politics’ As all forms of knowledge are situated and therefore partial, they are necessarily accompanied by specific forms of ignorance; yet all too often, ‘ignorance’ is perceived as a ‘lack of knowledge’, as illustrated in Willem’s statement. In contrast, I contend that situated forms of ignorance are no less particular and complex than situated forms of knowledge. Alongside various kinds of knowledge, particular forms of ignorance are

produced, enacted, and deliberately reproduced in the supply chain of brown shrimp. Since these forms of ignorance do not point to a general lack of knowledge, but rather, index a situational and contingent form of not knowing, ignorance is also multiple in this supply chain; rather than considering 'ignorance' as a singular condition, I contend that it is necessary to explore situated, 'vernacular ignorances'. [37] Such 'vernacular ignorances' inform people's actions, responses, and perspectives, and therefore deserve careful ethnographic attention.

Ignorances, in the context of Zoutkamp and Morocco, are not only produced in locally unique ways, but also productive of a range of specific affects, sentiments and ways of being. An account of how people value and practice 'not knowing' and 'uncertainty' is also crucial to understanding how the uncertainty of the future is understood, invoked and acted on along the sites of production and circulation of brown shrimp. While Chapter 5, 6, and 7 explicitly discuss the particular techniques through which 'the future' is invoked in this supply chain, this chapter provides crucial insight in how uncertainty and lack of knowledge is expressed and engaged. I show that ignorances have important 'world-making' qualities, and show that the enactment of ignorance is closely tied up with the cultivation of certain selves and livelihoods. These insights are essential to understand how different 'selves' engage with and act on the uncertain future.

The Gendered Production of Ignorance in Zoutkamp

I arrived in Zoutkamp eager to discover 'local' forms of knowledge about the sea. However, I was struck by how little fishers claimed to know about the marine environment; the sea was regularly invoked as a mysterious and unknowable place, and fishers would often stress the unpredictability and volatility of the sea. At first, I found such ostensible utterances of 'non-knowledge' puzzling. I asked fishers a range of questions about their fishing practices; why do shrimp aggregate in specific spots? Why do they migrate to different places every year? How come catches fluctuate so much from year to year? In many cases, my questions were met with a muted response. ''Oh, I don't know about that,'' fishers would say, or ''I am not a scientist.'' Initially, I was taken aback by these answers, as I imagined that they must conceal fishers' time-honoured knowledge about where to find shrimp and how to catch them. Yet as I kept asking different fishers how they knew where to fish for shrimp, most fishers would simply shrug. As I pressed on, one of my interlocutors laughed at my persistence. ''You know, the truth is, we don't know either. It's simply a matter of trial and error. And you need a bit of luck.''

[37] I thank Professor Heather Swanson for this particular formulation.

Of course, fishers foster an impressive range of knowledge and know-how about the sea. All shrimp fishers have attended a fishing school where they took a two-, three-, or four-year course during which they were taught about marine ecosystems and diverse species of fish, as well as about tides and navigation. Moreover, fishers are required to have extensive fishing experience before they are awarded the license that allows them to go fishing. All fishers can navigate their ships in extreme weather conditions, know the exact location of sandbanks and buoys, and can recognize other ships from miles away. Shrimp fishers also need to know how to tie complex knots and repair their own nets; they are familiar with all machinery on board and can resolve most mechanical issues. However, despite their vast experience at sea, most fishers readily admitted their ignorance with regards to certain topics; whether it is going to be a good fishing year, which locations are going to be good fishing spots, how the weather conditions will develop in a couple of weeks' time. Importantly, they never seemed particularly embarrassed to do so. Initially, I was puzzled by these open expressions of 'ignorance', and I thought I was merely asking the wrong questions; yet after a couple of weeks, I started to understand that these forms of ignorance might be deliberate cultural productions, worthy of ethnographic attention in themselves.

In an important edited collection, High, Kelly and Mair (2012) argue for the need for an anthropology of ignorance. ''To pursue the idea of the cultural production of ignorance (…) one would have to investigate not gaps in knowledge – which is where most existing studies of ignorance have concentrated their efforts – but rather their production, out of the infinite sea of things that people happen not to know, of culturally recognized and elaborated units, fields and modes of ignorance'' (High, Kelly, & Mair, 2012, p. 16).[38] During my fieldwork, I came to suspect that statements about the 'unknowability' of the sea might be such a 'field of ignorance' which held cultural significance for fishers and their communities. Whenever I talked to fishers, they were keen to tell me about great storms they had experienced, about hazardous conditions at sea and about moments when they had almost been swept overboard. Other people in Zoutkamp often recounted stories of disaster in which one or multiple fishers had perished at sea. In the context of such stories, fishers in Zoutkamp inevitably invoked the power and unpredictability of the sea, almost in a reverent way. 'Fishing is still a dangerous trade,' one fisher told me, ''Despite all the innovations that have taken place. The sea is unpredictable.'' All other fishers I spoke to agreed with this statement: ''No matter how prepared you are, you never know what might

[38] For an elaboration of the idea of an 'anthropology of ignorance', see also: (Dilley & Kirsch, 2015; Gross & McGoey, 2015; Bovensiepen & Pelkmans, 2020).

happen at sea,'' one of them summarized, ''the sea has its own ways.'' Such statements evoked both a sense of wonder and a sense of terror at the greatness of the sea, and served as a powerful reminder not to underestimate it.

However, fishers would often highlight how they went out to sea despite its apparent dangers and perils. Whereas fishers emphasized the unpredictable, volatile, and therefore dangerous nature of the sea, they never admitted to feeling frightened at sea. I would suggest that these two phenomena are closely related, since fishers' statements about the 'unknowability' of the sea are linked to fishers' perceptions of self. Fishers are known as 'rugged individuals', men who are tough and resilient. The fishing trade is highly gendered, and fishers bolster values that are typically perceived as highly masculine. When I asked fishers which qualities made a good fisher, they would often mention resilience, 'being tough' and hard work. In his ethnography *Braving Troubled Waters* (2009), Rob van Ginkel describes ''hard work, stamina, nerve, knowledge, prowess and dexterity'' as some of the core values of Dutch fishermen (van Ginkel, 2009, p.258). These perceptions were often shared by other people in the fishing community; fishers' siblings, wives and friends mostly portrayed fishers as hard-working and resilient.

Qualities such as 'being tough', 'hard working' and 'resilient' might well be necessary to become a fisher. Working on board of a fishing vessel is toiling; fishers leave before the break of dawn between 1am and 3am, depending on the tide. They work continuously for the whole day and stay out at sea for four to ten days at a time. Weather conditions on the North Sea and Wadden Sea are often challenging; in winter, it is freezing cold and windy, with frequent rain or hail. Autumn storms and spring storms produce towering waves which throw small cutters back and forth. At the same time, the shrimp fishing industry has changed a lot over the last decades; practices of hauling in nets and sifting and boiling shrimp have now become fully automated, and most processes on board can be executed from behind the dashboard in the dry and heated wheelhouse. In 2022, they only thing shrimp fishers need to manually do is rinse their catch and store it in the hold of the ship. As a result, shrimp fishing has become much easier compared to the past.

However, despite the increased automatization on shrimp cutters, fishers continue to produce 'masculine' associations with fishing, by invoking the danger of the seas, and in relation, their own 'toughness'. Such 'masculine values' also materialize in fishers' cutters, to which they are often strongly attached. Fisher Evert regarded modern, highly innovated ships as status objects of a younger generation of fishers, and told me that he could never imagine trading his 1926-built cutter for a more modern ship. ''Sure, other ships might be faster or more powerful,'' he mentioned, ''but they are mostly more badass

(*stoerder*)''. Some fishers in Zoutkamp had much larger and arguably more powerful ships; however, Evert also engaged in the production of masculine values by mentioning that younger fishers often had more modern ships because they demanded more comfort of their ships than the older generation. ''You know, I don't mind the small space and the lack of amenities,'' he said, ''but younger fishers want to have some more comfort. They need a TV and internet on board, and they always want to be able to go online. When we went fishing in the past, we would rarely be in touch with people on land; today, fishers are constantly chatting with their girlfriends, their children, or their parents.''

Whereas this struck me as a strong value judgement, Evert's sentiment was actually shared by many fishers, both older and young. In September 2022, I visited a fishing school in Urk, one of five schools in the Netherlands where it is possible to acquire a fishery education. The college was spacious and modern, with impressive technologies such as sailing simulators, engine rooms, and net knotting rooms. I joined a class with fifteen students aged sixteen, all training to become fishers. ''The older generation of fishers is much rougher,'' one of the boys told me with evident admiration, after I asked about the main differences between their generation of fishers and the 'older' generation. ''They are much more tough, they don't care about being cold or uncomfortable, they will lift five crates of fish at a time without even blinking.'' His statement was confirmed to me by Harry, another fisher of Evert's generation in Zoutkamp. When I visited his cutter in October, he pointed out all the innovations he had made on board in the last few years. ''I don't really care about the comfort, for me, all that matters is fishing,'' he told me. ''However, I cannot fish without a deckhand on board, and those younger boys usually ask for a bit more. We have to make fishing attractive for them, otherwise they will simply resort to doing something else.''

However, for some of those 'younger' fishers, 'masculinity' as not embodied in the lack of comfort, but rather in the technological specifications of their cutters. In the summer of 2022, I met up with Simon, a young fisher in his thirties, who had just started using his newly built cutter. His cutter was widely recognized as an ultramodern, ultrapowerful fishing vessel. ''It's true, it's a real monster,'' he told me proudly as he showed me pictures of his cutter, ''the levers are so powerful, I had to invest in some sturdier nets in order to haul all the fish in.'' Simon's old vessel was now docked in the old harbour of Zoutkamp, unused for the moment. ''I did have a bond with that cutter too,'' he mentioned, ''and you know, on the weekend we might go fishing with it, just for fun. However, my new cutter, that's a different story. It's a real powerhouse. I've never experienced anything like it. Moreover,'' he added grinning, ''I have three TVs on board: one in my berth, one in the cabin and one in the wheelhouse. I simply love being there. Last spring, I was basically at sea for three months, without coming back to land.''

Simon's mindset is emblematic for young fishers, according to Martijn, chair of the Dutch Fisher's Association. I visited their headquarter in Urk in September 2022, located in a somewhat deserted industrial zone. Martijn pointed to a model ship in his office, which was a detailed reconstruction of a small, somewhat round fishing vessel. ''Now that would be a real modern ship,'' he claimed. ''This is a model for a new type of cutter that's been developed over the last couple of years. It's quite revolutionary; it only uses a fraction of diesel compared to other cutters. On average, you will probably catch a bit less, and admittedly, you might not be able to go out to sea in very stormy weather. However, overall fishers would massively increase their profits if they used these ships, since they would save so much on diesel. Nevertheless,'' Martijn raised his hands in despair. ''They don't want them. Fishers want boats that float on the sea like a seagull, even when the waves are metres high. They want to be able to have the largest catch, regardless of their overall profits. If you ask them why they fish, they'll tell you; because my neighbour is fishing. Even at times when it's not profitable to go out to sea at all.''

As Martijn pointed out, cutters are closely associated with social status, and especially with the 'masculine' values they promote. However, fishers also rely on the 'unpredictability' and 'unknowability' of the sea to realize these forms of masculinity. Fishers often tell 'sailor stories' about their fishing trips, about being chased by patrol boats, (because they were fishing in protected nature areas, or because they did not having the right papers), about braving extremely high waves, or about working for hours on end without any sleep. Such stories contributed to the image of fishers as boisterous, tough, and resilient individuals. The sea always figured as the unpredictable and dangerous site of such stories, and by presenting themselves as the 'tough' and 'rugged' sailors that braved these waters with their 'badass' cutters, fishers engaged in the reproduction of gendered values.[39] The unknowable and volatile nature of the sea constituted a vital element in these stories that underlined the risks and dangers of going out to sea. Fishers' statements about the 'unknowability' of the sea could therefore be considered to constitute a 'productive' form of ignorance that plays an important role in the making of fishers as gendered persons in Zoutkamp.

Reasonable Doubt and the Politics of Ignorance

[39] Whether these stories were actually true was arguably less important to fishers; like many other fishing villages, Zoutkamp's harbour hosted a *leugenbankje* ('lies bench') which is traditionally the place where old sailors gathered to tell tall tales.

The stories that fishers recount about the sea do not exist in isolation. Rather, the Wadden Sea and North Sea have become the topic of heated debates between fishers, environmental NGOs and policymakers (see also Chapter 1). In order to move from the 'productivity of ignorance' towards the 'politics of ignorance', it is vital to understand the larger debates and arrangements of knowledge production in which fishers enact their 'ignorance' in 2022. In Zoutkamp, specific forms of ignorance come to be contested, debated, and defended in the context of shrimp fisheries management and policy formation. In the Netherlands, most fisheries policies are made in covenants, agreements made between the government and other stakeholders.[40] I did not attend any negotiations between stakeholders myself; rather, this chapter is based on what fishers, scientists and NGOs shared with me about the collaboration process of making shrimp fisheries policies. Additionally, I draw on various reports, newsletters, and websites to explore how 'politics of knowledge' and 'politics of ignorance' unfold in on-going discussions between fishers, policymakers and NGOs.

Shrimp fisheries covenants involve the collaboration between environmental NGOs (such as the WWF, the North Sea Foundation and the Wadden Sea Foundation), representatives of the fishing industry (such as unions and interest groups) and the Ministry of Agriculture, Nature, and Food Quality (renamed in 2024 as the Ministry of Agriculture, Fisheries, Food Security and Nature). The purpose of the covenant is to design policies for 'sustainable' fisheries management, and agreements between stakeholders concern issues such as requirements for fishing techniques, gears, and practices (e.g. mesh size of the nets and usage of sieve nets), fishing areas (e.g. avoiding some ecologically vulnerable areas in certain times of the year), and fishing hours (e.g. restraining fishing activities during the weekend). However, environmental NGOs, governmental policymakers, marine scientists, and fishers interest groups often disagree about what 'sustainable' fisheries management entails, since they have diverging conceptions about the nature and effects of shrimp fishing. Therefore, the creation of covenants usually requires a long and intense negotiation process in which all stakeholders defend their interests. Broadly speaking, most environmental NGOs seek to drastically decrease fishing activities on the North Sea and Wadden Sea, whereas fishers attempt to minimize the number of limitations to which they need to adhere. Since their interests are diametrically opposed, the cooperation between different parties is often strained.

In order to claim legitimacy for their interests, both fishers' interest groups and environmental NGOs seek to ground their arguments in scientific research. Both parties mostly rely on shrimp fisheries

[40] The broad strokes of fisheries policies are outlined by EU and state regulations; however, these guidelines leave much room for interpretation, and therefore the specifics of these guidelines are negotiated in covenants.

research conducted by Wageningen University and organizations such as the Royal Netherlands Institute for Sea Research and the Wadden Academy. These organizations produce reports on the effects of fishing on the seafloor, on fish stocks and ornithology. However, the findings published in such reports are often interpreted in divergent ways by different stakeholders. For instance, the findings of a 2023-report on the ecological effects of shrimp fisheries on seafloor and biota were summarized by the following headline on the website *visserijnieuws.nl* (‘fisheries news’, the trade magazine of the fishing industry): ‘‘Catching bigger and (in time) more shrimp with less effort’’. The article went on to explain: ‘‘when fishing pressure decreases, fishers will not only catch bigger, but in the long term also more shrimp’’ (Visserijnieuws, 2023). The same report was presented with the following headline on the website of the Wadden Foundation, an environmental NGO committed to the protection of the Wadden Sea: ‘‘[Proven] ecological effects of shrimp fisheries; decreasing fishing efforts will benefit all’’ (Waddenvereniging, 2023). The article continues: ‘‘[t]he current intensive shrimp fishery results in growth-overfishing, degradation of life on the seafloor and various fish populations and disturbance of protected bird species. (…) Yet the ministry has decided to prolong the tolerance scheme for the too intensive shrimp fisheries with more than year. An inexplicable and untenable situation.’’ Thus, both defenders and critics of the shrimp fishing industry mobilized the same report to different ends.

To some extent, the nature of fisheries research invites such diverse interpretations; (shrimp) fisheries scientists have long articulated the knotty nature of fisheries research, which makes it difficult to make definite statements about the marine environment. One of these difficulties is exemplified by the ‘shifting baseline syndrome’, a concept developed by Daniel Pauly that applies well to shrimp fisheries research (Pauly, 1995).[41] The concept of shifted baselines implies that it is practically impossible to assess the absolute impact of shrimp fisheries on the marine environment since scientists can only formulate findings about the relative changes that occurred as a result of shrimp fishing: the first studies of the effects of shrimp fishing on marine ecologies date back to the 1970s, whereas shrimp fishing has been practiced for centuries (Hoof, Steins, Smith, & Kraan, 2020). Of course, scientists can still derive important observations from the data they do have available: the 2023-report cited above showed that in 2022, fishing mortality is the prime regulatory factor for shrimp populations, whereas natural mortality (predation by cod and whiting) used to be the primary regulating factor for shrimp populations from

[41] The concept of ‘shifted baseline syndrome’ was introduced by fisheries researcher Daniel Pauly to describe how ‘baselines’ for species prevalence occur when every generation of fisheries scientists take the stock size and species composition manifest at the beginning of their career as the ‘baseline’ for their (future) research against which they evaluate changes. This is common practice according to Pauly, since scientists cannot make assumptions about the marine ecosystem ‘before’ this time, or about a hypothetical marine environment in which no human interference has taken place; as a result scientists can only assess the relative impact of fisheries on a given ecosystem (Pauly, 1995).

1970-1999 (Eijsackers, et al., 2023). However, given the rapid reproduction cycle of brown shrimp, scientists did not consider the exhaustion of shrimp populations to be a threat. Whereas they did observe growth overfishing of shrimp, meaning that most caught shrimp had not fully matured yet, they mostly conclude that less intensive fishing would be more efficient. From this observation, fishers and policmakers largely concluded that there was no immediate cause of concern regarding shrimp fisheries.

However, in 2022, most conservation efforts extended beyond the protection of individual species, and many environmental organizations have argued that the practice of shrimp fishing might be detrimental to the marine ecosystem as a whole. Shrimp cutters do affect marine ecosystems through seafloor disturbance, discarded bycatch, and interference with the foraging patterns of seabirds. Assessing the direct impacts of these practices is difficult, given the complex ecological relations that constitute the Wadden Sea and North Sea marine environments. Shrimp are important predators of juvenile fish species such as plaice, but are also prey for various fish species. Thus, the practice of shrimp fishing interferes in unpredictable ways in predator-prey dynamics (Campos & van der Veer, 2008). Measuring the impact of shrimp fishing is also difficult because other fisheries, freight transport, the construction windmill parks, and various commercial and recreational activities interfere in marine ecosystems too. Marine researchers mostly agree that shrimp fisheries have some significant impact on marine environments, yet the extent of this impact and its consequences are still contested, and therefore, mostly up for debate.

The range of uncertain variables listed above are often a reason for shrimp fishers to question, criticize, or even deny scientific reports. Whereas fishers feel the need to ground their arguments in 'scientific knowledge' when participating in fisheries covenants, they are often sceptical about these reports outside these formal arrangements. The critiques voiced by fishers draw attention to the ways in which scientific institutions are organized and perceived in the Netherlands. Fishers tend to distrust scientists which they consider to be 'outsiders' from their community, with little knowledge of how things 'work locally'. In Zoutkamp, few people attend university, and almost no scientists come from 'local' (fishing) communities. There is no high school in the village of Zoutkamp itself, and many young people opt for an apprenticeship rather than a university education. As a result, fishers are suspicious of scientists who are perceived to be 'left leaning' and committed to a 'green' agenda, concerns that are primarily 'Western' and 'urban' issues, in their point of view.[42] Fishers often frame themselves (and farmers) as 'normal', hardworking people who have become the victim of ''overzealous policies'' that

[42] Fishers often refer to the urban periphery in the West of the Netherlands, constituted by big cities such as Amsterdam, Rotterdam and the Hague as 'the West' or 'the Randstad' (the 'edge city').

‘‘have lost all touch with reality’’. Fishers contend that they contribute to the food provision of people living in the urban ‘West’ of the Netherlands yet feel misrecognized by these urban populations who often criticize farmers and fishers in the name of the ‘environment’. In the view of fishers, policy makers and environmental NGOs have lofty ideas about the environment in general whilst they are completely unaware of the actual, material realities of food production. In the summer of 2022, Thomas, a fisher from Zoutkamp told me over a beer in his garden that: ‘‘The divide between the ‘randstad’ and the countryside is really enormous. They don’t realize that, over there. Those urban environmentalists, with all due respect, they have no idea where their food comes from.’’ However, as Thomas went on to explain, it is the bureaucrats in the urban West of the Netherlands that are in charge of making policy for fishers and farmers alike.

Still, in 2022, scientists are quite aware of these divisions, and often attempt to engage different stakeholders actively in their research. The 2023 report on the ecological effects of shrimp fishing, issued by the ministry of Agriculture, Nature, and Food Quality, states in its preface:

> ‘Often, science is asked to provide knowledge: independent and impartial, disinterested, by means of careful scientific practice; in short, professional, complete and reliable. Such an approach is not always easy to realize. Not all necessary information is available, or accessible, existing information can be interpreted in a variety of ways, and even experts do not always agree with each other. The risk is that due to the amount and availability of information in combination with separate information and sources, *different views on the same topic* emerge’ (my italics (Eijsackers, et al., 2023).

The preface goes on to explain how the research for this report was conducted by a range of researchers from different institutions, including a researcher nominated by the fishing industry (who still had to meet the requirements of the rest of the committee). In addition, the researchers had two meetings with stakeholders including the representatives of the fishing industry and environmental NGOs, before conducting the research and writing the report. These stakeholders were also invited to comment on the report before it was published. As a result, the researchers conclude, they hope the report provides ‘the complete and reliable view on the effects of shrimp fishing that was envisioned’ (Eijsackers, et al., 2023).

However, even as the report seeks to assemble a variety of stakeholders, it still underlines the goal of providing a (single) ‘complete and reliable view’. ‘Different views on the same topic’ are seen as a ‘risk’ that should be prevented. As such, researchers aim to convince different stakeholders to accept a single vision on the effects of shrimp fishing on marine environments, and, by extension, to accept the sea

as a ‘singular object’ (Woolgar & Lezaun, 2013). In this view, ‘lacunas’ in existent knowledge about the sea are a hurdle to be overcome. Thus, fishers’ knowledges might be incorporated in the studies of the sea, but will need to become ‘universal’ and ‘objective’ in order to be translated into scientific discourse; the scientific report clearly posits the environment as something distinct and separated from the lived experiences of (human) communities. In contrast, for fishers, marine ecologies are not simply ‘objects of study’ but rather integral parts of the lived experience of everyday life. Fishers often question the ability of science to provide a ‘complete and reliable’ view on the marine landscapes which they experience as highly fluctuating and unpredictable. Many fishers argue that the manifold uncertainties that exist around marine environments provide insufficient grounds to make statements about the status of the sea and contend that most research does not conclusively ‘prove’ anything about the actual effects of shrimp fishing on marine ecosystems.

Importantly, fishers therefore do not claim to ‘know better’ than scientists; rather, they contend that no one can really make conclusive statements about the sea. Efforts by the government to include fishers in the process of policymaking, in contrast, seem to assume that fishers should be integrated in policy-making practices so that their local knowledge can be utilized. The underlying assumption is that fishers have some special sort of knowledge about the sea; however, arguably such an approach overlooks the importance of ‘not knowing’ about the sea in the context of Zoutkamp. Murray Last was one of the first anthropologists to write about the importance of ‘‘knowing about not knowing’’ (Last, 1981). Last criticizes anthropologists who assume that certain ‘systems of knowledge’ must underlie statements that seem to display a certain ‘lack of knowledge’; rather than assuming that such statements seek to conceal systems of knowledge, Last argues that sometimes people ‘don’t know’ and ‘don’t care’ (Last, 1981, p. 391). Last illustrates this claim in relation to his fieldwork in postcolonial Malumfashi, where people might still seek help from traditional healers even as they do not care about how these cures actually work; Last argues that people seeking medical aid mostly care about whether the cure helps them and not about how the cure works. I contend that a somewhat similar argument could be made for fishers in Zoutkamp; whereas fishers care about what the sea provides for them, they do not seek to understand or analyse the sea as if it was an object of knowledge. In Chapter 1, I discussed different ways in which the North Sea and Wadden Sea have been enacted, and I wrote that fishers mostly enacted the sea as sites of ‘freedom’ and ‘independence’. This is a largely practical way of engaging with the sea, and the sea is mostly ‘ready-at-hand’ (in the Heideggerian sense) for fishers; they often actively resist attempts to turn the sea into a theoretical object of reflection, in which it is produced as something situated outside of embodied, practical engagements.

Yet in the context of ecological crisis and environmental degradation, activists and researchers have often contended that such ways of 'enacting' ignorance are simply ways of deflecting or denying the realities of ecological crisis and climate change. 'Denial' and 'ignorance' have become topics of study for (social) scientists investigating responses to ecological crisis and climate disasters. For instance, Kari Marie Norgaard's study of the 'social organization of denial' amongst the population of a small village in Norway showed that 'climate denial' can take many forms, from 'literal denial' to 'implicatory denial' (failure to engage with the implications of climate change) (Norgaard, 2011). However, whereas many of these approaches consider 'denial' or 'ignorance' in the larger context of distrust towards science and the state, they consider such forms of denial to be produced only in response to contemporary debates around climate crisis. Thereby, they overlook the possibility that forms of 'ignorance' might have a longer history in certain places. Whereas enacting ignorance in relation to environmental debates might at times function as a logical strategy for fishers, it is also more than just a strategy, as I attempted to illustrate in the beginning of this chapter.

Whereas many studies have investigated the production of ignorance, I contend that few studies have attended to the politics of ignorance. However, in Zoutkamp, the 'politics of ignorance' are more important than the 'politics of knowledge.' Fishers and environmental NGOs do not simply disagree about what can be known about the sea but disagree about how to act on those things they do not know, and thus, about what the implications should be of not knowing the exact impact of shrimp fishing on marine ecologies. In the current legislation around shrimp fishing, the burden of proof lies with shrimp fishers to show that fishing does not affect marine ecologies. As explained in Chapter 1, fishers need a special license to fish in about 80 percent of their fishing grounds, according the to the nature conservation law. This license is only granted when 'no reasonable doubt' (*redelijke twijfel*)exists that shrimp fishing practices affect certain marine environments. However, 'reasonable doubt' is an ambiguous term that can be interpreted in a variety of ways. It is exactly this form of 'doubt' or 'not knowing' that comes to be debated in the process of making policies for shrimp fisheries management. Whereas environmental NGOs and various marine biologists argue that there is sufficient reason to doubt whether fishers have significant effects on marine ecosystems, fishers contend that, unless there is explicit proof to support these doubts, there is no sufficient reason to ban their fishing activities. Fishers are frequently frustrated with the ways in which environmental NGOs and some researchers mobilize the term 'reasonable doubt'. For instance, fisher Henk writes on visserijnieuws.nl:

> ''It it is frequently concluded that no hard evidence can be found for significant ecological effects [of shrimp fishing on the seafloor], yet according to researchers, that means 'reasonable doubt' about such

> effects cannot be eliminated. The argument is therefore that there is no 100% guarantee that shrimp fishing does not cause any negative effects on the ecosystem. Yet that would be impossible, given that every action always causes a reaction. (…) Is that how we want to live with one another, or could and should we accept that uncertainties will always exist, no matter how minimal?'' (Buitjes, 2023)

Shrimp fishers argue that everyone is, to some extent 'ignorant' about the sea; however, they contend that this ignorance should not prevent them from going fishing. Instead, fishers contend that as long as there are no significant proven effects of their practices, they should be allowed to keep fishing. Thus, fishers do not only actively perpetuate forms of ignorance to reproduce distinct 'masculine' fishing values; fishers also actively seek to identify forms of 'ignorance' in scientific research to argue that scientists and environmental NGOs do not really know the sea either. By pointing to the 'unknowns' that surround research on the effects of shrimp fishing on marine environments, fishers attempt to defend their 'right' to the sea, as they argue that there's no sufficient justification to limit or ban their fishing practices. Of course, environmental NGOs argue for the opposite; in their opinion, fishers' ignorance about the impacts of shrimp fishing is sufficient reason to limit or ban their activities, as it might have significant negative effect on marine ecologies. Whereas they also contend that we 'don't know' the extent of those effects, they argue that 'reasonable doubt' is sufficient to suspend fishing practices; thus, they mobilize 'reasonable doubt' as a particular form of ignorance that provides ground for conservation measures. Therefore, the debates around shrimp fisheries policy are aptly characterized as 'politics of ignorance', in which various stakeholders contest, debate, and propose distinct forms of ignorance and how to act on them.

Such politics of ignorance are by no means limited to Zoutkamp, nor do they only exist in relation to 'environmental debates'. In contrast, in line with an emerging 'anthropology of ignorance' I argue that forms of ignorance are part of everyday life everywhere. However, just as various forms of knowledge are often not 'stable', but contested, mediated and altered, 'vernacular ignorances' are also constantly questioned, debated and mediated. Attention to such 'politics of ignorance' might contribute to an understanding of how people move through the world in general. Therefore, I propose to shift perspective to the specific forms and enactments of ignorance in Tangier. Attending to the contours of 'ignorance' in this place might sharpen our understanding of the ways in which 'politics of ignorance' underlie various forms of life in the supply chain of brown shrimp.

Labour Rights Organizations and the Circulation of Dangerous Knowledge in Tangiers

In Morocco, the 'politics of ignorance' takes different forms than in the Netherlands. Various ethnographies have documented how uncertainty, ambiguity, and concealment are important aspects of social interactions in everyday life in Morocco, especially with regards to the mediation of 'truth' and 'knowledge' in everyday life.[43] Many anthropologists ground these forms of ambiguity in the prevalent idea that only God possesses absolute knowledge, and that all human understanding is fallible and partial (e.g. Menin, 2020; Eickelman, 1977; see also Chapter 6). As a result, many Moroccans are arguably less obsessed with establishing singular, objective 'truths' than most Dutch people are. However, in the context of shrimp peeling factories, 'concealing knowledge,' 'wilfully ignoring,' and 'insisting on not knowing' are common social strategies, employed by factory workers, factory owners and external organizations alike.

Shrimp peeling factories in Tangier, Tétouan, and Taza gather various stakeholders such as factory directors, floor managers, and Moroccan shrimp peelers. In addition, various NGOs concern themselves with women's labour rights, and are therefore involved with shrimp peeling factories too. These parties engage in subtle and complex negotiations over labour rights and conditions. In these collaborations, 'knowledge' does not take the form of 'scientific knowledge'; rather, 'knowing' certain things or certain people is closely intertwined with particular forms of power. Knowing the right things or the right people can enable one to pursue one's interests better; however, knowing 'too much' can also be disempowering, and in some cases, even dangerous. Thus, people engage in subtle interactions which mobilize certain forms of knowledge, whilst requiring the intricate 'arts of unnoticing' at other times.

Ostensibly, information is everywhere in Moroccan shrimp peeling factories. In the factory in Taza, paper lists hang on the walls of the entrance hall, which specify the names of the women and the amount of shrimp they have peeled the previous day. Adjacent to the hallway is an office which oversees the peeling hall through a large, glass window. Here, several floor managers spend most of their days, watching the factory hall and checking the production progress on their computers. In addition to their desks, the office houses a label printer and a small centrifuge in which the quality manager can run some basic tests. Filing cabinets line the backwall of the office, which store large logs; the production manager

[43] Famously, Lawrence Rosen has argued (1984) that in the Moroccan town of Sefrou, reality is composed by networks of relations that are ultimately malleable and open to negotiation. Utterances made by people in the process of forming relations are less about representing 'truth' and more about doing something in the world (Rosen, 1984). More recently, Matthew Carey (2012) has pointed out how acts of misrepresentation and dissembling are common strategies amongst young Moroccans engaging in romantic encounters, as such interactions create productive states of uncertainty that keep a range of potential possibilities open (Carey, 2012). Alice Elliott (2021) has employed the term 'hazy knowledge' to refer to the specific ways in which her Moroccan interlocutors frequently acknowledge 'not to know' about their migrated relatives' specific activities abroad.

assistant still records the production by hand. Sophisticated instruments track the temperature in all rooms of these factories, and Hamid, the quality manager in Taza, could readily show me on his computer which women had peeled the most shrimp, and which women the least; every part of the production process was carefully recorded and documented.

However, various forms of ambiguity and concealment underlie these apparent transparent forms of information. Women working in a factory in Tangier can see that one dirham per peeled kilo of shrimp is deducted from their salary on their payment slip; officially, this money is used towards paying for women's health insurance. However, when women need to rely on the health care system, their insurance papers often turn out to be impossible to find, or non-existent. Factory owners can produce official papers that testify paying for worker's healthcare, yet if women need medical treatment, they often end up paying for hospital treatments through the support of family members and co-workers. According to Moroccan law, companies are obliged to register their employees with the Caisse Nationale de Sécurité Sociale (CNSS) which manages health care insurance for people employed in the private sector. In reality, many companies in Morocco avoid registering the majority of their employees. Most of the shrimp peelers I talked to, did not know whether they had health insurance provided by the shrimp peeling companies they work for. Although they knew that they technically paid for health insurance, they were unsure whether they were actually registered with the CNSS. Yet whereas the women I spoke to considered it self-evident that they wanted to be insured, attempts to find out too much about the way in which the factory operates, was often considered a risky endeavour.

During my fieldwork in Tangier, I worked with an NGO that was concerned with women labour rights. The founder of the NGO explained to me that their existence was necessary since Moroccan workers could not really rely on official unions to represent them. There are several labour unions in Morocco, but the largest one, the Union Marocaine du Travail (UMT) is largely complicit with the governmental regime, which is more concerned with supporting rich and influential factory owners than with caring for workers' rights. Moreover, women working in factories are often fired for union membership, even if this is illegal; according to the documents of the NGO, factory owners often prevented unionized shrimp peelers from finding a job, not only by firing them but also by contacting other factory owners to warn them not to hire these women. As a result, there is effectively no organization that protects women's labour rights.

The NGO I worked with was founded in 2001 by Aboubakr, an elderly man with a long history as a social activist: he had been imprisoned during 'the years of lead', a period under the regime of King

Hassan II during which political opposition was violently repressed, and during which many political dissidents and democracy activists were tortured, imprisoned, or 'disappeared'. Upon his release, he continued to be politically active and in 2001 he founded the NGO 'Attawasul'. This NGO focussed mostly on improving the conditions for female factory workers in Morocco. In Tangier, various industries employ mostly uneducated women as a cheap labour force; in addition to shrimp peeling factories, women represent the majority of workers in the textile industry, in electronics factories and in other food processing industries producing conserved products such as capers and olives (see Chapter 2). Most of these industries fail to pay women a minimum wage and do not register them with social security. They also breach other official work regulations, for instance with regards to the maximum hours that workers are allowed to work. NGO Attawasul sought to improve the situation of workers in the long term, and therefore developed a program aimed at providing women with necessary skills to defend their labour rights more effectively. 'Education' was key for the NGO, and much of their work consisted in organizing literacy classes in the evening, as well as classes about legislations and basic worker rights. Many women working in factories are (to some degree) illiterate, and therefore have often signed their contracts without knowing what they entail.[44] In addition, the NGO organizes trips and 'social events' to foster social cohesion amongst the workers.

My housemate in Tangiers introduced me to Aboubakr, and in November 2022, I visited their office in an unassuming building in a popular neighbourhood of Tangiers. When I arrived, the main room in the office was being used for a literacy class for women working in a factory of a different industry. One of the younger members of the NGO, also a passionate activist, told me they were also planning an excursion for this group. ''It is essential to create a sense of social cohesion and solidarity before we help women to organize, so that women do not just seek to secure their individual positions, but rather seek to organize collectively,'' he explained to me. Only when the goals of education and solidarity were met, the NGO would start building a labour movement that could challenge the factory owners.

In 2008, this NGO started working with shrimp peelers in Tangier in a collaboration with a Dutch labour organization. The organizations decided to set up a schooling programme that would form the basis for a labour movement. The programme started off promisingly; some thirty women participated in the schooling programme, which consisted of literacy classes and 'assertiveness' workshops. In 2009, the organizations made a short documentary about the labour conditions and living circumstances of shrimp peelers, which they sent to some of the processing companies in the Netherlands. In 2011, a couple of

[44] See Akhil Gupta (2012) for an insightful discussion of 'literacy', and for a comprehensive critique of the idea that increased literacy rates lead to empowerment or social mobility (Gupta, 2012).

women working in shrimp peeling factories visited the Dutch shrimp processing company Gardema in the Netherlands; the Dutch labour organization had arranged this visit to foster a collaboration between the unionized Dutch workers in Gardema's processing factory in Zoutkamp and shrimp peelers labouring in shrimp processing companies in Tangier. Upon their return to Morocco, the NGO started drafting a plan for action with the women from the factory. They decided to collaborate with some of the men working in the logistics department of their factory to build a more powerful movement. Everything was going more or less according to the plans of the NGO, and in 2012, they considered the workers to be ready to organize their first public action.

In 2012, the NGO helped shrimp peelers to organize a series of strikes during which they demanded better pay, registration with the CNSS, and improved working conditions, such as reduced working hours and better treatment from the factory owners. The Dutch labour organization subsequently sought to bring this event under the attention of the Dutch media, and several newspapers wrote about the strikes (e.g. Bovenkamp, 2012). As the strikes reached the Dutch news, the Dutch Socialist Party asked parliamentary questions about the labour conditions of shrimp peelers in 2013. Several shrimp processing companies made public statements in which they expressed that they were 'shocked' upon learning about the labour conditions and promised to look into the matter. It seemed like the labour movement was going to be successful; yet ultimately, the strikes changed little for women working in the factories.

I made several visits to the NGO, and on one of these occasions, Aboubakr handed me a USB-stick that contained all the files, minutes, and action plans related to the shrimp case with me. The USB-stick contained photos, videos, and lengthy reports, and I spent hours trying to translate the documents. However, ultimately I could not figure out what had gone wrong, and when I returned to the NGO in December 2022, I asked Aboubakr why their actions failed to be successful in the long run. He answered me, looking slightly upset, that it was ''the case of Fatima''. Fatima was one of the women leading the shrimp peelers movement. She had become involved with the NGO after she found out that she didn't have health insurance when she needed medical care. Thanks to the connections of Aboubakr, she was able to have heart surgery in Casablanca. After she recovered from the operation, she became involved in the education program of Attawasul. ''She was a very smart woman,'' Aboubakr recalled, ''so we attempted to make her somewhat of a leader figure amongst the women of the factory.'' Fatima convinced many women to participate in the strike of 2012. However, despite the media attention for the event, no immediate changes in the working conditions of the factory occurred. Therefore, despite the NGO's continuous insistence on solidarity and collaborative action, Fatima decided to confront the factory owner by herself. She went to his office, reiterated her rights, and demanded to be registered with

the CNSS; in response, the factory owner fired her. According to Aboubakr, Fatima blamed the NGO for losing her job, and shared her frustration with the other workers. Many women were frightened by the story, as they became scared to lose their job, an event that would be catastrophic for most. In addition, according to Aboubakr, a member of the UMT started spreading gossip amongst the protesting women, telling them that the NGO received money for providing schooling for the workers.

Many of the factory workers were already frustrated that they only received schooling from the NGO and not more tangible help; the rumours reinforced their ideas that the NGO was profiting of them rather than helping them. The NGO sought to continue the labour movement by prolonging their education programme for the shrimp peelers; they attempted to convince workers that it takes time to achieve change. However, over time, women stopped coming to the NGO and went back to working in the factories. The Dutch media, meanwhile, quickly forgot about the protest, and the parliamentary questions asked by the Dutch socialist party were answered with reference to ILO-conventions and OECD-guidelines, and with the promise that companies would have a conversation with the NGO. The sponsor of the Dutch labour organization decided to withdraw its funds for the project, and invested in Morocco's agricultural business instead. In 2022, the NGO still ran a program for women working in textile factories but stopped working with women from shrimp peeling factories all together.

Most shrimp peelers I talked with in Tangier did not know about the NGO Attawasul or at least claimed not to know about it. During my fieldwork in Tangier, I only met one woman who had been closely involved with the NGO in 2013. In November 2022, I met Sarah, a woman in her forties who lived on the outskirts of Tangiers. She was a lively and cordial woman, and eager to share her stories of the factory. In 2022, she worked full-time in the factory of Sea Tail, the largest shrimp processing company in the city. She had been working there since 2008, and recalled the series of events from 2013 vividly: ''Our worst problems started in 2010,'' she mentioned, ''because the factory got a new director. The old director was from the Rif, and he was always nice. He provided us with a card that gave us access to free medication, we had a doctor visiting the factory every week, he even distributed old clothes in the factory. However, the new director was a Moroccan who had lived in the Netherlands for some time; he is awful. When he came to the factory, everything changed.'' Sarah got involved with the NGO Attawasul because she hoped that with their help, it would be possible to change some of the labour conditions in the factory. She took part in all the strikes and remembered Aboubakr well. However, she confirmed that many women got scared after the incident with Fatima. ''I think he [Aboubakr] is angry with me, because we stopped coming to the NGO,'' she mentioned, ''however, I tried to convince the other women we should continue, but they didn't want to; they were afraid.''

When I spoke to Sarah in November 2022, she was still seeking to improve the labour conditions in her factory, especially by pushing for registration with social security; at that moment she was looking for a lawyer that could defend their case at the labour tribunal. However, she was an exception in this regard; most of the women I spoke to did not attempt to address issues in the factory, and few were willing to openly support Sarah's mission. Two of Sarah's sisters worked in the factory, yet only one of them continued to support her. Sarah was in a somewhat unique position in comparison to other shrimp peelers: in contrast to most women, she had no children, and thus no family to support. She had moved to Tangier when she was 15 to accompany her brother, who was to attend a Quran school in the city. When her brother finished school, she refused to come back to her parents' home, since she describes her father as aggressive and authoritarian. Instead, she continued to work, and even managed to save some money to travel by herself. When her mother died in 2018, she was afraid her father would make her come back to her natal village, so she agreed to marry the brother of one of her colleagues. In 2022, she lived with her husband in a village on the outskirts of Tangier, and Sarah mostly worked to supplement his salary; however, arguably, she was not as dependent on her job as some of the other shrimp peelers.

The Strategy of 'Unnoticing' and White Ignorance

Many shrimp peelers, in contrast, could not afford to lose their job; their families were dependent on their income for paying rent and basic groceries. As discussed in Chapter 2 and 3, many shrimp peelers support multiple children on their salary, and shrimp peelers who are divorced are in an especially precarious position. Therefore, most women were deterred by the potential consequences of organized labour actions. Moreover, most women did not have time to engage in such actions, as they were responsible for a range of domestic tasks on top of their waged employment. Thus, even though many women were aware that the factories in which they worked breached the law by not providing them with social security, they choose to turn a blind eye to this practice; something that might be described best as the 'art of unnoticing'. The 'arts of unnoticing' is a concept coined by Loretta Lou to describe how certain forms of 'contrived ignorance' that are actively produced can help people to reclaim certain forms of 'agency' (Lou, 2022, p. 582). Lou describes how residents in apartments adjacent to large petrochemical plants in the South of China actively attempt to 'unnotice' toxic pollution. As a result, residents are able to feel fortunate and happy about their living arrangements. In a similar sense, I contend, shrimp peelers mobilize the 'arts of unnoticing' in order to live with the realities of their precarious employment, which provides them with the means to survive and to support their families. During my fieldwork, I found that women often stressed that the emergence of factories which provided work for women was a positive

development. Even as most women readily admitted that the circumstances in these factories weren't perfect, they insisted that it was a good thing that women could now make their own money and therefore be more independent (see Chapter 3). Most shrimp peelers I spoke to mentioned that they had made friends in the factory or talked of the occasional bonuses that their bosses had provided for them, and thereby underlined to brighter aspects of their employment.

However, I believe that sometimes, these utterances entailed an attempt at 'unnoticing', as women deliberately disregarded the negative aspects of their employment. They might have done so largely in my presence, but it often seemed to me that women sought to underline that it was their own decision to work in a shrimp peeling factory, and that they did derive some benefits from their work. Thereby, women refused to be considered 'victims' of these factories' exploitative practices. I came to think that by actively ignoring the labour rights breaches of these factories, women were able to feel (to some extent) positive about their employment, something that might well be necessary to endure the long days in shrimp peeling factories. Moreover, the practice 'unnoticing' helped women to avoid engaging with 'dangerous' forms of knowledge, which many women came to recognize as the cause of the firing of Fatima.

Matthijs Pelkmans and Judith Bovensiepen (2020), in their discussion of the concept of 'wilful blindness' have drawn attention to the graded nature of ignorance; ''Wilful blindness must (…) be understood as inhabiting a spectrum where deliberate unawareness is on one side, and normalised blindness (…) on another side of the spectrum'' (Bovensiepen & Pelkmans, 2020, p. 3). Pelkmans and Bovensiepen propose to attend to the dynamic and instable processes through which 'wilful blindness' is constituted and highlight the fluidity of intentionality and awareness within these processes. I contend that their approach is productive in the context of Moroccan shrimp peelers, as women engage in an on-going practice of enacting ignorance. I contend that this practice of ignoring never produces a stable form of 'ignorance'; rather, ignoring certain realities becomes a productive social strategy, which fluctuates somewhere between 'strategic' ignorance and 'wilful blindness'.

I became acutely aware of the 'arts of unnoticing' as a prevalent strategy when I visited a different NGO in Tangier. NGO Darna sought to help women in marginalized positions by providing them with trainings and internships that allow them to find a job. The NGO had collaborations with various factories in the city; however, few factories were willing to give women a permanent job. Instead, factories would offer women temporal traineeships for which they received an allowance (often less than the minimum wage) and no social security. Officially, factories were obliged to either terminate the

traineeships or to turn the traineeships into a job contract after a probationary period. However, most factories preferred to have trainees rather than workers, since they did not need to provide a minimum wage or social security for them. The NGO recognized that for most women, receiving a traineeship allowance was still preferable over having no job at all. Thus, the NGO put a lot of effort into convincing factories to prolong women's traineeships, thereby ignoring the legal (and moral) problems with such a solution. As such, the strategic 'ignorance' of these labour regulations helped the NGO to navigate a highly bureaucratic environment where personal connections and power are more important than the 'right' knowledge of the law. I was initially surprised that the people in the NGO readily shared those arrangements with me; however, many people in Tangier assured me that this was common practice, and that such arrangements were wholly unremarkable. Thus, the 'strategy of unnoticing' is hardly an individual practice in Tangier; rather, within Morocco's political context, such practices are common ways to navigate deeply unequal power relations (see also Chapter 2).

Meanwhile, the 'forgetfulness' of Dutch media, politicians, and consumers about the labour conditions of shrimp peelers might also be considered a form of 'wilful ignorance'. Such forms of 'ignorance' about the realities of production in global supply chains are hardly exceptional and often deliberately produced and circulated. Robert Proctor has proposed the term 'agnotology' for the study of the wilful production, spread, and maintenance of ignorance, and has specifically attended to the deliberate spread of misinformation and ignorance about the tobacco industry (Proctor & Schiebinger, 2008). Other scholars have shown how other corporate industries have taken inspiration from the tobacco industry to create public ignorance about sugar and climate change (e.g. Sanabria, 2016; Carroll, 2021). Robert Foster has argued that global supply chains often create value through the uneven distribution of knowledge and ignorance amongst different stakeholders (Foster, 2008). However, these studies largely attend to the production of ignorance by corporate actors; in contrast, wide-spread ignorance about the labour conditions of Moroccan shrimp peelers is hardly deliberately manufactured. Companies like Gardema display images of their factories on their website and do not attempt to 'hide' or 'underplay' the production process of brown shrimp.

When consumers, politicians, or retailers are ignorant about the production process of brown shrimp, this might be understood as a more general form of 'global white ignorance': Charles Wright Mills has coined the term 'white ignorance' to describe forms of ignorance that characterize Euro-American epistemologies at large and dispose white people to be oblivious about the structural harms, past and present, against black and brown people. Such harms entail the erasure of colonial histories, the erasure of black and brown figures in history, and on-going ignorance about the exploitation of black and

brown people in society (Mills, 2007; Mills, 2015). When I started my MPhil project on the brown shrimp supply chain in 2019, I was often surprised that shrimp fisheries often made the news because of their environmental impact, whereas shrimp peeling factories hardly ever featured in the news, despite the dire conditions under which shrimp peelers laboured. 'White ignorance' as an epistemological structure might well explain such a society-wide refusal to engage with the racial capitalist system which produces brown shrimp through the exploitation of brown bodies. Such forms of ignorance, moreover, are arguably necessary to the production of value in global supply chains; Ghassan Hage (2018) has shown how capitalist production processes depend on the capacity to displace the aggressive forms of accumulation through which profit is produced, in order to deliver value in a 'homely' way (Hage, 2018). However, rather than studying particular attempts to produce, circulate and maintain ignorance, Hage contends that such processes of displacement and homeliness are effected by 'generalized domestication' as a 'mode of inhabiting the world', a concept that aligns closer with Mills' 'white ignorance' that with Foster's idea of segmented knowledges, or Proctor's concept of wilfully produced ignorance. Such forms of 'ignorance' are actively perpetuated and upheld by broader social configurations and moral economies, which I will discuss in further depth in Chapter 5 and Chapter 7.

Conclusion

It was late afternoon in the fishing museum in Zoutkamp. The usual group of people consisting of retired fishers and volunteers had gathered in the office, where I was serving coffee and slicing cake. ''I saw an interview with Hans Klok [a famous Dutch illusionist] recently,'' one person mentioned, ''and he said that people from the North see through his tricks much quicker than people in the West. Even though these people have a much higher education level.'' The other people in the group nodded in agreement. ''Here, we rely on common sense,'' one of them remarked, ''and if we do not get something right one way, we just try it another way.'' The interaction reminded me of another moment during my fieldwork, a couple of months earlier. I was spending an evening in the house of Farrid, the director of the shrimp peeling factory in Taza. We were sitting in the salon after dinner, with Farrid's wife and two guests present. Farrid told a joke in Darija to his guests, who laugh heartily at the story. Then he turned to me to translate: ''So there is this rich man, who was never properly educated. He meets with an engineer who is working for his company. 'Imagine,' the engineer tells him, 'how rich you would be, if you had gone to university!' 'On the contrary,' the rich man answers, 'if I had been educated, I would have ended up like you, working for a rich man like me!'''

Despite their obvious differences, I was quite struck by the similarities between these two events. Both stories served to underline the relative insignificance of education and academic forms of knowledge, and pointed out that being educated is not necessary or even useful for acting and living in the world. I strongly suspect that both stories were recounted exactly because I was present as a young researcher. These stories therefore serve as a powerful reminder of High, Kelly and Mair's observation that 'anthropologists have too easily attributed to the people they study the same unambiguous desire for knowledge, and the same aversion to ignorance, that motivates their own work, with the result that situations in which ignorance is viewed neutrally – or even positively – have been misunderstood and overlooked' (High, Kelly, & Mair, 2012). The stories described above aptly capture the idea that knowledge and education do not necessarily provide one with useful strategies for moving through the world. In contrast, specific ways of enacting ignorance might provide one with the tool to navigate the world better.

In this chapter, I have proposed to shift attention from 'vernacular knowledges' to 'vernacular ignorances'. Of course, the different forms of ignorance discussed in this chapter are radically different: global white ignorance is very different from strategic forms of ignorance, which are again very different from the embodied or vernacular ignorances that fishers cultivate. Still, I contend that it is important to think with these different knowledges alongside the forms of knowledge that circulate, motivate, and underlie the supply chain of brown shrimp. In many places, forms of ignorance hold value for communities, as they are embedded in social-cultural histories. However, 'vernacular ignorances' are no more stable than 'vernacular knowledges'. As I have shown in relation to shrimp fisheries management, situated ignorances are often intensely debated and therefore subject to change, practices that might be considered situated 'politics of ignorance'. Attention to such politics requires paying attention to the various affects of which ignorance is productive, and show the importance of recognizing that people do not come to know the world in primarily rational ways. 'Vernacular ignorances' allow us to see how people turn various insecurities, uncertainties and other forms of 'not knowing' into productive strategies for moving through the world. For many people, 'ignorance' is not a calamity that must be mediated, addressed, or eliminated; instead, 'ignorance' can be an important aspect of life that should be treasured, protected and propagated alongside various ways of knowing the world.

Such a re-evaluation of ignorance is essential for understanding the different ways in which actors in this supply chain invoke and act on the uncertainty of the future. While it is often assumed that people generally try to reduce the uncertainty of the future, for instance by rendering it predictable through risk assessments or prediction devices, this chapter has shown that reducing uncertainty or lack of knowledge

is not always people's priority. As the next chapters show, this insight has significant consequences for how the future is invoked, discussed, and acted on. For instance, while managers in this supply chain often do try to reduce 'not knowing' through risk assessments, fishers often introduce the notion of 'luck', which cannot be predicted, whereas Moroccan factory workers regularly mention that their 'destiny' is known by God alone. These ways of engaging the uncertainty of the future come to infuse the supply chain of brown shrimp in myriad and sometimes surprising ways, as I will show in the following chapters.

5. The Moral Economy of Luck in Zoutkamp

‘‘Useless!’’ Evert snorted as he checked the speed of the boat again. It was 4am in the morning, well before sunrise. Evert and I were sitting in the cabin of his boat, sipping our morning coffee. We had been sailing for about an hour. Ten minutes ago, Evert had cast his nets at one of his favourite spots, on the edge of a shallow sandbank. However, as soon as the nets disappeared under the water surface, our speed started falling. Not a good sign. For about ten minutes, Evert kept frowning at his speed meter, but since it kept falling back, he clearly lost faith. Annoyed, he pressed one of the many buttons in the cabin and made the nets come up. As soon as they rose above the water, his fears were confirmed: even from the cabin we could see they were full of green drab. That meant we had to go out to deck to pluck the nets clean of slimy, wiry seaweed. ‘‘It’s no fun, fishing like this,’’ grumbled Evert, as he stumbled outside. ‘‘There’s too much green and no shrimp. The weather is too nice, the water is too calm. We need a big storm to give the waters a good swirl.’’ Nevertheless, as soon as we finished cleaning the nets, we set out to try again in a different place. To me, all stretches of sea looked the same, but Evert carefully picked his spots and lowered the nets. While I dozed off in the cabin, he anxiously checked the speed meter. This time, we left the nets out for about an hour. Evert did not seem too sure of himself, but when he finally decided to haul in the nets, even I could see that we had been successful; the nets were full of colourless, writhing shrimp. ‘‘How did you know?’’ I asked in awe, following Evert outside. ‘‘How did you know there was no seaweed here? And how did you know the shrimp would be here?’’ ‘‘To be honest with you,’’ Evert answered with a complacent smile, ‘‘I didn’t. It was simply pure luck.’’

During my fieldwork, I heard many fishers evoke the notion of *geluk* or ‘luck’ to explain their fishing successes. In Chapter 4, I showed that fishers often insisted on the ‘unknowability’ of the sea. This chapter attends to the notion of luck as a way of being oriented to the uncertainties of the fishing. The notion of *geluk*, I argue, is intricately woven into the constitution of everyday experiences in Zoutkamp, as it embeds a certain temporal orientation in the present. Luck is often evoked in relation to the unpredictability of the sea and fishers mostly invoke luck when no other obvious factors can explain their success. Luck can be ascribed to a person (‘a lucky fisher’), an event (‘a lucky fishing trip’) or an extended period of time (a ‘lucky’ fishing year). Such invocations articulate luck as a quality or property and mostly emerge from reflections on a past event in which a person or situation is retrospectively considered ‘lucky’. Luck, however, can also operate as ‘a technology of anticipation’ that produces an idea of an uncertain future to which one can have a hopeful orientation. In this chapter, I mostly attend to this prospective aspect of luck. Luck, I contend, enables a hopeful attachment towards fishers’ articulations of ‘the future’ and thereby evokes the world-to-come in a different way than notions of

'chance', 'risk', or 'fate' do. Luck, as a hopeful orientation, motivates fishers to keep fishing even if the chances for a good catch are low. Luck is therefore vital for the reproduction of the brown shrimp trade.

However, in a place like Zoutkamp, *geluk* is by no means equally distributed. Whereas most studies in maritime anthropology have focussed on the (social) function of 'fisherman's luck', 'economies of luck' have been somewhat understudied. Yet in Zoutkamp, I found that people were preoccupied with the allocation of fortune. Concerns regarding its 'rightful' distribution came to light when an emergency shelter for asylum seekers opened five kilometres from Zoutkamp. The shelter was built because the national administration centre for asylum seekers was overcrowded, so 500 migrants were transferred here to await their official administration. Their presence caused much debate and consternation amongst the population of Zoutkamp, and in conversations, the phrase *gelukszoeker*, or 'fortune seeker', was often used. This term carried decidedly derogatory connotations and was popularized by right-wing politicians around 2015 when an influx of refugees occurred. People often denounced the presence of asylum seekers by framing them as 'mere fortune seekers' who had to be distinguished from 'real' asylum seekers. I was struck by the way that *geluk* invoked the condemnation of the practice of 'seeking one's fortune' in the term 'fortune seeker', while explaining one's fishing success in terms of sheer luck was completely legitimate. People in Zoutkamp seemed to code-switch effortlessly between the notion of *geluk* as an aspirational quality in the context of fishing and geluk as an illegitimate aspiration of asylum seekers.

It is important to note that the Dutch term *geluk* means both happiness, fortune, and luck. The meaning of '*geluk*' in the term '*gelukszoeker*' is decidedly ambivalent and could refer to both luck or happiness. Thus, the 'distribution of *geluk*' also relates to the allotment of happiness, and this second meaning needs to be taken into account when considering the moral economy of *geluk* in Zoutkamp. In this chapter, I contend that what is at stake in the 'economy of *geluk*' is the distribution of certain temporal orientations, or of hopeful attachments to (local articulations of) the future. Many anthropologists have shown that hope for the future is not evenly distributed; Ghassan Hage has compellingly written about the political economy of hope, whereas Elizabeth Povenelli's work has shown how figurations of 'social tense' only extend a future to certain social subjects (Hage, 2003; Povinelli, 2011). Anthropologists attending specifically to 'luck' and 'fortune' have often grounded these concepts in Weber's foundational work on Protestant theodicies of fortune and theodicies of suffering, and Veena Das (1997) has made an important contribution by showing what happens when 'theodicies of suffering' are secularized through their displacement from religion to the institutions of the state (Das, 1997). Bringing these works in conversation with work on 'economies of *geluk*', I argue that the configuration of *geluk* in Zoutkamp structures what 'the future' should be and who can make a claim to it. This

configuration implies that certain forms of social life are allowed to be reproduced, whilst other forms of social life are configured as the mere grounds for such forms of reproduction. I will show in this chapter that the brown shrimp trade is dependent on this 'economy of *geluk*', since some of the key conditions for the continuation of the brown shrimp supply chain are provided by this economy. Moreover, since *geluk* is a primary topic of ethical reflection in Zoutkamp, and lines everyday actions with a certain ethical sensibility, the notion of *geluk* shows that brown shrimp fisheries are not produced despite ethical constraints, but rather, that the reproduction of shrimp fisheries is highly moralized. Attending to the notion *geluk* can illuminate how a distinct moral economy underlies the supply chain of brown shrimp and its highly uneven conditions of production.

Chasing Fortune: Maritime Luck and Anticipatory Action

When Dutch fishers employ the notion of luck, they use the term '*geluk'*. '*Geluk'* is defined in Dutch dictionaries as *1. Fortunate turn of events; good fortune*, and *2. Pleasant feeling of someone who rejoices* (my translation, van Dale Woordenboek, 2023). Thereby, the term conflates the meanings of 'luck' and 'happiness'. The word is related to the German term '*Glück*' (and in related dialects, '*(ge)lücke*' or *'(ge)lucke'*); the English word 'luck' is also derived from these continental terms (Sijs, 1997). When fishers refer to geluk in relation to fishing, it in its meaning of luck as a 'fortunate turn of events'. Fishers use the term *geluk* when no obvious reasons seem to explain the failures or successes of one's fishing trips. In its colloquial, everyday use, the word can apply to different scales: a particularly good fishing year is considered to be a lucky year, whilst luck is also invoked on the level of the individual to explain why some fishers are more successful than others. When fishers incidentally make a good catch, they are said to have 'had' good luck, whereas fishers who are often successful are considered to be lucky; *geluk* can therefore both be a personal quality and a force in the world that can be found or acquired. Luck is also often invoked as a motivation to go fishing, and therefore carries certain promissory qualities which enable a hopeful orientation of the future. The various uses of luck highlight the ambiguity of the concept, and fishers in Zoutkamp use the meanings above interchangeably.

Even though it is important to preserve the slippery connotations of the term, I contend that it is analytically productive to distinguish between a retrospective and a prospective perspective on luck; whereas a retrospective analysis of luck foregrounds its meaning as a quality that becomes attached to a person or an event, a prospective perspective highlights how luck can operate as 'a technology of anticipation' that provides a distinctly hopeful orientation towards (local articulations of) the future (da

Col & Humphrey, 2012).[45] Fishers in Zoutkamp evoke the notion of luck both from a retrospective and a prospective perspective; in this chapter I attend mostly to the forward-oriented uses of luck, to illuminate how people in Zoutkamp invent and relate to the future through moralized notions of luck.

Early anthropological analyses of luck discussed luck mostly from a retrospective perspective; luck was considered a quality that could be harboured, captured, or invoked through ritual. In many places around the world, vernacular concepts of 'luck' can be found amongst fishing communities, and Malinowski famously wrote about the relation between fishing and luck in the Trobiand islands, where he linked the invocation of luck to magic. The more dangerous or uncertain a fishing trip was, Malinowski wrote, the more likely Trobianders were to beckon good luck through a series of magic practices (Malinowski, 1948). Many maritime anthropologists subsequently followed Malinowski's theory by considering 'fisherman's luck' to be 'a kind of 'safety valve' in situations of anxiety' (Löfgren, 1989, p. 53). Such studies also attended to the relation between fishing taboos and conceptions of bad luck, and considered 'luck' to be an essential element of the 'worldview' or 'cosmology' of fishermen (van Ginkel, 1988; Löfgren, 1989; Zulaika, 1981). From the 1980s onwards, maritime anthropologists considered the role of luck in more 'industrial' fleets, and mostly examined the social function of luck. Luck, in these cases, was mostly understood to be an emic explanation for differential success between fishers. On the one hand, the notion of 'luckiness' could give a skipper more prestige and thereby justify his leadership, whereas on the other hand the notion of luck refrained from attributing differences between fishers to notions of skill, talent or effort. As such, the notion of luck was thought to preserve an egalitarian ethos between fishers, whilst justifying implicit social hierarchies (Byron, 1988; Palmer, 1989). Notably, many anthropologists observed that the importance of luck did not decline with the industrialization of fisheries (Byron, 1988; Orbach, 1977).

In the Netherlands, there are few documented rituals or practices related to 'luck' or 'bad luck' amongst fishing communities, even though anthropologists have noted that 'luck' is often evoked by fishers (van Ginkel, 1988; Vlist, 1970). In his study of Dutch fishing communities, Rob van Ginkel has come across some (archival) examples of taboos amongst Dutch fishers that seek to avert bad luck, such as whistling on board, seeing a cleric before boarding one's ship, or fishing on Sundays (van Ginkel, 1988). However, during my fieldwork, I did not come across any practices that sought to evoke good luck or to avoid bad luck, and when asking fishers about these, they would unanimously coin such practices

[45] Here, I follow Hirokazu Miyazaki's (2004) argument on the method of hope, which Miyazaki considers to be a radically open-ended manner of relating to the future that cannot be grasped from a retrospective analysis: see also introduction.

'superstition'.[46] Even when taking into account the fact that talking about taboos is considered bad luck in some places, and that many fishers might not want to talk about such 'superstitions', there is little ground for asserting that such practices circulate in the present amongst Dutch fishers (van Ginkel, 1989).

However, fishers in the Netherlands evoke the notion of luck very often when accounting for their own or others' successes. Luck, according to Dutch fishers, has nothing to do with skill, circumstances or experience; rather, you are 'lucky' or you are not. Luck is perceived as something outside of people's control; yet many fishers do actively hold open the possibility that one might 'get lucky' anytime. During my fieldwork, I regularly heard of shrimp fishers who went out to sea when diesel prices were very high whilst general catches were very low. This meant that going out to sea would probably result in an overall loss for fishers; they would likely spend more on gasoline than they would earn in profits. Yet these fishers would argue that 'you never know', and that they might just get lucky.[47] Such practices might be considered 'anticipatory actions', 'actions that inscribe in the present a specific orientation toward the future' (Elliot, 2016; Miyazaki, 2004). By 'proactively anticipating a fortunate future', fishers display an orientation towards the future that invokes the future as neither inevitable nor completely determined; the indeterminacy of the future is evoked as a promise rather than a problem (Col & Humphrey, 2012, p. 3).

Such attitudes towards luck have been noted by many anthropologists, and in an important companion piece on luck, Da Col and Humprey therefore consider 'luck' and 'fortune' to enable certain 'technologies of anticipation'. 'The quasi-event of luck does not provide certainty but rather constructs a fertile universe of doubts', they write, and therefore luck never seems as 'entirely out of one's grasp' (da Col & Humphrey, 2012, p. 2). Luck is part of the 'field of forces' that constitute the present beyond its actual manifestations and is therefore related to the present's potentiality; luck is considered a 'vital force' that flows between subjects, objects and places in many parts of the world, thereby mobilizing the latent potentialities of the present (da Col, 2012). Whereas luck cannot be controlled, it can be summoned, invoked, or proactively anticipated. In the case of Dutch fishers, the opportunity of a successful catch is never completely absent, and therefore provides fishers with a productive sense of possibility. This hopeful anticipation reminiscent of what Miyazaki has termed 'the method of hope,' which he considers to be a method for knowledge acquisition which is oriented towards the future rather than the past.

[46] I did come across a couple of tall tales and sayings that indicated certain ideas about bad luck, such as '*een vrouw en een kip zijn pest op je schip*' ('A woman and a chicken are the plague on your ship'). However, such sayings were mostly jokingly evoked, and did not influence fisher's actions in any way.
[47] However, it is important to know that such actions were often treated with ambivalence by other fishers, who condemned such behaviour often as 'irrational', whilst simultaneously voicing the anxiety that these fishers might actually, against all odds, be lucky.

Coping with Fortune: Luck and its Uneven Distribution

However, even as *geluk* can function as a technique for anticipating the best possible future, the way in which people talk about *geluk* in Zoutkamp makes clear that fishers contend that they should never depend on luck or let themselves be guided by luck. In fact, in most conversations I had with fishers, luck was stressed as something to be endured rather than pursued. This became clear to me when I talked to Thomas about the distribution of luck in September 2022. Thomas was a fisher from Zoutkamp in his 30s, who fished with his dad. I visited his house in the summer of 2022, in walking distance from the harbour. ‘‘My family has fished for 13 or 14 generations by now,’ he told me over a beer, ‘‘Yet that does not necessarily make me a good fisher. Some people are just better than me. I need to accept that. And other people are simply always lucky. Luck isn’t distributed evenly at all. As a fisher, that’s something you need to be able to cope with.’’ Such a statement could be used to illustrate that the concept of ‘luck’ accounts for differential success without ascribing this difference to fishers’ skill or talent, thus preserving a sense of egalitarianism. However, whereas this would be a retrospective understanding of the concept of luck, I contend that this statement also invokes ‘the future’ in a particular way.

As Thomas mentioned, fishers need ‘to be able to cope’ with the uneven distribution of luck. The ‘passive’ attitude that this requires seems rather unremarkable; yet as many fishers attest, being indifferent to the unequal distribution of luck is notably difficult. During my fieldwork, I often heard older fishers comment on the behaviour of younger fishers. They would for instance complain that young men were too focussed on making money quickly. ‘‘When the prices are high and the catch is abundant, then they want to become fishers,’’ Thomas explained. ‘‘These young guys want to buy flashy cars, to go out and party... However, as soon as prices start fall again, they leave the trade. Real fishermen need to know how to save. You need to be prepared for the bad years, for meagre times. There are lucky years for everyone, but those never last.’’ On another occasion, fisher Simon agreed with him: ‘‘These days, the first question I get from young crewmen is: ‘how much money are we going to make?’ I try to teach them; you cannot be a fisher if you are just interested in making a profit. You never know how much you are going to make. If you want to make it as a fisher, there is only one strategy: fishing, fishing, fishing. In the good times and the bad times. That’s the only way you are going to persist.’’

In previous chapters, I have discussed that brown shrimp are also known as the ‘weeds of the sea’ and therefore not particularly prone to overfishing. However, brown shrimp catches are notoriously volatile, and catches vary greatly from year to year: as I explained in Chapter 3, patterns of brown

migration are poorly understood, and in some years, fishers hardly catch any shrimp, whereas in other years, catches are abundant. Therefore, experienced fishers warn younger fishers to be thrifty and cautious; even as shrimp fishers might make big profits in particularly good weeks or years, older fishers tend to stress the instability of the shrimp trade and underline the importance of saving up in 'lucky' times for harder times ahead. The nature of a 'lucky' event is therefore never completely transparent and cannot be taken at face-value; rather, only future events can define present events as 'lucky' in retrospect. Therefore, fishers contend that the 'proper' attitude towards luck consists in acknowledging the whimsicality of luck whilst relying on one's own hard work and discipline.

Such an attitude that stresses personal endurance over the pursuit of luck carries significant Protestant undertones. In *The Protestant Ethic and the Spirit of Capitalism* (1930) Max Weber famously analysed the doctrines through which the uneven distribution of luck and fortune was understood under Protestantism. Since the notion of an omnipotent God seems to be at odds with the random distribution of fortune and misfortune in the world, 'fortune' was a problem to be solved under Protestantism. Weber, interested in the sociological dimensions of this problem, distinguished two distinct solutions for this problem: the 'theodicy of suffering' is well-known and explains the existence of pain and agony by stating that such suffering will be compensated for in the afterlife. The promise of redemption makes it possible to endure one's hardship and supplies misfortune with meaning, thereby preventing the 'unfortunate' from revolting against the privileged classes. The 'theodicy of fortune', in contrast, legitimizes the fortune of the privileged classes by stating that good fortune in this life is a sign of God's benevolence and goodwill. Both the theodicy of fortune and the theodicy of suffering are part of the Protestant ethic, according to Weber, and underwrite the idea that the uneven distribution of fortune is ordained by God (Weber, 1930).

Whereas the fishing community in Zoutkamp is not as markedly religious as other Dutch fishing communities such as Urk, the Northeast of the Netherlands has long been under a Calvinist sphere of influence (van Veen, 2009).[48] In 2022, the Protestant church in Zoutkamp counted 400 members on a population of 1200 (Protestantse Gemeente Zoutkamp, 2025). In the last decades, the Netherlands has undergone significant secularization, and none of the fishers I talked to in Zoutkamp were religious or mentioned religion (even though I was told that there were some very religious fishers). However, arguably, protestant theodicies have not entirely disappeared with processes of secularization: Veena Das

[48] The village of Urk, one of the most well-known fishing villages in the Netherlands, is part of the Dutch 'bible belt', and therefore fishers from this town are usually deeply religious.

(1997) building on Max Weber and Talal Asad, has written about what happens when such theodicies are secularized. She contends that in many secular nation-states, the problem of suffering has been transfigured from a religious problem into a problem for the legitimacy of the state. Whereas Protestant theodicies justify the existence of this-worldly suffering through reference to an otherworldly afterlife, states cannot make such a claim to a 'next world'. Instead, Das argues, secular states often justify the existence of suffering by posing it as a necessary evil to secure some greater good for future society (Das, 1997).

Whereas Das' focusses more on the 'theodicy of suffering', her analysis can be extended to Weber's 'theodicy of fortune'. Both Protestant and secular theodicies of fortune and luck could be said to understand lucky events from a 'future anterior' perspective; the significance of events depends on what will have been their ultimate truth in the (predestined) nature of the world (Povinelli, 2011, p.3). Moreover, such theodicies do not simply seek to provide an explanation for the uneven distribution of luck but imply highly moralized norms for how to engage with luck. Such moralized social norms were evidently present in Zoutkamp, where fishers expressed clear judgements on how to engage with luck in the 'right' way: a good fisher was expected to accept the unequal distribution of luck, and to supress emotions such as envy, greed, and jealousy. Whereas the lure of luck might sometimes motivate fishers to go fishing under suboptimal circumstances, most fishers contended that 'luck' should not be actively chased. As Thomas underlined, the uneven distribution of luck was mostly something 'to be coped with', and most fishers stressed the importance of hard work and perseverance as the 'right' way to do so. Fishers valued long-term commitment over short-lived experiences of good luck, and contended that resilience and endurance were durable qualities that helped them to navigate the unstable effects of luck.

However, such an unperturbed attitude is notably difficult to cultivate: ''If envy could burn, Zoutkamp would be on fire,'' fisher Simon once told me. His statement points towards the fact that being 'indifferent' to luck is notoriously difficult, and many fishers agreed that such an attitude requires practice. In Zoutkamp, fishers judged both themselves and others on how well they were able to remain unfazed by the fickleness of luck. The statements made by Thomas and Simon about young fishers, for instance, can be read as implicit complaints on their improper attitudes towards luck; both Simon and Thomas contended that it was wrong for these young fishers to spend their profits too quickly. A 'proper' attitude towards good fortune entails embracing it as a good sign whilst not showing it off too readily. Fishers who behave inappropriately in the face of luck are held accountable for their future losses, and almost everyone I spoke to in Zoutkamp could recall a shrimp fisher who had spent his profits too lavishly, only to find himself bankrupt a couple of years later. Whereas fishers could readily express their

sympathy to fishers in financial trouble due to changing government policies or bad luck, they did usually not extend their sympathy to those fishers who had too conspicuously displayed their successes in the past. Fishers in Zoutkamp were often scornful about those who had made 'improper' lifestyle decisions, such as the purchase of a fancy car; in fact, most fishers secretly seemed to hope that such behaviour would face repercussions of some sort.

Luck is therefore the substance of intensive ethical reflection. Since fishers are held morally accountable for the ways on which they act upon their fortune, this raises a question of how a moral economy of luck is structured in Zoutkamp, and what bearings this moral economy has on the supply chain of brown shrimp.

'Fortune Seekers' in the Moral Economy of Luck

The original concept of the moral economy, coined by the historian E.P. Thompson (1971), addressed the norms, obligations, customs and traditions bound up with a certain system of economic activity. Whereas Thompson coined the concept to explain bread revolts amongst 18th century working classes in England, James Scott (1976) took the concept to refer to the values, emotions and senses of justice that circulate amongst contemporary peasant populations in Southeast Asia. Both scholars were mostly concerned with subjugated groups, even as there are important differences between Thompson's 18th century English peasants, or Scott's Southeast Asian peasants in the 1980s. In an entirely different tradition, Lorraine Daston (1995) used the term moral economy to refer to 'a web of affect-saturated values' that are integral to scientific communities. Didier Fassin (2009) has attempted to reconcile these disparate notions of 'moral economy' by defining it to be 'the production, distribution, circulation, and use of moral sentiments, emotions and values, and norms and obligations in social space' (Fassin, 2009, p.37). As such, he incorporates both norms and values in his definition, and extends the concept beyond either subjugated or scientific communities. He contends that the concept can enrich our understanding of political economies, not by displacing questions about political economy, but by investigating how these are linked up with certain moral economies (Fassin, 2009).

However, Fassin's approach to moral economies has been criticized for prioritizing 'morality' at the expense of the 'economic'. To stay attuned to the economic dimension of moral discussions of luck, I follow Palomera and Vetta's (2016) proposal to consider 'moral economy' an approach that can highlight how ambiguous logics and values guide and sustain livelihood practices through attention to fields of struggles around 'the boundaries of what is good and acceptable, their power hierarchies and the political

projects that they might inform' (Palomera and Vetta 2016, p. 415). Such an approach can highlight how a moral economy of luck underlies contemporary shrimp fisheries; moreover, I suggest that this approach can illuminate pervasive anxieties and moral concerns around the distribution of *geluk,* which were implicit in the wide-spread use of the term 'fortune seeker' in Zoutkamp in the autumn of 2022.

In the Netherlands, the term *gelukszoeker* (which I translate as 'fortune seeker' here) gained popularity in 2014-2015, when right-wing politicians started using the word to refer to a subset of refugees and migrants who were considered to have come to the Netherlands for illegitimate reasons. Politicians such as the far-right leader Geert Wilders specifically mobilized the term *gelukszoekers* or 'fortune seekers' to differentiate refugees from economic migrants. In 2015, the usage of the term peaked on (what was then) Twitter, with more than 53.000 (re)tweets mentioning the term *gelukszoeker* or *gelukszoekers* (plural), and in 2016, 561.179 tweets containing the word gelukszoeker were recorded in an extensive online data study (Verhaar & Schäfer, 2016). During my fieldwork in the summer of 2022, the term was frequently used by people I spoke in Zoutkamp, when an emergency shelter for asylum seekers opened five kilometres from the village.

The shelter was opened in response to the national 'shelter crisis' of 2022, which resulted from years of structural underfunding and political neglect of the administration and housing facilities for incoming migrants. In the summer of 2022, the national registration centre for migrants in Ter Apel was alarmingly overcrowded and more than 700 people were forced to sleep outside in August 2022, while doctors without borders were called to the registration centre to alleviate the situation. To relieve some of the pressure on the administration centre, the government decided to open an emergency shelter on the military training area in Marnewaard, five kilometres away from the village of Zoutkamp in September 2022. The military base already housed 500 evacuees from Afghanistan, and the new facility would be able to host 600 more migrants who had to stay in the facility until the official application centre in Ter Apel had the capacity to register them. The military base was located in an unsheltered, barren nature reserve and provided few amenities for the people who stayed there. Thus, to seek some respite from their surroundings, many asylum seekers ventured into Zoutkamp during the day to do some shopping or to explore the village. Soon after their arrival, stories started spreading on social media about migrants walking through people's gardens or entering boats in the harbour. The only supermarket in the village complained about large groups of migrants entering the shop and installed a controversial policy which allowed only four asylum seekers at a time in the shop. On Facebook, people began posting videos and reports recording the activities of migrants, which led to heated online debates and the spread of xenophobic and racist statements. One person in the village invited the far-right politician Geert Wilders

to the village, and on the 24th of October 2022, Wilders made a thirty-minute visit to Zoutkamp, which attracted 250 people. The local municipality responded to the unrest by opening a shop for migrants on the military base; in addition, the Central Agency for the Reception of Asylum Seekers started circulating codes of conduct for migrants to prevent incidents. Additional personnel were hired to communicate between the village council, shop owner and the emergency shelter, which eventually caused the unrest to settle. After November 2022, few incidents were reported, and in March 2023 the emergency facility was dismantled.

I was doing fieldwork in the village of Zoutkamp when the emergency shelter was opened in September 2022. I never met any of the asylum seekers housed in the shelter myself; however, soon after its opening, the arrival of the migrants became the primary topic of conversation amongst the people I talked to. Many of these conversations took place in the fishing museum where I volunteered weekly during my fieldwork. The museum had a small office behind the ticket desk which was a vibrant meeting spot for the community of volunteers and retired fishers that were the driving force behind the museum; every morning and afternoon, between 6 and 12 people would gather here for a cup of coffee and a slice of cake. Most of these people associated with the museum were born and raised in Zoutkamp, although a few had moved here later in life from one of the surrounding villages. Around five or six older volunteers would gather daily in the office, exchanging local news and gossip whilst waiting to be served coffee by one of the volunteers on duty. During these gatherings, I often head people referring to the migrants as *gelukszoekers* or 'fortune seekers.'

''We used to be poor as lice ourselves,'' one of the volunteers would repeatedly mention whenever the topic came up. This comment did not express empathy towards the migrants, however, but rather sought to denounce their presence. By evoking Zoutkamp's former poverty, people often sought to legitimize their current relative affluence: since many volunteers in the museum asserted that they had worked hard all their lives, they considered themselves to be 'deserving' of their current wealth. In contrast, by positing migrants as 'fortune seekers', they implied that migrants sought wealth or fortune by illegitimate means. Overhearing conversations like these always made me deeply uncomfortable; yet I also puzzled over the term 'fortune seeker' and its strong negative connotations. In the debates surrounding the arrival of asylum seekers in the Netherlands, more progressive and leftist journalists attempted to reclaim the term 'fortune seeker' by asserting that 'we are all *gelukszoekers*' and that 'everyone has the right to seek *geluk*'. In such statements, *geluk* refers more to happiness than to luck; the word *geluk* is arguably ambiguous in the term *gelukszoeker*, and could be understood as referring to either

'luck', 'fortune', or 'happiness'. Efforts to recuperate the term ultimately failed, however, as the term remains undoubtedly stigmatized in colloquial Dutch.

There is an extensive body of work on 'deservingness' and 'social worth' in anthropology (e.g. Tošić & Streinzer, 2022; Kalb, 2024), as well as on the 'worth' of work and its affects (Berlant, 2011; Muehlebach & Shoshan, 2012; Hann, 2018). In Chapter 3, I sought to recount some of the ways in which activities such as fishing, peeling, and trading shrimp are closely entwined with people's sense of self; however, here I seek to explore how 'social worth' and 'worthlessness' are expressed in a certain moral economy of *geluk*. It seemed to me that asylum seekers were perceived to be transgressing the implicit codes that structured these economies of luck and fortune. As became clear above, fishers in Zoutkamp consider luck to be something that should be endured rather than pursued. Actively 'seeking' fortune might be considered 'improper', as it implies a refusal of the 'natural' order of luck. Yet of course such an explanation is not sufficient for accounting for these xenophobic statements. When people were talking about asylum seekers, they were not simply denouncing their perceived search for fortune; rather, they denounced the presence of asylum seekers all together, and the term *gelukszoeker* seemed to articulate a profound anxiety that asylum seekers might lay claim to a share of *geluk*. Therefore, I contend that the usage of the term gelukszoeker raises the vital question of who is considered to have a right to *geluk* in Zoutkamp.

In *Against Paranoid Nationalism* (2003) Ghassan Hage famously attributed rising anti-immigrant sentiments to a scarcity of hope. Societies, he argued, are mechanisms for the distribution of hope. Nation-states did not only allocate social services and resources to its citizens, but also circulated hope in the form of promises of a better future; many political campaigns worked because they made 'the good life' seem accessible and achievable for the entire population. For several decades, Hage argued, such 'distributions of hope' worked together in tandem with capitalism; however, the emergence of global capitalism and the introduction of neoliberalism, entailed the decline of the welfare state and its capacity to distribute hope. As nation-states became less invested in 'national society', wealth and hope became concentrated in small pockets of cosmopolitan elites, leading to a 'scarcity of hope' amongst working-classes and former middle-classes. Hage argued that this scarcity lies at the root of anti-immigration discourse; under conditions of hope-scarcity, migrants are seen as threatening competitors in the scramble for scarce opportunities for a better future. In a follow-up article, Hage (2009) contends that these sentiments were reinforced since the condition of 'feeling stuck' was normalized in many societies: as social mobility drastically decreased under neoliberal regimes of government, the condition of 'being stuck' has become an ordinary part of everyday life. However, a perceived increase in migration has

produced the belief that 'other' people are 'on the move', whilst white working classes remain 'stuck'. In response, people condemn migrants for transgressing the codes that have emerged around 'stuckedness', which involve the moralization of 'waiting out' the crisis, and showing signs of endurance.

Ghassan Hage wrote about 'the shrinking of hope' at the start of the 21st century, when the effect of neoliberal policies were felt throughout the global North. Of course, the political landscape has changed significantly in the decades after Hage's book came out, yet arguably, some of the trends he observed, have only become more pronounced. In the Netherlands, for instance, social differences between wealthy urban areas and poorer rural areas have only increased in the last twenty years. In an important report (2021), Dutch researchers Josse de Voogd and René Cuperus have analyzed how differences in income, health, and education in the Netherlands translate into electoral differences. Their report notes that on average, inequalities have widened between wealthy urban areas and more remote rural areas, which are both 'perceived' to be more deprived, as well as 'actually' more deprived. The report posits that this urban-rural division is the most important social divide line in the Netherlands in 2020, and that it has produced an increased popularity of anti-establishment parties amongst rural communities who have generally lost faith in the political establishment (de Voogd & Cuperus, 2021). After the far right-wing party PVV hailed an unprecedented victory in the 2023 elections in the Netherlands, the report published by de Voogd and Cuperus was evoked as a visionary insight into the fabric of Dutch society.

The report by de Voogd and Cuperus applies particularly well to the region of Zoutkamp; as I described in Chapter 2 and Chapter 3, many fishers feel abandoned by the state, and express that they feel 'unseen', 'unheard', and 'left behind' by the political establishment. In 2023 and in 2024, the province of Groningen was the only province in the Netherlands to see a 'significant' decrease in its economy (*Centraal Bureau voor Statistiek*, 2025). Many people in Zoutkamp considered the opening of the emergency shelter for refugee seekers to be an additional burden for the region; volunteers in the fishing museum were convinced that the shelter was deliberately built in their rural outpost, since politicians did not care about their interest and well-being anyway. In many ways, the village of Zoutkamp could therefore be said to experience a 'vacuum of hope' as described by Hage. Since in Zoutkamp, hopeful orientations towards the future were primarily articulated through the notion of *geluk*, the 'shrinking of hope' resulted in a perceived scarcity of luck. Such a 'scarcity of geluk' can explain people's refusal to share whatever forms of *geluk* they take to circulate and inform the accusatory nature of the term gelukszoeker. However, to understand to whom fishers extend the right to luck and to whom they deny it, I contend that it is vital to investigate how an 'economy of luck' operated in Zoutkamp.

The 'Rightful' Distribution of Happiness: Fishers, Fortune Seekers and the Future

An understanding of this 'economy of *geluk*' should also consider the larger political economy that structures its uneven distribution. Questions around the distribution of *geluk* have been central to Dutch politics since 2010, when then-prime minister Mark Rutte announced that the state was not a *geluksmachine*, or machine for luck/happiness (Vendrik, 2010). Whereas in other European countries, the notion of 'happiness' was increasingly central to state policy, Mark Rutte considered 'happiness' to be a private affair, that previous governments had circulated too readily (Blauw, 2015). In the wake of his announcement, critics wrote passionately about whether the state had a responsibility for the happiness of its citizens, whether the state had ever functioned as a machine for happiness, and what the political incentives behind this attack on happiness were.

Such debates evoke *geluk* or 'happiness' as a rather self-evident notion, but in fact the meaning of *geluk* has changed significantly over time. The Dutch historian Auke van der Woud (2015) has documented how around 1900, understandings of the basis for *geluk* (in its meaning as happiness) were changing, as *geluk* came to be understood as having a physical basis rather than a spiritual one (van der Woud, 2015). Bodily health was promoted as the primary condition for happiness, and the state was thought to play a vital role in providing the conditions for general health (see also Chapter 2). Thus, state-funded housing (155) and public parks and gardens (169) were constructed with the explicit aim of promoting happiness. At the same time, older discourses around *geluk*, mostly religiously inspired, continued to circulate alongside such novel, embodied understandings of *geluk*. Religious discourses continued to link 'eternal happiness' (*eeuwig geluk*) to a religious upbringing, and the state also sought to accommodate such discourses by allocating equal funding for public and religious schools. This way, the state did play a vital role in the facilitation and distribution of happiness. However, just as Hage has linked the decline of the nation-state to its decreased ability to distribute hope, the retraction of the state in public life can also be understood as its declining capacity to distribute happiness. During my fieldwork in Zoutkamp, it became clear that in 2022, people generally did not consider the state to be responsible for the distribution of happiness. The way in which the term *gelukszoeker* is used powerfully illuminates this.

The use of the term 'fortune seeker' relies on an implicit distinction between 'legitimate' migrants and 'illegitimate' migrants. ''Of course, people who have to flee their country because they are in danger are welcome here.'' a volunteer in the museum explained to me, ''but many of these migrants come from safe countries like Morocco and Tunisia. They are not really refugees, they are simply fortune

seekers.'' Claims like these were indicative of a racialized moral economy in which the 'right' to seek luck/fortune is distinctly coded as Dutch and white. The village of Zoutkamp is overwhelmingly white, even though official numbers on ethnicity are not collected: the Dutch census does not record information based on race or ethnicity, but rather classifies people as having a Western/non-Western/Dutch migration background. Even though this is clearly a 'race-ethnic categorisation' (Schie, 2018), the refusal to name it as such is part of a more pervasive denial of 'race' and 'racism' in the Netherlands, a phenomenon that Gloria Wekker has coined 'white innocence' and which she shows to be central to the self-representation of Dutch society and culture (Wekker, 2016).

At the same time, such statements also reveal something about people's expectations towards the state; whereas the state is expected to provide 'security', 'safety', and 'human rights' like 'freedom' to everyone who needs it, the state is not expected to distribute happiness or fortune to everyone inside its borders. Thus, the state is a provider of 'basic' security, order, and safety, but is not responsible for the (economic) well-being of its citizens. It seems therefore, that many people in Zoutkamp had naturalized Mark Rutte's statement. Sara Ahmed has explored how 'happiness' has come to be understood as an individual responsibility. In her book *The Promise of Happiness* (2010) she has written about the emergence of the 'happiness industry', which emerged in the early 2000s when the nation state was detracting from social life, and responsibility for health and well-being was increasingly put onto individuals (e.g. Rose, 2001). Ahmed traces the genealogy of the concept of 'happiness' to show how 'happiness' came to be equated with 'the good life'. Whereas happiness originally meant to have 'good hap or fortune', and thus didn't distinguish between 'happiness' and 'luck', the history of the concept can be read as a 'defence against its contingency' (Ahmed, 2010, p. 22). 'Happiness' came to be understood as a virtue that must be trained through forms of self-cultivation. Arguably, in the early 20th century, nation-states often took responsibility for providing conditions for the pursuit of happiness, as Auke van der Woud showed for the Netherlands; however, under conditions of late liberalism, subjects have become responsible for their own happiness. Importantly, 'happiness' is never readily available in the present, but always lingers on (an imagined) future horizon. Rather than a quality in itself, 'happiness' is often mobilized as a hopeful attachment to the future. Still, this 'hopeful attachment' is not available for everyone.

Most of Ahmed's book is focussed on the normative ways in which happiness is structured within society, and therefore, Ahmed's focus is on those subversive subjects that refuse these normative conditions for happiness. However, contemporary happiness discourse is also defined by 'an anxiety that the wrong people can be happy, and even a desire for happiness to be returned to the right people.'

(Ahmed, 2010, p. 13) This observation is vital in the case of Zoutkamp, as it speaks directly to the question of who has a right to happiness. As described above, the term 'fortune seeker' seems to imply that some asylum seekers do simply not have the right to pursue geluk. Ahmed points out that denying some subjects the pursuit of happiness might be essential for the 'political economy' of happiness in general;

> 'The classical concept of the good life relied on a political economy: some people have to work to give others the time to pursue the good life, the time, as it were, to flourish. Arguably, such a political economy is essential rather than incidental to the actualization of the possibility of living the virtuous life' (Ahmed, 2010, p.13).

Ahmed does not elaborate in detail how certain subjects in contemporary society are refused access to the 'economy of happiness', yet her observation is key for understanding how geluk is distributed in a place like Zoutkamp. Ahmed argues that the possibility to actively pursue one's happiness requires other subjects to provide the grounds for such a pursuit. These subjects are therefore not simply 'competitors' for 'happiness'; rather, they are configured in a passive tense, as the means of making the conquest of happiness possible for others.

Whereas theodicies of suffering and fortune seek to justify the uneven distribution of fortune, Ahmed shows how this uneven distribution is not only justifiable but often necessary in liberal nation-states, since the fortune of some is often directly contingent on the misfortune of others. Veena Das (1997) considered this to be a common outcome of the 'secularization' of theodicies: she contends that in secular nation-states, 'the suffering of those defined as a social waste is appropriated for projects of a good society in the future' (Das, 1997, 570). In *Economies of Abandonment* (2011), Elizabeth Povinelli illustrates how such social configurations are justified through a distinction between the autological subject and genealogical society. The autological subject, Povinelli writes, 'projects herself as her own authentic grounds' and therefore inhabits a mode of subjectivity that is characterized by the fantasy of autonomy and self-sovereignty, and that is considered free from race, class and history (Povinelli, 2005, p. 175). However, the figure of the autological subject only becomes legible against its counter-figure termed 'genealogical society'. Discourses of genealogical society 'stress social constraint and determination in processes of subject constitution'; genealogical societies are imagined to determine the lives of its subjects completely. The fantasy of the 'autological subject' derives its power from its mirror image 'genealogical society'. Drawing on Foucault, Povinelli asserts that an 'imaginary of national and civilizational tense' underlies these discourses (Povinelli, 2011, p.27). Figurations of tense work to locate

the truths of some in a past perfect being – 'their already have been' whilst the truth of others is 'judged from their potentiality' (ibid). Thus, only those subjects who are configured as 'autological subjects' inhabit a future tense in late liberal societies; in contrast, subjects perceived to be under the constraint of 'genealogical societies' are considered to essentially belong to the past, even as they still materially co-inhabit the present with other subjects. Of course, 'autological subjects' are equated with liberal, 'Western' subjects, whereas indigenous communities and non-western societies are often taken to be 'backwards' examples of 'genealogical society'. As such, this 'technique' of social tense ascribes a 'real' future only to the liberal, 'Western' subjects.

Povinelli's distinction powerfully illuminates how the concept of *geluk* operates in the context of Zoutkamp. For fishers, the notion of *geluk* often operates as a 'technology of anticipation', that enables fishers to invent and project a hopeful future. Fishers mostly sought to cultivate an unperturbed attitude towards the uneven distribution of luck, and it was generally considered uncharitable to publicly denounce another persons' fortune. However, the usage of the term 'fortune seeker' seemed to be an exception of this rule. I contend that this exception was legitimized and normalized through a configuration of 'social tense' similar to the one Povinelli describes; in Zoutkamp, the meaning of most lucky events was deferred to some point in the distant future, whilst the rightfulness of the fortune of the 'fortune seeker' could be denounced in the here and now, since migrants were already configured in a 'past perfect tense'.

Meanwhile, fishers' own hopeful orientations towards 'the future' did not only endow their actions with a future-facing temporal orientation; rather, fishers also configured *themselves* as subjects of potentiality, in contrast to 'fortune seekers' who were configured in the 'past perfect'. In other words, if luck is considered a 'vital force' that can mobilize the latent potentialities of the present (da Col, 2012), then fishers considered themselves to have a rightful claim to it. While the impending regulations, increasing gasoline prices, and environmental NGOs discussed in Chapter 1 and Chapter 4 all threatened the continuity of the brown shrimp fisheries in 2022, fishers in Zoutkamp stubbornly insisted on the viability of their trade and their future potential. When shrimp fishers accuse environmental NGOs of attempting to eliminate the shrimp fishing industry altogether (see Chapter 3), this accusation is in itself is considered to be a valid critique of environmental NGOs, since people involved in the fishing industry take it as self-evident that shrimp fisheries should be allowed to continue (e.g. de Volkskrant, 2024; de Vries, 2024). In essence, the conditions that threaten the brown shrimp supply chain are configured as temporal setbacks or misfortunes that need to be endured, even when they might be rhetorically framed as critical threats to the fishing industry. Ultimately, shrimp fishers take it as unquestionable that they should

be able to practice their trade, both in the present and in the future; thereby, fishers articulate 'the future' as an object to which they have a natural 'right'.

Conclusion

The ways in which people invoke, imagine, and debate the future as a distinctive discursive formation, reveals much about the commitments, interests, and hopes that inform their everyday practices. In the last decade, ethnographies concerned with hope, uncertainty, or time have sought to unpack how ecological, economic, political, and affective dimensions inform particular ways of imagining the future and one's relationship to it. In the brown shrimp supply chain, the instability of the social, political and ecological formations on which the brown shrimp supply chain depends make the future of shrimp fishing seem highly uncertain for shrimp fishers. Of course, fishers employed different concepts to engage with such uncertainties; the weather might be considered a matter of chance, whereas economic investments might be associated primarily with risk. In this chapter, however, I attended to the notion of *geluk* as foundational to shrimp fisheries in Zoutkamp. The specific configuration of *geluk* or luck implies a hopeful orientation to the world-to-come, yet it has not produced any techniques for controlling or accessing it. However, there are implicit codes of conduct that prescribe a 'right' way to engage with geluk. Showing endurance and perseverance in the face of both 'lucky' and 'unfortunate' events, fishers defer the ultimate truth of these events to the future; however, as long as they adhere to these 'proper' codes of conduct, fishers assume that they are rightfully positioned to adopt a hopeful attitude towards the future. However, other social subjects such as asylum seekers, are denied access to the 'economy of geluk' altogether; migrants are not simply perceived to transgress the codes of conduct that structure geluk's implicit economy, they are denied a position from which they can make a rightful claim towards the future.

In Chapter 1, I wrote how the brown shrimp trade is contingent on both the North Sea and the Mediterranean Sea as infrastructure. The Mediterranean Sea, I argued, is a vital infrastructural component of the brown shrimp trade, since it is enacted as a border that allows for brown shrimp to travel, whilst keeping Moroccan shrimp peelers 'in place'. In Chapter 4, I wrote that public ignorance about the conditions under which shrimp are peeled is a crucial aspect of the supply chain of brown shrimp. However, shrimp fishers do know where shrimp are peeled, and therefore, they are not entirely ignorant about the production process. The usage of the term 'gelukszoeker' might provide an essential insight in the ways in which people in Zoutkamp have normalized the highly uneven modes of production in the brown shrimp supply chain. The ways in which people mobilize the notion of geluk in Zoutkamp reveals

that the right to make a legitimate claim towards 'the future' is unevenly distributed. Whereas fishers consider their own practices to be oriented towards the future, they rely on certain 'others' to be the grounds for this position, against which the potentiality of the future in Zoutkamp can be defined. This chapter showed how a local economy of luck configures some social subjects to be 'outside' of the distributional mechanisms for geluk. This system is not maintained and reproduced in spite of ethical concerns, but rather produced by them, since the economy of geluk is highly moralized, and implies strong ideas about what is morally 'right'. As one of the volunteers in the fishing museum explicitly said, ''many of these migrants come from safe countries like Morocco and Tunisia. They are not really refugees, they are simply fortune seekers.'' This statement implied that this search for fortune was illegitimate, and therefore, that Moroccan subjects did not have the same 'natural right' to the future as people in Zoutkamp considered themselves to have. Such statements arguably indicate how the hardly concealed uneven conditions of production in the brown shrimp supply chain are normalized and naturalized: thus, where Chapter 1 showed infrastructural arrangements produce and maintain such uneven social realities, this chapter has shown how these realities were internalized and justified by subjects like shrimp fishers. However, anxieties over the arrival of migrants in Zoutkamp reflect deep-rooted concerns over what happens when this configuration of the social, based on the enactment of the Mediterranean Sea as an impermeable border, becomes undone.

6. Destiny and the Labour of Hope

‘‘If God wanted all people to be rich, he would have made everyone rich. If God wanted all people to be poor, he would have made everyone poor. But he made some of us rich and some of us poor.’’ Samira remarked as she was sticking labels on bags of frozen seafood. We were in a shrimp peeling factory in Bouskoura, where Samira had been working for more than 15 years. After she divorced her husband in 2002, she had to raise her two sons by herself and started peeling shrimp in this factory. She was quite critical of the work: for instance, she lamented the fact that she did not earn enough to travel home to see her family in Béni Mellal and complained that the work is hard and tiring. If she had the option, she would prefer to stay at home and not work at all. However, Samira supported herself and her two sons on her salary and therefore, her income was indispensable for her family. And despite her complaints, Samira assumed quite a resigned attitude towards her circumstances. After all, she contended, she worked in the factory because it was God’s will.

Such an attitude is quite common amongst the women working in shrimp processing factories that I met. In Chapter 4, I discussed the concerted efforts of a labour rights organization to address working conditions in these factories; however, as I wrote there, few labour actions have been successful thus far. Although many of the women I spoke to could readily list their complaints about the factory, few women expressed an inclination to act on those. Whereas a range of factors might account for their apparent resignation (see Chapter 4), I was struck by how many women evoked the notion of ‘destiny’ in relation to their circumstances. Destiny, however, did not simply serve as an explanatory device that incited straightforward reconciliation with one’s fate. Rather, invocations of ‘destiny’ indexed a careful mediation between action, patience, and forbearance. In this chapter, I will explore how destiny is a constitutive aspect of various forms of labour in shrimp peeling factories in Morocco and show how a subtle relation to destiny in the ordinary practices and activities of shrimp managers and peelers alike becomes constitutive of the production process of brown shrimp.

The ethical considerations informed by destiny took quite a different form from the ethical considerations I witnessed in Zoutkamp. In Chapter 5, I described how a ‘moral economy of luck’ structured fishers’ ethical comportment and informed how they articulated morally charged visions of the future. In Tangiers and Taza, I did not hear of equivalents to the notion of luck; whereas the concept of ‘destiny’ informed ethical sensibilities which people used to interpret their circumstances, ‘destiny’ or associated concepts did not seem to be the substance of a shared moral economy. Therefore, the notion of ‘destiny’ almost never informed moral judgements or statements of other people, even if the importance

of living in accordance with one's destiny was widely acknowledged. Drawing on the forms of ethical self-cultivation inspired by destiny, I argue in this chapter that approaches to 'moral economy' could be sharpened by being more attuned to such 'tacit' forms of ethical comportment, that do not translate in clear-cut moral values or moral sentiments. The notion of 'destiny' urged people in shrimp peeling factories to carefully reflect on their present circumstances but was not linked to any value, sentiment, or emotion in particular, and could incite either action, patience, or forbearance.

The subtleties of destiny as a distinct way of being oriented towards the future became clear to me during my sustained conversations with Hamid, the quality manager of the shrimp factory in Taza where I conducted 3 months of fieldwork. Hamid would patiently describe the importance of the notion of destiny in Islamic thought to me; moreover, his actions in and beyond the factory also revealed how destiny materialized in practice as a constitutive part of his everyday life. The notion of a predestined future is central to Islamic thought: belief in God's divine will and decree (*al-qadar*) is one of six pillars of faith in Islam. This decree states that the future is both ultimately predetermined yet ultimately unknowable, since only God has absolute knowledge. Recent anthropological work has traced how this combination of 'fixity' and 'unknowability' is productive of the 'labour of hope' and as such compels people to act in the world in specific, anticipatory ways (Elliot, 2016; Elliot & Menin, 2018). In this chapter, I trace how the notion of destiny infuses people's everyday practices and orientations in the global supply chain of brown shrimp. Acting in recognition of one's destiny entails a decisively ethical dimension, as it inevitably raises the question of how to live well, in line with a preordained future that is ultimately written by God. Thus, by trying to live a life in accordance with God's divine decree, shrimp peelers and factory managers alike embed the notion of destiny in brown shrimp supply chain. Making sense of the forms of labour that make up the supply chain of brown shrimp therefore requires attending to the ways in which destiny is constitutive of this lively commodity. By understanding their labour and livelihood as a vital part of their preordained lives, shrimp peelers and factory managers in Morocco make the ethical imperative of living in accordance with God's will central to the production process of brown shrimp.

Within the lives of shrimp peelers and managers, destiny is not just an abstract theological concern; rather, destiny materializes in everyday understandings of the future, and informs distinct ways to think about 'fixity' and 'unpredictability'. Understanding one's circumstances, hardships, and 'ordinary events' through the lens of destiny ''powerfully positions divine transcendence in the texture of these events'' (Menin, 2020, p. 515); however, just as the notion of destiny imbues 'ordinary events' with divine meaning, 'modern' notions of destiny are in turn shaped by concrete infrastructures of capital,

contemporary modes of production, and kinship obligations that structure the everyday of workers in Morocco. Shrimp peelers and managers in Morocco often mobilized powerful social critiques to criticize the conditions under which they laboured, yet when it came to their individual experiences and circumstances, 'destiny' inevitably featured as an important narrative element. In their attempts to decipher what was 'written' for them, people contemplated their limitations and possibilities for action, and as such questioned which parts of 'the everyday' were 'malleable' and which were 'fixed'.[49] Their recognition of the social nature of some of the inequalities and injustices they encountered did not replace the possibility that these circumstances were not also divinely pre-ordained; as such, the 'transcendental' and the 'social' were no separated realms but rather existed in 'the same conceptual frame' (Menin, 2020, p. 517). Thus, I contend that attention to the notion of destiny enables a richer understanding of the intersection between labour and ethical conduct in the supply chain of brown shrimp.

Between Fixity and Malleability: Destiny in Everyday Islam

In Islam, the concept of 'destiny' is embedded in the precept '*qada' wa qadar*', or God's divine will and decree (often translated as 'divine predestination' (De Cillis, 2014). This precept constitutes the 6th pillar of faith (*Iman*) in Islam and has been much discussed amongst Islamic scholars and anthropologists alike. Very simply put, '*Qada' wa qadar*' is taken to mean that God is all-knowing and omnipotent and has decreed the outcome of everything that happens in the universe. The decree also assumes that all human lives are 'written' prior to birth, and that everything that happens in life is willed by God and unavoidable. At the same time, Islamic scriptures stress the capacity of human beings to distinguish good and evil and their responsibility to make the right decisions. The tension between this notion of 'predestination' and 'free will' has been a topic of debate amongst Islamic scholars for centuries. Different schools and traditions of Islam interpret these scriptures in distinct ways and have come up with various 'solutions' for this apparent tension.[50]

Most anthropologists have instead focussed on the specific ways in which these discourses are invoked outside the narrow confines of scholarly tradition to grasp how understandings of destiny inform

[49] When talking about destiny, Moroccans often use the phrase 'it was written' or 'it was not written', thereby referring to the idea that God's has 'written' all human lives in advance. Dave Eickelman (1916) has described this notion of 'el-maktub' or 'that which is written' as being central to 'Moroccan Islam' (Eickelman, 1976).
[50] Some schools of thought, such as the Mu'tazila and the Qadariyyah even denied the notion of predestination, as they took it as being in contradiction with moral responsibility and therefore any idea of justice. However, the most prevalent view on predestination and free will is generally associated with Imam Abu al-Hasan al Ash'ari (AD 936) and his Ash'arite school, which defends the position that human beings enact their destiny in freedom, and therefor seeks to conjoin the notion of free will and predestination (De Cillis, 2014); see also (Schielke, 2015)).

certain practices and ways of being in the world. The notion of destiny has recently become central to the anthropology of Islam as there has been a call for an 'anthropology of destiny' (Elliot & Menin, 2018). Destiny, according to Alice Elliot and Laura Menin, is not a 'fatalistic background' against which human lives enfold, but rather informs the ways in which people live and act in the world. Fixity and unknowability are two crucial elements of destiny; the 'fixed' quality of destiny makes the outcome of all human acts ultimately inevitable, whereas its 'unknowability' implies that one never knows for sure what one's destiny will be. The combination of these two qualities is highly productive, as it can spur what Elliot calls 'the labour of hope'. As such, the notion of destiny constitutes a distinct temporal orientation towards the future that is expressed through particular modes of inhabiting the present.[51]

In a seminal article on destiny, Alice Elliot (2016) compared the modes of conduct and practice incited by destiny with Weber's observations on the effects of the Protestant belief in predestination on people's actions. Famously, in *The Protestant Ethic and the Spirit of Capitalism* (1930) Weber argued that the 'Protestant' (particularly Calvinist) belief in predestination urged people to be prudent and work hard in this life, since the worldly success that resulted from this hard work was often read as a sign that one might be amongst the elect in the afterlife (see Chapter 5).[52] Thus, hard work and progress were imbued with moral and spiritual meaning. Elliot takes from Weber the insight that belief in predestination leads people to direct their actions towards a future that 'one hopes is one's own.' (Elliot, 2016, p.493).

In Chapter 5, I invoked Weber's writing on theodicies of fortune and misfortune to understand how the temporal structure of luck informs fishers' ways of engaging with 'the future'. In his writing on predestination, Weber contrasts Protestantism and Islam by underlining that in Islam, all aspects of everyday life are considered to be pre-determined, whereas in Protestantism, only the final judgement is already decided. Weber therefore concludes that Islam is a 'fatalist' doctrine, which precludes the

[51] This call for an anthropology of destiny is grounded in a larger debate in the 'anthropology of Islam' which revolves around the question of how to study the role of Islam in everyday life. Central to this debate is a critique of anthropological scholarship to highlight liberal 'Western' notions of agency, resistance self-determination at the cost of other forms of self-cultivation, such as piety, conformity and subordination, which are more prevalent in the Islamic world (see, for instance Abu-Lughod, 1990; Mahmood, 2004). Saba Mahmood's hallmark ethnography *Politics of Piety* (2005) showcased such an approach, by attending to the forms of self-cultivation practiced by a women's Mosque Movement in Cairo, which challenge 'liberal' concepts of agency. However, critical readings of these critiques have argued that such approaches have amounted to 'too much Islam in the anthropology of Islam' (Schielke, 2010, p. 1); instead, some anthropologists have proposed to study the ambiguities, ambivalences and inconsistencies that characterize the everyday lives of the vast majority of Muslims. Thus, the study of Islam has seen a turn towards 'everyday Islam' (Fadil & Fernando, 2015) and many anthropologists have investigated the actual 'lived experience of being a Muslim', and the often ambiguous and 'messy' reality of Islam 'on the ground' (e.g. Schielke & Debevec, 2012; Simon, 2009; Soares & Osella, 2009; Zyskowski, 2014).

[52] Although Weber distinguishes between Calvinists, Lutherans, Methodists, Baptists, Quakers and Moravians.

laborious search for divine signs in the everyday since every part of life is thought to be predestined. Therefore, he holds that Islamic understandings of predestination fail to incite something similar to the 'Protestant work ethic' in its followers. Weber's rendering of Islam has been much criticized, and Elliot contends that her interlocutors in Morocco perform exactly the kind of 'proactive labour of hope' that Weber ascribes to Protestants. My interlocutors in Morocco similarly engaged with their circumstances in a prospective yet hopeful manner, as I will discuss in later in this chapter; yet it is interesting to compare the anticipatory practices of fishers that I discussed in Chapter 5, to the practices and reflections of shrimp peelers and factory managers in Morocco. In Chapter 5, I wrote that fishers considered 'luck' to be ultimately ungraspable and therefore, impossible to 'summon' or 'incite'. A pervasive 'moral economy' prescribed 'proper' ways of how to behave in the face of fortune in Zoutkamp, and circumscribed who could make a moral claim to something like 'luck'. In contrast, in Morocco people mostly refrained from making claims about the ultimate meaning or 'distribution' of fortune and destiny, since this was known by God alone; therefore, they mostly paid sustained attention to their own circumstances and to everyday events to discern 'right' and virtuous forms of action, as I will discuss in this chapter. Whereas both orientations could be described as 'hopeful', in Zoutkamp, the notion of 'luck' inspired very different forms of action than the notion of 'destiny' did in Morocco.[53]

Elliot considers the 'labour of hope' in relation to the ways in which young female university students engage in premarital encounters with Moroccan men who have migrated to Europe. Elliot shows how women evoke their divinely predestined futures as a motivation to engage in practices of beautification and cautious romantic courtships, since these acts seek to elicit and 'unlock' specific conjugal futures women hope are written for them. By extending the term 'labour' to these practices traditionally considered outside of 'the economic realm', Elliot complicates clearcut distinctions between the 'economic' sphere and the more intimate spheres of kinship and affect, and the ordinary dramas and events that go into making those (see Chapter 3). Thus, even though the concerns of Elliot's interlocutors might seem far-removed from those of the shrimp peelers and managers in Morocco I spoke to, her work is valuable for exploring how labour materializes together with destiny in contemporary Morocco.

Labour and Morality: Debates in Economic Anthropology

Before exploring Elliot's argument further, it is worthwhile to reiterate some of the debates in which her argument is situated. There is a long tradition in anthropology that has sought to explore the intersection

[53] The Darija word for 'luck' is *zhr*, although I did not hear this word being used much in everyday language.

of labour and morality, and the Weberian tradition is only one of them.[54] For instance, some scholars have drawn on Marcel Mauss' essay on the gift to explore the different 'moral logics' between forms of exchange (e.g. Graeber, 2014), whereas other scholars have extended Karl Polyani's notion of the 'embedded market' to show that economic exchanges have never really been distinct from kinship, religion, and political institutions (e.g. Granovetter, 1985). In Chapter 5, I briefly introduced the moral economy as an approach that seeks to bring together analyses of political economy with the anthropology of ethics and morality. However, some of the approaches to 'moral economy' tend to reduce morality and ethics to a matter of 'moral values' and 'ethical sentiments'.[55] The 'turn to ethics' in the 2000s has complicated such a straightforward understanding of ethics, and has multiplied anthropology's ways of engaging with morality; in the 21st century, approaches range from 'ordinary ethics' to virtue ethics to phenomenological investigations of morality (Das, 2015; Laidlaw, 2002; Lambek, 2010; Throop, 2008; Zigon, 2007).[56]

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[54] In fact, as part of these debates, the term 'labour' has been critically scrutinized in anthropology; it has been suggested that anthropologists might move too hastily between the concepts of 'labour' and 'work', and that the term 'labour' might be too Eurocentric and universalizing to apply in a range of diverse, non-Western contexts, embedded as the concept is in a specific history of enlightenment ideas (e.g. Strathern, 1990, see also: Narotzky, 2018). However, given the pervasive spread of capitalist relations across the world, many anthropologists have reinstated the notion of labour as a valuable theoretical concept, stressing both its (historical) specificity and its abstractness (e.g. Bear, 2014; Harvey & Krohn-Hansen, 2018; Narotzky, 2018). Therefore, they contend that the concept of labour still has important heuristic value to make sense of the diverse and delicately situated practices and realities that have become entangled with capitalist relations. Here, I follow Susana Narotzky's definition of labour as 'work effort (human energy expenditure) in its relation to capital, taking into account, however, that this relation has many forms, including many non-commodified and unwaged forms which can be dominant in certain historical conjunctures' (Narotzky, 2018, p. 41).

[55] Although some philosophers and anthropologists (e.g. (Faubion, 2011), drawing on Foucault's *History of Sexuality* (Foucault, 1978) have sought to distinguish between 'morality' and 'ethics' as two different aspects of morals, most anthropologists have used the terms interchangeably and indeed question the value of analytically separating them. I prefer to let different aspects of morality emerge through my ethnographic data, and refrain from categorizing them in terms of 'ethics' or 'morality'. Therefore, I use the terms interchangeably throughout this chapter.

[56] This 'ethical turn' has subsequently refined anthropological engagements with the intersection of morality and markets. Webb Keane (2021) for instance has underlined the importance of understanding the religious dimensions of economic practices: since every economic system incites ethical action of those who take part in it, and since people's ethical judgements are mostly grounded in broader ontological assumptions, often provided by 'religion,' religious principles tend to carry over into 'economic' activities. As Keane puts it, in Islam and many other religious traditions, 'God or the divinities are the real sources of value,' and therefore, religions endow 'seemingly ordinary financial events with indexical connections to the divine.' (Keane, 2021) This observation resonates with my experiences in shrimp peeling factories in Morocco, since both managers and shrimp peelers often made reference to God's will and divine decree in relation to their livelihood. Daromir Rudnycki's and Filippo Osella's edited volume Religion and the Morality of the Market (2017) however, reiterates the important reminder that 'religion' is a contentious category. Nevertheless, they contend that it can be an important heuristic device to make sense of a range of social actions. Taking religious practice to be 'a means both of making sense of the world and providing instruction on how to act ethically within it,' (Rudnyckyj & Osella, 2017, p. 20) they address the question of how market logics and religiously informed moral action are 'assembled' in diverse ways that are 'neither necessary nor pre-ordained' (ibid). The relationship between religious morality and market logics always runs two ways, and their edited volume presents various ethnographic case studies that explore how such processes of co-constitution unfold

Alice Elliot's work on destiny could be considered an example of 'ordinary ethics', which privileges 'everyday comportment and understanding' as the grounds of ethical life (Lambek, 2010, p. 3). Such an approach does not consider 'ethics' to be something discrete that can be studied in relation to other objects of enquiry, but rather attempts to 'explore how attention to the ethical might shift or deepen our understanding of social life more generally' (Lambek, 2010, p. 7). Whereas the ethical is therefore a pervasive dimension of social life, this ethical dimension entails ambiguity, uncertainty and ambivalence. Therefore, proponents of ordinary ethics impel anthropologists to attend to the complexity 'and perhaps inconsistency' of people's ways of acting in the world: most of the time, 'ethical action' does not imply rational or calculative reasoning based on clearly defined moral values, sentiments and commitments. Rather, attention to 'ordinary ethics' requires fine-grained analysis of ordinary forms of comportment and practice instead of large-scale analysis of 'politics' or 'the economy' as such (Lambek, 2010; Das, 2015).

The ways in which my interlocutors evoked the notion of destiny and reflected on it, attuned me to exactly such ways of being in the world. The notion of destiny, in contrast to some other religious notions, was not clearly linked to a set of moral values or sentiments; most of the time, living in recognition of a pre-ordained destiny rather entailed tacit forms of ethical comportment. An acknowledgement of one's destiny surfaced for instance in Samira's matter-of-fact observation cited at the beginning of this chapter that God had created some people to be rich and some people to be poor; and even more mundane expressions such as 'God willing' (*inchallah*) that peppered everyday speech, pointed to the acknowledgement of divine providence. Sometimes destiny was the subject of explicit reflection, for instance in those moments when concerns about the future acutely emerged; but even then, the notion of destiny did also not translate in clear-cut judgements or forms of action. Since forms of ethical comportment inspired by destiny do not let themselves be translated into moral values, sentiments and emotions, the notion of destiny provides an interesting vantage point on 'moral economies', which often take values, sentiments, and emotions to be the 'components' that are circulated or exchanged. Attending to articulations of destiny in shrimp peeling factories might therefore provide a unique perspective on the intersection between 'ethics' and 'labour' beyond moral economy approaches. As became clear to me over my sustained conversations with Hamid, ethical reflection incited by the notion of destiny was often characterized by doubts and insecurities that one might be wrong about one's interpretation of divine signs. Here, I will show how such reflections intersected with everyday forms of labour on the factory floor.

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in particularity, at a specific place and time . My investigation of the ordinary ethics of destiny in the supply chain of brown shrimp seeks to add to this important body of work.

Destiny in a Shrimp Peeling Factory

I came to know Hamid well during my time in a shrimp peeling factory in Taza where I conducted three months of fieldwork. After my initial plans to join the women peeling shrimp in the factory had been rebuffed by the human resource manager of the factory, I resorted to spending my days in the office overlooking the peeling hall. This office was primarily occupied by Hamid, the quality manager of the factory, and Ahmed, the manager responsible for the production process. Occasionally we were joined by Hajar, who was both Ahmed's sister and assistant. As Ahmed did not speak English and as I did not speak Darija or Tamazight, I mostly spent my days chatting to Hamid, who became primary interlocutor in the factory. Even as Hamid had to do the occasional safety checks in the factory, his job did not require his constant attention. Moreover, he seemed to enjoy telling me about his life and sharing his ideas with me. Relations between Hamid and Ahmed were somewhat tense, so I suspected that Hamid secretly enjoyed speaking to me in a language that Ahmed could not speak, subtly showcasing his education.

Hamid was twenty-seven when I met him, and generally quite proud to be a quality manager by that age. In Morocco, where unemployment rates are extremely high (see Chapter 3), many young men struggle to find a secure job. This has far-reaching consequences for social life in Morocco, where many aspects of social life hinge on a man's ability to provide for himself; for instance, when getting married, men are expected to be able to buy and furnish a house, as well as to pay a significant bride wealth (*sadaq*) (see Chapter 2 & 3). As I discussed in Chapter 3, this has become increasingly unattainable for young men, and many young men therefore experience a sense of 'stuckness' or failure to progress in life (See, for instance, Elliot, 2021, Chapter 2). In contrast, Hamid had married young and had a three-year-old daughter. Having grown up in a 'popular' (working-class) neighbourhood in Fes, Hamid liked to stress that he had accomplished all these things through hard and diligent work. When I first met him, he took great pride in his professional achievements. He often worked six days per week, sometimes seven, and enjoyed listing all the things he had accomplished for the company. His attitude seemed to indicate that he thought of himself as a 'self-made man'; however, the way he narrated his accomplishments displayed an intricate balance between individual agency and divine interference. ''Everyone can make it in this life,'' he liked to say, ''because God has made opportunities for all of us. No one's destiny is just bad. However, you need to be able to see the good things in life, to grab opportunities and seize them.''

Hamid's approach to destiny resonates with the 'individualization of moral responsibility so characteristic of modern Islam' that is a key characteristic of the Islamic revival (Mahmood, 2005, p.64;

see also Menin, 2020; Schielke, 2015; Spadola, 2015). Hamid indeed actively engaged with revivalist ideas through online sermons and forum discussions, and in the office overlooking the factory floor, Quran recitations were always playing softly in the background. Hamid disapproved of people who complained a lot but did not do anything to improve their situation. He tried hard to live a pious and righteous life himself; he prayed diligently, carried out his tasks with great care and tried to please his superiors. For him, the notion of destiny did not in any way contradict his agency for engaging in hard work. He held that even though it is always possible to ask God for help, it is also necessary to make your own decisions. He explained this to me with the following example from his own life: ‘‘I left this job once to work for another company. However, as soon as I worked there, I noticed the people were frauds. Many of them stole from the company, they didn't do their job well. I didn't know what to do, so I asked God for help. One week later, I received a call from the managers.’’ He gestured to the office, ‘‘They asked me to return to the company. It was the sign I was waiting for, so I came back.’’ Even as Hamid stressed that everyone's destiny is predetermined, he also underlined that you cannot expect God to solve your problems. Rather, according to Hamid, acting well involves proactively engaging with your circumstances; interpreting the present for divine signs is an action that requires much reflection and training. ‘‘The real meaning of destiny is believing that all riddles in our lives are part of God's plan, whilst not evading responsibility for our actions,’’ he summarized for me.

However, in April 2022, something seemed to change in Hamid's attitude; his mother fell severely ill and was admitted to the hospital. After several medical investigations, it turned out she had a problem with her kidneys and needed urgent surgery. She was admitted to a public hospital where she had an operation. When his mother's condition did not improve afterwards, Hamid had her transferred from the public hospital to a private hospital. There, they found that her kidneys had gotten infected after the previous operation, meaning she would need surgery again. Since this treatment was expensive, Hamid had to borrow money to afford it. Meanwhile, he received little support from the company; the Human Resource manager only granted him a single day off, and no one in the company seemed to pay much heed to his hardships. During this time, Hamid turned taciturn and preoccupied; he didn't want to talk much but told me he prayed a lot.

Then, one day Hamid came into the office with a resolved expression. As soon as Ahmed had left, he confided in me. ‘‘I might quit my job’’, he told me resolutely. I asked him why, and he elaborated: ‘‘I have worked here for seven years now; however, I still earn almost the same as when I started. I never got a pay raise. Last year, I was actually offered another job where I would earn sixty percent more than I do now. I did not take it because I wanted to remain loyal to Mr. Farrid [the director of the company], but

now with my mother's situation, I need to consider my family. I will try to ask for a pay raise first,'' he concluded, ''But if I don't get it... I'll have to leave.'' The next day, I received a message from Hamid on my phone: *Do you think this is a good email?* He had attached his email to the director of the company, asking for a pay raise. By the time I replied to him, he had already sent it off.

However, Farrid took his time to get back to Hamid. Several days went by until someone entered the office to tell Hamid that Amina, the Human Resource manager, wanted to see him. Hamid disappeared for almost an hour, and when he returned, appeared to be frustrated and disappointed. ''Come outside,'' he told me, whilst he fumbled in his pockets for his cigarettes. ''Farrid forwarded my email to Amina,'' he told me angrily as we walked out of the factory, ''and told her to handle my request at the administration here. She made me feel so uncomfortable; she put me under pressure, said they cannot afford a pay raise. However, I told her that in that case, they leave me no choice but to quit my job.'' ''So what did she say?'' I asked, following Hamid. 'She offered me a 500 dirham pay raise.'' Hamid suddenly sounded sad and defeated. ''I said that wasn't enough and asked for 1000 dirham. Amina said she'd get back to me.'' Hamid was clearly on edge, so I tried to distract him by playing some games to pass the time. Thirty minutes later he received a phone call. For some minutes, he talked agitatedly on the phone. ''And?'' I asked expectantly. ''They offered me 700 dirham,'' Hamid answered quietly. ''So?'', I asked, ''did you accept?'' Hamid looked at me blankly. ''What else could I do? I don't have another job; I need to pay my bills.'' He looked away, and I can almost feel his despair. ''So yes, I accepted. This is Morocco,'' he added bitterly.

In the days that followed, Hamid was quiet and seemed rather down. He left the office early and did not display his usual vigour and motivation. However, one day a few weeks later, he suddenly seemed to feel better again. ''I'll just keep looking for a new job, and in the meantime, I will earn 700dH more,'' he told me, almost cheerfully, ''It's really not that bad. It's all part of God's plan,'' he added, 'I'll keep looking for other jobs, and I will keep praying. When the time is right, God will give me a sign.'' When I left Morocco by the end of 2022, Hamid was still working for the company. ''I'll find a new job when the time is right'', he told me when I left, ''if God is willing.'' His initial efforts for finding a new job had waned, however, and when we got back in touch in 2023, he was still working for the company.

Destiny therefore figured in a peculiar way in Hamid's narrative. When I first met him, Hamid always stressed the importance of making your own destiny. However, over the course of my time in the factory, his attitude slowly turned into one of resignation and acceptance of his circumstances. Such a change is reminiscent of Luca Nevola's (2018) discussion of the temporal dimensions enabled by destiny.

Nevola has shown how invocations of destiny can instigate a 'transformative temporalization' of people's narratives of their own lives which enables them to rationalize their past and to 'close' certain events in time. Importantly, both Hamid's decision to take action and his decision to accept his circumstances were motivated by the concept of destiny. Thus, the notion of destiny in itself did not direct him either towards resistance or resignation; rather, the concept of destiny provided him with a sensibility with which to evaluate his present circumstances. Hamid's attempts to live up to certain responsibilities – doing his job well, providing for his family, caring for his ailing mother – were guided by his attempts to find out the 'right' thing to do. However, over time, his ideas about how to live in accordance with God's plans for him, changed; when his attempts to get a proper pay raise or find another job failed, he drew the conclusion that those things must not be written for him in the present.

According to Laura Menin (2020), living in accordance with a preordained future imposes an obligation on Muslim subjects to 'embody' God's will. By reflecting over a prolonged period of time on his situation, Hamid concluded that it must be divinely ordained for him to continue working for the company, at least for the time being. Through this relation to destiny, his concrete responsibilities, such as caring for his mother and providing for his family, were subtly reconfigured; at the same time, it was these very concrete responsibilities that framed how Hamid thought about his obligation to live in accordance with God's plans. Understanding how destiny emerges as a constitutive element of labour and work in shrimp peeling factories therefor requires a closer investigation of how everyday obligations, shaped and reconfigured by concrete socio-economic circumstances, interact with people's understanding of their obligation to fulfil their preordained destiny. This raises the question of how embedded understandings of destiny are reconfigured through protean social obligations of kinship and work in contemporary Morocco.

The Gendered Dimension of Destiny: Destiny beyond the Self

Social obligations and everyday understandings of one's responsibility are of course mediated in important ways by gender, class, and generational differences, and therefore Hamid's situation significantly differed from the circumstances of women labouring in shrimp peeling factories. Hamid took pride in his work and was disappointed when his efforts and achievements were not recognized. As I discussed in Chapter 2, the same is not true for female factory workers, for whom work in a factory was long highly stigmatized. However, many of my interlocutors told me they did not feel any shame or embarrassment about their employment. For instance, when I visited Fadila at her home in Taza in May,

2022, she seemed proud that she had contributed to buying the apartment through her work in a shrimp peeling factory. ‘‘The work is hard, very hard,’’ she confirmed, ‘‘but it is no longer shameful.’’

My experiences of the factory therefore significantly differ from Laetitia Cairoli’s observations in garment factories in the 1990s, where she conducted fieldwork amongst young girls and women. Women working in these factories, Cairoli wrote, adopted discourses and practices that could render the factory as ‘home’: by calling managers and factory owners ‘uncle’ or ‘fathers’, women defused the potentially morally comprising proximity of men (Cairoli, 2011; see also Chapter 2). Even as I heard factory managers in Taza sometimes affectionately refer to workers as ‘sisters’, none of the women I spoke to referred to their managers in such terms. It might be that in the thirty years since Cairoli conducted her fieldwork, social norms have considerably changed; however, most of the women I spoke to were also older than Cairoli’s interlocutors and mostly married or divorced. Therefore, they were perhaps not as strictly subjected to social norms and male guardianship as the young, unmarried girls that Cairoli worked with, since older women are usually less associated with sexuality, and therefore, less strictly guarded and policed (Davis, 1983).

Yet whereas the women I spoke to did no longer consider their employment ‘shameful’ (*hshuma*), they did not take pride in their work in the same way as Hamid did. Women often complained about the long working days, the uncomfortable and cold factory hall, and the low wages. Women were exposed to severe bodily regimes, as factory halls are kept at a chilly sixteen degrees Celsius to keep shrimp fresh. Therefore, women wore fleece pyjamas underneath their white factory coats and rubber boots. They also wore rubber gloves, face masks and hairnets; however, their hands and faces were still exposed. Women were closely monitored all day by ground-floor managers: if they did not wear their factory attire properly, or if they did not peel meticulously enough, or if they talked too loudly, they were harshly reproached. Women worked shifts for up to ten hours, during which they had to disinfect their hands constantly. They were also forbidden from wearing jewellery or henna and had to take meticulous care of their disposable gloves and aprons. These ‘protocols’ were directly exported from the Netherlands and sought to optimize the efficient and ‘sterile’ production of brown shrimp, even though this clearly compromised the wellbeing and safety of women working in these factories (see Chapter 7). In Chapter 7, I describe an incident during which 30 women fainted and were hospitalized after inhaling a new preservative; however, more common discomforts and recurring ailments also affected women. I often heard women complain about their joints because they were sitting for ten hours straight on uncomfortable plastic chairs; many women also said they suffered from arthritis because of the cold.

Moreover, peeling shrimp is still a low-status factory job, even if working in and of itself is no longer 'shameful' (*hshuma*). Leïla Kilani has powerfully depicted the stigma associated with shrimp peeling in her film *Sur La Planche* (2013). In her film, Badia, the main character, can be seen forcefully scrubbing her skin to get rid of the persistent smell of shrimp. Later, she can be seen lying about her job to two other girls, stating she works in a garment factory. Many women told me that they would much rather work in a garment factory than a shrimp peeling factory. ''The work is much nicer,'' Selwa told me regretfully, ''However, unfortunately I lack the skills'' (*ma3ndish l maharat*). Selwa was especially badly affected by the conditions in the shrimp peeling factory. Not only did she suffer from arthritis because of the cold; she was also allergic to some component of the shrimp, which caused an allergic reaction that left itchy red blotches over her entire body. When she had approached the factory doctor, they had prescribed her a cream; however, she could not afford to buy this on a regular basis. When I expressed my shock at her skin condition, with which she had been living for five years, Selwa made a weary gesture and said something my translator struggled to translate, but eventually rendered as ''I hope it will be taken up in the balance'' (*llah yj3lha f mizan lhasanat*).

At the time, I considered her weary gesture and her statement as quite a resigned position. Whilst fully recognizing the low pay, the straining working conditions, and the failure of the factory management to fulfil its basic responsibilities, Selwa did not see any way to change these things in the present. Multiple women had been fired in her factory after complaining to the management, and these experiences kept her from approaching the factory management herself (see Chapter 4). I wrote about Selwa's life story in Chapter 3, which described how she was urged to marry her sister's husband's friend who subsequently abandoned her with her baby daughter as he was imprisoned. Selwa therefore had an intense fear of losing her job, as she was supporting both herself and her daughter on her salary. While in 2022, her daughter was living with her parents, she harboured the quiet hope that her daughter could join her in Tangiers once she was old enough, so she could live with her and go to school in Tangiers. Until that time, Selwa chose to endure her challenging working conditions in the factory, and often retorted to saying ''may God reward me with something good'' (*Allah yjazini b-elkheir*).

Thereby, she practiced a quiet forbearance, and her remark struck me as quite similar to Samira's comment that God decided to make some people rich and some people poor, cited at the beginning of this chapter. An implicit acknowledgement of God's divine decree underlay these remarks, as well as a recognition that God's ways were unfathomable. This recognition was evoked by both Samira and Selwa as a reason to endure their exacting labour conditions, and I contend that such forms of 'endurance' or 'forbearance' are similar to what Saba Mahmood (2005) has described as *sabr*. *Sabr* is a distinctly Islamic

virtue, sometimes also translated as 'endurance', 'perseverance', or 'self-control' (Asad, 2003, p.90). The notion of *sabr* is essential to the cultivation of a virtuous self, which in the Islamic tradition should be achieved through sustained practice and bodily conduct (Mahmood, 2001; Asad, 2003).[57] Thus, rather than emphasizing 'intentionality', 'wilfulness', and 'agency', the notion of *sabr* foregrounds a long-term commitment to virtuous habit. The exercise of *sabr* does not prevent women from embarking on forms of social reform, according to Mahmood, just as the practice of 'self-esteem' (which she takes as the liberal opposite of *sabr*) does not necessarily enable it. Rather, Mahmood contends that both can be different modes of engaging with social injustice (Mahmood, 2005, p. 174).

However, it is important to recognize that the notion of *sabr* posits the relationship between self and world in quite a different way then liberal notions such as 'resistance' or 'empowerment' do. Talal Asad has discussed the relationship between suffering, agency, and sabr with great eloquence in his seminal *Formations of the Secular* (2003), and his vision is worth quoting at length here:

> ''My concern, however, is that our fascination with "resistance" itself comes from larger, supporting ideas. (…) The assumption here is that power —and so too pain— is external to and repressive of the agent, that it "subjects" him or her, and that nevertheless the agent as "active subject" has both the desire to oppose power and the responsibility to become more powerful so that disempowerment —suffering— can be overcome'' (Asad, 2003, p. 70-71).

In Chapter 3, I described some of the efforts of labour NGOs to make women 'unite' to 'stand up' against the factory regime, and I ascribed their ultimate failure to the riskiness that comes from 'knowing' and 'demanding' one's labour rights. However, such a narrative runs the risk of 'romanticizing' resistance, or to 'naturalize' the tendency to oppose such factory regimes. Whereas I do not want to mitigate or obscure the oppressive conditions of these factory regimes, I contend it is also vital to attend to how such factory relations are lived by women through their understandings of divinely decreed destiny and practices of 'forbearance'.

Selwa's statement ''may God reward me with something good'' (*Allah yjazini b-elkheir*) is illustrative in this regard. Selwa hoped her sustained endurance in the factory would be recognized as

[57] As Asad has famously argued, Islam, as a discursive tradition rather than an 'ideology' or 'belief system' does not equate 'faith' with a 'state of belief' but rather, considers faith itself to be 'the virtue of faithfulness toward God, an unquestioning habit of obedience that God requires of those faithful to him (mu'min ̄in), a disposition that has to be cultivated like any other, and that links one to others who are faithful, through mutual trust and responsibility' (Asad, 2003, p. 90)

virtuous, and therefore be rewarded; she was therefore not simply suffering the oppressive conditions in the factory, but rather, inhabited its challenging conditions meaningfully. This mode of inhabiting the world implied a distinct temporality, in which 'the future is not made, but encountered' (Asad, 2003, p. 99). Ammara Maqsood (2023), seeking to go beyond narratives that either romanticise liberal notions of resistance or focus solely on the cultivation of submissiveness as a form of non-liberal agency, has called attention to the practices of forbearance and the work of time in relation to the notion of destiny. Writing about 'the work of time' on the marriages of Muslim women in Pakistan, she considers her interlocutors' pliable modes of conduct not to be a form of 'fatalistic acceptance', but rather a mode of endurance, which carries its own tacit expectations for the future. Underlining the patience implied in such a practice of forbearance, she contends that discussions of destiny should recognize 'the richness of possibilities that emerge with an 'openness' towards time and the work that it does on selves and others' (Maqsood, 2023, p.59).

Susan S. Davis (1983), in her study of women's lives in a Moroccan village, has similarly described 'patience' as one of the most important means for women to negotiate challenging circumstances (Davis, 1983). Maqsood conceptualizes such forms of patience as an attitude of 'openness' which calls for an acceptance of the inevitable while holding open the potentiality of change. Therefore, practices of endurance and forbearance are ''active and charged with an anticipation of change, even as the shape and timing of it remain unpredictable'' (Maqsood, 2023, p.71). For a woman like Selwa, who had few possibilities to actively change her circumstances, practicing such forms of 'forbearance' enabled a hopeful relationship to her destiny despite her current hardships.

Moreover, many women hoped that if they endured harsh factory conditions, they would be able to open up possibilities in life for their children. Fadila, a shrimp peeler I met in Taza, told me that she forbade her daughter from working in the factory with her: ''My daughter has offered to come and work with me in the factory during school holidays. However, I won't let her. The work is too hard. I want her to study, so she won't have to experience anything like this.'' Whereas Fadila's daughter took over a lot of domestic chores like cooking and cleaning, Fadila found the thought of her daughter in a factory unbearable. Meriem, a forty-year-old shrimp peeler from the Rif, agreed with her, and reiterated that she hoped that her daughters would never have to experience the same hardships as her. ''I have told them about my time in the village, just because I think they should know the story. My youngest daughter cried when she heard my story. However, it is important for her to know. I don't want them to marry young. I want them to go to school and get a degree and to do whatever makes them happy'' (*ay haja katfarrah-hum*).

Meriem's oldest daughter wanted to be a professional football player, whilst her youngest daughter wants to study abroad. Meriem supported them both unconditionally. However, she reiterated that it was not always easy (*sehla*) to help her children. ''When we moved here, I was very happy to spend a lot of time with my children, but it was also difficult,'' she told me. ''I wanted my children to study, so that they could have a better future, but my son refused to. I was really afraid he would go astray [*De3 f triq*] but fortunately he found a job and is very motivated now. That's my biggest relief.'' (*llah 3la raha*). Whereas she never had similar concerns about her daughters, she was aware of the complex social and economic restraints that her daughters would be facing when they grew up. Laura Menin (2024) contends that ''broader socio-economic changes in Moroccan society have created not only new possibilities in girls' intimate and social lives but also tensions and contradictions that are difficult to handle'' (Menin, 2024, p. 69). Such contradictions haunted the hopes and fears women in shrimp peeling factories harboured for their children, especially for their daughters. For instance, whereas many women expressed that they wanted their daughters to be educated, girls that are 'too educated' sometimes struggle to find a husband in Morocco, where qualities such as 'youngness' and 'inexperience' are still highly valued in potential brides (Menin, 2024, p. 63). And whereas most women underlined that they wanted their daughters to have more options and opportunities than they had themselves, their daughters often took over a significant part of the domestic labour, by cooking for the family and cleaning the apartment. Meriem contended she did what she could to support her daughters, but that it was ultimately not completely in her hands. ''It's important to accept the things as God gives them. Things happen when they happen [*Hadshi kaywqe3*]'' she summarized.

Thus, Meriem recognized the limits of her own agency to help her daughters. By evoking God's ulterior power in combination with an 'openness' towards time, her story illustrates how a concern with destiny can be extended beyond herself (Maqsood, 2023). Of course, feminist critiques and feminist anthropologies of capitalism have long challenged the 'genderblind ontological individualism' that classically led many economists and social theorists to think about people's actions, desires and motivations in terms of 'self-interest' (Martin, Wig, & Yanagisako, 2021, p. 6). Several decades of feminist thought have shown that whilst capitalist systems often profit from intergenerational forms of care, such forms of care and responsibility are not merely 'exploited' but also often considered to be intrinsically meaningful. Thus, whilst on the one hand recognizing such practices as forms as 'affective labour' (cf. Hardt, 1999), on the other hand feminist theories have sought to destigmatize 'dependence' and to defend 'the right to care' (Borneman, 1997).

Notions of care clearly infused Selwa's, Meriem's, and Fadila's engagements with their divinely preordained realities: what transpired from their stories was a sense that the ways in which their individual future was 'written' could potentially open up a different kind of future for their children. Thereby, their reflections indexed an intergenerational understanding of time and destiny that was meaningful and open towards the work of time. The fixity and unknowability of both their own destiny and that of their children might have prompted patience and forbearance on their part, yet these forms of forbearance were decidedly more 'hopeful' than the efforts of endurance described by for instance Elizabeth Povinelli (2011). Destiny emerged as a powerful concept through which women mediated the rhythms and constraints of contemporary modes of capitalist production.

Still, it is important to note that forms of forbearance exist alongside other ways of engaging with one's labour conditions. Shrimp peelers might rarely resist the factory management, but minor acts of disobedience do occur regularly. For instance, in Taza, women collectively refused to peel a batch of shrimp which they considered too small in 2021; they halted their activities until the management agreed to pay them more. Moreover, sometimes organized labour actions do take place: in January 2022, shrimp peelers in Tangiers took to the streets after a change in the factory organization required them to do more work for less money. They only resumed their activities after the management retracked the organizational reform and promised an (admittedly negligible) pay raise.

In November 2022 I spoke to Sarah, one of the leaders of the protest (see also Chapter 4). She recalled the vindicative atmosphere amongst her and her colleagues as they took to the streets and marched to the Wilaya de Tanger. However, despite their small victory, she has little faith in the institutions which are officially endowed with protecting their workers' rights. Neither did she trust that God would provide for her. When we talked about the issue of social insurance, she defended her viewpoint fiercely; ''The factory does not help us with anything. Neither does anyone else. If someone falls ill in the factory, we take care of each other. People pay for people; that's how things work here.'' Thus, Sarah first and foremost invoked a sense of social responsibility in the factory; when I asked her about her ideas on destiny, she told me that her activism was written for her by God. For Sarah, the underpaid and exploitative aspects of her livelihood were socially rather than divinely determined, and she would argue that she took action against the factory management with God's support and will.[58] This

[58] Sarah's explanation is reminiscent of Samuli Schielke's (2015) account of revolutionaries in Egypt who mobilize the notion of destiny to accept or resist the political regime in a variety of ways. In the conclusion to his wonderful book on hope and frustration after 2011 in Egypt, Schielke discusses how religious and secular protesters mobilized the knowledge that the revolution was preordained by God differently to argue for different political futures. According to proponents of the Muslim Brotherhood, 'God alone' brought down the Mubarak regime, and therefore,

is quite a different sense of destiny than the one articulated by Selwa or Meriem, and it might serve as a useful reminder that different understandings of destiny circulate.

Conclusion

Hamid, Fadila, Selwa and Meriem all had their own reasons to take up employment in a shrimp peeling factory and had different experiences of their labour. However, their work was connected by the cyclical and repetitive schedules of the factory that organized their working days, even if these schedules were punctuated by singular events such as a mother falling ill or a husband losing his job. In addition to the schedules of the factory, Hamid, Fadila, Selwa and Meriem also shared an understanding of and concern with the notion destiny, which expressed the future as 'unknowable' yet 'fixed'. The notion of destiny informed an 'embodied ethical sensibility' through which these workers understood their labour; even though the notion of destiny did not prescribe particular forms of actions or virtues, it attuned Hamid, Meriem, and Selwa to the present in a unique way. Everyday factory labour as well as ordinary events were simultaneously understood as mundane occurrences and as particular manifestations of a divine will, potentially laden with divine signs. Therefore, the 'drama' of everyday life often led shrimp peelers and managers alike to reflect on their circumstances, and spurred attempts to precipitate their preordained futures. Such attempts could take multiple forms; sometimes these involved animated action, as illustrated by Sarah's activism and Hamid's initial efforts to get a pay raise, whereas at other times it incited patience and forbearance, characterized by a quiet yet hopeful resignation to the present. Thus, through a subtle relation to destiny, everyday rhythms of life were always intersected by a tacit orientation towards the future, marked by a divine temporality.

Alice Elliot (2016) has coined such practices that seek to precipitate the divinely decreed future 'labours of hope'. Through such 'labours of hope' directed at preordained futures shrimp peelers sought to embody a divine will, and these forms of labour remade their relation to their labour in shrimp peeling factories. Most shrimp peelers I met directed their 'labour of hope' not only at their own preordained futures, but also sought to precipitate desirable futures for their children. This implied that they engaged with the future on a relatively long-term scale, which also meant that the women I met were often willing to endure challenging labouring conditions to safeguard the possibility for upward social mobility for their children in the distant future.

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the political future of the country must be Islamic; however, secular-oriented protesters countered that both the Mubarak regime and the revolution were God's will, and argued for what Schielke calls a 'revolutionary politics of freedom' that could be enacted with the will of God.

However, whereas factory owners arguably profit from the ethical considerations and moral obligations that underlie women's relation to their work, the labour of shrimp peelers is not simply reducible to abstracted, alienated, or exploited factory labour. As concerns with divine providence animate concrete labour regimes and structural relations of capitalist production, shrimp peeling factories become something other than places structured by contractual rights and obligations. In shrimp peeling factories in Morocco, a moral economy that promotes faith in divine providence has become entwined with a political economy that seeks to extract surplus value from a precariously situated workforce. And while it is vital to understand how this moral economy intersects with a political economy, it is also important to reiterate that an understanding of these 'moral economies' cannot be captured nor grasped by relying on concepts such as 'moral values' or sentiments. Rather, attention to the ways in which ordinary forms of comportment and reflection, mediated by the notion of destiny, shape a distinct morality in these factories is required to understand how shrimp peelers and managers are immersed in factory regimes and particular forms of labour. For many shrimp peelers labouring under exhausting and demanding factory regimes, such forms of ethical comportment are critical to endure and persist in everyday life.

7. Bio-securing Brown Shrimp: Perils and Productivity of Risk

Jacob scrutinized me closely as I took off my jewellery, covered my hair with a hairnet and slid into the slip-on shoes he had provided. I was wearing a white overall that left no part of myself exposed; Jacob was wearing the same, ultra-sterile outfit. I was in the processing factory of Gardema, the largest shrimp processing company in the Netherlands. Jacob was about to give me a tour of the factory, but before we could proceed to the factory floor, we had to consider a host of precautionary procedures. When Jacob approved my attire, we passed through a gate which disinfected our hands and shoes before it let us through. A woman at the entrance desk of the factory floor handed me a special pen to make notes, which contained no loose parts; bringing my own equipment was strictly forbidden. ‘‘These precautions might seem excessive,’’ Jacob mentioned, ‘‘but believe me, they’re necessary. We have experienced the most bizarre things here. People trying to put glass shards into our products, people smearing their excrement all over the walls... as you understand, food safety is a massive concern of ours.’’

When Jacob was showing me around the factory, he took the opportunity to monitor the factory spaces; he checked that the storage units were kept at the right temperature and that employees were wearing the proper attire. As we were walking around, he reproached certain workers for leaving storage boxes on the ground; he also told a woman off for wearing earrings and reported another employee for crossing from the ‘raw side’ of the factory to the ‘cooked’ side (where all shrimp, as a result of being cooked, should be free from Vibrio bacteria). When he thought he caught a whiff of chlorine, he immediately addressed the responsible floor manager, and when he saw a wet patch on the ground, he took a photo to report it later on. ‘‘These might seem like small incidents,’’ he mentioned later, ‘‘but small risks can have huge consequences for a large corporation like ours.’’

In this chapter, I seek to outline the contemporary biopolitics implicit in the practices of ‘bio-securing’ brown shrimp in this global supply chain (cf. Hinchliffe & Bingham, 2008). Understanding how pathogens such as salmonella, listeria, and vibrio emerged as the object of risk management strategies requires a deeper understanding of the long history of foodborne disease and food safety management in Europe and the Netherlands. [59] To account for the perceived ‘risks’ of contemporary practices of food consumption, attention needs to be shifted, in Steve Hinchcliffe’s words, from pathogens to

[59] Of course, these pathogens are not clearly defined actants, nor stable objects; the families of bacteria to which I refer here have been transformed and mutated through particular histories of bio-industrial production and scientific research (see for instance, Hardy, 2015) on the transmutability of the Salmonella family of bacteria). Here, I refer to these pathogens as a shorthand, however, the way these pathogens are named, stabilized and enacted by bio-industrial corporations such as Gardema.

pathogenicity; the larger socio-economical contexts and the webs of relation within which contamination occurs (Hinchcliffe, Bingham, & Allen, 2016). Salmonella, listeria, and vibrio have their own particular histories through which they came to be recognized and singled out as harmful pathogens capable of contaminating seafoods such as shrimp. In this chapter, I focus on how Salmonella emerged as a public concern in the Netherlands, which spurred the emergence of a variety of laws and institutions seeking to safeguard food products such as brown shrimp. This history in turn influenced the ways in which food safety is established and governed in the present through both national and EU-mandated protocols.

However, over the last few decades, the acquisition of certificates and the development of preservatives have also become important ways to make brown shrimp more marketable for Gardema. The management of risk is both a precarious and a productive process, and highlights the double nature of risk as a problem/promise (cf. Paxson & Helmreich, 2014); therefore it is necessary to attend to 'the productive life of risk' (Zaloom, 2004). Yet the implementation and enactment of risk management strategies cannot be reduced to a solely calculative exercise. Rather, as Mary Douglas famously illustrated, the construction of risk is always morally coded, and distinct moral concerns materialize in Gardema's risk management practices (Douglas, 1966). However, critical attention to the ways in which risk is calculated in this supply chain shows that only some lives are considered to be 'at risk' and therefore the target of risk management, whereas other lives are merely mobilized in order to provide protection for those consumers, even if that means they are disproportionally exposed to hazardous chemicals and practices. Thus, radically uneven forms of risk management that are grounded in biopolitical concerns yet valuable for Gardema as a company, have become constitutive of brown shrimp production in 2022.

Risk in the Bio-Industry

In the offices and factory halls of this processing company, the concept of 'risk' was central to most discourses and practices I witnessed. The anthropology of risk has been a proliferating field in anthropology since Mary Douglas showed that risks are always constructed in highly morally and politically charged ways (Douglas, 2002 [1966]). Interest in risk has exponentially increased since the 1990s, when some scholars argued that risks were perceived in new and very specific ways under conditions of 'late liberalism'; Ulrich Beck famously argued in *Risk Society* (1992) that modern societies have evolved into 'risk societies' which are obsessed with controlling the future (Beck, 1992), whereas Anthony Giddens has argued that modern institutions both produce and seek to manage risks (Giddens, 1990). Ian Hacking has shown 'risk analysis' and 'risk management' are relatively recent phenomena,

which he traces back to 1969 and 1995 respectively. Rooted in the ascent of probability and the emergence of insurance businesses, Hacking has traced the particular emergence of the 'risk' concept in Western societies (Hacking, 1990).

Inspired by yet diverging from these philosophical and sociological approaches to risk, anthropologists and STS-scholars have provided ethnographically informed accounts of the perception and production of risks. Many of these studies, heavily inspired by Foucault, have given particular attention to the government of risk (Caplan, 2000; Rabinow, 2007; Rose, 2006; Caduff, 2014). Nikolas Rose has defined risk as 'a family of ways of thinking and acting, involving calculations about probable futures in the present followed by interventions into the present in order to control that potential future' (Rose, 2001, p. 7). Risk-informed ways of thinking therefore attempt to 'colonize the future' by developing calculations and technologies of anticipation that seek to pre-empt potential catastrophes (ibid). Such forms of thinking are especially prevalent in contemporary bioindustry where the risk of disease never seems far off: outbreaks of avian influenza, hoof-and-mouth disease, and various swine fevers have shown zoonotic disease to be a particularly unsettling side-effect of bio-industrial modes of production (e.g. Fearnley, 2020; Lakoff, 2017; Wallace, 2016). Scholars studying ways of coping with these 'modes of uncertainty' have distinguished between 'risk technologies', 'preparedness technologies' and 'event technologies' to account for different forms of governing the unknown future, which all construct the future in their own way (Samimian-Darash & Rabinow, 2015; Samimian-Darash, 2013).

Within bio-industrial corporations, risk technologies are used as technologies of governance that make potential threats to production quantifiable and calculable (e.g. Keck, 2020; Porter, 2019). The ways in which such risks are articulated have important social and material effects. For instance, Steve Hinchcliffe has shown that bio-industrial corporations construct risk in spatial and territorial ways, as the pathogen-ridden 'outside' world is conceived to threaten a sterile and pure 'inside'. Risk is therefore epitomized by specific pathogens and articulated through concepts such as transmission; such constructions of risk underplay the relational aspects of disease (pathogenicity) and thereby shift attention away from those structural aspects of bio-industrial production that increase the pathogenicity of certain diseases. Instead, certain objects or organisms get singled out as the origin of disease and become the target of elaborate risk management strategies (Hinchcliffe, Bingham, & Allen, 2016). Such risk management strategies subsequently shape contemporary modes of production and forms of human and non-human sociality (Tsing, 2013). Often, they entail what Heather Paxson has called 'microbiopolitics'; the social regulation of microbial life, which operates by singling out certain microbiological agents and prescribing appropriate behaviours and practices with regards to these microbes that enable or derail

human infection, inoculation and digestion (Paxson, 2008, p. 17). Attempts to control food safety risks involve elaborate regimes of government which promote particular forms of living with microbes that are considered to minimize the risk of food-borne disease, both in spatial and in temporal terms.

The Emergence of Salmonella: A History of Food Safety in the Netherlands

However, the relational nature of pathogens such as Salmonella and their management requires an understanding of the particular local histories through which they came into being. In the Netherlands, the emergence of food safety as a public health concern has been shaped by a contentious political history in which various corporate and public institutions competed to establish 'ownership' over the management of food safety. Whereas most studies of biosecurity and food safety have focussed on public actors such as the FDA, the Dutch food industry has a long history of private self-regulation, rooted in private inspection services initiated by business organizations to fight the spread of cheaper, adulterated counterfeit products. These early business interest organizations were subsequently transformed and integrated in steering groups and sectoral organizations that significantly influenced food safety regulations in the Netherlands (van Waarden & Havinga, 2013).

Food safety became a widely recognized public concern in the 19th century, when the number of contaminated food products on the market increased under the pressures of industrialization. At the same time, knowledge about food safety was increasing, and the first nation-wide public health interventions emerged in the Netherlands. Outbreaks of typhoid and cholera were common in the Netherlands during the nineteenth century, and generally ascribed to poor hygienic conditions and sanitation (van der Woud, 2021). However, whereas Louis Pasteur's well-documented contributions to the germ theory of disease were published in 1861, bacteriological explanations of disease outbreak were controversial during the late 19th century. It was not until 1880 that the German bacteriologist Karl Eberth described the Salmonella Typhi bacillus as the likely cause of typhoid, and even then, the role of the bacillus in the transmission of the disease was originally highly contested; microbiology was an emerging science seen by many as fraud with uncertainties, and many public health officials favoured a sanitary and environmental approach to disease over a microbiological method (Hardy, 2015). General 'environmental' approaches managed to reduce the number of cholera outbreaks drastically during the second half of the 19th century, both in the Netherlands and elsewhere; as a result, bacteriological explanations for cholera and typhoid were initially of minor importance (van der Woud, 2021; Hardy, 2015).

However, even before Salmonella bacteria were recognized as important actants in the occurrence of foodborne disease, food safety had already become a public health concern in the Netherlands in the second half of the nineteenth century.[60] Food production became more industrialized and therefore less subject to forms of social control, which characterized previous forms of food distribution and circulation. In 1883, the first Inspection Service of Goods (Keuringsdienst van Waren) was established in Rotterdam, quickly followed by other regional inspection services. These institutions were mostly concerned with safeguarding the 'quality' of goods, where quality was taken indicate a 'true' product rather than a counterfeit (e.g. 'real' milk rather than diluted milk, 'real bread' made of pure flour rather than flour mixed with sand; see van Waarden & Havinga, 2015). However, the inspection service also concerned itself with eliminating decaying and potentially dangerous foods from the market. Only after the First World War, when many adulterated food products emerged on the market, food quality became governed by the Dutch Product Inspection Law (1919), which sought to establish a framework for securing food safety; it was passed due to the intensive lobbying of business interest associations, which sought to eliminate fraudulent food producers from the market (van Waarden, 1992).

From the 1940s onwards, animal carriers became a widely recognized object of concern in the discussion of food safety. The emergence of veterinary epidemiology effected a shift from epidemiological approaches to bacteriological approaches to foodborne disease, and the recognition of the role of the Salmonella bacillus in seafood-related gastro-enteritis had important consequences for the development of public health institutions and food chain management in post-World War II Europe (Hardy, 2015). After the second world war, the Dutch State Institute for Public Health was rapidly expanded. The Netherlands had witnessed some severe typhoid epidemics in the 1944-1945, and therefore, eradication of Salmonella infections became a primary concern for the State Institute of Public Health (*Rijksinstituut voor Volksgezondheid*, RIV). The Veterinary Inspectorate of Public Health was established and sought to address Salmonella infections by regulating the use of dead livestock and animal remains in animal feed (for instance, by regulating the use of undersized brown shrimp as fodder).

However, after the Dutch Famine of 1944-1945, the Dutch state had also become highly concerned with food sovereignty, and the 1950s saw the start of the industrialization of both the agricultural industry and fisheries in the Netherlands. Whereas the Dutch fleet underwent major technological innovations, the rapid industrialization of the Dutch agricultural system, spearheaded by Sicco Mansholt, did not only transform technologies of production, but also resulted in the emergence of

[60] However, Anne Hardy has shown how up until the 1890s, seafood was generally not considered a host of harmful pathogens since seafood was considered to have 'purifying' qualities.

powerful agricultural organizations (Westerman, 1999). These business interest groups had significant influence in the public sphere, and agricultural organizations opposed extensive surveillance and interventionist policies put forward by public health officials and lobbied for self-regulation of the industry rather than top-down governance (Haalboom, 2015).

The agricultural industry could count on the wide support of the Dutch state and the public since the wartime famine of 1944 had spurred a broadly supported commitment to make the Dutch food industry as self-sufficient as possible.[61] Its concrete claims of agricultural development and economic viability therefore ultimately trumped the Public Health sector and its rather abstract concerns about public health.[62] This resulted in the passing of 'the little Salmonella bill' (1965) (*het salmonellawetje*), which promoted the self-regulation of the industry over external control. Even as the environmental policies adopted in the 1980s curbed the self-regulatory power of the agricultural sector, the maintenance of food safety was largely regulated by industrial corporations rather than the state.

At the same time, new strains of Salmonella developed in Europe due to the intensification and industrialization of the agricultural sector (Hardy, 2015). From the 1950s to the 1970s, Salmonella infections amongst livestock rapidly increased, a development which closely followed the industrialization of the bioindustry. Upon its discovery, typhoidal strains of Salmonella had been the most hazardous, yet from the 1950s onwards, 'a whole new ecology of Salmonella was being established' (Hardy, 2015, 183). The industrialization of the beef cattle industry resulted in high-density farming conditions and meant that cattle had to be transported over greater distances to centralized slaughterhouses; both these developments massively increased the pathogenicity of the disease. The rapid expansion of the broiler industry which relied on imported eggs and day-old chicks soon made Salmonella endemic within the British poultry flock, and imported feeds which contained animal protein spread Salmonella in the poultry, pig, and beef industry alike. Poorly regulated waste-management in the emerging bio-industrial complex further exacerbated the Salmonellosis problem. Non-typhoidal strains of Salmonella, such as Salmonella Typhimurium and Salmonella Enteritidis developed and mutated under these conditions and soon replaced Salmonella Typhi as the most prolific strain of the bacteria. Moreover,

[61] Ironically, the industrialization of the agricultural sector in the Netherlands largely depended on foreign imported animal feed; moreover, most of the Dutch agricultural products were in fact exported. See (Westerman, 2023 [1999]) and Haalboom, 2017).

[62] See the excellent dissertation *Negotiating zoonoses: dealings with infectious diseases shared by humans and livestock in the Netherlands (1898-2001)* by Floor Haalboom (2017) for a detailed and informative history of how the Salmonella problem was debated and contested by the agricultural sector and the public health sector in the Netherlands.

due to the high usage of antibiotics in the bio-industrial complex, many strains of Salmonella developed antibiotic resistant genes or the capacity to produce ESBL-enzymes which could break down antibiotics such as penicillin and cephalosporin (Hardy, 2015; Barrow, Jones, Smith, & Wigley, 2012).

These new strains of Salmonella turned out to be notoriously hard to manage, since seemingly healthy animals could still carry the bacteria. Moreover, most strains of Salmonella could survive under extreme conditions, which made the bacteria hard to detect and eradicate. Whereas the industrialization of the agricultural industry took different forms in the Netherlands and in Britain (in the Netherlands, the pig and poultry industry expanded more rapidly than the cattle industry, for instance), the Netherlands also struggled with an increase in Salmonella cases. Fisheries did not contribute to the emergence of new strains of Salmonella, but they were affected by the circulation of these bacteria. Unregulated waste-disposal of the agricultural industry and the recycling of waste-products into manure led to environmental contamination, for instance through discharge of insufficiently treated sewage into coastal water (Don, Ammini, Nayak, & Kumar, 2020). Moreover, Salmonella had increasingly crossed over from farms to wild birds such as seagulls, which could in turn transmit it to seafood and fishing vessels. Thus, whereas Salmonella is not indigenous to shrimp and other seafood, the fishing industry still increasingly had to grapple with the increased risk of Salmonellosis. In fact, seafood was seen as so vulnerable to contamination, that manager Jacob once remarked to me that ‘‘as soon as people get food poisoning, and any seafood is around, you know in advance what will get the blame’’.

The Dutch fisheries sector has never been as well organized as the agricultural sector; still, the strong lobby of the ‘green front’ described above significantly shaped the management and governance of the entire Dutch food industry. In the Netherlands, the Dutch Food Safety Authority (*Nederlandse Voedsel- en Waren Autoriteit* or NVWA) is part of the Ministry of Agriculture, Fisheries, Food, Security and Nature (whereas in many other countries, food inspection services are part of Ministry of Public Health). Therefore, the Dutch Food Safety Authority has had strong ties with the food industry since its initiation.[63] Within the Dutch Food and Authority Inspection (after this: NVWA), a close collaboration between the food industry and the state has resulted in a general approach that promotes self-regulation over top-down controls. Of course, incidentally the NVWA intervenes in food production practices, as was the case in the ban on the home peeling of brown shrimp, described in Chapter 1. Whereas home

[63] This fits in a general pattern of Dutch policy networks, which can be characterized as a form of meso-corporatism (van Waarden, 1992), a form of governance which favours cooperation between state and business. Frans van Waarden (1992) has shown how the inclusion of business interests in the formation and implementation of policy and state interventions has a long history in the Netherlands, dating back to its days as a mercantilist republic.

peeling had officially been illegal before 1983, its prohibition was not enforced until the 1990s; however, after 13 elderly people died in a care home after eating a contaminated shrimp cocktail in 1983, the NVWA banned home-peeling for good, thereby significantly affecting both the modes of production of brown shrimp and the ordinary lives of thousands of migrant workers involved in these forms of production.[64] Processing companies like Gardema had to reinvent a significant aspect of the production process of shrimp and had to bear responsibility for the hygiene conditions and biosecurity protocols in the factories abroad that were established as a result of the NVWA ban.

The Productive Life of Risk: Managing 'Modern' Salmonella

Due to this emphasis on the self-regulating capacity of the food industry, Gardema had to develop sophisticated testing equipment to monitor the presence of Salmonella on their products. Jacob considered risk management to be at the centre of his job, and often underlined that other actors in the supply chain were not as meticulour about ensuring food safety as his company was. ''Look at these charts,'' he told me as we were sitting in his office, ''they represent how well food safety is insured throughout the supply chain.'' The charts he showed me on his desktop screen tracked how fishing ships, fishing auctions and processing plants like Gardema contribute to maintaining food safety by looking at three markers: approval (mainly EC approval through an EC number), certification (which include a range of certificates recognized by the GFSI) and participation grade (a rather abstract measure that seeks to quantify the additional efforts a given organization makes to establish 'food safety').[65] ''As you can see, the situation is quite dramatic,'' Jacob mentioned as he scrolled through the list, which was full of red-marked columns. ''Fishers will do the bare minimum to ensure food safety; they only have EC approval, and that's it. Fish auctions are not much better. Look, in the case of brown shrimp, they do not have any certifications, nor do they show any form of participation. That means it all comes down to us.'' He moved his mouse over the last column in the charts, which were marked bright green. ''As you can see, we are certified, we comply with internationally recognized protocols and our own participation is very high. We do everything we can to assure we provide a safe product.''

It seems, therefore, that Gardema takes the risk of food contamination by pathogens such as Salmonella, Listeria, and Vibrio very seriously, and takes on the primary responsibility of navigating these risks within the supply chain. Indeed, much of Jacob's job involved implementing protocols and

[64] Later it turned out that the cause of death could be traced to one of the chefs in the care home, who was suffering from dysentery; in fact, the shrimp in question were not brown shrimp but a tropical species.
[65] The Global Food Safety Initiative, a 'coalition of action' founded by the Consumer Good Forum, an organization consisting of food manufacturers and retailers (GFSI, 2025).

measures to ensure food safety within the factory. As the ‘poison mixer’ (gifmenger) of Gardema, Jacob was also in charge of developing preservatives that could optimize the preservability of brown shrimp. However, some of the risk management strategies outlined by Jacob slightly puzzled me. For instance, he mentioned he had personally written the hygiene code for shrimp cutters, an 18-page document which outlines the proper forms of cleaning and maintaining shrimp cutters to minimize the risks of contamination on board. Nevertheless, Jacob seemed to be surprisingly cynical about this code: ‘‘I doubt that anyone actually reads it,’’ he mentioned. ‘‘No fisher actually adheres to this code. For instance, whenever fishers find maggots on board, they will just buy an HG spray to get rid of them. That is absolutely not permitted by this code, since they are working with a food product.’’ When I asked what it would take to make fishers adhere to the code, he shrugged. ‘‘Some people have told me I should make the code shorter and easier to read; however, the point is, everything needs to be covered in the document.’’

In 2022, Gardema ran standardized tests for all products that entered their factory. During my fieldwork in 2022, Salmonella bacteria were detected on a batch of brown shrimp from Zoutkamp. The company was able to trace the origin of these shrimp to an association of four fishers that had just started their own independent business in 2016. These fishers sought to sell their product locally, under their own brand name; however, they did not have the facilities to package their product, and therefore outsourced the packaging process to Gardema in exchange for a small fee. Jacob was visibly upset by the discovery of Salmonella, since the shrimp had already been distributed, they had to be retracted from shops and wholesalers. The product had a tracking code associated with Gardema, and therefore he was concerned this would result in reputational damage for the company. ‘‘I do realize what happened here,’’ Jacob irritably explained to me, ‘‘these fishers tried to copy our specific preservation methods. However, the trick to using this preservation method, is keeping shrimp preserved for a full week by minus two degrees. That way, if Salmonella is present, it will remain active and subsequently starve. If you freeze the shrimp at a lower temperature for a shorter amount of time, the salmonella will simply become inactive, but will become active again once you defrost your product.’’

However, despite his frustration, it was not in Gardema’s interest to share their preservation methods openly with other businesses; the chemical and technical expertise the company has developed does not only seek to heighten food safety, but also works as a profit-generating system that has added to the competitive position of the company in the global seafood industry. In fact, the company has gone through much effort to establish this competitive position. Jacob joined Gardema in the 1990s and recalls that ‘‘it was a mess’’. ‘‘The prevalent strategy of the company was to conceal problems rather than to

solve them. Preservatives that were known to be carcinogenic were added to brown shrimp without a second thought. At that time, the company was facing lawsuit after lawsuit,'' he remarked. Jacob was trained as a biologist, but soon built up a meticulous knowledge of legal protocols and EU regulations. Upon joining the company, he ordered a thorough restructuring of the production process: ''By relying on such strategies [as the ones he mentioned before], you will always remain a small fish. I made it clear to the company that, in order to become a significant market player, you need to play by the rules and acquire certifications. Big retailers expect you to be certified.'' Jacob thus pushed for the acquisition of various certifications, amongst which the MSC label.

Around the 1990s, the landscape of food governance significantly changed on a larger scale as well. International regulation became more important: as food supply chains became increasingly globalized, national public agencies could no longer monitor the entire food chain. Moreover, in the Netherlands, like in many other countries, funding for public organizations such as the NVWA was cut back so that other systems were put in place to ensure food safety. Auditing firms emerged that were hired by both public and private organizations to check the hygienic conditions of food production. The endorsement of HACCP (Hazard Analysis and Critical Control Points) guidelines is illustrative of this process, as it was in the 1990s that the HACCP system became widely established in the food processing industry. The first HACCP guidelines had been developed as early as 1971, but only in 1993, after several large food production companies implemented these guidelines, the WHO endorsed the system and multiple big supermarket chains started requiring adherence to HACCP from their suppliers. The implementation of a HACCP food safety management system then became an EEC mandated requirement of food production companies in 1995. Although the HACCP systems vary between different food industries, the guidelines for good hygienic practice are always developed by the food industries, after which they need to be approved by governmental authorities, such as the European Commission (Weinroth, Belk, & Belk, 2018).

From the 1990s onwards, third parties such as retailers and audit firms became significantly more involved in the management and enforcement of food safety, thereby rearranging the distribution of risk in supply chains like the supply chain of shrimp. Their involvement resulted in the emergence of (international) certifications for the food industry. Retailers such as large supermarket chains collaborated to formulate certain standards for their suppliers, and labels such as GLOBAL G.A.P., BRC (British Retail Consortium) and IFS (International Featured Food standard) emerged as a result. These standards often set higher norms for hygienic food production than public institutions such as the NVWA, and retailers now often require these additional certifications from their suppliers. Thus, the acquisition of

certain labels and standards became vital to food industries in order to retain their customers; moreover, the acquisition of these certifications makes their products more marketable.[66]

According to Jacob, it is large food production companies themselves now that define and set the standard for hygienic food production. ‘‘It’s corporate platforms that safeguard the quality of our food products’’ he once told me, ‘‘they are really the frontline. The government is only a fragile control apparatus. For instance, they do not have the means to safeguard the quality and authenticity of our products: there are shrimp that closely resemble brown shrimp, but these are caught in China. We could just buy those and sell them for a profit. The only thing that ensures this won’t be able to happen, is the product certifications established by the corporate sector.’’

The fish sector is represented by the *Visfederatie* (Fish federation) in the national steering group Private Assurance Food Chains, (*stuurgroep private borging voedselketens*), a project initiated by the Ministry of Agriculture and Fisheries to promote effective self-regulation of food chains in the Netherlands. This steering group, composed of private actors from within the fishing industries, represents all fisheries in the Netherlands and is endowed with investigating food safety within the fisheries sector, and making suggestions for improvement. In practice, this regulation often entails the acquisition of certifications which provide criteria and markers for safe and reliable processing. For instance, in a document provided by the Fish Federation in 2020, the committee notes that some well-known certifications, such as IFS and BRC, in fact do not over all important risks; these certifications do not require processing plants to have cleanable walls and sufficient hand washing stations. Therefore, the steering group recommends the acquisition of additional, private certifications, such as GLOBAL G.A.P. and the BAP aquaculture standard. The group can propose for these certifications to be recognised by the NVWA. Since these standards often promote high-tech processing equipment and technologies which are expensive to acquire, the installation of these standards puts large processing factories in a privileged position, as it becomes almost impossible for smaller businesses to enter the market.

[66] In 2022, the WRR (the Scientific Council for State Policy) recognized four regulatory parties concerned with the realization of ‘food safety’ in the Netherlands. First parties consist of corporations themselves; second party regulation consists of regulations enforced and agreed by trade partners, such as supermarkets and bulk buyers; third party regulation entails corporate certifiers, consumers’ organizations, industry organizations or NGO’s organizers; and fourth party regulation entails the government. In practice, they recognize that all four actors cooperate in order to enact ‘food safety’.

Profitable Pathogens and the Production of Value

It has often been noted by scholars working on food safety that the developments since the 1990s in the global food industry have resulted in a strange paradox: on the one hand, food products are generally 'safer' than ever (when 'safe' is taken to denote 'pathogen-free'); on the other hand, consumers are more and more aware of the potential risks of consuming food. However, as described above, for companies such as Gardema, risk has a distinctly productive side. As described above, in the Netherlands, the food industry has not simply been restricted by public health officials but has played an active role in determining how to live with microbes such as Salmonella, Listeria and Vibrio. The emergence of food safety certifications like Global G.A.P, BRC, and IFS, whilst prescribing specific ways of how to secure sites of food production, additionally also plays a key role in adding value to brown shrimp as a food product.

However, certifications are not the only technologies through which risk is managed; rather, a host of protocols and precautionary measures characterize the process of processing shrimp. According to Jacob, what allowed Gardema to become a high-profile food processing company was being highly rigorous and professional about food safety. Therefore, Jacob went to great lengths to acquire certifications, develop food safety protocols, and provide employee trainings. Moreover, by constantly monitoring and surveilling the factory floor meticulously, Gardema would continue to be recognized for living up to the highest standards of ensuring food safety by auditers and retailers alike. Therefore, within the factory, Gardema sought to 'contain pathogens by deploying devices that enclose humans and animals in specific, sterile, and segregated spaces' a method that Javier Lezaun and Natalie Porter have described as key to contemporary forms of dealing with threats of zoonotic disease, exemplified by the emergence of the One Health agenda (Lezaun & Porter, 2015, p. 100). Gardema's methods also mirror what Steve Hinchcliffe (2015) has called an obsession with contamination (rather than configuration) within current bio-industrial complexes, where pathogens and transmission events are singled out as the culprits of disease, rather than the larger structures of bio-industrial production which can often be said to increase pathogenicity in general (Hinchcliffe, 2015).

Of course, for Gardema, there is an important economic incentive for conceptualising zoonotic disease this way. By locating food-borne disease in distinct pathogens, rather than in the web of (bio-industrial) relations between human consumers, brown shrimp and pathogens, the company does not only draw attention away from the larger infrastructures of shrimp production which arguably, in some ways, increase the pathogenicity of foodborne disease; the company also manages to turn these pathogens, once

singled out and identified as dangerous, into a source of value (or in Jason Moore's words: a 'commodity frontier' (Moore, 2015).[67] According to Jacob, the company has built up a great reputation for providing top-quality preservatives, many of which have been developed by Jacob himself. Gardema provides different preservatives for different suppliers; for instance, one large supermarket chain in the Netherlands does not want benzoic acid in their products, but prefers their products to be treated with acetic acid. ''Of course, they pay extra for that,'' Jacob mentioned. Additionally, some supermarkets prefer preservatives to be listed as an E-number on their labels, whereas other supermarkets want the actual name of the preservatives on the ingredient list. Gardema provides different packaging for all these products.

Under such contemporary regimes of biosecurity, brown shrimp are multiple: they emerge both as a 'natural' resource, as a 'lively commodity' (Barua, 2017), as a potential host for harmful pathogens, and, once processed, as a 'safe' and qualified food product. Following Cousins, Pentecost and van Helden, I contend that biosecurity management enables a 'chain of conversions' in this supply chain (cf. Cousins, Pentecost, & van Helden, 2018). Drawing on Jane Guyer's (2004) discussion of Bohannon's spheres of exchange, the authors adopt the definition of a conversion as something that ''adds, substracts, or otherwise transforms the attributes of exchange goods in ways that define the social direction of future transactional possibilities'' (Cousins, Pentecost & van Helden, 2022, p. 420). Over the course of the 20th century, brown shrimp were transformed from a 'natural resource' into a global commodity, sold and distributed to a wide European market.[68] The discovery and subsequent management of Salmonella bacteria, alongside other pathogens, also effected a significant ontological change; brown shrimp were turned into a potential host of harmful pathogens that could cause disease and severe discomfort and thereby became a new vehicle for the productive reproduction of risk. New strains of virulent Salmonella bacteria emerged over the second half of the twentieth century, alongside growing public concern over food safety, yet the emergence of food safety certifications and quality hallmarks enabled the conversion of shrimp from a potential food hazard into a safe and qualified object. By enacting a host of protocols, hygiene measurements and biosecurity controls, Gardema placed itself firmly in the centre of this series of transformations; thereby, the company could derive surplus value from the conversions of value that

[67] For instance, by increasing the risk of more resilient strains of pathogens; see (Wallace, 2016; Hardy, 2015).
[68] Of course, the representation of freshly caught shrimp as a 'natural' resource is already a specific construction that relies on a certain nature-cultural dichotomy and imbues certain qualities on brown shrimp as somehow 'outside of culture', 'pure', or 'wild' (see also: Swanson, Lien, & Ween, 2018). Given that brown shrimp as they are found today are themselves made through several socio-natural histories of fishing and seascape management, I do not seek to adopt such a depiction of brown shrimp as 'natural' here; however, I am interested in how shrimp are *enacted* as somehow 'natural' by stakeholders in this supply chain.

brown shrimp, as an ‘ontologically unstable and multiple’ commodity undergo (cf. Cousins, Pentecost & van Helden, 2022, p. 422).

As the acquisition of certifications transformed brown shrimp from a potential source of pathogens into a safe and qualified food product, companies like Gardema attempted to inscribe values such as ‘quality’ and ‘cleanliness’ into the flesh of brown shrimp. As a part of these processes, risk was remade as a phenomenon that requires expert knowledge and highly refined technologies in order to be controlled. Contemporary articulations of risk in the Dutch food industry have thereby also rearranged the distribution of social and technological capital in this supply chain, as ‘expertise’ and legitimacy have become redistributed. Private actors involved in the steering group described above consider risk to be their area of expertise and as a ground for corporate intervention. These new articulations of risk have not only reduced the influence of the state on controlling zoonotic disease but has also reinforced the power of large food processing companies at the expense of smaller food producers.

However, corporate actors do not only recognize biosecurity risks, but rather perceive risks to be multifaceted. In the brown shrimp supply chain, processing companies consider legal and social risks too. As a quality, compliance and development manager, Jacob was in charge of dealing with most of these; whereas his role as a quality manager put him in charge of ensuring the freshness and safety of his products, his role as a compliance manager involved ensuring that the company remained within the legal boundaries of the law and did not run into any legal liabilities. As a development manager, Jacob oversaw various expansion and innovation projects running at the company, which required him to anticipate future market fluctuations. All these different branches of the shrimp trade involved a host of different risks, ranging from food contamination to legal prosecution to financial setbacks. Sometimes, these risks were traded off against one another. This became clear to me when Jacob told me about the hygiene code he had written, and mentioned that he did not think that fishers actually read this code. Jacob prioritized the liability risks of not having a proper hygiene code in place over the effectivity of the actual existing code, for instance; rather than adjusting the code to guarantee optimal hygiene on board, he stressed the importance of having everything ‘covered,’ thereby revealing the importance of managing bureaucratic risk over the risk of microbial infection.

The concept of risk was therefore central to Jacob’s conception of what it means to be a good manager. Jacob highly valued professionalism and stressed the importance of having meticulous knowledge of both the bio-chemical side of food preservation, and of legal protocols and regulations. ‘‘Many people have an opinion on preservatives for instance, but often they are just saying stuff without

knowing what they are talking about,'' he mentioned, ''They absolutely do not know the juridical rules of the game. Whereas actually, people did put some thought into making certain regulations.'' It is up to Jacob to navigate these debates, and to make sure that the company complies both with legal regulations and consumer demands. Doing this well can create productive opportunities for the company. ''The most profits can be made on the margins of the law,'' he told me, ''developing methods that are just about legal.'' He mentions a recent innovation of the company. ''For instance, we just expanded our factory in Morocco, as we are starting to make shrimp skewers now. We marinate the skewers in acetic acid first, which functions as a preservative. However, since acetic acid is officially registered as an ingredient rather than a preservative, we can label the skewers as 'fresh'''.

The transformation of risk into value has long been noted by anthropologists of finance. Caitlyn Zaloom (2004) has called attention to the 'productive life' of risk amongst financial traders on the Chicago Board of Trade. Risk-taking both defines the infrastructure of financial future markets and is essential to making of personhood on the trading floor. Other anthropologists working in financial institutions, such as Karen Ho (2009) and Sylvia Yanagisako (2002), have also outlined the (highly gendered) ways in which risk becomes productive of creating certain managerial selves. Even though Gardema, as a food processing company, is a very different kind of corporation, much of Jacob's job consists in limiting the risk of food contamination, whilst keeping it alive as a spectral presence; for if the risk of food contamination was completely eliminated, Gardema would lose its competitive advantage over other companies.

The management of risk is therefore a complex process that is both a precarious and productive, highlighting the double nature of risk as a problem/promise; yet risk management strategies cannot be reduced to a solely calculative exercise. Rather, whilst fully embedded in the managerial culture of supply chain capitalism, distinct moral concerns materialize in risk management. The enactment of risk management strategies, moreover, makes clear that moral concerns are unevenly distributed. Contemporary risk calculations only consider some lives to be 'at risk' and therefore the target of risk management, whereas the lives of others, like shrimp peelers, are mobilized to produce 'protection' for those under protection, even if that means they are disproportionally exposed to hazardous chemicals and practices.

The Moral Dimension of Risk Management

Whereas Jacob's job mostly consisted in the well-performed risk management, he did not consider himself to be relentlessly chasing profits for the company. ''We actually do consider the interests of the hundreds of fishers, thousands of peelers, and millions of consumers that we are dealing with,'' he once told me, ''Sometimes, a company like Gardema is depicted as a *zakkenvuller* [a pocket filler, e.g. greedy actor trying to make a profit off the back of others]. However, we do not make that much profit off brown shrimp at all; within Gardema, only about 10 people are concerned with brown shrimp, but it's our other products which make the largest profits. We could easily do without brown shrimp as a product, yet we try to take the interests of fishers, peelers and consumers at heart.'' Of course, such statements should be taken with a grain of salt; however, Jacob's story does illuminate how he thinks of himself as a corporate actor. When I asked him for instance why the industry made all these efforts if there is little profit to be gained, he told me: ''mostly 'good employeeship'. This is what I was hired for by Gardema, so I try to do my job as well as possible. Also, I do actually care about things such as sustainable fisheries. Personally, I support the initiative to have a MSC certificate for fisheries. And I like having achieved something for the company, and having my name attached to it. It's nice to be able to plant your flag somewhere.''

Jacob's ideas about himself therefore seems to correspond to what Foucault termed the 'entrepreneur of the self'. In his lectures on the birth of biopolitics (1978-1979), Foucault argued that neoliberalism does not only materialize in institutions, forms of government and market regulations, but also affects a change in subjects' relations to themselves. Under (American) neoliberal conditions, Foucault argues, most subjects do not see themselves as caught up in the cogs of the larger economy; rather, the neoliberal homo œconomicus considers himself an entrepreneur, 'behaving in the economic field—in the form of competition in terms of plans and projects, and with objectives, tactics, and so forth' (Foucault, 2004, p. 175). Thus, neoliberalism produces subjects that consider the self as a site of improvement, optimalization, and investment. Subjects internalize values integral to neoliberalism, such as competition, progress and self-improvement. Quoting Hayek, Foucault implies that neoliberalism has successfully become a 'general style of thought, analysis, and imagination' (Foucault, 2004, p. 219). Understood in these terms, for Jacob, working in the highly corporate context of Gardema, doing his job as efficiently and 'successfully' as possible is both a professional achievement and a project of self-realization.

Managers like Jacob were essential to the operation of the brown shrimp supply chain in 2022. However, there is a shadow side to the development of high hygiene standards, meticulous protocols and

food certifications which seek to produce brown shrimp as a 'pure' and 'qualified' product. Whereas such measures seek to meet contemporary (European) consumer demand and are productively employed by processing companies to add value to their products, workers positioned far from the compassionate gaze of liberal governance suffered from the extensive measures to which they were subjected. Many shrimp peelers in Morocco complained about the cold of factory halls, the rigorous forms of control to which they were subjected, the low pay and long hours, as well as the general discomfort of their work. The factory floor was generally kept at sixteen degrees Celsius, which meant that all women coming in were always wearing fleece pyjamas underneath their sterile overalls and aprons. Still, working ten-hour shifts at this temperature was experienced as challenging by many women. In all factories I visited, managers patrolled the factory floor to check that women were always wearing their factory attires appropriately. Women were often responsible for cleaning their own aprons and overalls, and had to take meticulous care of the cheap, disposable gloves they were provided with. At some point, I witnessed a fight in Taza between the management and some shrimp peelers, which erupted after the factory had run out of smaller-sized gloves. Therefore, women were forced to wear gloves that were too large which made it much harder, and therefore slower, to peel shrimp. This affected the livelihood of peelers directly since they got paid a piece rate. The management refused to listen to their complaints, however, since protocols prescribed that women had to wear gloves at all times, and no other gloves were available. Neither were the ground floor managers by contract entitled to adjust women's piece rate in proportion to their decreased peeling speed.

More serious incidents also occurred; in Chapter 6, I described how Selwa, a shrimp peeler from Tangiers, showed me the eczema which she had developed from contact with the shrimp. Whether the eczema was caused by preservatives on the shrimp or something else she did not know; when she approached the factory management, they referred her to the factory nurse, who prescribed her a cream she could not afford. She had been living with eczema, which extended in large, red blotches over her entire body and gave her terrible itches, for five years by the time I spoke to her. In addition, the labour rights NGO in Tangiers with which I worked, had recorded several cases of kidney failure amongst shrimp peelers, although they could not specify the cause of this.[69] They also recounted in incident in 2010, when 30 shrimp peelers fainted in a shrimp peeling factory and had to be hospitalized. They attributed this incident to the inhalation of preservatives, which they considered one of the most pressing problems women in shrimp peeling factories face.

[69] See for instance also (Kierans, 2020) and (Nading, 2023) on chronic kidney disease of non-traditional cause (CKDnt).

Although it is mandatory for all foreign companies in Morocco to provide their workers with social insurance, which would give them a right to free healthcare, few factories provide this in practice (see Chapter 3). Whereas it is commonplace for factories to detract one dirham per kilo (+/- 0.8 cents) from women's salary for this insurance, in many cases insurance turns out to be non-existent when women need it or attempt to check with the management whether they are registered for insurance. Some factories only provide insurance for women that manage to peel a certain minimum quota of shrimp every month.[70] This means that, whereas women are disproportionally exposed to the hazardous techno-chemical environment of the factory, there is no sufficient protocol or regulation in place to protect them from the risks to which this exposes them. This highlights the partial and uneven nature of risk management strategies in the supply chain of brown shrimp, which only serve to protect some lives from the risks associated with industrial food production.

The implementation of biosecurity measures in Moroccan factory spaces thus seeks to extend 'corporate networks in the name of 'security at home'' (Hinchcliffe, 2012, p.537). Priscilla Wald (2008) has outlined the implicit temporal understandings that underlie such forms of risk management. Analysing media coverage on the 2003 SARS outbreak, she contends that the risks of globalization are often framed as emerging from putting 'primitive' spaces into proximity to 'modern' ones, for instance when 'traditional' forms of backyard poultry raising are seen to threaten 'modern' forms of bio-industrial production. As such, emerging infections are conceived as resulting from 'the danger of putting the past in (geographical) proximity to the present' (Wald, 2007, p. 7). This framing allows for the conceptualization of 'global networks' and 'technology' as the solution for impending zoonotic diseases, rather than their source: biosecurity measures, imposed by Western corporations on distant sites, are seen as 'modern' interventions that seek to mitigate the dangers emerging from 'less modern' or 'traditional societies' (Wald, 2008, p.8). Such an implicit temporal framework was certainly present in Jacob's narrative of the process of outsourcing peeling labour; according to him, it was due to Gardema's efforts of transporting technological equipment and biosecurity knowledge that factories in Morocco could meet the European standards for food production.

The risk management strategies enacted by Gardema therefore highlight how the sites of brown shrimp production are understood through a double social tense, similar to the one described in Chapter 5

[70] This quota is for instance 102 kilo per month in the factory of Sea Tail, which requires women to be working full-time for about 22 days per month; Sarah, one of the shrimp peelers to which I spoke, mentioned that she did not know anyone who had ever made this quota.

with regards to ‘luck’. Figurations of tense work to locate the truths of some in a past perfect being – ‘their already have been’ whilst the truth of others is ‘judged from their potentiality’ (Povinelli, 2011, p. 27). Thus, only those subjects who are configured as ‘autological subjects’ inhabit a future tense in late liberal societies; in contrast, subjects perceived to be under the constraint of ‘genealogical societies’ are conceived as inhabiting a ‘past perfect’ sense, ‘an already have been’.

For Jacob, corporations like Gardema actually ‘make’ society, as evidenced in his statement that ‘‘corporations are really the frontline.’’ When I asked him why he chose to work for Gardema, he told me that ‘‘initially, I saw my future in doing research; but many people asked me when I was going to do something back for The Netherlands Inc. And over time it has become clear to me: change in society is made possible by the corporate sector. Not by the state, definitely not by universities.’’ Thereby, Jacob ascribed to corporations like Gardema a unique ‘potentiality’, or a ‘future tense’ (Povinelli, 2011). In contrast, in his view Morocco is exemplary of a ‘genealogical society’, constrained by tradition, social conventions, and practices that he would characterize as ‘not of this time’. According to Jacob, Gardema’s operations in Morocco were actually beneficial to the country, as he contended that they helped to ‘‘connect Morocco to the world market.’’ Therefore, Moroccan society is posited in a ‘past perfect’ tense, as not autonomously capable of partaking in ‘modern’ forms of global economic production. Only when a company like Gardema extends its production process to places like Tétouan or Tangiers, these places are ascribed a place in Jacob’s ‘progress narrative’. Thus, in this understanding, risk-thinking is not only a symptom of ‘late modernity’; rather, risk-thinking (as evident in ‘modern’ forms of biosecurity and risk management) is considered to be an essential element to participate in ‘modernity’ by people like Jacob. Thus, risk-thinking and its accompanying practices of risk management indeed constitute an attempt to ‘colonize’ the future by delegitimizing practices that do not neatly fit into European ideas of ‘biosecurity.’

The configuration of social tense in the supply chain of brown shrimp also enables managers like Jacob to justify their factory in Morocco as a social ‘good’: Jacob often implied that Gardema’s corporate presence in Tétouan was actually beneficial for Moroccan workers (specifically) and Moroccan society (in general), since it enabled Morocco’s participation in global trade networks. Even if he acknowledged that the company wasn’t exactly a philanthropy (‘‘We are certainly not Santa Claus’’, he remarked once), he considered the expansion of Gardema’s activities in Morocco to be ‘good’ for Moroccan peelers by providing a livelihood and ‘reasonable’ conditions for working. For instance, Gardema operated a nursery in their factory (which was closed during the COVID-19 pandemic), whereas some other Dutch shrimp processing companies have provided literacy classes to their workers. These practices can be

characterized as a form of 'humanitarian government' that Didier Fassin (2012) has highlighted as characteristic of contemporary liberal society. Complicating narratives that merely highlight the 'calculative' aspect of neoliberal forms of government, Fassin contends that 'modern identity is indissociable from the conjunction of affects and values that regulate conducts and emotions toward others and define a respect for human life and dignity' (Fassin, 2012, p. 4). These 'humanitarian' affects and values translate into a distinct form of 'humanitarian government' which entail distinct modes of governing human lives, and therefore entail a certain 'politics of precarious lives' (Fassin, 2012, p.5). However, such forms of government, whilst seeking to alleviate suffering in the name of a 'universal' and 'self-evident' good, often both obfuscate and perpetuate deep structural inequalities between lives. As many scholars writing on corporate social responsibility (CSR) have pointed out, when corporations are expected to take up certain social responsibilities that were traditionally ascribed to the state, certain forms of 'ethical entrepreneurship', such as providing literacy classes or free childcare, can work to enhance the reputation and image (including the self-image) of corporations whilst perpetuating structural forms of exploitation (see, for instance: Dolan & Rajak, 2016). By engaging in certain forms of 'humanitarian practice' corporations such as Gardema therefor establish a certain 'moral authority'whilst deriving surplus value from the lives of those workers whose 'suffering' or hardships they allegedly alleviate.[71]

This imaginary only 'works', however, when Moroccan shrimp peelers are considered subjects in need of 'Western' liberal goods such as literacy or 'freedom to work', rather than structural benefits such as social insurance or basic healthcare. By configuring the former as essential attributes to participate in a 'modern' global economic world order (which is the only world order managers like Jacob recognize as existing in a 'future tense'), the company frames their involvement in Morocco as 'corporate social practice'. As such, the company engages in a form of arbitrage that derives value from a 'moral economy' that considers the alleviation of European-defined forms of 'suffering' a laudable moral objective: certain liberal moral goods (literacy, the opportunity to work and to develop oneself as an entrepreneur) are traded for (highly underpaid) labour power from Moroccan women. As is characteristic of 'humanitarian government' as Fassin has described it, workers in Morocco were not allowed to articulate their own needs, desires or goals; rather, these have been defined by corporations and their humanitarian social imaginary in advance.

[71] In the case of Gardema, the company often highlights their 'moral authority' by comparing their factory to Moroccan shrimp processing factories where working conditions are allegedly less regulated and therefore worse.

Although the conditions in shrimp processing companies in the Netherlands were generally better than those in Morocco, workers in these factories also were exposed to stringent regimes of control. One fisher in Zoutkamp told me that factory work in Gardema used to be well-paid, and that workers would get paid extra for working in the cold storage. Since the bankruptcy of Gardema in 2014, however (see Chapter 2), this changed; when I spoke to fisher Simon in the summer of 2022, he told me that most factory workers from Zoutkamp had sought employment in other factories, since the salaries paid by Gardema no longer sufficed to support a family. The factory now relies almost exclusively on migrant labour and throughout the factory floor, notes and rules are displayed in English, Polish and Dutch. In 2022, most workers were from Eritrea and sent to Gardema's factory by employment agencies. Whereas labour migrants in the 1970s and 1980s were employed directly by companies, in 2022, corporations almost exclusively worked with employment agencies to keep wages low and legal liability for workers to a minimum (Bouazza, 2022). These employment agencies are in charge of providing both work and housing for labour migrants, which puts these workers by default in a precarious position. Even as these workers on paper enjoy the same rights as all other workers in the Netherlands, in practice, they are often highly exploited; living in crowded apartments under appalling conditions, in constant fear of being fired and becoming unemployed and homeless at the same time. Deliberately vague employment agency constructions and lack of enforcement perpetuate these often-illegal conditions of exploitation. Migrant workers working for Gardema rely on infrequent public transport to start their work, which includes jobs such as cleaning the factory floor or packaging shrimp in the middle of the night. They are often housed under decrepit conditions in small villages in the countryside. While the jarring conditions in which labour migrants employed in the Dutch food industry have been highlighted time and again (e.g. Roemer, 2020; Bouazza, 2022) changes to improve their conditions have been slow and insufficient. Since labour migrants occupy an ambiguous place in the social imaginary defined by forms of humanitarian reason (neither 'victims' in need of saving, nor subjects fully participating in Dutch society), their lives at the margins of social life often become 'invisible' to the rest of the Netherlands.

Conclusion

Thus, the ways in which risk management strategies have developed and materialized within the supply chain of brown shrimp have significant consequences for the infrastructure of the brown shrimp supply chain. The agricultural sector has long had significant influence in Dutch politics, and in recent years, the work of peeling and processing shrimp has been transformed through the implementation of sterile, segregated and highly monitored spaces that seek to 'purify' conditions of production (Lezaun & Porter, 2015). Such contemporary ways of monitoring production processes are inscribed in the guidelines and

standards provided by public and private certifications which emerged from the 1990s onwards as the primary means of ensuring food safety. Certifications are said to be in the interest of the consumer and are often retail-driven inventions that are widely recognized to ensure quality and food safety. Whereas these certifications claim to decrease the risk of food contamination to a minimum, they do not serve to protect everyone equally: risk is highly unevenly distributed, and migrant workers in the Netherlands and women in shrimp peeling factories often face disproportionate exposure to chemicals and hazardous labour conditions. Therefore, whereas risk management strategies are enacted to protect those groups which are considered worthy of protection (such as consumers), other actors are exposed to hazardous factory conditions, with largely undocumented and unknown effects for their health and safety.

However, for a manager like Jacob, the successful execution of risk management protocols is a professional success that produces both social and economic value. Such an approach to risk management is informed by a distinct moral economy, characterized by a double social tense. Corporate involvement in Morocco is framed as a 'social good', since it provides liberal moral goods such as the 'ability to work' as well as additional liberal values ('emancipation from financial dependence', and 'literacy', for example). Thereby, Gardema extends not only its corporate network, but also, an imagined 'future tense' towards subjects and sites in Morocco which are configured in the European gaze as 'traditional' and 'constrained' (and thereby stuck in the 'past perfect' (Povinelli, 2011)). Enacting such forms of 'corporate management' is not only part of the company's strategy for enhancing a certain 'moral authority'; rather, these practices are carried out by managers like Jacob as part of their individualized project of moral self-realization, defined by professionalism, entrepreneurship and self-improvement. Risk management, as a way of conceptualizing and governing an uncertain future, therefore operates under a distinct social imaginary that is characterized both by humanitarian values and particular projects of self-realization. Therefore, the moral economy of risk-thinking which stretches across the brown shrimp supply chain, materializes and governs uneven regimes of living in late liberal conditions of bio-industrial food production.

Conclusion

At the start of October 2022, right at the end of my fieldwork in the Netherlands, I visited Garnalen Pelcentrum Blok, a shrimp peeling centre in Lauwersoog that had developed the first profitable shrimp peeling machine in the Netherlands. Albert Heijn, one of the largest supermarkets chains in the Netherlands, completely switched to buying brown shrimp peeled by these machines in 2022. I was excited to see these machines for myself, especially since I had been asked over and over why shrimp were not peeled automatically. However, apart from generic references to the difficulty of such an enterprise, I did not have a very compelling answer, and I was curious to see the machines and their inventor that might change the supply chain of brown shrimp for good.

I was received by Michiel Blok, a middle-aged man with round glasses and a soft voice, in an office above the production hall. Michiel had founded this company together with his father and his brothers, and he immediately took me to a window from which I could see their machine in operation. Looking out over the production hall, I saw a small conveyor belt on which shrimp were transported, one by one, into the machine; at the other side of the machine, which was the size of a small dining table, shrimp rolled out, readily peeled. However, Michiel did not let me study the machine close up; ‘‘It is much easier to copy something than to develop it,’’ he smiled, ‘‘we try to keep the mechanism of our machines top-secret.’’ Michiel, his father, and his brothers, had worked on the machine for over forty years. ‘‘When they forbade home-peeling in the 1980s, we thought that automatic peeling would naturally be the future,’’ Michiel told me. ‘‘We thought we were going to be rich.’’

However, things worked out differently. When Michiel’s father and his sons began to work on the machine, they had to start from scratch: no such machine had been built before, and neither Michiel’s father nor his sons had any technical qualifications or experience. In fact, Michiel’s father had been a shrimp fisher himself until he began a small-scale shrimp processing business in the 1970s. In Michiel’s words, they relied on *boerenverstand* (‘farmer’s common sense’) to develop the mechanisms and prototypes of what would become the shrimp peeling machine. While they developed an initial model early on, the returns were low, whilst the machine was costly to operate. Since all shrimp differ slightly in size and shape, it was hard to assemble a machine that was able to peel all shrimp. Moreover, even for those shrimp that they could peel, it was not easy to find a sales market; most retailers chose to buy from large processing companies, since they were afraid that if they would purchase their shrimp elsewhere, those processing companies would refuse to supply other fish to them too. Eventually, their business went bankrupt in 2001, and all sons sought employment elsewhere.

Yet despite these setbacks, Michiel's retired father kept working stubbornly on the machine in his garage, and eventually he made a break-through with his son in 2011; they had significantly improved the peeling technique and started to look for potential buyers of their machine. After a failed collaboration with a processing company in 2014, a major shipping company bought fifty percent of their business in 2020, and invested a large sum of money to employ an engineering business that came to replicate and sophisticate the machines. In 2022, the company had already built 31 machines, and was in the process of adding 9 more; they processed around 70 tonnes of shrimp every month. ''We might finally start earning some money now,'' Michiel remarked, ''and I have to say it is nice to be in calmer waters, after years of financial precarity.''

In spite of these promising developments, it is hard to predict the exact trajectory of the company. Although the investments in Garnalen Pelcentrum Blok are significant, it is not the first time that a revolution in the shrimp trade is announced: since the 1980s, every five years or so, the advent of the shrimp peeling machine has been declared (Schouten & Verhey, 2016). However, large processing companies like Gardema still do not consider automatic peeling to be the future. Various theories circulate as to why that might be the case; it has been argued that the adoption of peeling machines could give fishers more freedom to peel their own shrimp, and that processing companies therefore try to avoid this at all costs (see Schouten & Verhey, 2016). However, according to Michiel, the company simply does not consider these machines efficient enough. ''Of course, sometimes I wondered: when will we get a call from Gardema? Yet I think they still consider the returns of these machines too low. At the moment, we are almost as efficient as shrimp peelers in Morocco,'' he told me. ''However, a big disadvantage is that we cannot peel frozen shrimp yet. That means we cannot peel the surplus of shrimp from the high season in the low season, which means we depend on more expensive and lower-quality shrimp in the low season.''

Therefore, whether automated shrimp peeling will be the future, is hard to predict. Whil Michiel hoped that increased efficiency of shrimp peeling machines would eventually make shrimp peeling in Morocco redundant, Gardema was expanding its factory in Tangiers in 2022, so that the company could start processing other seafood products there as well. Thereby the company betted on the socio-political stability of the country, which does not always seem to be guaranteed: in 2025, large-scale protests organized by young people shook Morocco, and urged the government to adopt a set of social reforms. However, whereas such political developments might jeopardize the processing process of brown shrimp, the supply of shrimp cannot be taken for granted either. In 2025, the Dutch government introduced a

decommissioning scheme aimed at reducing the shrimp fishing fleet by at least twenty-five percent. At the same time, in 2025, the far-right government also awarded a shrimp fishing permit to shrimp fishers for twenty-five years, an unprecedented decision that undid all previous negotiations around fishing grounds and fishing hours between environmental NGOs and shrimp fishers. All these developments highlight the multi-facetedness of the supply chain of brown shrimp and the complexity of forecasting its future. Whereas the supply chain has been remarkably adaptable in the face of significant upheavals, foreseeing major disruptions or events in the production process has been notoriously hard.

Plural Temporalities: The Specificity of Uncertainty and the Uneven Distribution of the Future

However, such complexities did not stop different stakeholders from speculating about the future of brown shrimp fisheries in 2022. In this thesis, I have sought to illustrate how actors in the brown shrimp trade invoked, produced, and contested the future in myriad ways, drawing on the materials and discourses at hand to cement certain discursive formations of the world-to-come. I showed that shrimp fishers like Simon and Thomas often employ the notion of 'luck' when engaging with the future. 'Luck' is a peculiar concept to engage with uncertainty since although it cannot be invoked or manipulated, it does require 'proper' forms of behaviour that require distinct forms of self-cultivation. Fishers strive to remain unperturbed in the face of unevenly distributed luck, but deny 'outsiders' like precarious migrants, the right to luck altogether. In contrast, shrimp peelers and floor managers in Morocco often articulated concerns with the future through the notion of destiny. Whereas destiny cannot be manipulated or changed either, destiny also requires subjects to behave in a righteous way, which materialized in sustained attention to one's circumstances, and the careful mediation between action, patience, and forbearance. I showed how Hamid sought to act in accordance with his destiny when his mother fell ill. Whereas he initially sought to change his life around, he eventually considered his circumstances to be divinely ordained, and decided to continue working in a shrimp peeling factory. From yet another angle, corporate managers in the Netherlands engaged with the uncertainty of the future through the notion of 'risk'. In the supply chain of brown shrimp, risk is constructed as a problem and as a source of profit, I showed; moreover, the unequal distribution of risk showcased how lives are unequally valued throughout the supply chain. Manager Jacob considered risk management to be at the heart of his job and pursued this as both a professional and a moral project.

These different forms of engaging with the future were mediated by longer histories of kinship, infrastructure, and the state. While these histories are constitutive of the supply chain of brown shrimp, actors in the brown shrimp supply chain also reinvent and re-enact kinship, infrastructure, and the state

through their diverse labour practices. I have argued that it is important to attend to the different ways in which the future is expressed by actors in this supply chain, since these discursive formulations sustain the various labour practices, material infrastructures, and business strategies that compose the brown shrimp supply chain in 2022. Different stakeholders are highly invested in the future of the brown shrimp supply chain and fervently debate how the supply chain might develop. For instance, fishers had deep concerns about the continuity of their trade in 2022, whereas environmental activists were worried about the marine ecosystems of the North Sea and Wadden Sea. Meanwhile, shrimp peelers often cherished the hope that working in a shrimp peeling factory might help them achieve some social mobility and security amidst precarious economic circumstances, while a processing company like Gardema sought to actively shape the future through careful risk management and innovation.

The diverse ways in which people articulate and engage 'the future' are especially important in relation to the question of social and political change. As I showed in this thesis, concerns around social inequality and environmental degradation are embedded in distinct forms of temporal reckoning that are not shared by everyone; as Jane Guyer (2007) has written, there is always a 'historical specificity' to uncertainty, even is uncertainty is often coined as a universal condition of life. In Chapter 1, 2, and 4, I have shown how particular histories of social, ecological, economic, and political changes have produced the conditions for producing, circulating and trading brown shrimp in 2022, and the gendered and racial hierarchies on which these production processes depend. I have shown that the reproduction of the supply chain of brown shrimp depends on the ways in which people try to secure the continuation and reproduction of specific forms of life, and their associated forms of sociality. Many debates over the 'right' organization of the supply chain of brown shrimp could be characterized as debates over how to produce a particular kind of future, premised on the (re)production of a particular forms of life.

However, the reproduction of some forms of life can impede the emergence of other forms of life, and anthropological literature on the future has shown that the right to make claims to the future is highly unevenly distributed (e.g. Hage, 2001; Povinelli, 2011). Whereas shrimp processing companies such as Gardema could be said to attempt to control and 'colonize' the future, fishers in Zoutkamp consider fortunate futures to be a scarce resource that was increasingly evading them. Rather than seeking to 'colonize' the future, they attempted to lay claim to a share of it, even if they thereby denied others such as precarious migrants the opportunity to do the same. Meanwhile, shrimp peelers in Morocco often had limited resources to bring about their desired futures, and therefore mostly retorted to tacit forms of endurance instead. Thereby, the 'capacity to aspire' is unevenly distributed in this supply chain, since actors have to draw on the material resources and conditions afforded by their labour to articulate

particular hopes and aspirations for the future (Appadurai, 2004). Rather than simply considering the structure of this supply chain to be a mechanism for the unequal distribution of economic resources, I propose to understand this arrangement as a mechanism to allocate a sense of the future and the possibility to 'accumulate life' in radically uneven way (Narotzky, 2022). In that sense, this supply chain could be considered a 'machine for time' that assigns a sense of potentiality to some, whilst leaving others to endure their present circumstances without a clear idea of what shape 'hope' might take.

Therefore, the form and content of 'hope' in this supply chain is significantly shaped by its material arrangements. Hope's uneven distribution raises the question of what social critique might be, in this moment of social and ecological crisis. Elizabeth Povinelli (2011) has written about the 'persistence of hope' under conditions that seem to foreclose any prospect of flourishing. Following Deleuze, she considers hope to be an 'affect' or a 'force of existing' that does not represent anything and is therefore not reducible to its content or to a certain set of ideas. Under certain material conditions, Povinelli writes, persevering is a miracle ''against the play of social forces'', that can be discerned as ''another mode of being in the face of those forces'' (Povinelli, 2011, p.109). However, observing the strenuousness of persevering for precarious social subjects like her indigenous interlocutors, Povinelli asks what form critique might take in the present, when material conditions radically ''reduce being'' for certain social subjects, and render their struggle to endure increasingly lethal and exhausting. Rather than promoting solutions to make such forms of being less lethal and less exhaustive, Povinelli contends that it is essential to attend closely to the forms that enduring and ''the will to persist'' might take under conditions of 'late liberalism'.

Whereas the ''struggle to endure'' was decisively less exhaustive for most of my interlocutors, I take from Povinelli the question of what critique might become in the present, and what it means to ask about the conditions for making the world 'otherwise'. I have suggested that it is essential to pay attention to the multiple forms of life that have emerged alongside the distributed sites of production of the brown shrimp supply chain, and the particular modes through which people seek to endure, persist in, and reproduce these forms of life. However, while these forms of life are shaped by the material conditions of brown shrimp production, the invention, production, and circulation of certain futures was not completely determined by the structures of this supply chain. Non-human actors such as brown shrimp and other marine species introduced an element of unpredictability in the production process of brown shrimp, and forced both powerful actors, such as corporate managers, and more precarious actors, such as fishers and shrimp peelers, to adapt to their ecological rhythms. Thus, despite conditions of social and ecological degradation, new 'forms of life' continue to emerge amidst 'industrial ruins' (Tsing, 2015). Moreover,

despite the unevenly allocated capacity to ‘make a living’, all people I met sought to ‘project’ life forward one way or another and held certain aspirations for something like the ‘good life’. Such ‘future aspirations’ did not simply inspire strategic forms of action, but also informed various forms of ethical reflection and consideration. For instance, shrimp fishers did not make decisions based on strategic anticipations of the future, but rather sought to engage in socially and morally appropriate ways with the presence of ‘luck’; in a different way, for shrimp peelers and managers in Morocco, the present was often imbued with the idea of divine providence, which did not necessarily compel them to act in certain ways, but provided an ethical sensibility with which to reflect on their circumstances. And while the concept of ‘risk’ is often invoked as the most calculative way to produce and engage with ‘the future’, there was a distinct moral dimension to risk management, as I showed in Chapter 7.

The fact that such articulations of the future entail a clear ethical dimension, does of course not mean they should by lauded or celebrated, since the moral economies on which they are premised might still produce abject forms of social exclusion or ecological harm. However, it does mean that the production of particular futures, as distinct discursive formations, should be taken into account when considering critiques of the brown shrimp supply chain and the conditions of possibility for organizing it otherwise. Throughout this thesis, I have described the attempts of both social justice activists and environmental NGOs to reform the supply chain of brown shrimp and its conditions of production. These organizations projected utopian ideas of what the supply chain of brown shrimp could be when it was more ‘just’ or ‘sustainable’. However, their ideas often failed to gain traction amongst shrimp peelers and shrimp fishers who did not share such projections of ‘the future’ and the associated forms of action required to bring these about. As I showed in Chapter 4, the emancipatory language of ‘resistance’ (in the case of labour rights NGOs) or ‘conservation’ (in the case of environmental NGOs) often obscured and misrepresented the ways of being and forms of social striving that characterized the lives of shrimp peelers or shrimp fishers.

However, even though I am critical of specific interventions by social and environmental NGOs, I do not merely seek to offer a critique of ‘critique’, or a critique of social interventions in general. On the contrary, during the time I have been writing this thesis, from 2023 to 2026, the acceleration of climate crisis and the dismantlement of many global institutions and their associated logics of liberalism or humanitarianism have made it more important than ever to engage in forms of social critique. At the same time, it is arguably becoming more challenging to suggest viable proposals to make the world ‘otherwise’. Therefore, the question of what it means to engage in ‘critique’ in the 2020s, before ‘‘immediately produc[ing] a propositional otherwise’’ (Povinelli, 2011, p. 191) is crucial. In line with Povinelli’s

writing, I suggest that it is important to explore how particular forms of life endure, persist, or flourish amidst the social and ecological crises before articulating alternative normative projections of the world.

This thesis has sought to explore how various actors sought to make a living, sustain life across generations, and 'accumulate life' in the brown shrimp supply chain. I have attended to the myriad forms of social striving that characterized these forms of life, as well as to the unevenly distributed conditions for the reproduction of life produced by them. In the supply chain of brown shrimp, diverse discursive traditions and material conditions have produced locally and historically specific expressions of and aspirations for the future. Illuminating these social aspirations and their associated forms of life is vital, since the potential for making the world differently should be situated *within* these forms of life. Amidst drastic global upheavals, constituted by political and environmental change, the global supply chain of brown shrimp has shown the remarkable capacity to adapt and transform. Rather than awarding this capacity to the capacious powers of 'capitalism', I have situated the potential for social reproduction within various forms of life and the social projects that they entail. Such social projects do not exist outside of capitalist structures, but they are not completely suffused or determined by its logics either. The ways in which actors in the brown shrimp supply chain seek to make a living and articulate, promote, and aspire to distinct futures are surprisingly diverse, and when considering the conditions of possibility to organize this supply chain differently, it is essential to engage critically with these myriad projects. While these capacities might be transformed in different ways by conditions of social and ecological crisis, they might also suggest pathways to endure, persist, and live on in this supply chain, under its conditions of 'crustacean capitalism'.

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