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Constructing
Maritime Geographies:
The Pragmatic Mobility of
Senegalese Fishermen

by

JULIETTE HALLAIRE

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Abstract

Senegalese fishermen have significantly expanded their mobility into the eastern Atlantic Ocean since the early 1980s. Fishermen have been crossing international maritime borders and organising long sea journeys, in part as a response to the decrease in fishing resources in Senegalese waters. From the early 2000s, they began carrying West African migrants on the maritime routes from Senegal to Spain, diversifying into irregular maritime migration or ‘people smuggling’. Fishermen’s fishing techniques and the migration flows they have facilitated are well documented. We have a good understanding, too, of the push-and-pull factors shaping these maritime migration patterns. Thus far, the social and political meanings of fishermen’s maritime mobility and cross-border movements have been comparatively neglected. This thesis argues that these mobility patterns are connected, revealing links between regional fisheries and mobilities and international migration flows that create distinctive maritime geographies.

Drawing on participant observations and narratives collected in 69 in-depth interviews, my analysis explores the ways in which power and knowledge shape the at-sea experiences of Senegalese fishermen. For them, mobility is more than a response to the decrease in fish resources. By deploying their mobility, fishermen seek to recover control over their maritime and social environments. To map the maritime geographies this mobility co-creates, I examine three spaces. First, I chart the social and political mechanisms of fishermen’s mobility in Senegal, examining the gendered and local meanings of their movements. Second, I examine these mechanisms at the regional level – at the Senegal–Mauritania border and in the waters off Guinea and Guinea-Bissau. Finally, I track fishermen’s routes to the Canary Islands. By attending to fishermen’s accounts, I demonstrate the many ways in which they appropriate the ocean space, shape the geographies of maritime borderlands and rationalise their navigation. I reveal how their maritime mobility opens up multiple opportunities for fishermen to negotiate with – and reshape – the power relations that structure their social, political and natural environments.

Key words: Maritime migration, mobility, borders, Atlantic Ocean, Senegal, artisanal fishermen, power/knowledge, fishing crisis

For Florent and Mathilde

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¹ Forthcoming, "The mobility strategies of the Senegalese fishermen at the Senegal-Mauritania maritime border", *Portuguese Journal of Social Sciences*

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² Senegalese administrative division, equivalent to UK county

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Chapter 1 – Introduction.

Power, Mobility and the Sea

1. Introduction

Overfishing has generated a loss of environmental and economic resources, which has tested Senegalese coastal societies. The Food and Agriculture Organisation of the United Nations (FAO) reports that most of the fish stocks in West African waters are considered over-exploited (FAO, 2010: 40). The decrease in fish resources is especially worrying in a context of extreme poverty: in Senegal 46.7% of the population³ – including coastal communities (Neiland & Béné, 2004) – live in poverty. Fishing-related economies are essential to the country as they generate around 650,000 jobs in fishing, processing and marketing (FAO, 2008: 15). A recent NOAA⁴ fisheries report suggests that around 40% of fish catches in West African waters are extracted illegally.⁵ With huge fishing and processing capacity, industrial vessels have contributed to overfishing in West Africa, threatening the food security and economic development of coastal communities (Alder & Sumaila, 2004). To a lesser extent, pressure on fish resources also results from the intense fishing activities of the many Senegalese artisanal fishers. Nearly 18,916 Senegalese artisanal canoes⁶ explore the national and neighbouring waters every day, often developing questionable practices. Many other examples point to the over-exploitation of West African waters by all sorts of actors and on many scales. How has this situation affected Senegalese coastal communities? What reaction might we expect from small-scale fishermen? In the Horn of Africa, overfishing is often cited as one of the root causes for the emergence of piracy (Chalk, 2010). Given the situation in Senegal, could Senegalese fishermen become West Africa's pirates, as recently suggested in the media?⁷

³ World Bank, 2014

⁴ National Oceanic and Atmospheric Administration

⁵ NOAA, 2014

⁶ Results of the 2012 Senegalese Fisheries Registration Programme – statistics collected during interviews with fisheries officials, Interview 69, Dakar, 21st June 2012

⁷ Guardian.co.uk, 2012. John Vidal explains how the fishermen's bitterness towards foreign industrial fishers might lead them to assault foreign fleets in a similar way to what happened in Somalia. Nevertheless, Somalia and Senegal are not comparable in terms of political stability or economic and

Senegalese fishermen have not waited for decades before considering alternatives to the decrease in fish resources. They have already started crossing borders and fishing or moving abroad; their mobility has certainly been a key response to the crisis for many of them. Their maritime mobility patterns have intensified since the beginning of the 1980s (Chaboud & Kebe, 1991). Fishermen now leave their village of origin for longer periods of time. They look for new fishing places, organise longer fishing expeditions, settle in remote places or fish in foreign countries' waters (Binet, Failler, & Agossah, 2012). For each mobility trend, the average time usually spent at sea – or at least away from the village of origin – has increased, whether for limited daily fishing trips or long-distance fishing expeditions. In the last decade, these patterns also expanded dramatically as fishermen engaged in people smuggling and maritime migration to Europe. Thus far, the connections between these mobility patterns have raised only minor attention. Studies on fishermen's mobility from Senegal have mainly focused on the description of their fishing techniques and specialities or areas of migration or on the relation between the decrease in resources and the increase in fishermen's movement at sea (see, for example, Binet & Failler, 2010; Failler & Binet, 2010). Henrietta Nyamnjoh has certainly applied strong qualitative methods to efficiently examine the role of the Senegalese fishermen in the development of irregular migration routes from Senegal to the Canary Islands (2010). Nevertheless, the social and geographical mechanisms of these mobility patterns remain partially explored, and less attention is given to the connections that exist between these maritime mobility trends. Furthermore, little is known about the individual experiences of the fishermen at sea, about the way they apprehend maritime borders or about the meaning they give to their mobility.

The lack of empirical data on Senegalese fishermen's mobility and maritime experiences has therefore led me to raise the following questions: *How can we apprehend the complexity and dynamism of fishermen's mobility at sea and how can this analysis evidence the connections between regional fishing mobility trends and irregular maritime migration to Spain?* This project seeks to offer thorough responses by examining the individual experiences of the fishermen and of

humanitarian background. The issue of piracy in the Horn of Africa raises many more contextual, historic and political questions than the fishing crisis alone (Chalk, 2010)

the other actors involved in these maritime mobilities. I interrogate the meaning of these movements through the narratives I gathered in the field during two visits to Senegal in 2011 and 2012. By doing so, I will show that fishermen's mobilities are more than a simple response to the decrease in fish resources. My ethnographic data suggest that these mobilities involve complex mechanisms linking sea and land spaces and are shaped by specific power-knowledge relations between distinct actors.

This project examines the maritime mobility of the Senegalese fishermen in Senegal and beyond Senegalese borders. It examines mobility as a whole, as part of coastal communities' ways of life and as part of their local economies and cultural habits. Thus, here, the notion of mobility includes fishermen's everyday sea mobility, cross-border mobility in Mauritania, long-distance fishing migration to southern countries such as Guinea and Guinea-Bissau, and irregular maritime migration to Europe. What is happening in Senegalese waters, on a very local scale, informs us about larger West African sea mobility trends, which are themselves related to global maritime migration from Africa to Europe.

The ocean is changing, as are fishermen's movements on it. This research is based on the assumption that borders, sea spaces and mobility are socially constructed (Adey, 2010; Cresswell, 2006; Mechlinski, 2010; Steinberg, 2001). Fishermen's mobility would only be partially examined were it seen as a simple movement crossing what we might understand as arbitrary lines which are drawn on abstract seas. The realities are far more complex: the natural maritime environment is not only natural, because borders are not just lines and because fishermen's mobility carries significant meanings and functions. By addressing the power relations at stake in these mobilities, I hope to offer a realistic and pragmatic account of the complex way in which fishermen unfold and use their mobility across spaces. I will show how fishermen's maritime geographies are changing depending on the way in which they unfold their mobility. Their experiences show how the sea is a space where they can take advantage of borders and political constraints and can negotiate with or elude border practices. The ocean becomes a whole bordering space when used as a space to reach Europe.

My initial research questions certainly entail looking at the causal relationship between the decrease in fish resources and fishermen's expanding mobility trends. However, focusing on these aspects alone would keep us away from other essential aspects and reduce mobility to a forced response to environmental degradation. There is certainly a direct relationship between environmental degradation and mobility. Put simply, there are fewer fish in the sea, so fishermen need to go further from the shore to find more. Nevertheless, the patterns of their mobility cannot be understood as simply determined by resource scarcity. I show that fishermen's mobility is shaped by the power relationships linking various land- and sea-based actors. What the fishing crisis does, in fact, is strengthen these power relations, all of which result in greater mobility based on pragmatic knowledge. The fishing crisis has generated a decrease in resources and income for the fishermen who have traditionally been earning most of their living from fishing. The economic situation of the fishermen has made them unable to fulfil their role of head of the family. I show how, by deploying their mobility, fishermen have been seeking to recover the control they have been losing over their maritime and social environment. Through their maritime mobility, the fishermen have found multiple opportunities to negotiate with the existing power struggles and power-knowledge relations that structure their social, political and natural environments. These mechanisms apply not only at the level of Senegalese waters and fishermen's households (chapters 3, 4, 5 and 9) but also through the analysis of maritime border experiences (chapters 6, 7 and 8). Rather than openly contesting traditional "domestic" and social institutions (Chauveau, Jul-Larsen, & Chaboud, 2000: 42), or confronting the exercise of local and national state power by border agents, fishermen have deployed a pragmatic mobility in order to elude these forms of control. At the same time, their mobility asserts power over their social and geographic environment both on land and at sea.

Looking at the particular dynamics of fishermen's mobility at sea is therefore vital to understand both border regimes and tensions in Senegal and abroad. This research engages in larger debates at the crossroads of the geographies of the sea, mobility studies and border studies. By focusing on fishing and West African migration, I show that fishermen appropriate the maritime environment in a pragmatic way and that this is noticeable through the shape taken by their

mobility. In this section, I start by examining the linkages between the notions of maritime mobility, networks and power and show how these linkages result in the production of pragmatic knowledge for the fishermen. I then move on to the specific issue of borders. My approach suggests considering the maritime and socio-political dimensions of the construction of borderlands through the mobile experiences of the fishermen.

This research is about mobilities. Before I outline the conceptual framework I will use to disentangle the object of this research, I would also like to make clear what this research is not about. My project is not about Senegal's politics, fisheries or migration management. Although I question Senegalese sea governance and European and African migration policy management, I do so in relation to fishermen's mobility only. This research does not aim to cover the maritime knowledge of the fishermen, either. Their knowledge is by definition practical and, as Scott puts it (1998), the best way to grasp its complexity would be through repeated practice. Because the possibilities for practising were quite limited for me, I mostly look at the fishermen's mobility from the shore, through the accounts of their own mobile experiences. I will certainly give significant examples of the fishermen's knowledge of the sea, but I do not intend to provide a comprehensive view of the complexity of their knowledge.

2. Linking maritime mobility, networks, power and knowledge

Fishermen's sea mobility relies on networks and articulates around power-knowledge relations between various network members. In order to better grasp the meanings of Senegalese fishers' sea mobility, I first situate the conceptual framework of these connections and show how these connections are related to the production of maritime geographies. This section seeks to demonstrate the limits of the traditional approach to the fishers' mobility. I highlight the need for a practical approach that apprehends the construction of maritime spaces on the individual scale of the actors of mobility.

In the literature on migration and fishing, leading authors disagree on the reasons for migration, although they acknowledge that mobility remains an essential driving force for the

fishermen's community, whether it spreads at the level of West African waters or from Senegal to Europe. Failler and Binet argue that the decrease in fishing resources in West African waters has pushed the fishermen to migrate and spread their mobility all over the ocean in order to find new resource-rich fishing places (Failler & Binet, 2010). According to Nyamnjoh, Senegalese fishermen took part in the organisation of irregular migration journeys to the Canary Islands during the 2000s decade mainly because of the decrease in fish stocks in their national waters. Boat migration appears to be an opportunity for them to compensate for the decline in their fishing-related income (Nyamnjoh, 2010). In turn, Sall and Morand rather bring to the fore that the maritime route to Spain fully benefited from the dynamism of Senegalese fisheries and mobility habits, thus minimising the impact of the fishing crisis (2008).

While these studies focus on the roots of fishermen's various migration patterns, they do not examine the nature of the mobility itself. In fact, the movement of people in West Africa has been mostly understood within the scope of migration studies, as the following examples suggest. Adepoju notes that African people have always used migration as a habit that is part of their everyday life at the social, cultural and economic levels (Adepoju, 2002). The continent is in perpetual movement, and its societies and places are shaped by the circulation of people across borders. Carling explores the mechanisms of irregular migration from West Africa to Europe as movements which are organised around transit towns and adjusted to migration management policy (Carling & Hernández-Carretero, 2011; Carling, 2007b). The literature on African migration has considered both territorial and maritime routes leading the migrants to North Africa and Europe, highlighting the complex connections between migrants' individual experiences and the effect of border surveillance and migration management policy on their trajectory (Bredeloup & Pliez, 2005; Carling, 2007b; De Haas, 2007; Dünnwald, 2011; Pian, 2006). Fouquet understands migration as a way for the young people of Senegal to gain access to greater social and individual recognition (Fouquet, 2008), while Riccio emphasises the importance of the transnational connections between the Senegalese migrants in Italy and their community of origin (Riccio, 2006). Other West African migration-related studies focus on the impact of remittances which emigrants regularly send to their community (Beauchemin, Kabbanji, Sakho, & Schoumaker, 2013) or on the effect of

environmental changes on people's migration decisions (Henry, Schoumaker, & Beauchemin, 2004).

The limitation of this literature is that it explores fishing mobility patterns in Senegal and West Africa and recent migration from Senegal to Spain separately. Failler and Binet have outlined the multiple migration patterns of West African migrant fishermen, which they classify by ethnic background, fishing techniques and specialities, and maritime routes and habits (Binet et al., 2012; Binet & Failler, 2010; Failler & Binet, 2010). Chauveau, an anthropologist, has provided rich reflections on West African fisheries and Senegalese fishermen in particular, highlighting the historical aspects of today's fisheries development (1986, 1989). Chauveau *et al.* demonstrate how access to the sea has long been determined by the complex power relations between the fishermen and the multiple local and national institutions in West Africa (2000). Other key studies have focused on the cultural and economic use of the sea space in Senegal and have provided rich insights for further understanding fishermen's movements at sea (Cormier-Salem, 1995; Sall, 2007). Though this literature thoroughly addresses the mechanisms of fishing-related mobilities, it pays little attention to the connections between the actors involved in maritime mobilities or to the fishermen's strategies for crossing maritime borders. My project seeks to deepen the overall knowledge by providing qualitative data on the social and geographical meanings and implications of fishermen's border-crossing experiences.

I follow Cresswell in attempting to transcend the limits of migration studies by thinking of mobility holistically. For Cresswell, mobility cannot be summarised as "getting from point A to point B" (2006: 2). In this sense, migration studies only explore one part of mobility. Classic migration studies' focus results in a compartmentalisation of migration patterns which dismisses the linkages that exist between the various shapes and scales of mobility as well as the genuine significance of this mobility. Cresswell and Adey have emphasised the way cultural, economic and social contexts shape movements (Adey, 2010; Cresswell, 2006). Mobility is not only a practical means that joins places; it can carry meanings, reveal power relations between agents or constitute a resource for the exercise of power (Adey, 2010; Cresswell, 2006). Because fishermen's mobilities result from complex connections between various actors, they carry meaningful social and political

functions. These actors not only make possible these mobilities, but they give them different meanings and directions. In this sense, these mobilities not only enable the fishermen to exercise power over their maritime and social environment: they are also constructed upon and reflect the hierarchal and cultural codes of the socio-economic organisation of coastal communities (Adey, 2010: 19). For Adey, it is essential to look at the political, economic or social context of mobilities, and examine the various meanings which are given to them to the extent that these meanings substantively influence these mobilities (2010: 38). Mobilities are not neutral, and their meanings “can make a big difference. They can shape social relationships, and they might alter the way we think about and act towards them” (Adey, 2010: 38). In this sense, the mobility of the fishermen takes distinct meanings not only for themselves, but also for the many actors directly or indirectly related to this mobility.

Mobility involves multiple scales and physical dimensions as the moving nature of the ocean itself generates fishermen’s mobility. Launching a boat or reaching a nearby fishing place necessarily implies a mobile action adjusted to a complex moving and liquid environment. For these reasons, mobility should be both addressed as a whole, whether it is local, national or international, and examined as part – or a producer – of specific maritime geographies. These mobilities participate in the “social construction of the ocean” (Steinberg, 2001). Fishermen’s mobility is a linking movement between sea and land spaces. This mobility gives the ocean a central role in the everyday life of coastal communities, making maritime spaces not only valuable surfaces upon which fishermen unfold their trajectories or resource-rich spaces from which they earn a living, but also meaningful spaces where social and political structures are challenged.

For these reasons, this research gives particular attention to fishermen’s experiences of the ocean. Investigating the maritime dimension of the fishers’ mobility and moving the focus to the construction of maritime geographies in an African environment help us to properly grasp the everyday dynamics of coastal communities in Senegal. Although oceans cover more than two-thirds of the world’s surface, it is only recently that they raised the attention of human geographers (Steinberg, 2001, 2014). As with other human sciences fields, geography has long been a “landlocked” discipline (Lambert, Martins, & Ogborn, 2006; Peters, 2010). Maritime spaces

have occupied marginal places of the mental construction of the world, yet they have specific functions within societies. Indeed, for Steinberg, what occurs on sea spaces has significant effects on societies on land, and vice versa. There is a continuous movement between sea and land, according to which both spaces interdependently influence each other, and this movement plays a determining role in the creation of social identity (2001: 200). Fishermen's experiences invite us to think of maritime spaces as "more-than-representational spaces" (Jon Anderson & Peters, 2014: 9). As Peters and Anderson argue, the sea is not only a symbolic surface or an abstract concept for individuals. Senegalese fishermen physically experience the multi-dimensional nature of the sea by constantly adjusting their movement to its moving, fluid and changing materiality (Jon Anderson & Peters, 2014; Peters, 2010). These maritime experiences influence fishermen's relationship to the ocean and to the political rules that regulate it. Through their maritime mobility, fishermen challenge the orders of many structures and institutions. They use the sea as a space in which to challenge the conventional organisation of their society and as a space in which to negotiate with existing social and political structures – exemplifying Steinberg's argument (2001: 191). Competition between the fishermen over scarcer resources or illegal incursions into protected areas are examples of the tensions that are directly or indirectly linked to what is happening on land. In turn, before spreading to the sea, small-scale fisheries and fishermen's mobility are first organised on land and result from the interaction of a myriad of more or less powerful actors. Although this mobility happens at sea, it is decided on and prepared from the earth and results from complex connections of networks.

Networks, power and mobility

One of the ways to decipher fishermen's mobility and grasp the complex power relations that give shape to this mobility would be to disentangle the networks at stake in sea mobilities. Actors taking part in the organisation of sea mobility are constitutive of networks, within which different forms of expressions of power occur. Investigating such networks entails looking at the human and non-human actors which form part of these networks and examining their connections in terms of resources and power and their mobile or immobile nature. Whether it is used for fishing

or migrating to Europe, fishermen's mobility is based on organised networks of people, financial possibilities and material resources. For Latour, non-human and human elements have always been mixed together; they are linked by networks and constitute collectives which progress between the poles of nature and societies without any kind of interruption or division (Latour, 1993). Nothing is essentially human or natural; facts connect humans, natural elements and phenomena into networks. 'Actants' are 'hybrid' actors which progress within a complex system of networks interplaying with time, place and spaces, and human and non-human elements (1993).

Fishermen are obviously the central actors of their mobility, and their practice of the sea involves various time scales, including their ancestors' knowledge transmission and their own experience of navigation. Fishermen's narratives will demonstrate that the many actors with whom they interact significantly influence their trajectories. These actors are either family, community members, state agents or members of fisheries organisations who encourage, fund, denounce or depend on the fishermen's mobility. As Urry and Sheller suggest, we should pay particular attention to immobile actors and acknowledge the vital role which their immobility plays to making mobility happen (2006). These actors can also be rich and influential or dependant and vulnerable. Fish species are play a key part in this network of actors (Bear & Eden, 2008): their movement attracts the fishermen, who follow their trajectories. Conversely, the lack of fish species also influences fishermen's mobility. Tide movements and currents, the rocks of maritime grounds and the wind, but also the technologies and techniques fishermen rely on, are other non-human actors which give shape to this mobility.

In the field, I quickly noticed that power relations are essential drivers for mobility on every scale. The human actors related to fishermen's mobility exercise power, depending on their social and economic resources. Power relations are formed from the interaction between these different actors, making possible – or not – this mobility and giving direction to it. In fact, I noticed many forms and mechanisms relating to Foucault's "microphysics" of power operating on many scales (1975). For Foucault, power is not only something that has to do with the state and with political and economic domination, and it is not the preserve of a public sphere; it is also a matter of power on every scale – from the self to the intimate family circle, and from the community to the

nation – being exercised, claimed, expressed, hidden or imposed (1975). Power is grasped as a human relationship which necessarily involves an interaction between individuals:

Power's condition of possibility, or in any case the viewpoint which permits one to understand its exercise, even in its more "peripheral" effects, and which also makes it possible to use its mechanisms as a grid of intelligibility of the social order, must not be sought in the primary existence of a central point, in a unique source of sovereignty from which secondary and descendent forms would emanate; it is the moving substrate of force relations which, by virtue of their inequality, constantly engender states of power, but the latter are always local and unstable. (1978: 93)

Power is not possessed; it is something "immanent" and would be better seen as an effect of social relations rather than as something external and dominating that can be lost or recovered (Allen, 2011; Bouchard, 1996). This research proposes to "use its mechanisms as a grid of intelligibility of the social order" (Foucault, 1978: 93) in the context of fishermen's mobility. Power relationships do not work as a binary system simplistically opposing dominating and dominated actors. Actors related to fishermen's mobility constantly develop strategies and techniques rather than exercise a dominating power. They adjust to existing orders and institutional mechanisms to exercise power through mobility. In this sense, these 'microphysics' enable power to be exercised as a "conduct of conducts, and a management of possibilities" (Foucault, 2001: 341).

In order to better grasp these invisible power relations, we should also investigate the spatial dimension of power, as these networks link both actors and spaces. These actors represent mobile nodes through which power is exercised, giving the impression that power circulates from point to point throughout this network. Castells stresses the juxtaposition of networks and flows which have become a specificity of our contemporary world, suggesting that these flows constitute a support helping power to circulate (2009). However, I follow Allen's argument that since power cannot be held by individuals or network nodes, its movement or circulation has to be understood more accurately. Rather than enabling a 'circulation of power', networks only make possible the exercise of a mediated power through the use of different goods, resources, actors, knowledge, experience, material belongings, age or mobility, which are constitutive of these networks (Allen,

2011). Through this mediation, power can therefore be exercised through relation at a distance (Latour in Allen, 2011: 133). Organised around nodes and lines, networks present a constant mobile configuration with a spatial manifestation of powers that “overcomes distances” and which causes mobility to happen. In this sense, this thesis provides many examples showing how the connecting role of networks in Senegal enables long-distance control of sea activities from land, and vice versa. We will see how land-based boat owners sometimes hire captain-fishers and direct their trajectories at a distance. Similarly, sea-based or emigrated fishermen seek to mediate power at a distance to better control expenses relating to and decisions regarding their land-based community. As a resource that mediates power, sea mobility becomes an empowering strategy that is made possible thanks to network systems. Mobility enables the mediation of power, knowledge and capital throughout Senegalese families and across international borders. The study of such connections will bring to light the ways in which these mobility networks influence the shape of societies and sea spaces (Calvo, Javaloyas, Albero, & Garcia-rossello, 2011). The use and production of knowledge – in a broad sense – play a major role in the making of these connections. Fishermen’s mobility is also associated with their practice of the sea space. This practice enables them to gain knowledge and experience of a wild and uncontrollable environment. In this sense, their mobility is used as a powerful producer of knowledge.

Power, knowledge and mobility

From the intimacy of the household, to border experiences at sea and encounters with state agents, the power relations giving shape to the mobility networks rely on various kinds of power–knowledge connections. At any scale and for all the actors – human and institutional – involved in fishermen’s mobility, the question of knowledge is central. This notion of knowledge is not limited to the sea experiences of the fishermen. This idea certainly involves the sort of knowledge which fishermen need to navigate, but it also involves the knowledge which is produced by their mobility. We will see how valuable this knowledge is for them, as it constitutes a strength that helps them legitimate their circulation and illegal movement across the ocean. For Foucault, “the exercise of power perpetually creates knowledge and, conversely, knowledge constantly induces effects of

power” (Foucault, 1980: 52). Power and knowledge are intimately linked and work together, yet Foucault insists on the necessary distinction that power is not knowledge. In fact, power cannot be exercised without knowledge and, conversely, knowledge is necessarily produced through the exercise of power (Foucault, 1980). These relationships are examined here in relation to mobility: fishermen use knowledge as a resource for the exercise of power. The mechanisms of their mobility demonstrate that knowledge can also be produced through, by and for the exercise of power through mobility. I will show how the fishermen’s mobility enables them to create knowledge, giving them more control of their environment (chapters 5, 6, 7 and 8).

More precisely, this thesis gives particular attention to the use and production of a pragmatic knowledge through the fishermen’s mobility. Senegalese small-scale fisheries are known for their dynamism and quick adaptation potential by constantly adjusting to political, technological, social or environmental constraints (Chauveau, 1984). Chauveau speaks of the “realism of canoe fishers” (1984: 15). Through their realism, fishermen have adapted their techniques and technologies as well as structured and rationalised their activities over time. The mobility of the fishermen reflects this dynamism and makes them play a central role in West African waters. This realism implies that fishermen constantly adjust their knowledge to the market needs – when landing their catches in the most valuable fishing wharves, for instance – or to border controls – at the Mauritanian border, among other examples. They have proved to be able to seize opportunities and divert the colonial state’s mobility-related interventionist practices by using their state-subsidised engines to spread their mobility and escape state control (chapter 4). There are many examples – explored in this thesis – which illustrate this dynamism and realism that is based on practical knowledge.

This pragmatism certainly reminds us of Scott’s Greek notion of “*mêtis*”, which grasps the complexity of practical knowledge and which he opposes to “*technè*”, or “technical knowledge”:

Mêtis represents a wide array of practical skills and acquired intelligence in responding to a constantly changing natural and human environment. (Scott, 1998: 313)

Technical knowledge, or *techne*, could be expressed precisely and comprehensively in the form of hard-and-fast rules (*not* rules of thumb), principles, and propositions. At its most rigorous, *techne* is based on logical deduction from self-evident first principles. (1998: 319)

Scott refers to sailing as one of the most difficult activities to teach in a practical way. Precisely because of the weather conditions, the sea's and fish species' movements constantly change, so knowledge can be acquired mostly through repeated experiences, making secondary the use of handbooks (1998: 313). Senegalese fishermen often mention how the sea is their "school", emphasising the value of their practical knowledge. In this sense, their mobility relies on "mêtis". It also seems that because this mobility adjusts to various forms of control and is a way for them to exercise power, it is in opposition with "techne" and the "simplification" power of state's norms (1998: 309). Scott argues:

Mêtis resists simplification into deductive principles which can successfully be transmitted through book learning, because the environments in which it is exercised are so complex and nonrepeatable that formal procedures of rational decision making are impossible to apply. In a sense, mêtis lies in that large space between the realm of genius, to which no formula can apply, and the realm of codified knowledge, which can be learned by rote. (1998: 310)

Fishermen's realism, or "mêtis", is pragmatic. In this study, I understand pragmatism as being based on practical knowledge and being characterised by providing the fishermen with the ability to both negotiate and rationalise. At sea or on land, fishermen have used their practical knowledge in a pragmatic way to negotiate with the institutions and existing structures such as sea governance, border regulations and community organisation. In this sense, their mobility and practical knowledge does not radically exclude "techne" to the extent that fishermen have proved that they can adopt, reject, or negotiate with external state structures and regulations that first sought to govern their mobility. The notion of pragmatism involves realistic calculations, which fishermen develop in order to assess existing constraints, as well as the ability and resources which can be used to overcome, cope with or take advantage of these constraints. Mobility constitutes an

ability to elude obstacles, while financial resources, knowledge and networks make this mobility happen. Precisely because the mobility of the fishermen is by nature flexible, it allows spaces for negotiation with existing power struggles. These tactics are similar to the mechanisms explored by De Certeau in *The Practice of Everyday Life* (1984). De Certeau decrypts the way ordinary people develop subtle tactics to appropriate spaces. These tactics enable individuals to get around all kinds of established orders which are meant to dominate their everyday life, determine their behaviour and shape their mobility (1984). These pragmatic tactics result in the production of genuine sea geographies and reproduce on the many scales of fishermen's mobility in Senegal's waters and beyond.

3. Crossing international maritime borders

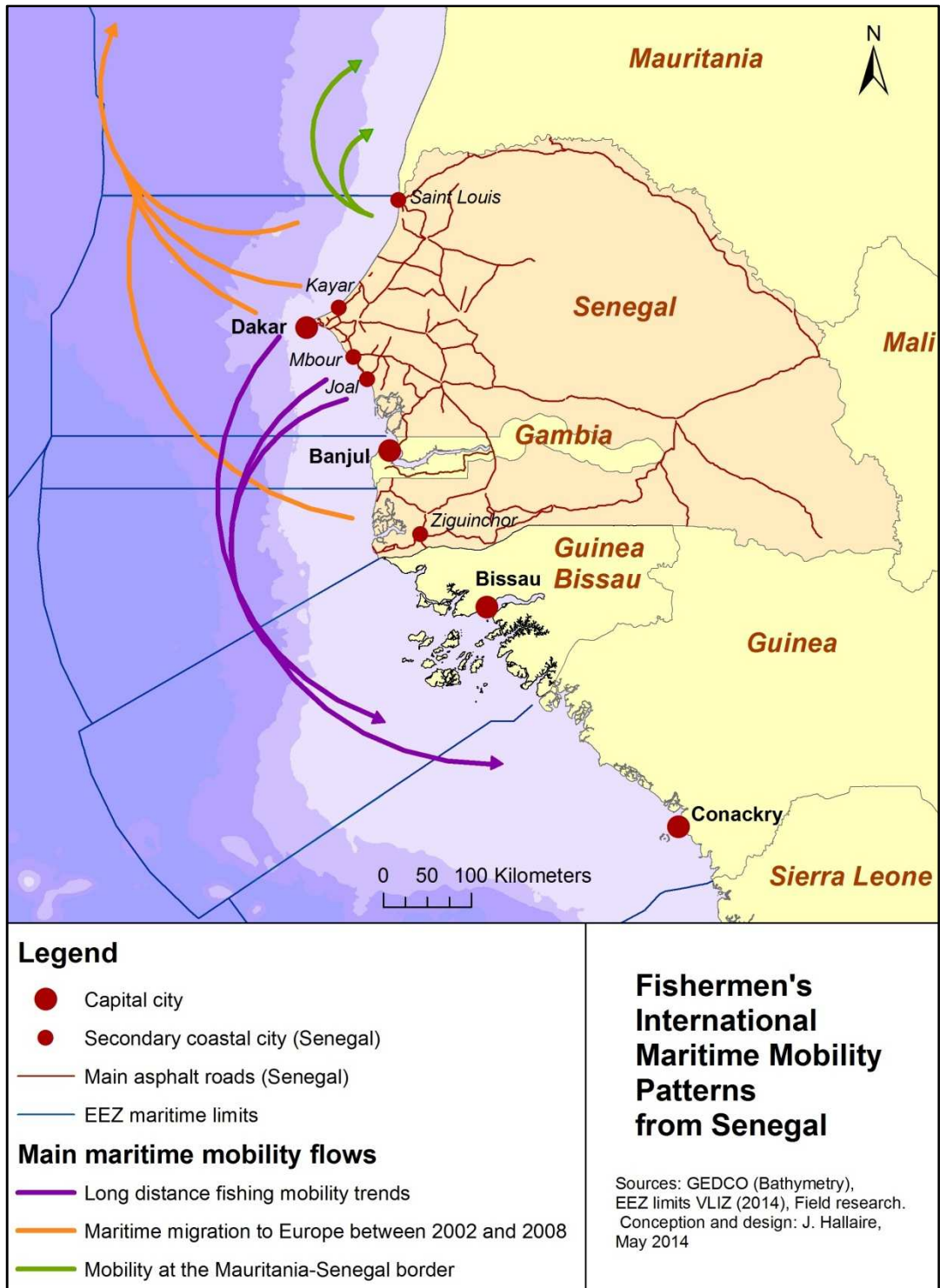
Whether fishermen legally or illegally cross maritime borders, encounters with border agents almost systematically generate problematic situations. How do they legitimate their illegal incursions into forbidden areas? How does maritime border regulation influence fishermen's mobility? I will show how fishermen shape West African oceanic spaces through their everyday border experiences. From among the multiple mobility strategies Senegalese fishermen have been considering over the last decades, I focus on three meaningful maritime border-crossing scenarios (Map 1).

Firstly, over the last few decades and with the progressive border-closing process in southern Mauritania, different mobility strategies have been developed by the local Saint-Louis fishermen (Guet Ndarian⁸) to avoid border controls and take advantage of the rich neighbouring Mauritanian waters (chapter 6). Secondly, at the beginning of the 1980s, some Guet Ndarian fishermen also started to navigate very long distances and reached Guinea-Bissau, Guinea and Sierra Leone's waters, where they have been organising lucrative fishing expeditions since then

⁸ Guet Ndarian fishers come from the famous fishing village of Guet Ndar, which is located in the former colonial capital Saint-Louis, in the very north of Senegal

(chapter 7) (Failler & Binet, 2010, and field results).⁹ These maritime movements towards the south first increased with the 1991 Mauritania–Senegal border closure and were then reproduced by fishermen from other Senegalese communities. In parallel, fishermen started to take part in the organisation of illegal migration journeys to the Canary Islands from the end of the 1990s. Europe’s migration management policy had the effect of progressively deterring the smugglers who were organising departures from Mauritanian beaches. As a response to the border reinforcement and in a context of resource scarcity, Senegalese fishermen started to organise these perilous trips from their local beaches in Saint-Louis, Dakar, Mbour or Ziguinchor (chapter 8) (Nyamnjoh, 2010; Sall & Morand, 2008).

⁹ This thesis does not address the mobility of the fishermen across Gambia. Fishermen reach Gambian waters every day. The country is landlocked within Senegal and fishermen progress in its territorial waters as if they were fishing in Senegal. In fact, in interviews, fishermen never raised particular attention to the question of the crossing of Gambia’s common maritime borders with Senegal. The border with Gambia has been easily crossed, whether it has been for fishing activities (1982 agreement, revised in 1992, 1994 and 2003) or transit rights. These reciprocal fishing agreements which were signed by Senegal and Gambia guarantee free movement at sea and fishing activities in both countries with no required payment (Pape Gora Ndiaye et al., 2007)



Map 1: International maritime mobility trends from Senegal examined in this study, May 2014. Design: J.H.

Through their expanding mobility, fishermen have experienced different kinds of border practices at sea. The analysis of these experiences entails addressing the contemporary academic discussion on the notion of border. In fact, examining these border experiences requires a

theoretical frame that will address the maritime dimension of the border and the complex mechanisms of fishermen's mobility.

Recent changes in and conceptions of European borders, territories and mobility modes have generated a more complex and conceptual theoretical framework for the understanding of the way borders work in our contemporary spaces. Globalisation has eased the circulation of flows, capital and information, resulting in the development of all kinds of mobility and networks which now seem to prevail upon static places and traditional borderlines (Castells, 2009). While global networks as well as de-territorialisation processes are brought to light in the making of trans-local and transnational identities, the proliferation of flows of information and media facilitates the work of imagination and encourages a greater mobility (Appadurai, 1996; Castells, 2009; Conradson & McKay, 2007). Migrants can therefore represent and project themselves thanks to the technological support introduced by this global system. However, their mobility clashes with the sometimes violent material reality of the borders they encounter whose role is to filter the desirable flows from the less desirable.

Anderson and O'Dowd (1999) show how globalisation-focused studies pointed out the progressive weakening process of borders in the 1990s, describing the emergence of a borderless world where flows and networks are increasingly questioning the role of territorial borders. Contemporary border research stresses that although flows of people, information and capital may circulate more easily nowadays, these free movements paradoxically involve the reinforcement of national borders, which stops certain kinds of human mobility and materialises in delocalised security practices outside traditional territorial border areas (James Anderson & O'Dowd, 1999; Bigo, 2010; Van Houtum, Kramsch, & Zierhofer, 2005; Walker, 2000). Balibar stresses the way borders take unequal meanings and function by filtering people and things depending on their socio-economic or geographic origins (Balibar, 2002: 92). Mobile controls outside Europe's territorial borders embodied by the creation of Frontex¹⁰ in 2004 are a type of these new forms of mobile border practices (Carrera, 2007). They give another meaning and function to the notion of

¹⁰ European Agency for the Management of Operational Cooperation at the External Borders of the Member States of the European Union

border. These debates bring valuable elements to the understanding of border practices and their related effects. Borders result from social and economic constructions, reproducing and strengthening hierarchies by their unequal filtering action (Van Houtum et al., 2005). However, as these works address borders from a state perspective and mainly focus on the effects of borders, little room is left for the action of everyday border experiences on borderlands.

Basing his research on a study of 169 security checkpoints, Mechlinski argues that because the cross-border movements of individuals in West Africa participate in the socio-economic and cultural formation of borders, the individual experiences of borders should be fully addressed in border studies (Mechlinski, 2010). Moreover, instead of looking at borders from a classic state viewpoint, Rumford suggests that scholars should rather start seeing “like a border” (Johnson et al., 2011: 68; Rumford, 2006). Invisible border practices, individual border performers and specific border-related effects can then be better identified, therefore giving much more room to everyday local actors in the shaping of borderlands. This approach brings valuable insights which highlight the inherent paradoxes of border functions. Because this approach entails including non-state agents in the creation of borderlands, it shows how borders can be appropriated by actors such as the fishermen. In this way, border functions can be turned to the advantage of actors who are initially discriminated against. All this can be perceived through fishermen’s experiences of borders, whether European or African. This approach enables us to shed light on the great capacity fishermen have for diverting originally mobility-restricting border functions into more profitable meanings: once organised, mobility becomes a powerful tactic to escape and/or appropriate rigid border practices. In the case of Senegalese fishermen, these tactics reveal their dynamism and adaptation skills that constitute a significant counter-power to regulating state practices. Because fishermen cross maritime borders, this approach enables us to address the specific maritime dimension of their border experiences.

In Africa, borders were traced according to the colonial elite’s will, following natural landmarks and ignoring the existing juxtaposition of ethnic groups from both sides of borders (Newman, 2006). Their drawings have generated a number of political and identity struggles since the independences, although African borders mostly have not changed since then. For example,

despite the 1989 border crisis, Senegal and Mauritania are still separated by the Senegal River, and territorial and maritime cross-border movements still occur on an everyday basis. Although African borders might have been drawn arbitrarily, Englebert, Tarango and Carter suggest that in most cases they have remained permeable and have enabled cross-border movements of people (Englebert, Tarango, & Carter, 2002). Adepoju stresses how the lack of police controls at borders has made easier African migrants' border crossings on the continent (Adepoju, 2005). Fishermen do not cross maritime borders as smoothly as other West Africans might at the territorial level. However, international maritime border regulations are part of their representations of the sea space, and their narratives suggest that borders should not be reduced to external abstract structures which have been imposed on them (chapters 6, 7 and 8). Fishermen appropriate and shape borderlands; they integrate borders as part of their maritime geographical constructions. Through fishermen's practices, borders are either directly or indirectly lived, shaped, avoided, confronted, ignored, challenged, imposed, suffered, invisible or visible, useful or irrelevant, or legitimate or illegitimate and so forth.

Given the complex nature of both the sea and the mobility of the fishermen, and the way they experience multiple border practices at sea in many situations, apprehending maritime borders as mere dividing lines limiting the movement of the seamen is far from satisfying. Both West African and European maritime border practices operate in a mobile style, rather than in a sedentary mode that would be attached to territorial limits. This is generated not only by the constant growing movement of Senegalese fishermen but also by the fluidity of the sea and the potentiality provided by the nature of maritime spaces. The lines which divide sea spaces remain abstract political constructions dismissing the complexity of individuals' mobility and experiences, fish and sea movements, and historical and social meanings which constantly shape borderlands. As Steinberg remarks, these lines are "divorced from the matter that is experienced by those who actually inhabit the environment" (Steinberg, 2013: 162). For this reason, I understand the geographical frame of the maritime borderlands which fishermen have been crossing as an unstable and changing spatial mechanism combining the mobility of the fishermen, border patrols and the sea rather than as a simple, abstract, dividing borderline disconnected from the reality.

4. Overview of the structure of the thesis

The methodological approach I used for this research is detailed in chapter 2. In this chapter, I introduce the different actors I chose to interview and explain my methodological choices. The chapter also addresses the political and socio-economic background of this research. It defines “the institutional dimension” (Chauveau et al., 2000: 14) at stake in fishermen’s mobility and disentangles the complex network which makes mobility happen. I then question the weight of the domestic institutions and African solidarity in relation to mobility. Given the community pressure around active workers in fishing communities, mobility appears to be an efficient way to elude a potentially demanding family and social environment.

These first considerations provide some elements of a response to the question I raise in chapter 3: are fishermen environmental migrants? In this chapter, I explain why addressing fishermen’s mobility under the scope of “environmental migration” would be too reductive, based on the responses provided by “environmental migration”-related studies (Bates, 1989; Black, Kniveton, Schmidt-Verkerk, & Smith, 2008; Gemenne, 2007; Gonin & Lassailly-Jacob, 2002; Tacoli, 2009). Reducing migration merely to the environmental reasons for it would not only dismiss the complex realities of fishermen’s mobility but would also provide potential responses to legitimate the strengthening of security practices (Hartmann, 2010). This chapter certainly points to the responsibility of the fishing crisis for mobility patterns, suggesting that mobility is one among other strategies which fishermen have chosen in order to cope with the fishing crisis. However, “naturalising” the causes of migration and ecological issues (Hartmann, 2010: 235) would tend to dismiss the political and social meaning of fishermen’s mobility and reduce the sea space to a mere space consisting of natural resources.

In fact, the maritime mobility of the fishermen will be better understood first in relation to the Senegalese state’s fisheries governance. Chapter 4 explores the way the relationships between the political institutions and the fishermen have long shaped the mobility of the latter. This chapter examines the historical grounds of today’s fisheries policy, as well as the power struggles which have emerged throughout fishermen’s routes. Empirical examples provide material for the analysis

of fishermen's relationships to the state, norms and rules. This chapter emphasises the way "mêtis" and "techne" (Scott, 1998) cohabit and are not always mutually exclusive. It sets the bases of fishermen's practical knowledge, which relies on a mix of local, internal and external elements. The reflection brings to light the way fishermen's movement as well as their way of thinking has long been realistic.

More than a reaction to state control measures, the mobility of the fishermen connects sea and land spaces through the creation of networks and a mediation of power. Chapter 5 shows the extent to which mobility is an empowering strategy for the fishermen and a resource for the mediation of power, knowledge and capital throughout the Senegalese fishing community. Two "success stories" based on different kinds of mobility which happened within Senegal exemplify the power-knowledge relations at stake in fishermen's mobility patterns: in the first story, mobility is understood as internal migration movements and maritime mobile habits, and has proved to be essential for the successful fisherman. The second narrative highlights other success-related mobility aspects, suggesting that those sea-land connections might take countless forms in this context of maritime activities.

Fishermen's mobility mechanisms also provide information about what is happening beyond Senegalese borders. The same dynamics which operate in Senegal (chapters 2 to 4) reproduce in distinct border-crossing scenarios. Chapters 6, 7, 8 and 9 address a reflection on the function of cross-border mobility and its direct consequences on the shape of the ocean space and households. In any case, power relations at stake in those mobilities are strengthened by the border situation. Chapter 6 examines the local cross-border mobility of Guet Ndarian fishermen at the Mauritanian border. It sheds light on the different strategies and tactics which fishermen have used to take advantage of the border, thus becoming active border producers. A historical review of the origins of the local border issues emphasises the specificity of the local struggles and the genuine shape of that cross-border mobility. At the Mauritania-Senegal border, reputed knowledge and experience enable the fishermen to justify their illegal practices beyond the border. This legitimacy is strengthened by the way fishermen romanticise their own mobility. The chapter raises the question of whether fishermen can be compared to Deleuzian nomads given the way they elude

state practices and give legitimacy to their illegal movement. Emphasising fishermen's nomadic nature leads to a dismissal of the risks, dangers and instability which they are exposed to.

Moreover, this idealisation of fishermen's mobility is questionable given the level of rationalisation of their mobility. Chapter 7 focuses on the way fishermen's mobility has produced specific geographies of maritime spaces beyond borders in Guinea-Bissau, Guinea and Mauritania through the rationalisation of their border crossings and the practical knowledge which they created beyond borders. This chapter further questions the romanticisation of fishermen's mobility by putting into perspective the rationalisation and individualisation of their practices in foreign waters. I compare their practices in Mauritanian waters and Bissau-Guinean and Guinean waters. Although in both situations distinct motives legitimate their illegal mobility, fishermen tend to reproduce similar appropriation 'tactics' (according to De Certeau's meaning (1984)), such as using a specific language, the creation of names and the mental representations of border areas.

The fishermen applied the same mechanisms of appropriation to the maritime route to Europe that they had been developing over the course of their West African sea expeditions. Chapter 8 situates the global context of the emergence of boat migration from Senegal to Europe and examines the links between the changes in European border controls, the shift in West African migration routes to Europe and the local effects of the fishing crisis in Senegal. It seeks to clarify the role taken by the fishermen in these journeys. It then emphasises how these routes changed the function of the ocean to a border space. Again, a specific rationalisation of maritime mobility and border crossing is observed, turning the fishermen into pragmatic mobile agents who adjust to geographic constraints thanks to their skills. Finally, for the failed migrants, that specific cross-border mobility, which first looked like a way to recover control over the sea space and their life, eventually turned into a physical and moral failure which they had no control over.

While this thesis has essentially turned towards maritime experiences, this research moves on to look at the specific mechanisms occurring within and developing from fishermen's households. Chapter 9 explores the gendered dimension of mobility in relation to the organisation of ocean spaces (Steinberg, 2001). It first investigates the traditional place of men in Senegal's fishing community. This mobility is based on a gendered organisation of spaces, and articulates

between an open, unlimited, “masculine” ocean space and a narrow, “feminine” house space. The chapter engages with a view that challenges a supposedly weak female immobility and a virile and powerful male mobility (Cresswell & Uteng, 1994). It outlines the ambiguities at the core of the relationships between men and women. Whether a woman or a man, each actor proves able to negotiate a form of power within their own sphere of action which challenges these apparently strong gendered constructions. This power of negotiation expresses itself through different forms of mobility: for the men, it means sea mobility, migration to Europe and the search for “absence”, whereas for the women it is generally reflected through the mediation of male mobility.

Finally, chapter 10 draws the conclusion of this research, starting with Sarkozy’s 2007 Dakar speech and its provocative ethnocentric assertions. The chapter discusses the way fishermen have become free mobile subjects through the control of what they know and what they let the actors who embody institutional – social and political – structures know. Drawing on Steinberg’s discussion (2013), I further question the way in which theoretical metaphors can provide useful tools for the understanding of the mechanisms of fishermen’s maritime mobility and at the same time can be limited and limiting methods that minimise fishermen’s realities. Finally, I suggest alternative pragmatic perspectives to address the management of sea spaces and explore the idea of participatory sailing surveillance systems.

Chapter 2 –
Disentangling Networks:
Approach and Background

There is an important gap between the unpredictability of the field and the rigour and discipline that are required by academic research standards. The field researcher must cope with many obstacles and s/he is expected to adjust to many unpredictable situations. Because we depend on those people we are interested in, we are in an incredibly vulnerable position and should be aware of our own limits and expectations. How can we conduct a research project in such a context? In order to take reasonable trajectories, it seems that we have to be aware of every single detail, focus on what did not look important to us at first and challenge our own mental constructions. In fact, qualitative research methods are helpful for the researcher who apprehends a specific cultural environment such as Senegalese fishing communities.

Narratives provide essential information on the individual experiences of mobility, borders and the sea and help grasp the realities lying beyond aggregated data and basic surveys. Participant observation, narratives' analysis and other qualitative research methods have proved to be an efficient way to grasp the meanings which individuals give to mobility. The main results of this thesis are based on qualitative field research, secondary data from the Internet and a literature review. In total, I conducted 69 qualitative interviews with a wide range of actors in Senegal during two field sessions in 2011 and 2012. I had various opportunities to spend time with members of fishing communities, such as, for example, during several immersion stays in Kayar and Saint-Louis and during the fishing trips I was invited on by groups of fishermen. I got in touch with people in the field not only during the interviews but also before and afterwards, when we had informal conversations which were not directly related to mobility. In other words, I found key responses for this research both through the specific answers of my respondents and through my personal field experience. The way I approached individuals or how I failed in some interviews or had the feeling of being vulnerable, for instance, informs the precise subject of this thesis, as these

experiences enabled me to be sensitive to ongoing tensions, emotions and power relations. As Rabinow shows in *Reflections on Fieldwork in Morocco*, conducting fieldwork cannot be reduced to a simple data-collection activity. It is, rather, a “distinctive type of cultural activity” which fully involves the researcher’s experiences in the data-creation process and the search for meanings (Rabinow, 1977: 5).

The directions in which I took my project certainly changed from the beginning to the end of my PhD. However, I attempted to keep my approach coherent, following realistic methodological principles. Because my approach adjusted to the realities of the field, in this chapter I suggest starting to disentangle the networks which organise fishermen’s mobility and identifying the main actors and institutions of this mobility. I first explain my methodological choices and the reasons why qualitative research methods are more appropriate for the kind of research questions I raise here. The chapter describes the fieldwork approach and clarifies different categories of interviewees, methods of analysis and the empirical limits of this particular field. I then move on to examine the “institutional dimension” (Chauveau et al., 2000) around which fishermen organise their mobility. I shed light on the way fisheries are managed in Senegal and on the complexity of the fishing unit’s organisation, providing general background information on Senegal.

1. Approach: looking for appropriate qualitative methods

Unlike quantitative research, qualitative studies result from an inductive process involving a constant progression and an adjustment to the material which is obtained throughout the research project (Schutt, 2011). This process entails that the interpretation of qualitative data starts at the moment of data collection rather than afterwards (Schutt, 2011). For example, the respondents’ answers may determine the interviewer’s next questions; or the researcher may identify new actors who might bring valuable information or interpretation and thus give new orientations to his/her project. My research certainly started from a main hypothesis to which I expected the fieldwork study to offer responses. At first, I aimed to investigate the causal relationship that exists between the collapse of fisheries in Senegal and fishermen’s migration to Europe, examining the European

policy responses to this migration. Nevertheless, field studies and further readings have highlighted the need for a less ethnocentric research question that would not have assumed that all migration flows are directed to Europe and that Europe is solely responsible for the fisheries' collapse. In fact, the complexity and multiplicity of fishermen's maritime trajectories call for a broader perspective of inquiry (as I show in chapter 1). Therefore, I have progressively oriented this research towards something slightly different from what was initially envisaged: new connections and areas of interest raised my attention in the field, leading me to move the focus of my research. In this sense, this project articulates as a "progressive focusing" (Parlett & Hamilton, 1976, cited in Schutt, 2011: 322), which is a common process in qualitative research.

There are many reasons which encouraged me to make the choice of conducting qualitative interviews and participant observations. For Silverman, qualitative research methods give access to a higher level of analysis when researchers examine individual experiences (2010). In fact, it seemed more appropriate to tackle the way individuals unfold their mobility at sea, experience cross-border movements or mentally shape sea spaces through their own accounts of everyday practices rather than through spreadsheets, tables or graphs. As qualitative analysis enables a "focus on meanings rather than on quantifiable phenomena" (Schutt, 2011: 324), it constantly looks at the influence of contextual facts and background on the behaviours and interpretations of individuals. Using qualitative research methods led me not only to examine what my respondents were saying about mobility as such, but also to grasp the way their own cultural, political and social background had influenced their mobility and their relationships to other actors, for example. I did not explicitly speak about mobility with the respondents, and my question was not "what does mobility mean for you" but rather addressed a range of general questions in which the meanings of mobility could be grasped through my own interpretation. If I were to classify my approach into a specific category, I would certainly call it an "ethno-methodological" approach (Schutt, 2011: 336). My field research involves participant observation and narratives' analysis and looks at the actors' interpretations of the world, starting from the assumption that they construct and create reality through these interpretations. In fact, this research results from an interpretation (mine) of interpretations (the narratives of my interviewees). I am aware that my analysis of the respondents'

narratives is influenced by my own experiences, feelings and academic and social background as well as my expectations of what field observations should reveal. However, those biases would also apply in relation to any quantitative methods – that is, in the choice of variables, data collection methods, orientation of research questions or hypotheses, for example. Furthermore, there are atmospheres, specific relationships, informal, brief conversations, silences and emotions or tensions which are not tangible solely in the interviews I transcribed in this thesis. This entire context I learnt to be sensitive to has influenced my own perceptions, research questions and interpretations. I attempt to give room to these emotions and perceptions throughout this thesis.

This qualitative approach specifically focuses on networks. Given the difference in the nature of the actors involved in this project and the way they are interconnected, I focused the fieldwork methodology on the existence and identification of networks, stressing the relations between human and non-human elements (B. Latour, 2005; Ruming, 2009). As Ruming states, rather than being a strict theoretical framework, “Actor-Network Theory” (ANT), used as a methodology, might help “translate” facts produced by visible or invisible networks (Ruming, 2009: 454). The Actor-Network-Theory suggests that networks should be “translated” so that research becomes a mediator which occupies a place in the studied network itself and which in return influences the actors of this same network by this translation work (B. Latour, 2005; Ruming, 2009). The relevant aspect of this methodology is that the same importance is given to human and non-human actors and that the “tracing” (Ruming, 2009: 353) of their interrelations provides key information. For example, field study attempts to “trace” human and non-human network actors and understand their interaction and creation.

Other reasons deterred me from conducting surveys. I noticed that these methods tend to provide very impersonal and poor responses for this kind of case study. In 2007, when I first conducted fieldwork in Senegal for a Master’s thesis, I noticed that fishermen all tended to provide similar answers when my questions were too specific and precise. This can be explained by their general distrust of and reluctance towards what they associate with administrative procedures and scientific knowledge and so forth. It was therefore more helpful for me, and less intimidating for the respondents, to use my old notebook and mentally prepare my questions rather than to have a

properly typed questionnaire in my hands. Nevertheless, sea mobility patterns are certainly quantifiable phenomena, and it is of interest for this research to assess them. In the field, I gathered quantitative data related to the mobility patterns studied in this research. Also, results are mainly based on the 2005 official fisheries census, which appeared to be one of the most reliable, complete and recent data sources (ISRA, 2006). Unfortunately, few data are available on irregular migration to Spain or on cross-border movements throughout West African waters. Access to more recent and reliable quantitative information on fishing migration to Mauritania, Guinea and Guinea-Bissau was impossible at the time of the fieldwork. In 2012, I had access to a series of scientific reports meant to assess fishermen's migration patterns at the sub-regional level and for which research had been conducted by a recognised international organisation. Unfortunately, I was informed that those statistics had been manipulated for political interests and were thus unsuitable for further scientific use.

As this research involves human participants, I sought approval from Keele University's ethics committee. My project was approved by Keele University's Ethics Review Panel on two occasions, in April 2011 and January 2012, before the two field sessions I conducted in Senegal.¹¹ Before starting any interview, I informed the respondents about the objectives and implications of my research, the confidentiality of the research, asked them if they wanted to remain anonymous and gave them details about my own background. In accordance with the ethical requirements, we started the interview only after they had formally given consent. Depending on their personal wishes and professional requirements, institutional respondents have not been systematically anonymised. Also, I changed the names of most of the fishermen I interviewed in order to protect their identity.

Organisation of fieldwork

I first conducted a two-month fieldwork session in 2011, in order to identify the main actors and immerse myself in the field. I carried out 28 in-depth interviews among a wide group of actors, including state agents from the Ministry for Fisheries (monitoring and control sections of

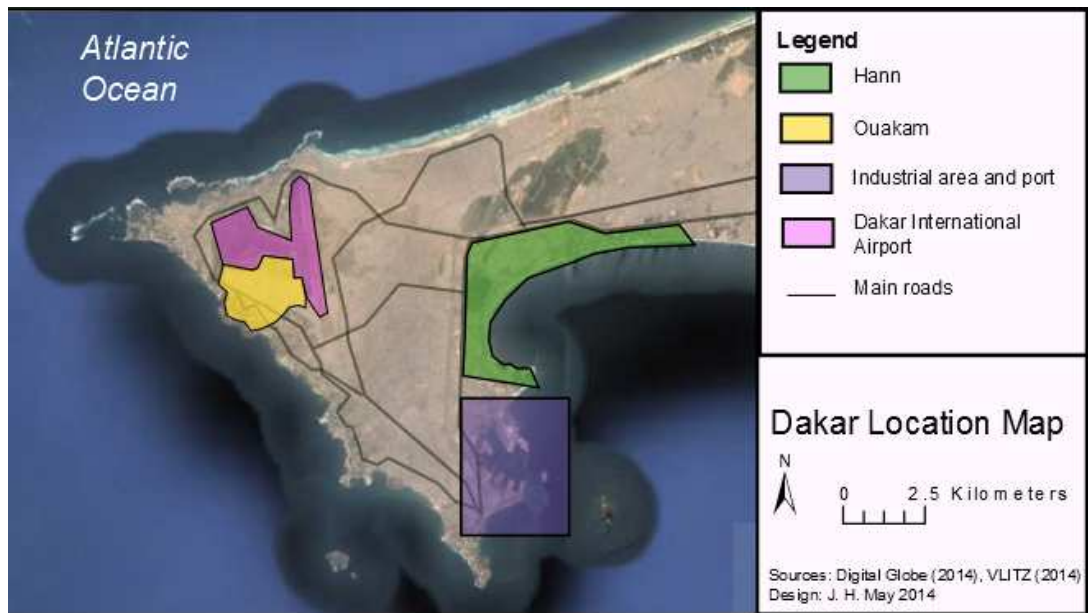
¹¹ Appendix 1

small-scale and industrial fisheries), civil society members (ADEPA, CNPS, FENAGIE), fishermen, fishermen's leaders and returned migrants from Europe (failed migrants).¹² It was very common for these actors to fulfil several of these roles. For example, in this panel, professional organisations' representatives could be retired fishermen; similarly, interviewed failed migrants were always former or active fishermen.¹³ However, I chose to orientate the interview depending on their present status at the time of the research, personal migration or fishing-related history. Broad questions were raised at this stage and directions were given for further field analysis.

The choice of the fishing villages was made according to their specificity in terms of mobility. Indeed, in order to gather fishermen's experiences, I first selected three fishery sites in the Dakar area from which different types of fishermen's mobility can be observed. The first one, Ouakam (Map 2), specialises in small-scale demersal fishing: fishermen stay in the coastal area and generally fish around Ouakam with small canoes. The second place, Hann, is more focused on large-scale mobility, with departures to Guinea-Bissau, Mauritania and Guinea (Conackry) and a small number of local net and line fishermen as well. The third site, Kayar, presents cases of both large-scale and small-scale mobility, and has been one of the most common departure points for fishermen's migration to Europe over the last decade. In Kayar, failed migrants have created an organisation through which they could be reached. In total in 2011, fourteen of the respondents were fishermen (including two leaders of professional organisations). They were failed migrants, local net and line fishermen, fishermen's leaders or international fishermen who agreed to talk about their migration decisions and sea experiences. On the national scale, representatives of institutions and organisations specialising in fisheries were mainly targeted. More than primary data, these interviews mainly generated essential material for discourse analysis and an understanding of mobility patterns in Senegal. Categories of respondents for this first fieldwork stage are listed in Appendix 2.

¹² For a full list of respondents and organisation, see Appendix 2

¹³ For further information on the respondents' status, see Appendix 2, Table 1: *Respondents' categories according to their main function, status, professional activities or personal migration history*



Map 2: Dakar peninsula, May 2014. Design: J.H.

This panel helped get an overview of the fishing sector in Senegal and a general idea of the local sea geography Senegalese fishermen have constructed over time. In 2012, I conducted a second and longer field study, mostly among fishing communities in Hann, Saint-Louis and Joal. The following description of the field approach not only gives information on the way interviews were conducted, but also on the way networks are organised among fishermen. In fact, in order to disentangle the networks organising fisheries and mobility patterns in Senegal, as a researcher I had no choice other than *integrating* these networks. Besides, the simple action of interviewing these field actors and making connections between them can be considered as an action of network creation (Ruming, 2009).

Over the course of the 2011 session, representatives of professional organisations gave me contacts of potential respondents from various fishing wharves in the Dakar peninsula who were known as local leaders. I got to know the relationships which tied these different key network actors together, and was also introduced to potential respondents. By the end of this first field session, I had a broader understanding of the field and it was easier to recognise the leaders and understand the hierarchical connections between them. The way they were introduced, talked to or

welcomed by the members of the community were indications and cultural codes helping me to grasp the structure of the local networks' organisations.

In order to meet fishermen, I always started working from the local fishery services where my informants were generally based. My informants then used to walk me either through the narrow, dusty streets of the fishing village or to the noisy fishing wharf. Because of the high level of their mobility, the fishermen – and especially the cross-border migrants – I first interviewed in 2011 were not interviewed again in 2012. They were either not available, were fishing in Guinea-Bissau or had moved to another village. Nevertheless, I interviewed some of the respondents I first met in 2012 several times over the course of this second field session.

Everything, including my own person, as a researcher, was involved in the power relations. This was unavoidable as it was one of the conditions needed to reach a proper comprehension of fishermen's mobility. For instance, the only effective way to meet with key respondents and gain their trust was to be properly introduced to them by influential members of the community. I first identified actors according to their functions in the organisation of mobility: those people who were physically taking part in maritime migrations, those people funding sea journeys, those people in charge of stopping illegal movements at sea and those people indirectly encouraging departures and so forth.

Although respondents varied from one year to the other, key informants remained the same. For this research, key informants are defined as those field actors who are fully integrated into the network studied and who agreed to guide me and put me in contact with would-be respondents. I first interviewed these actors in an isolated way, and as soon as I perceived their recognised leading function among their community, I proposed that they introduce me to other members of the network. They were more than a simple interface between the interviewees and me. I noticed that I was "treated" in the same way they were and I was given the "same" social function they were; and respondents agreed to answer my questions in the same way they would for my informants. Being aware of this specific social hierarchy between network actors undoubtedly helped to gain the trust of the respondents as well as to get deeper answers in interviews. For example, in 2011, I attempted to conduct a couple of interviews in a fishing village, but because I

was helped by an informant who was not very influential – or who was perhaps not willing to help me properly – I either had very common and impersonalised responses or fishermen were not very keen to take part in my study. The choice of field informants needs experience, as being aware of social codes and the cultural hierarchy in such environments is absolutely not an easy task for a Western researcher.

For these key informants, coming back a year later, as I promised I would do in 2011, was seen as a sign of intellectual honesty, which meant that they finally opened their doors in a wider way than they did in 2011. Therefore, the time I spent in their company in the time before I got to know new potential interviewees was more fruitful every time. They had a lot of information about fisheries, their social and professional organisation and power relations between actors and mobility patterns – the kind of information which fishermen themselves were not always willing or able to provide me with, with any precision, during interviews. These key informants acted as translators of cultural codes I was not able to understand or even perceive in the field, so that lots of responses I found for this research came out of discussions with them. In 2012, my field study lasted six months, during which I conducted 41 interviews with representatives of fishery-related public institutions (Ministry for Fisheries) and professional organisations (FENAGIE, CNPS) and with fishermen, fish traders and fishermen's community members¹⁴ in Dakar (Hann and Ouakam), Saint-Louis, Mbour and Joal (Map 1). I identified different categories of fishermen: local or international, demersal or pelagic fishermen, fishermen who attempted to go to Europe by sea and fishermen who mainly fish in Guinea or Mauritania and so forth. I mainly targeted cross-border fishermen as well as their relatives for this field session and conducted in-depth qualitative interviews among specific actors in the field. The narratives of the fishermen's relatives are essential to this study as they explicitly put forward the value of the mobility experience on the intimate and social scales. They also enable this project to introduce a gender dimension for the analysis of mobility patterns from Senegal and become a valuable link between the different forms of mobility I propose to explore.

¹⁴ Appendix 2

Details of life stories, border experiences and migration and fishing narratives were given in these interviews. In 2012, I met actors several times and conducted interviews in a freer way than in 2011. When possible, mental maps were drawn, although this was seen as a very difficult task for the fishermen. They are not used to drawing – still less drawing maps – and most of them are poorly educated. They were sometimes reluctant to hold a pen and draw the local geography of their fishing places. Also, lots of time was needed to gain their trust, so I had very few opportunities to ask them to do this exercise.

Translation issues

It is very difficult to evaluate the number of fishermen who were able to speak French properly as some of them were happy to answer my questions in a mix of French and Wolof, while others who could speak perfect French chose to reply in Wolof. In 2011, I was helped by a Senegalese research assistant who translated the interviews with the fishermen – I am able to understand a bit of Wolof, but this was not enough to conduct the whole interview in this language. This research assistant was external to the fishing environment and had no personal link with the network of fishermen I was attempting to mentally disentangle. However, I soon realised that respondents were actually more distant and less talkative in the presence of a translator, despite them his native: I had more common and impersonalised responses than in much less structured interviews with “pure” Wolof-speaking fishermen. Also, I perceived that the presence of this translator as well as the key informant were in fact intimidating for the interviewees – needless to say, the fact that the interviewer was a European woman inquiring into a purely masculine and native environment also made the situation even more delicate. In 2012, I decided to conduct the interviews in the presence of a respected and well-known key informant only, although I was aware I would get less precise translations. This method proved to be much more fruitful, and although I did not have the best translations, I could get insightful responses that I would never have been able to hear otherwise. Also, the transcription process of the interviews involved another translation movement from French to English. When doing this, I attempted to keep as respectful to the original respondents’ way of speaking as possible.

Finally, because fishermen's mobility first depends on their fishing speciality, techniques and habits, it is important to outline the categories I used for this research. They can be either demersal or pelagic fishers, local or international fishermen or failed migrants and so forth. It is also worthwhile highlighting the connections between these functions as a starting point for this research.

Categories of respondents: who are the fishermen?

In Senegal, fishing activities spread all along the coastline from Saint-Louis, at the northern border area next to Mauritania, to Casamance, near the southern border of Senegal, next to Guinea-Bissau. The local economies of Saint-Louis, Kayar, Dakar, Mbour, Joal and Ziguinchor are greatly influenced by important fishing centres from where pelagic and demersal fishermen, whether local or migrant, go back and forth and organise their maritime trajectories (ISRA, 2006). The 2005 national census estimates that Senegal has at least 57,000 active maritime fishermen who are either captain-owners, simple crew members or apprentice fishers who are all men from various ethnic backgrounds (Wolof, Lebous or Serers Niominkas) (ISRA, 2006). The social status of the fishers depends on their age and their relationship to the boat owners: young fishermen are single, with less responsibility on board, whereas captains are slightly older (30 to 35 years old) and generally are close relatives of the boat owners – when these boat owners are not captains themselves (30% of them are captains) (ISRA, 2006). Finally, most of the fishermen had a limited education as a majority of them only went to primary school (84.6%) and/or Koranic school (56.5%). Also, it is very common that 15 to 20 family members live together, composing extended households which financially depend on a couple of fishermen. The economic situation of the fishing communities is difficult to assess as the incomes of the fishers vary from one day to another throughout the year. A simple hand-line fisherman might earn XOF 50,000 (£63) a month and, with other male workers, pay for the expenses of up to 15 family members. Coastal communities generally live in a modest economic situation; more than 55% of Senegalese households earn less than two \$2 a day.¹⁵

¹⁵ World Bank, 2014

For this research, I identified six categories of fishermen: the outlines of these categories are flexible as fishermen might shift from one category to another over the course of their career, depending on their resources, their family's traditions and preferences and their individual wishes or opportunities. In fact, it is unlikely that a captain fisherman whose family owns boats and gear for line fishing, for example, will eventually decide to convert to being a pelagic fisherman. By contrast, when fishermen do not own boats and gear and are unskilled (in terms of fishing), they might get hired by either demersal or pelagic fishing crews. Also, a local fisherman might become a cross-border fisherman, depending on the opportunities he gets, and vice versa. I will explore the reasons for these shifts in different scenarios, as personal choices and professional orientations certainly give meaning to mobility. Table 1 summarises the distinct categories and fishing places on which this project is based:

Table 1: Categories of fishermen respondents and their fishing destinations¹⁶

		Cross-border fishermen				Local fishermen	
		Demersal fishermen	Long-distance demersal fishermen	Pelagic fishermen	Long-distance demersal fishermen	Local demersal fishermen	Local pelagic fishermen
Categories of fishermen / fishing areas		Small fishing units, 4 to 5 crew members, based in Saint-Louis (hand line, drift nets, set nets)	Ice-box 20-metre-long boats, 13 to 20 crew members, based in Saint-Louis (hand line, drift nets, set nets)	Up to 30 crew members, based in Saint-Louis (purse seine/surrounding nets)	Ice-box 20-metre-long boats, 13 to 20 crew members, based in Dakar peninsula, Mbour, Joal, Casamance (hand line, drift nets, set nets)	Based in Dakar peninsula, Mbour, Joal, Sine Saloum Casamance, 4 to 5 crew members (hand line, drift nets, set nets)	Based in Dakar peninsula, Mbour, Joal, Casamance, Sine Saloum –up to 25 crew members (purse seine, surrounding nets)
FISHING AREAS	Beyond the Mauritanian border, coastal waters (max. 24-hr trip)	X		X			
	Senegalese coastal waters	X		X		X	X
	Few hundred km off Mauritania, sometimes up to Morocco		X				
	Guinea-Bissau, Conakry, in some cases Sierra Leone				X		

¹⁶ Among the respondents, “failed” or returned migrants might belong to any of these categories.

i. *“Failed” or returned migrants*

Fishermen are either local fishermen or cross-border fishermen used to fishing outside Senegal in West Africa. Among these two categories of fishermen were also those who had tried to reach Europe by sea, sometimes several times, and who failed and returned to Senegal either voluntarily – when they had to interrupt their sea voyage because of a storm, for example – or involuntarily – when they got arrested at sea, or arrived in the Canary Islands but were repatriated to Senegal¹⁷. For convenience, I chose to call them “failed” or “returned” migrants. These migrants failed as they aimed to reach Europe but for some reason they did not manage to make it, and considered these attempts as failures, as did their families and communities (see Dünwald, 2011; Pian, 2006).

ii. *Demersal and pelagic fishermen*

Pelagic fishermen work on large 20-metre-long boats, with 15- to 30-member crews (Photographs 1 and 2). They generally fish in coastal areas using “purse seine” (surrounding nets). These are immense and heavy fishing nets used to catch pelagic species and can measure up to 500 metres long. Pelagic species move in shoals under the surface of the water, contrary to demersal species, which are deep-water species. Sardinella and mackerels are common pelagic species that Senegalese fishermen usually catch. Fish shoals follow specific seasonal migration patterns all along West Africa, from Guinea-Bissau to Morocco. These fish migrations generate a very mobile way of fishing, sometimes leading fishermen to illegally cross international maritime borders, as in the case of the Senegal–Mauritania border and Saint-Louis fishermen. Fishermen adjust to these seasonal movements and migrate all along the Senegalese coast at different times of the year, looking for sardinella, mackerels, horse mackerels or false scads, depending on the season. They then sojourn in camps or relatives’ houses for the fishing season, usually living with the other crew members, far away from their wives and children. Whereas fishermen generally organise 24-hour fishing trips in order to keep the fish as fresh as possible, their regional migrations can last several days, weeks or even months (Binet et al., 2012). They sell their catches on the local market, as

¹⁷ Mostly after 2006 following the bilateral agreement signed by Senegal and Spain (chapter 8)

pelagic species are mostly directed towards local consumption and have a low-value market in comparison with the demersal species.

Furthermore, the upwelling system off Senegal and Mauritania influences the movement of fish shoals on a seasonal basis. The upwelling results from strong seasonal winds which, by blowing on warm surface waters, generate a movement of deep, cold waters up to the surface. These cold waters attract many fish species as they favour the proliferation of phytoplankton and seaweed, which encourage the development of marine ecosystems by providing food for fish (Boely, Chabanne, & Fréon, 1979; Cury & Roy, 1988). For example, sardinellas migrate from Guinea-Bissau to Mauritania, generally from February to September: from April to the beginning of July is the best time of the year for pelagic fishermen to catch them in great quantities in Senegalese waters, as sardinellas are attracted by the rich waters brought up to the surface by the upwelling (Boely et al., 1979). Similarly, white groupers – which fishers catch with hand lines – migrate each year from Mauritania to Senegal at the beginning of the cold season, and near Dakar, fishermen start catching them in February to March (Cury & Roy, 1988).¹⁸

Demersal species live in deep waters and are directed for export to Europe, Africa and Asia. Sea bream, white groupers or barracuda are demersal species which in Senegal are also known as the “noble species” and which are mainly sold on the international market. Fishermen either catch demersal species in local coastal areas (Photograph 3), looking for rocks where deep-water species usually live, or they navigate long distances, crossing international borders and fishing in the waters off Guinea-Bissau, Conakry, Sierra Leone or Mauritania (Photograph 4). They use many fishing techniques, such as hand lines, set nets and drift nets, depending on the species they target. Demersal fishermen do not follow shoals as pelagic fishermen do; they go directly to these richer, remote fishing places, sometimes navigating for days before they can reach them.

iii. Cross-border fishermen

In this study, *cross-border fishermen* are fishermen who have been crossing the maritime borders of one or more West African countries. Crews of long-distance international demersal

¹⁸ These species are attracted by the rich ecosystems of the cold waters brought up to the surface by the upwelling

fishermen are made up of around 13 to 20 members, and they spend up to two weeks on board large 20-metre-long boats: these boats are called “ice-box canoes” (*pirogues glacières*) as they carry important ice stocks so that fish is kept frozen until its sale once back on Senegalese shores. These fishing expeditions are very specific since crews remain at sea when abroad. Crews stock up on ice, fuel and food supplies in Senegal so that they remain autonomous at sea during the expedition. In fact, with their significant carrying capacities, both ice-box and purse seine boats were used to carrying West-African migrants up to the Canary Islands.

The category of cross-border fishermen also includes demersal and pelagic fishermen who are used to crossing the Mauritanian border in order to fish either legally or illegally there. They do not consider themselves as migrants as they do not organise long-distance fishing journeys: rather, they leave for 12- to 24-hour trips, contrary to the line fishermen, who navigate up to Moroccan waters or down to southern countries’ waters, or even to those who temporarily settle in Mauritanian camps (chapter 6). However, their everyday experiences of the Mauritanian border and daily migration movements, as well as the way they justify their illegal border crossings, make their situation comparable to long-distance fishermen.

Furthermore, the cross-border fishermen I am studying in this thesis are all based in Senegal and always come back home after the fishing season. This project does not deal with the Senegalese fishermen who permanently settled with their family in neighbouring countries’ fishing villages (Binet et al., 2012) as fieldwork was conducted in Senegal only. Also, for reasons of time, migration on board large-scale fishing boats – called *bateaux ramasseurs* – will only be briefly mentioned in this research. From the end of the 1970s, Asian industrial boat owners started hiring local line-fishers for a couple of weeks or months (Sall, 1999). These boats carry around 40 small line canoes and 200 to 250 fishermen, departing from Senegalese fishing villages and navigating to rich, remote waters (Sierra Leone, Mauritania and Guinea, for example). The small boats are then released in these remote waters, and crews fish and bring their catches to the ship-owner every day during the season. In exchange, they are hosted (aboard) and are paid at the end of the season. These fishing methods were more or less legally developed and are now disappearing. Although ship-owners hold valid licences, they generally hire these fishing crews in very extreme conditions.

These practices were reported by NGOs for violating human rights (Sall, 1999). Some of my respondents, especially the migrant fishermen, reported that they had experienced this kind of fishing migration, once in a while, during their professional career. However, lack of information on these specific fishing migration patterns means that this project cannot examine them in depth.

Whereas pelagic fishermen are very mobile at sea, following shoals and stopping only while throwing their nets into the water, line-fishers rather look for fixed fishing places where slightly less mobile deep-water species are likely to dwell. Drift-net fishers let their nets drift in order to trap demersal fish species, which move along with sea currents. These ways of fishing influence fishermen's geographies of the sea space. Pelagic fishermen mentally construct the seascape according to moving marks, whereas demersal fishermen progress between fixed points in the sea (chapter 7). Also, these categories bring to light different kinds of human and non-human interconnections. First, the movements of demersal and pelagic fish species in the sea are interconnected: through the oceanic food web, demersal species depend on pelagic species to survive – the former eating the latter. Second, demersal migrant fishermen use sardinellas and other pelagic species as bait: the mobility of these fishers and the way they organise their fishing trips thus highly depend on the availability of pelagic species and purse seine fishermen's catches and mobility.

These categories simplify the complex organisation of the fishermen's mobility as well as their traditional techniques and preferences. They provide a first-hand clear frame for further analysis, and, as this mobility not only depends on environmental elements, I now move on to introduce the institutional and political background of fishermen's mobility.



Photograph 1: Purse seine boat off Dakar coasts, April 2012, J.H.



Photograph 2: Crew members of purse seine boat on a fishing trip off Dakar coasts, April 2012, J.H.



Photograph 3: Local demersal-fishing boats, Mbour, May 2012, J.H.



Photograph 4: Demersal fishers back from Guinea-Bissau, July 2012, Hann, J.H.

2. Institutions and mobility

In Senegal, domestic and political institutions have a significant impact on people's mobility and behaviours. For small-scale fisheries, these institutions can be perceived at many levels through professional organisations, traditional rules for the use of sea resources, state representatives, the law and its agents, religious leaders, a traditional distribution of the workforce and resources or capital. Chauveau, Chaboud and Jul-Larsen emphasise how access to the sea is determined by the complex power relations between the fishermen and the multiple local and national institutions in West Africa (2000). They define these mechanisms as follows:

Through institutional dimension, we understand all the rules, norms, conventions, institutional arrangements, forms of coordination and information and decision making processes from which the distinct social actors, both individuals and collectives, interact together in order to organise access to resources, assert their control over these resources and find room for manoeuvre [*marges de manoeuvre*] according to their position, to the stakes they conceive of as vital for them and to the particular background in which they progress". ... "It [the institutional dimension] not only involves the - formal or informal- regulation to material, environmental and economic resources' access, but also the political, social, identity and symbolic resources and constraints which condition this access. (2000: 14)¹⁹

These authors understand this "institutional dimension" as a series of mechanisms for the exercise of social and political powers which West African small-scale fisheries take into account in the organisation of their access to sea resources. The authors emphasise the way the "distinct social actors, both individuals and collectives" negotiate with these institutions to "assert their control" according to their own possibilities and specific positions. In other words, access to resources is shaped by the power relations linking the specific actors of the small-scale fisheries and the domestic, local or national institutions. For Jul-Larsen, these relations not only give shape to competition for access to resources but also determine the economic development of fisheries in

¹⁹ My translation

the case of Congolese migrant fishermen (Jul-Larsen, 2000: 168). In Senegal, these institutions take multiple shapes around which fishermen unfold and organise their mobility.

It is certain that national state structures and local institutions exercise power separately in terms of access to the sea. The state institutions aim to control sea activities, the exploitation and preservation of fishing resources and the development of both small- and large-scale fisheries. These institutions are embodied by the Ministry for Fisheries (DPM, *Direction des Pêches Maritimes*), which is divided into different sections that include small-scale fisheries and industrial fisheries management, scientific research and maritime surveillance. At the end of the 1990s, the Senegalese state started a decentralisation policy which aimed to give more strength to state control at the local level along Senegalese coasts. State agents are certainly more visible in the field but still lack legitimacy for the local fishermen (chapter 4). Border agents of neighbouring countries also embody external institutions which fishermen must deal with. In parallel, fishermen are represented by several national professional organisations such as FENAGIE²⁰, CONIPAS²¹ or CNPS.²² In theory, these organisations defend the fishermen's interests, providing financial and political support to fishing activities. Local fishing-related private actors elect representatives of local GIEs (*Groupe d'Intérêt Economique* - Economic Interest Groups). GIEs generally organise the fishing wharves and operate in collaboration with local state representatives, and in practice they often have a mediating function between the state and individuals. Fisheries-related actors are the women processing the fish (drying, salting and local sales), fish traders (who can be either women or men – though mostly men) and local workers carrying fish boxes and selling fishing-related items (ice, fuel, gear) and so forth.

Fishermen interact with these institutions every day. Their international fishing-related mobility involves a higher geographical scale which the Sub-Regional Fisheries Commission²³ covers. This Dakar-based intergovernmental commission covers seven West African countries, including Cape Verde, Gambia, Guinea, Guinea-Bissau, Mauritania, Senegal and Sierra Leone. The

²⁰ *Fédération Nationale des GIE de Pêches*

²¹ *Conseil National Interprofessionnel de la Pêche Artisanale au Sénégal*

²² *Collectif National des Pêcheurs Artisans du Sénégal*

²³ SRCF or CSRP in French. For further information, see <http://www.spcsrp.org/Presentation/Objectif>

organisation aims to strengthen cooperation and fishing resources management policy among these state members through common policy programmes, research and surveillance structures. Among other functions, the organisation gives a political frame to the implementation of international fishing agreements linking the member states. The SRCF website provides the official material and policy texts that I used in this thesis. Fishermen never mention the work of this intergovernmental organisation in their narratives.

These institutional “arrangements” also cover the religious dimension, which is essential to the organisation of Senegalese communities (Gemmeke, 2011) and fisheries in particular. marabouts, who are spiritual leaders who preach Islam and ward off fate with animist rituals, play a decisive role in the mobility of the fishers as they take part in the blessing of the canoes before the fishing seasons. The longer the sea trip, the more expensive the marabout’s consultation. In fact, the financial dimension of small-scale fisheries is also very complex. While private banks and cooperatives provide loans to the fishermen, interest rates are generally very high (up to 14%) due to the unstable economic situation of the fishermen (who are often not even able to provide enough guarantees to the funders) (Sall & Diallo, 2001). Fishermen tend instead to seek funding at the informal level of the community from their relatives, fish traders or boat owners.

Traditional fishing communities are methodically organised, following strong values and principles based on the community system, task sharing and social hierarchies. The institutional dimension is especially strong at the domestic level. A lot of pressure is put on the fishermen, who fulfil the role of livelihood providers. A strong solidarity system works as a form of “informal social security”, as in many West African countries (Calvès & Marcoux, 2007: 8), and somehow fulfils the role of the state. In the name of this solidarity system, active workers often have to feed many more mouths than expected. This solidarity system might take negative shapes when it generates strong dependent relationships and constitute obstacles to self-realisation by preventing individuals from saving a share of their income and projecting themselves into future sustainable plans (Marie, 2007). As we will see, in many situations, mobility is a response to this solidarity system to the extent that migrating or being absent enables the fishermen to escape social pressure (chapter 9). Finally, these hierarchies and the rationalisation of community members’ tasks and

roles remind us of Janin's observations about agricultural communities in Sub-Saharan Africa. Janin emphasises how these communities organise themselves according to "micro-geopolitics of resources" (Janin, 2008: 1). Each individual fulfils specific functions and carries out specific tasks according to his or her age, gender, experiences and skills. For Janin, this rational task-sharing system is a guarantee of cohesion and a reliable response to risks.

For the fishermen, these "micro-geopolitics" are noticeable on many levels, including on the scale of the fishing unit. Each fishing unit – no matter whether it is demersal or pelagic oriented – is based on a complex hierarchical and traditional system which determines the way the earnings generated by the fishing activities are distributed among the crew as well as the distribution of specific tasks and responsibilities on the boat. Each fishing unit always includes a captain, a second captain, a boat owner, an engine, a net, a cooker and distinct crew members. Each of these specific agents earns a share of the profits gathered at the end of the fishing trip. This organisation implies that a boat owner who can be both a captain and an engine owner, for example, will earn a share for each of these specific functions. The proportions of the share vary according to the fishing units: sometimes the share of the boat owner corresponds to a third of the total and sometimes it can be half of it. Also, a boat owner's share can represent ten crew members' shares. Similarly, crew members' shares vary according to their level of experience and skills: for instance, a 15-year-old fisherman may earn half of a share, whereas his more experienced father, also in the crew, earns a full share. In theory, this system enables the crew to properly manage and cover the expenses involved in the fishing trip: fuel, ice and supplies for the crew and so forth. These shares are methodically calculated and distributed by the crew captain. Crews are considered as a proper family for these fishermen: the trip funder (often the boat owner and/or captain) is responsible for his crew members. He is supposed to cover all the food and accommodation expenses during the fishing season, and sometimes even supports his crew members by helping them financially in difficult times, somehow working as personal insurance. This organisation makes the fishing units work like a balanced system, methodically mixing human and non-human agents.

In conclusion, I have broadly introduced the methodological and field background of this research, outlining the way I approached the respondents and the limits I was confronted with. This qualitative approach has enabled me to identify the main actors of mobility and be aware of the dynamics of fishermen's mobility. The institutional dimension of their mobility is essential: these complex institutional mechanisms manifest at the public or domestic level, on the international, national or local scale, and aim to secure the communities' stability. These mechanisms give shape to the fishermen's mobility to the extent that they structure the way coastal communities work and play a decisive role in the access to sea resources and in the sharing of economic resources. We will see that although sea mobility – or rather access to the sea – depends on, and is possibly thanks to, these institutional mechanisms, mobility paradoxically also enables the fishers to negotiate with these arrangements by providing them with opportunities to exercise power in a pragmatic way over their physical, socio-economic and political environments.

For the analysis of fishermen's mobility patterns, I first interrogate the nature of fishermen's mobility. Is their increased mobility merely environmentally induced? If fishermen are environmental migrants, what are the political and economic implications of their mobility? The next chapter explores the limits of such assumptions.

Chapter 3 –
Are Senegalese Fishermen
Environmental Migrants?

Climate change may significantly affect vulnerable populations of many nations in the near future. The rise of the sea level will have a major impact on coastal communities in Guyana, the Bahamas and Bangladesh by 2100 (Dasgupta, Laplante, Meisner, Wheeler, & Yan, 2007), whereas drought and a decrease in rainfall are more likely to affect West African countries – causing an emergency situation for millions of people, as happened in March 2012.²⁴ As a response to these environmental changes, the people affected may consider migration strategies and become “environmental migrants” or “refugees”. If in Senegal the decrease in fish stocks influences the maritime mobility of the fishermen, shall we call the fishermen environmental migrants? In a recent study called “Migrant fishermen: climate and ecological refugees”²⁵, Failler and Binet suggest that the analysis of Senegalese fishing migration patterns should form part of the wider debate on environmental migration (Failler & Binet, 2010). They argue that the decrease in fishing resources in West African waters has pushed the fishermen to migrate and spread their mobility all over the ocean. What is the interest in classifying the fishermen as belonging to such a category?

This chapter explores the relation between the fishing crisis and the mobility of the fishermen through the concept of environmental migration. I question the relevance of this emerging concept, which has been discussed in the security-oriented literature (Dalby, 2009; Deudney, 1991) and anthropologic and geographic studies (For example Black, 2001; Gemenne, 2007; Hartmann, 2010). The narratives of Senegalese respondents certainly evidence the linkages between the environmental crisis and sea mobility. However, reducing their mobility to a mere response to resource scarcity does not inform us about the social, political and geographic meaning of – and causes for – their mobility. In fact, the creation of the category of “environmental

²⁴ BBC News, 2012

²⁵ My translation

migrants” tends to move the focus to the natural aspect of the crisis and dismisses the political dimension of the fishing crisis.

The first section examines the notion of environmental migration. I interrogate the way this environmental crisis is linked to the fishermen’s mobility in Senegal and finally the shape of maritime mobility patterns. The reflection brings to the fore many connections other than those pointed out in the environment–migration nexus.

1. Environment and migration: what linkages?

The “environmental refugee” concept was first formulated in a United Nations’ report in 1985 (Gemenne 2007). This concept suggests a new interpretation of migration trends by describing migratory movements as a response to changes in migrants’ sending environments. This category of environmental refugee emerges in the context of public awareness about climate change after the 1972 Stockholm Summit (Gemenne, 2007). Myers, an environmentalist, designates environmental refugees as every population located in vulnerable areas that might suffer in the future from natural events. Myers predicts flows of 200 million environmental refugees fleeing the consequences of climate change in the next few decades (Myers, 2005). These assertions have encouraged policymakers to assimilate climate-change-induced migration as a potential political threat to the security of national states. A 2008 European Commission paper foresees a significant increase in climate-change-induced human migration, considering these potential migrants as a threat to the political stability of receiving countries (Solana Madariaga, 2008). For environmental security academic research, it is clear that resource scarcity causes “environmental migrants” or “refugees” who will threaten the security of many countries, potentially producing conflicts and tensions (Dalby, 1996, 2009; Homer-Dixon & Boutwell, 1993). However, geographer Richard Black denounces the oversimplification of the Malthusian approach to the environmental refugee concept and instead suggests the use of the notion of “environmental migration”:

This notion of “environmental refugees” hardly tallies with arguments about recent destruction of the ecological balance by modern society; rather, migration is again

perhaps better seen as a customary coping strategy. In this sense, movement of people is a response to spatio-temporal variations in climatic and other conditions, rather than a new phenomenon resulting from a physical limit having been reached. (Black, 1998: 28)

Whereas Myers predicts huge waves of forced refugees, Black characterises migration as a chosen strategy to cope with climatic crisis and resource degradation rather than as an unprepared response (Black, 1998). Findley observes that during and after drought periods in Mali in the 1980s, population movements from rural to urban areas were circular and temporary rather than definitive (Findley, 1994). In other words, rural Malian communities adopted temporary migration strategies in order to cope with environmental change and did not flee drought as they would flee a violent conflict – that is, in an immediate and forced way. In fact, contrary to the security-oriented studies, some academics do not take for granted the link between environmental degradation and migration, suggesting that this link is not so evident and may lack consistency (Black, 2001; Gemenne, 2007; Tacoli, 2009). Tacoli conducted several local-scale case studies in Senegal, Bolivia and Tanzania. Her results corroborate the idea that the systematic causal environment–migration relationship should not be taken for granted and clearly shows that long-term environmental degradation does not necessarily engender large-scale migration movements (Tacoli, 2011). Furthermore, the characteristics of environment-induced population movements might also be determined by the nature of the ecological change (Black, 1998, 2001; Findley, 1994; Henry et al., 2004; Tacoli, 2009). A sudden natural disaster might not have the same impact on a local population as a long-term drought, for instance. Similarly, a population affected by rising sea levels will not necessarily produce similar migration responses to a population facing a serious crisis in fish stocks. What these studies show, in fact, is that although environmental changes may induce human migration movement, we cannot predict the shape of the resulting mobility patterns, their quantity or direction.

Moreover, migration can be deeply influenced by environmental factors, although it would be too simplistic to “naturalize” its causes (Hartmann, 2010: 235). For Hartmann, the “environmental refugee” concept is an invention which tends to minimise the responsibility of the

state in the management of the phenomenon and “depoliticise the causes of displacement” (Kibreab, 1997: 21, cited in Hartmann, 2010). Kibreab believes that receiving states would not have the obligation to take care of refugees were the cause of their displacement acknowledged as merely environmental (1997: 21). This “depoliticisation” results in reducing the responsibilities of states for this displacement as it is natural and environmental rather than political. According to Hartmann, “in addition to unreliable statistics, the ‘environmental refugee’ concept has a number of shortcomings. It naturalises the economic and political causes of environmental degradation and masks the role of institutional responses to it” (2010: 235).

It seems that by disconnecting the notion of “environmental migration” from the *network* to which it is linked, its political and social substance is being extracted. Paradoxically, environmental migration is being changed into a political object at the same time precisely because it is becoming a security preoccupation. Reducing migration to its environmental aspects might lead to the negation of its political dimension:

The degradation narrative has proved particularly popular in Western policy circles because it kills a number of birds with one stone: it blames poverty on population pressure, and not, for example, on lack of land reform or off-farm employment opportunities; it blames peasants for land degradation, obscuring the role of commercial agriculture and extractive industries and it targets migration both as an environmental and security threat. (Hartmann, 2010: 234)

Thus, according to Hartman, considering Senegalese fishermen as environmental refugees would make them responsible for Senegalese marine grounds’ overfishing and underestimate the role of foreign industrial fisheries in Senegalese waters. At the same time, fishermen’s mobility would be pointed out “both as an environmental and security threat”. It is certain that a cautious use of the notion of environmental migration is needed. The mobility of the fishermen might not only be considered to be a direct result of a natural crisis and the fishermen themselves as the cause of resource scarcity. Following Latour’s interpretation of modernity, Kibreab’s and Hartmann’s analyses would evidence the nature–culture separation. Here, nature is seen as an object disconnected from any kind of political reality. For Latour, an ecological crisis such as the ozone

hole is not purely natural but “simultaneously naturalized, sociologized and deconstructed” (B. Latour, 1993: 6). Hybrids such as global warming or deforestation are “human because they are our work” and “natural because they are not our doing” (B. Latour, 1993: 50). The notion of “environmental migration” suggests an association between natural elements and human facts. The concept implies that natural events have an impact on social behaviours and that social behaviours may be the direct result of ecological changes. As we will see, in Senegal, the fishing crisis is a natural manifestation of political choices and strategies involving a myriad of actors – including industrial foreign fishers, small-scale fishermen and the Senegalese government. Once species are endangered, they progress exponentially towards extinction and, as soon as a certain limit is reached, the extinction becomes irreversible (Meadows, Randers, & Meadows, 2005). In Senegal, marine ecosystems are endangered, because the intensity of maritime activities is increasing as well as the number of fishermen using these ecosystems to extract resources. This biological phenomenon has a great impact on the organisation and mobility of coastal communities and cannot be analysed in isolation as the causes of the fishing crisis as well as its consequences involve other actors of the chain-reaction process.²⁶

In order to address these complex mechanisms, there have been several attempts to theorise the interactions between natural marine elements and their human exploitation. Corlay applies the concept of the “geosystem” to the study of small-scale fisheries; it combines an “ecosystem” (the fish resource) and a “socio-system” that involves the fishers’ techniques, as well as their social and cultural habits (Corlay, 2004, cited in Le Roux & Noël, 2007). This definition echoes Cormier-Salem’s description of the fishing resource, which is that the construction of marine and fishing spaces should not be reduced to the fish, as they are instead based on an association of biological, cultural, political and environmental elements (Cormier-Salem, 2000). Similarly, Chauveau applies the notion of “technotopes” to the distinct maritime areas around which the fishermen circulate at sea (1991: 26). These “technotopes” form part of a “spatial system” of networks which fishermen exploit according to a “combination of bio-ecological, economic and political factors” (1991: 26).

²⁶ Chapter 4 explores the causes of the fishing crisis, evidencing the responsibility of the Senegalese state in the development of the fishing sector and looking at industrial and small-scale fisheries’ unsustainable practices and overfishing.

Fishermen choose to go to these “technotopes” depending on their knowledge, specialisation and fishing techniques. The balance of these “geosystems” or “technotopes” is threatened when fish stocks diminish because of some forbidden techniques and practices, overfishing and inadequate marine governance. These concepts address the spatial organisation of mobility into networks as well as the practical dimension of the distinct knowledges implied by the exploitation of these marine areas. These notions evidence specific relationships between the seamen and their marine environments and take into account fishermen’s particular local knowledge.

In conclusion, because it is not easy to put the notion of environmental migration into practice, because this notion simplifies the mechanisms of human mobility and because it might encourage the development of state security responses to the detriment of vulnerable communities, the use of this concept seems inappropriate to address Senegalese fishermen’s mobility. Nevertheless, what is certain is that there is a link between fishermen’s mobility and the fishing crisis: although fishermen are not “environmental migrants” as such, their movement is led by fish species’ movement and stock evolution.

2. Fishing crisis and mobility responses

Fishermen’s mobility seems to be both a clear expression of resource scarcity and its cause. In Senegal, fishing has become an outlet activity whose future is greatly jeopardised by a negative feedback loop involving increased competition, which is itself encouraged by a greater use of technologies and new fishing techniques, and an expanding mobility, all of which threaten marine ecosystems. These connections are not noticeable at first glance. There are many ways to look at national reports assessing Senegalese fisheries and fish stocks. On one hand, these reports may reveal a sectoral dynamism, while on the other hand, they may also produce signals indicating that the situation is critical. In fact, the decrease in fish species’ stocks is not correlated with the fishermen’s catches as, according to 2013’s official statistics, this sector has significantly contributed to the growth of the national economy (Direction des Pêches Maritimes, 2014). However, ecosystems are greatly threatened today, as many species are fully, even over-exploited

(FAO, 2010). Fish resources in Senegalese waters, especially demersal species, are considered to be in a serious condition (Alder & Sumaila, 2004; FAO, 2010; Gascuel, Laurans, Sidibé, & Barry, 2002; SSNC, 2009). One of the most threatened species in Senegal is the grouper²⁷, and it is now facing extinction because it is over-exploited (FAO, 2010). Scarce catches of white grouper are destined for export as local communities cannot afford to buy it, although it used to be a central element of Senegalese everyday food habits.

The critical situation of fish stocks in Senegal was formally acknowledged at the level of the government in the 2007 policy sectoral letter.²⁸ For the Senegalese government, these changes are the consequences of unsustainable fishing practices and the over-exploitation of coastal demersal species. However, for the researchers Sall and Morand, official statistics do not show a decrease in catches for the small-scale fishing sector at the national level but rather indicate a stagnation (Sall & Morand, 2008). In fact, the total number of catches greatly varies from 1997 to 2008, indicating an alternation between a decrease and an increase in catches (Table 2). Furthermore, the most recent information on artisanal catches reports that small-scale fisheries today contribute 4.8% to Senegal’s national GDP (Direction des Pêches Maritimes, 2014), whereas in 2007, this proportion was only 1.9% (Sector Policy Letter, 2007).

Table 2: Catches of small-scale Senegalese fishermen in and out Senegal’s Economic Exclusive Zone (EEZ) from 1997 to 2008 (Source: Direction Maritime des Pêches and FAO, 2008: 10)

	Artisanal fisheries catches (thousands of tonnes)
1997	345.6
1998	317.1
1999	302.3
2000	328.8
2001	320.4

²⁷ *Thioff* in Wolof

²⁸ After a series of dialogue and negotiation processes on the management of Senegalese fisheries, Senegal’s Ministry for Fisheries compiled the main objectives and policy of the fisheries sector into “The Aquaculture and Fisheries Policy Sectoral Letter” (*Lettre Politique Sectorielle des Pêches et de l’Aquaculture*) (Sector Policy Letter, 2007)

2002	292.9
2003	385.8
2004	395
2005	406.9
2006	–
2007	368.1
2008	383.6

Yet, field observations suggest that this stagnation or increase in catches is not significant for the evolution of Senegalese fishing activities nor for fish stocks. National statistics do not include fish species which are caught in foreign waters and sold in the national market (this is specified in Direction des Pêches Maritimes, 2014). These assessment methods are especially ambiguous because we know that a growing number of fishermen have been organising long fishing trips beyond Senegalese borders since the 1980s (Binet & Failler, 2012 and chapter 5). Furthermore, the demersal species which are caught abroad have a higher market value than the Senegal-caught demersal species. Therefore, the higher financial benefits provided by the sale of these valuable catches in the Senegalese market also make more complex the assessment of the actual condition of fish stocks in Senegal. In this context, how should we interpret national statistics on fisheries? What they certainly do reflect is the dynamism of the artisanal fishing sector. Unfortunately, they tend to hide the critical situation of both marine ecosystems and local fishermen who keep fishing in coastal areas. In 2012, there were around 3.8 more artisanal fishing boats than in 1984 and 1.5 more than in 2006.²⁹ Despite the decrease in fish stocks, the total number of boats has quadrupled in the past 30 years, suggesting the immense pressure over marine resources. Although we observe a stagnation or slight increase in artisanal production, this evolution of the national production is not proportional to the significant expansion of the number of boats. Furthermore, this increase in boat numbers also suggests deeper and more general economic issues as it reflects how the fishing sector has been a last-chance sector for a number of

²⁹ Considering that there were 4,968 boats in 1982; 12,619 in 2006 (FAO, 2008: 8) and 18,916 fishing boats in 2012 (Results of the 2012 Senegalese Fisheries Registration Programme – statistics collected during interviews with fisheries officials, Interview 69, Dakar, 21st June 2012)

young people seeking employment in Senegal. In this context, it is more uncertain that we should still speak about the dynamism of Senegal's fisheries sector. As a response to the resulting decrease in resources, artisanal fishermen have spread their mobility over the ocean.

Mobility and fishing crisis: evidencing linkages

The consequences of fish-resource scarcity on the fishermen's mobility have taken multiple shapes. Their everyday mobility is a subjective indicator giving valuable insights which reveal the fishing resource's current condition. First, local and regional mobility have increased: for their daily fishing trips, pelagic and demersal fishermen must go farther from the shore in order to find fish. Second, seasonal migration patterns have become more permanent and require higher financial investment. Thirdly, although the aim of a third maritime mobility pattern is not fishing, it is worth making connections with the first two mobility trends. Some fishermen turned to smuggling and economic migration to Europe at the beginning of the 2000s. These strategies – especially the first two – are reminiscent of Jorion's remarks on the recent changes in West African fisheries:

Once access to land has been severed, diversification of occupations becomes impossible and risk-minimization strategies need to take an altogether different direction: mobility in following the fish wherever they go. There are two distinct qualitative ways of doing this. Follow the fish over a stretch of coast centred on one's beach settlement, an outpost of the ancestral village, which I have called *seasonal moves*, or, via what I have called *migration*, turning to the more drastic solution of exiling oneself for a time under more favourable skies, where fish are plenty and buyers rich. (Jorion, 1988: 152; cited in Jul-Larsen, 1992)

Furthermore, the specific maritime movement of the Senegalese – demersal and pelagic – fishermen has been theorised by Marie-Christine Cormier-Salem. Fishermen progress according to two kinds of principles determined by the geographical organisation of fishing resources (Cormier-Salem, 1995). The maritime space can be characterised by two different areas: the first one is a

territorialised space which is dominated and organised by the “*paysans-pêcheurs*” (1995: 53) or “peasant-fishermen”. It corresponds to coastal, estuary and closed areas and is opposed to the open oceanic spaces, which cannot be controlled as they are “spaces to be conquered and whose limits are always pushed away but never fixed yet” (Cormier-Salem, 1995: 53). “Sailor-fishermen” or “*marins-pêcheurs*” progress in this second kind of space. Thus, Cormier-Salem suggests the notion of “*parcours*” or “route” to characterise the mobility of the “sailor-fishermen”, which would be opposed to the notion of “*terroir*” or “territory” used to describe the activity of the “peasant-fishermen”. The idea of a “route” both efficiently captures the unpredictability of the sailor-fishermen’s movement, which is adjusted to the mobility of the fish resources, and characterises their will to discover new horizons. When local fishermen choose to become migrant fishermen, they become “sailor-fishermen” and exclusively live on, from and with the sea.

In their observations, fishermen associate the increase in their mobility with the decrease in the natural resource. This implies that on the local scale, they are forced to spend more time at sea every day and for a smaller income. Although they still exploit their traditional fishing places, they now have to increase the places they go to. Most of the time, when I ask the fishermen about their catches, they first say something very vague like, “*It was better before, catches were bigger.*” From fishermen’s responses, it was difficult to distinguish what relates to a lower condition of fish stocks regularly occurring at some point during the year from what relates to the general evolution of the fishing resource. Local fishermen do not have organised timetables for their working year; they plan their everyday sea trips according to fish movements just the day before or a couple of hours before they go fishing.

Alioune³⁰ is a retired fisherman and one of the respected leaders of his local community. He is general secretary of Ouakam’s local fishing committee (CLP³¹), leading some of the state projects for the protection of local fish resources – although he is not a civil servant. Ouakam’s fishing wharf is a reasonably small fishery structure where around 450 fishermen work every day.

³⁰ Interview 17

³¹ *Comité Local de la Pêche*

As a local leader, he agreed to share his experiences on the decline of fish stocks and the issues the community has been facing over the last few decades. His statement reflects what I have generally heard about the fishing crisis:

*It has diminished ... catches have started to diminish. We're going fishing farther and farther away. We spend more time in the sea and with our "pirogues de marées" [long- distance canoes]. Instead of spending two days at sea, we stay four days and we go farther and farther. Before, we used to fill the canoe with catches within a half day. In the 1970s, when I learned to fish, the canoe was full, with the Thiof, all these species, the noble species. They have a high market value, but now it is diminishing.*³²

Similarly, Lamine³³, a fisherman from Hann, explains that before, fishing canoes did not go that far and that one could see them from the beach, fishing along the horizon line all year long. Today they have to navigate for two or three additional hours except during a couple of months each year – during the rainy season, they stay near the coastline and are not visible from the beach anymore. In Kayar, the statement of a CRODT technician who has been working in the area for the last 20 years gives other visible indicators of the decline of the fishing resource:

*Fish shoals were closer to the village. Fishing places were less distant. But for demersal resources, fishing places remain the same. We have fishing places opposite the village and with the motorised canoes they are located from five minutes away to one or two hours from places like Mboro. The pelagic species have changed and their fishing places vary. In 1991, the purse seines had the opportunity to go fishing three times in 24 hours. This means somehow that fish shoals were not that distant from the village which made fishing trips easier than today.*³⁴

³² Interview 17

³³ Interview 21

³⁴ Interview 1, Center for Oceanic Research of Dakar Thiaroye, *Centre de Recherche Océanique de Dakar Thiaroye*

Modou is a fisherman from Kayar who had tried to go to Europe twice in 2006 and had been deported back to Senegal that same year. As do most of the Kayar fishermen, he fishes demersal species such as grouper, octopus or sea bream. He had to discover new fishing places as fish were not as plentiful in traditional places as they used to be, although he keeps going to the old fishing places.

*I felt I had to go further to fish. At the beginning, I needed around 20 minutes before getting to the fishing places. Now you can navigate for almost 3 hours. But it depends; it varies according to the species. Sometimes, 30 minutes away you can find fish and sometimes you have to go on looking for fish and navigate for 3 hours.*³⁵

With his friend Abdu, they explain that they do not necessarily go farther out to the sea. They rather multiply and diversify the fishing places they go to. The president of Kayar fishery's local committee confirms that "*there used to be one fishing place per canoe, now there are hundreds*"³⁶. However, the way they name the places has changed and has become more personalised (see chapter 5). Thus, on the local scale, the idea of the fisherman going "further and further out to the sea" because of resource scarcity might be more exactly formulated as an intensified mobility between old – and not necessarily remote – new fishing places rather than as a constant movement towards new and increasingly distant places. In fact, fishermen speak about their fishing trips and everyday mobility more in terms of length than of distance. Distances are calculated according to time references, which means that they perceive the amount of time now spent in the sea as a sort of distance although they do not physically navigate farther than before. In this sense, "from 20 minutes to 3 hours" can be seen as an indicator of resource scarcity. The effect remains the same whether going farther or spending more time navigating – even next to the shore: time and money spent in this mobility represent a higher investment in the fishing activity than before.

³⁵ Interview 23

³⁶ Interview 2

Fishermen unanimously describe great changes in their everyday fishing habits, although they are, most of the time, unable to give a precise account of their yearly activity. As the quote above shows, words such as “it depends”, “it varies” or “it changes every day” are very commonly used during interviews. They reflect the unpredictable nature of the fishing resource and the way fishermen adjust their mobility to it. So, at the very local level of daily fishing places and areas, fishermen’s mobility has intensified. In order to cope with the higher costs related to this increased local mobility, some of the local fishermen who used to migrate on a seasonal basis to other Senegalese places started migrating more permanently.

From seasonal mobility to longer migration patterns

Fishermen have based their way of life on mobility patterns. These mobility habits were intensified only lately, as a result of a combination of aspects. Chauveau reports that in the eighteenth century the sailing technologies mainly used by the Guet Ndarian fishermen spread among the other fishing communities in Senegal. For example, the Lebu from other regions developed Guet Ndarian sailing techniques by adjusting them to their own habits:

Technological contacts multiplied as Guet Ndarian and Lebu sailors needed to stock up on processed wood pieces and canoes further and further in the south, in the area of Joal in the middle of the nineteenth century, and in Casamance later on. At the end of the century, the Northern fishermen started undertaking migrations down to Casamance during the dry season. (Chauveau, 1984: 3)³⁷

Two centuries ago, mobility patterns were remarkable, especially in the northern regions of Senegal. Mobility enabled the spread of efficient navigation techniques as contacts between distinct fishing communities increased. These migrations were encouraged by the seasonal movements of fish species and the need for wood which wet forests of the southern regions could provide for the canoe constructions. The alternation of dry and wet seasons temporally marked fishing migrations as well, and, as long as land was available, fishermen could either fish or cultivate – except in the case of Guet Ndar, where fishermen have had no access to arable land. In the 1970s, the high

³⁷ My translation

demand for fish inside Senegal, a severe drought and soil salinisation are the reasons which indirectly contributed to the development of artisanal fisheries. Instead of diversifying their economic activities, coastal ethnic groups started specialising in fishing. The Niominka from the Petite Côte and the Wolof from Guet Ndar (or Guet Ndarians) became the first main actors of the Senegalese fishing economy, and, later on, the Lebu from Dakar, especially from the Hann Bay and Petite Côte (Chauveau, 1984). The organisation of fishing migration beyond Senegal's borders started in parallel with this national specialisation in fishing in the 1970s (Chaboud & Kebe, 1991; Chauveau, 1984). In fact, the development of these fishing routes results from a double movement. According to Chaboud, internal fishing migrations intensified in the 1980s and were mostly organised by the Guet Ndarians, who became the first ethnic group to spread their maritime routes. In 1983, half of the internal migrant fishermen in Senegal came from Saint-Louis (Chaboud & Kebe, 1991). In 1990, Chaboud observed a noticeable move of fishing units to southern fishing wharves. Many Guet Ndarians left Saint-Louis and settled in Dakar, Mbour and Casamance. These migrations were initially temporary, as the fishermen used to come back to their region of origin after their fishing expeditions. They soon became definitive as some of them started to settle all along the Senegalese coastline. The wide spread of Guet Ndarians in Senegal, and their reputed know-how, navigation skills and fishing techniques undoubtedly influenced the habits of the autochthon population with whom they came across en route over the course of their migration.

Chaboud and Kebe interpret this internal move as a direct consequence of the events of 1989 and the closing of the Mauritanian border (1991). Indeed, fishing migrations increased because of the reinforcement of the northern border, so migrant fishermen directed their trajectories to the south. Some Guet Ndarian fishermen found that it was more advantageous for them to invest in fishing trips to southern countries' waters rather than to Mauritania's despite the great proximity of the border. The narrative of El Hadj, a fisherman I met in Hann in 2012, summarises this situation: in the same response, he associates the lack of fish resource, the reasons why he thinks there are fewer fish now, Mauritanian fishing regulations and controls, and the resulting new fishing routes he is taking now:

It was easier before. Before, the fish were closer and we always stayed in Senegal. Now we go to Guinea because there are no fish anymore. ... In Mauritania, we are not allowed to fish. I am from Saint-Louis, I used to go there but I no longer go because it is forbidden. Controls are tight. ... The fish... Where I used to fish before in Senegal, there is no fish anymore. It's because of the big boats [the trawlers]. We are forced to go fishing elsewhere.³⁸

It has, then, appeared to be more profitable to invest in large-scale sea trips and more sophisticated gear in order to maintain this activity among fishers' communities. Also, settling in Dakar, la Petite Côte and Casamance considerably reduced the distances between the departure places and the remote fishing places abroad. Moreover, long-distance fishing migration strategies were already developed by the Guet Ndarian fishermen who, in order to avoid Mauritanian border patrols, used to – and still do – head to the west by navigating in international waters and head further north to reach the Nouhadibou area (chapter 6).

Thus, organising southern fishing trips from Dakar was a solution for many of the northern fishermen who had not made the choice of struggling with the Mauritanian border agents and instead started to take southern routes. Also, the circulation of the fishermen on the ocean was less constrained by fishing and border regulations than today – thus making their trajectories shorter and easier. Over time, navigation times have increased, as have political constraints. However, these new obstacles do not prevent the fishermen getting organised and adjusting their mobility. A retired fisherman and local leader whom I met in Hann gives a few details about his former mobility habits around the Saint-Louis area:

The Maures had other activities; they didn't care about their sea. ... I was one of the first fishermen who took some Maures with me to sea. We started at 4 am and came back at 3 pm. We used to have a lot of fish there. But now, what we used to do in 11 hours [...] today [...] we go to Guinea and do it in 13, 15 or 17 days. The last time I

³⁸ Interview 13

*went to Guinea, it lasted 4 days ... 96 hours to reach the fishing place. I had a very good canoe at that time. Some canoes do it in 5 to 6 days.*³⁹

In addition to these local and regional circumstances, the emergence of international fishing migration beyond Senegalese borders is also related to economic and political events. Guet Ndarian fishermen originally developed these large-scale mobility habits from Saint-Louis, and the Nyominkas and Lebou imitated them later on (Chaboud & Kebe, 1991: 59). Failler and Binet show how the search for demersal species became a valuable activity following the Lomé Convention in 1974 (Binet et al., 2012). Since 1974, a series of agreements was signed according to the ideas set out in the convention. The Lomé Convention aimed to support the development of ACP⁴⁰ countries through cooperation with the European Community (Dahou et al., 2007). The convention also sought to encourage a rational management of fisheries. Hence, African countries got access to the European market and started to export high-value fish species thanks to this convention. In 1990, Lomé IV provided privileged treatment for African exports directed to the European market (Dahou et al., 2007). Because of their potentially high commercial value, demersal species started to become very attractive. This economic context consequently added pressure over Senegalese fishing grounds. Navigating to remote, unexplored waters naturally appeared to be a valuable solution for many fishermen. The 1994 devaluation of the West African (CFA) franc also seems to have had an impact on fishing migrations as Senegalese exports became more valuable – and imports as well, with the rise of fuel prices, for example (Binet & Failler, 2012). Failler and Binet stress that 60% of exports of high-value fish catches from Senegal to Europe come from these fishing migrations, and represent 80,000 tonnes of fish per year (2012: 105). Running in parallel to this international economic background, the advent of new technologies made longer sea expeditions possible. With engines and GPS, the mobility of the fishermen has taken new shapes.

³⁹ Interview 27

⁴⁰ Africa, Caribbean and Pacific countries

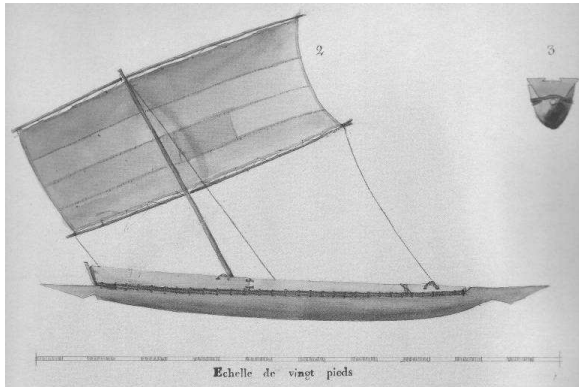
Adjusting fishing and navigation techniques to resource scarcity and increased competition

Fishing and navigation techniques have changed over time, and these changes reflect the evolution of fish species' abundance in Senegalese waters. Indeed, coastal communities were used to catching fish shoals directly from the beach in front of their house with beach seines. These large nets are thrown out straight from the shore and dozens of fishermen pull them up while the tide is going out. Nowadays, fishermen are progressively abandoning this technique as fish species are keeping away from the shore. For example, in Hann, fewer than four beach seines are now registered, far less than a few years ago, when there were a dozen⁴¹. Furthermore, from the beginning of the 1950s, sails were progressively replaced by engines. Today, each canoe has an engine on board and sails have become synonymous with archaic and inefficient techniques. Canoes got bigger and stronger and navigators started to use GPS devices when they got further out to sea. With GPS devices, fishermen no longer needed to follow the coastline to orientate themselves. These steps are significant as they reflect the evolution of the fishing activity in Senegal and take part in the shaping of the littoral landscape. They reveal how fishermen's adaptation skills and fishing techniques adjusted to mobility.

The following photographs show distinct stages of artisanal fishing in Senegal. Photograph 5 is a painting from 1830 by François-Edmond Pâris which shows a typical ancient sailing boat from Gorée Island (in the Cap-Vert area). The canoe is much thinner and smaller than today's traditional fishing canoes as it was adjusted to the fishermen's reduced mobility. Photographs 6 and 7 show Saint-Louis canoes being launched directly from the beach before 1960. Engines were not widespread yet and fishermen used to paddle to drive their canoes. Again, these techniques were adjusted to their mobility habits. Photograph 8 shows a similar scene 50 years later, in 2012: Saint-Louis fishermen are launching a boat before a fishing trip to Mauritania. The photograph was also taken from Guet Ndar's spit of land. The photograph's composition is very similar, although the boat has neither sail nor paddles as it is motorised; it is slightly longer and stronger, and painted with colourful markings. In photograph 9, we see fishermen back from a fishing trip in Guinea-Bissau. Fish catches are stocked in the ice-boxes. The crew is waiting for their captain, who is

⁴¹ Field notes

negotiating the price of his catches with the fish trader on the beach. What these photographs demonstrate is the way fishermen have adapted their techniques according to the availability of the fishing resource and their growing mobility. Apart from this, nothing has truly changed. In Saint-Louis, no Western-style modernised fishing wharf has been built despite the growing number of fishermen, the high level of specialisation in fishing and the liberalisation of the fishing economy.



Photograph 5: “Canoe of Gorée”, watercolour by François-Edmond Pâris, 1830 (in Rieth, 2010: 165)



Photograph 6: Boat launching, with Guet Ndarian fishermen paddling. Saint-Louis’ spit of land, taken before 1960 by anonymous photographer (in Rieth, 2010: 169)



Photograph 7: Boat launching in Saint-Louis’ spit of land. taken before 1960 by anonymous photographer (in Rieth, 2010:168)



Photograph 8: Boat launching for fishing trip in Mauritania, Saint-Louis’ spit of land, July 2012, J.H.



Photograph 9: Ice-box canoe about to land the catches, Hann Bay, July 2012, J.H.

The mobility story of the Hann elder leader summarises well these developments in the fisheries and their connections to local, national and international backgrounds. He describes the changes he had been observing in Senegal's fishing economy:

I was born in 1952; I was a line fisherman from Mbour. I grew up on the beach there, and also in Saint-Louis. Today I am a retired sailor and neighbourhood representative. In the past, I used to sail and fish. I was a fisherman from 1952 till 1998 ... I grew up in Saint-Louis until 1964 [...] I left in 1964 to Hann. I came here after a fishing trip we made around here. I used to have a wife and a house in Saint-Louis, but now my family is in Hann. I used to go fishing from Saint-Louis to Joal for three or four months. When we fished in Joal, we were living there, for around four months, and then we went back to Saint-Louis. We also used to go to Gambia, sometimes for three or four months, but this was after the fishing trips in Joal. Then, after, when we got engines, we used to go to Guinea-Bissau and Freetown. With two 18-horsepower engines [...] the Evinrude and Johnson, and after, it was Yamaha [...] from 1959, people started to use engines in Senegal [...]

In 1966, Evinrude spread in Senegal and the cheapest engines were sold for 140,000 francs ... I had a canoe, and with the machine, we went to Gambia. But here in Senegal, the industrial ships [...] they made the sea get difficult [...] they drove the fish away. For this reason, we started going to Gambia in 1982 to 1983, from Joal. In 1982, I had an ice-box motorised canoe. I bought it gradually. At that time, sailing canoes were worth 50,000 francs, and today it is worth 1 million. With the currency devaluation, the cost of life, you have nothing. At that time, there was no fishing licence, everyone got along well. And you could land your fish anywhere.⁴²

This narrative reflects the connections between the condition of fish stocks in Senegal, the advent of new technologies, the economic and political background of Senegal's fishing economy and the expansion of fishermen's mobility. Finally, the third and final mobility trend is connected

⁴² Interview 27

to the first two observed patterns: over time, fishermen have gained in-depth knowledge and navigation skills, which became essential for the organisation of illegal migration to Europe.

When fishermen became illegal migrants heading to Europe

Some fishermen found out at the beginning of the 2000s that this would be a profitable enterprise and a useful response to the stronger constraints they were facing at sea. Large canoe owners, powerful fishermen or simple would-be migrant fishermen soon calculated that investments in these trips would be the best strategy to counter the decline in their income from fishing. Willing migrants embarking were mostly either small daily fish workers or Senegalese non-fishermen who were young to middle-aged men (Mbow & Bodian, 2008). Nyamjohh usefully explores the role of the fishermen in the emergence of maritime migration routes to Europe. She emphasises the combination of the lack of fish resources in Senegal, weaknesses of the government's political involvement in fisheries management and young people's aspirations for independence and autonomy as the reasons for migration to Europe. Her work provides a precise description of the relationships between the conveyors of boat migration, local and skilled fishermen and would-be migrants and their families, bringing to the fore complex power relations linking these different actors (Nyamjohh, 2010). Irregular maritime migration from Senegal to Europe is connected to regional- and international-scale backgrounds: European migration policy and border controls and the movement of regional migration routes in West Africa have deeply influenced the emergence of this maritime route (see chapter 8). For Alioune⁴³ – Ouakam's local leader – there are obvious linkages between fishermen's fishing migration habits and maritime migration to the Canary Islands:

Fishermen... they search... they look for fish, and they are looking for something when going to the Canary Islands. Maybe it is better there, and that's it, it's not complicated! ... They go there and see what happens; some succeed, they were luckier than the others, and some are still there wandering...it's not working, it's not good, so the fisherman will still be looking for something, he will not stop – it's me saying it!

⁴³ Interview 17

*Because we know the Canary Islands, we'll do something else... either going to the UK, to the United States, everywhere! Yes, this is possible! With our canoes, we can! We could go everywhere, everywhere! With the GPS it's easy! You just need to manage it.*⁴⁴

Through this narrative, we understand how fishermen's movement adjusted to constraints and is characterised by either the search for fish or for a better life that would bring the fishermen the same benefits as a successful fishing expedition. Navigation techniques and technologies make these mobilities possible and lead the fishermen wherever they wish.

Conclusion

In conclusion, there is not just one direct connection between the mobility of the fishermen and the decrease in fish resources. In fact, these first observations have shown how maritime mobilities in Senegal are complex and take multiple trajectories which adjust to a series of economic, political and environmental constraints. There is certainly a link between the fishing crisis and mobility. However, it is inappropriate to use the category of "environmental refugees" given that fishermen's mobility is not only a response to environmental changes. The elements outlined here provide a background to the Senegalese fishing crisis. Mobility, which was at first a forced response to this crisis, has become a real strategy to cope with it. In fact, the decrease in resources has strengthened the power relations between the actors involved in fishermen's mobility through growing competition for resources with other actors at sea or with state agents in charge of sector regulation.

Fishermen want to secure their livelihoods and increase their mobility, while the Senegalese state now attempts to concentrate its efforts on the securitisation of the natural resources. This crisis has shaped socio-political tensions and constructed new seascapes. In each of these mobility scenarios, this increased mobility has led fishermen to experience various forms of state regulation at the national or international level. In fact, in chapter 4, a deeper analysis of the relationship between the fishermen and the Senegalese state informs us about these emerging

⁴⁴ Interview 17

power struggles. The working space of the fishermen is getting narrower as they knock against new and stronger obstacles. I will show how the sector has grown exponentially over the last 40 years, making its management increasingly difficult for the government. Beyond the environmental crisis, the relationship between the Senegalese fishermen and the state has shaped maritime mobilities.

Chapter 4 - Senegalese Fishermen and the State

Industrial and – to a lesser extent – small-scale fishers’ overfishing practices generated today’s decrease in fish stocks in Senegal. What these fishing practices bring to the fore are the contradictory resource access and regulation policies which Senegal’s state has implemented since the independence. In fact, while Senegalese governments significantly fostered the development of national fisheries, this development policy was not combined with the application of a surveillance and access restriction policy efficient enough to regulate artisanal and industrial catches. The successive state practices have produced ambiguous relationships between Senegalese fishers and the state since the 1960s (Chauveau and Samba 1990). In fact, while Senegal’s state has increasingly opened access to the sea to foreign industrial trawlers since the 1980s (Alder & Sumaila, 2004), in parallel the same governments have made intensive efforts to regulate small-scale fishers’ movements. As a result of the fishing crisis, the sea has become a space of interaction shaped by power struggles between individuals and institutions, bringing to light the inadequacy that exists between a rapidly evolving artisanal fishing sector and a postcolonial African state. Rather than reducing the role of the environmental crisis to a single cause for mobility, the decrease in fish stocks has accelerated the emergence of these power struggles between fisheries actors at the national level.

I argue that these relationships between the fishers and the state have shaped fishermen’s mobility through the fisheries’ development policy, inappropriate sea resources’ regulation measures and fishermen’s mobility management. I will show that while the dynamism of the mobile fishers first expressed a positive strength which the postcolonial state wanted for Senegal’s economy, this dynamism has become a threat to marine resources’ sustainability, which the state has failed to regulate. These failures certainly involve a lack of coherence and surveillance means in the application of fisheries’ policies, but mainly reflect a poor consideration of fishermen’s

practical knowledge or “mêtis” (Scott, 1998). As a result, fishermen’s mobility has increasingly become dynamic and uncontrollable and has conveyed negative meanings to the regulators.

This chapter first examines the development policies of small-scale and industrial fisheries in Senegal since the 1950s and explores the limits of Senegal’s recent participatory turn in small-scale fishing policy. I then show how state efforts have failed to regulate Senegalese fishers by dismissing their practical knowledge or “mêtis” and developing incoherent fishing regulation practices. I will show where transgression becomes legitimate (according to the fishermen) and where local cultural norm systems bypass state rules.

1. Fostering fishing activities in Senegal

The growth of the artisanal fishing sector

From colonial and postcolonial interventionist policy to recent participatory policy, the artisanal fishing sector has progressed independently from governmental measures, although these measures have had indirect and unexpected effects on the fisheries’ evolution. The causes for the expansion of the small-scale fishing sector lie in the reinterpretation and re-appropriation fishermen made of state intervention rather than in the potentially successful implementation of interventionist fishing policy. However, though the state encouraged the growth of local fisheries, this growth is now considered problematic as expanding numbers of fishermen clearly escape state control and participate in the decrease in fish resources.

Until the 1980s, the small-scale sector was considered to be an obstacle to the development of a modern system of fishery exploitation (Chauveau & Samba, 1989; Kebe & Deme, 2000). The French colonial administration and the successive postcolonial governments followed interventionist policies towards the small-scale fishing sector, assuming that fishermen’s traditional nature would slow the development of Senegalese fisheries. The state first encouraged the spread of new technologies at the beginning of the 1960s, and from 1980 onwards, it significantly subsidised artisanal and industrial fishing activities (Kebe & Deme, 2000). In fact, the fishermen pragmatically adopted some of the state’s modernising measures while rejecting others, depending on their needs, habits and practices. Two main technological development measures marked

Senegalese fisheries: the advent of motors and the development of purse seine technologies (Kebe & Deme, 2000). Fishermen willingly adopted these technologies, which enabled them to spend more time at sea and bring in bigger catches. The “motor-generalisation” policy among artisanal fishers was successful from 1952 onwards because it very quickly started to spread the use of motors among coastal communities. Whereas the government’s initial objective was to develop local fisheries and sedentarise the fishers, motorising boats had the opposite effect. Rather than developing sedentary fishing, motors finally encouraged fishermen to become more mobile at sea and around Senegal. Chauveau and Samba observe,

we must look for the cause of the dynamic growth of artisanal fisheries during recent decades not within the administrative framework but in the processes that have diverted state measures. (Chauveau & Samba, 1989: 609)

Fishermen’s adaptation and ‘modernisation’ occurred, but in a diverted way that made use of state support without, paradoxically, following the initially desired directions. In this sense, this independent nature of fishing communities in response to successive administrations has been essential for the development of the small-scale sector. Apart from these technological advances, state measures to modernise artisanal fisheries mostly failed to seduce the fishermen mainly because they dismissed fishermen’s practices and specific knowledge. Since 1950, several measures aimed to strengthen the traditional wooden boats’ structures with new technologies such as glass fibre, polyester and metal in order to make navigation safer. The high costs implied by these modifications – despite state financial support – deterred the fishermen from adopting them (Kebe & Deme, 2000). Similarly, in 1959 the “Cordier” project aimed to ease the transition from small-scale fisheries to semi-industrial fishing by introducing bigger, stronger and longer fishing boats (Kebe & Deme, 2000). Again, fishermen preferred their wooden boats as they were adjusted to their needs, navigation skills and experience.

In parallel to these technological advents, the state has provided financial assistance to the fishermen for their gear. Fishermen have always benefited from state grants for their production costs: fuel prices are much lower than on the open market, and gear such as motors, fishing nets and canoes are tax-free (Kebe & Deme, 2000). The small-scale fishing sector has always been state

funded, not only in order to encourage wealth and employment creation for the sector but also to maintain fair prices for the population so that everybody in Senegal can afford to eat fish on a daily basis. However, Deme and Kebe (2000) argue that, again, this interventionist policy has had unintended effects on the local economy. Deme and Kebe (2000) suggest that subsidies have led to growing competition over resources and to a devaluation of fish prices with the reduction of production costs. Fishermen, as a consequence, need to produce more for a better income as fish stocks decrease, because of greater fishing pressure. Coastal communities experience the consequences of such a policy: scarce fish and restrictions on their abilities to fish them.

These policies reflect Senegal's state interests in developing maritime fisheries as a strategic sector in order to balance the lack of development in the other economic sectors. Unable to propose sustainable solutions to overcome the agricultural crisis, the government considered the exploitation of marine resources to be a great potential for national economic growth. In fact, since the 1970s and as a response to the drought affecting Senegalese rural areas, many peasants have migrated to coastal areas, where they have been hired as workers by fishermen crews (Nguyen-Van-Chi-Bonnardel, 1980). Fishing became an immediate, simple solution for these peasants, as they did not need to have specific fishing skills to be hired. As fishermen needed help to get their heavy nets out of the water, drought-fleeing migrants became a useful workforce. Peasants who turned into fishermen were used to physical tasks, although they were unskilled for fishing. Drought-fleeing migrants progressively learnt more about fishing processes and became more qualified, which enabled them to buy their own boats and develop their own fishing activities⁴⁵. A representative of the ADEPA organisation adds the following:

*We have to say that fishing has always been a very interesting and lucrative activity for coastal areas. The economic crisis which has been aggravated by drought and unemployment has encouraged people who were not "naturally" fishermen to make do with fishing.*⁴⁶

⁴⁵ Interview 4, ADEPA, *Association Ouest Africaine pour le Développement de la Pêche Artisanale*; West African Association for the Development of Artisanal Fisheries

⁴⁶ Interview 4

Moreover, the lack of infrastructure and the state's financial involvement in fish processing has indirectly encouraged overfishing practices. For Alioune, it is the lack of communication between fishermen that prevents them from self-regulating their daily catches:

Sometimes, the purse seine fishers all land their catches in the same fishing wharf. In Hann, for example, all the pirogues, you know... these very deep 18-metre boats, filled with tonnes of fish. Well, they don't phone each other and say. "I've got fish, do you have some in your area?" Instead, they all land their catches at the same time and of course, they don't find any buyers. What do they do? They throw everything back into the sea, and the fish goes rotten. They have been doing so for years! [...] We share a big responsibility, you see... If we don't get organised, we're on a slippery slope, it'll somehow go rotten.⁴⁷

Unstable electricity supplies and a lack of infrastructures and freezing equipment in Senegalese artisanal fishing wharves do not allow the fish workers to store their catches and better plan their activities. In addition to the high number of fishers, contestable fishing techniques and overfishing practices in Senegal, the weaknesses of infrastructures are a tangible hindrance to the sustainable development of Senegalese marine grounds. Thus, the growth of the artisanal fishing sector and the resulting fishing crisis have resulted from a number of spatio-temporal circumstances. These circumstances involve a development-oriented policy, combined with an inherent dynamism of the fishermen and an environmental and economic crisis which brought many new fishers into the fishing sector. In parallel to these developments, the Senegalese government has opened the national maritime spaces to various foreign fleets, mainly since the beginning of the 1980s.

Encouraging the large-scale exploitation of marine resources

Senegal has been party to a number of fishing agreements signed by the European Commission and African countries, which increased in the 1980s (Catanzano & Rey Valette,

⁴⁷ Interview 17

2002). These agreements have enabled the West African countries whose fishing capacities and financial means are limited to take advantage of their marine grounds and benefit from a financial counterpart. These agreements have been largely criticised as European fish catches constitute a considerable loss of resources for local fisheries. Scientists have documented a serious fishing crisis (Gascuel et al., 2002) for which European fleets have been mentioned as sharing responsibility in West African waters (Kohnert, 2007). These formal agreements were not renewed with Senegal in 2006 because of the serious condition of the fish resource (SSNC, 2009). However, since 2006 a number of European-based companies have settled in Senegal in joint ventures. They are officially Senegalese and count as Senegalese fishing companies, but at the same time, this is an opportunity for foreign fleets to informally fish in Senegalese waters and direct their catches for export to the international market (Baché 2011).

By ratifying the 1982 UN Convention on the Law of the Sea, Senegal reinforced its sovereignty over the 200 nautical miles of its national Exclusive Economic Zone (EEZ). Through this convention, the Senegalese fishing area was divided into two parts, which extend between the coastline and 12 nautical miles offshore. The first 6 nautical miles are exclusively dedicated to small-scale fisheries, whereas most of the industrial fishing boats can only fish beyond the 12-mile limit depending on their size, fishing capacity and targets⁴⁸ (Decree no 90/970, 1990) (Map 3). Local fishermen are also allowed to fish beyond the 6-mile limit, where they increasingly compete with national and foreign trawlers.

There is a lack of transparency regarding the legal framework of industrial fishing licences' sales. The Senegalese Minister for Fisheries and Maritime Affairs, Haïdar el-Ali, estimates that around 40 Chinese, Russian or Ukrainian vessels – among other nationalities – circulate across West African waters and fish illegally in Senegal.⁴⁹ On the 5 January 2014, the Senegalese authorities seized the Russian ship *Oleg Naydenov* while it was fishing illegally off Senegalese shores. For being a “repeat offender”, the ship-owner was sentenced to a XOF 600 million

⁴⁸ Except for sardine fishing trawlers, whose fishing capacity does not exceed 250 tonnes a day (for further details see Decree n° 90-970, 1990)

⁴⁹ RFI, March 2014

(£763,900) fine.⁵⁰ With a processing capacity of 250 tonnes of fish per day,⁵¹ illegal fishing operations have remained a lucrative activity for the Russian trawler. Fines seem to have a poor deterrent effect and do not stop the trawlers from continuing to make illegal incursions into Senegalese waters. The former government may be complicit as, in 2011, the Senegalese fisheries organisations denounced the signature of 22 illicit agreements in 2010 allowing foreign trawlers to fish extensively in national waters.⁵² The NGO “Pêche et Développement” reports that the Senegalese government sold questionable pelagic fishing licences to the joint venture companies Senemer and Société Atlantique de Pêche in 2010 (Niasse & Seck, 2011). Among other Russian ships, the *Oleg Naydenov* vessel has actually been operating under the name of *Senemer*. Despite the lack of transparency of official data regarding these joint venture companies, Niasse and Seck provide the following estimation:

Table 3: Industrial fishing joint ventures in Senegal (Source: Niasse & Seck, 2011: 5)

Nationality	Joint venture companies	Ships/trawlers
Senegal/Spain	11	29
Senegal/China	1	26
Senegal/France	3	24
Senegal/Italy	2	7
Senegal/Greece	1	2
Senegal/Russia	2	4

Although these ships must land their catches in Dakar, they rarely do so as they can freeze up to 1,500 tonnes of fish for 12 days at sea. These ships can also process 40 to 50 tonnes of fishmeal per day (Niasse & Seck, 2011: 5). The huge capacity for freezing and fish processing of the many industrial vessels not only enables the ships to fish in great quantities but also prevents the Senegalese communities from economically benefiting from these activities. Indeed, Niasse and Seck estimate that only 15% of the joint venture companies’ industrial catches are processed and sold in the Senegalese market (Niasse & Seck, 2011: 7).

⁵⁰ RFI, March 2014

⁵¹ Greenpeace, 2014

⁵² IPS, 2011

In fact, both small- and large-scale fisheries are responsible for the decrease in resources in West Africa's seas. The Senegalese state has failed to develop an efficient management of its seas by encouraging the exponential growth of the national fisheries. Despite the government's desire to regulate access to the sea through multiple laws and decrees, the lack of surveillance means has prevented a proper and sustainable regulation of marine resources' exploitation. Fishermen experience state regulation efforts as a constraint that obstructs their free movement at sea.

2. Regulating sea mobility and fishing activities: the reasons for the state's failures

Today, as a result of resource scarcity, the fishing sector, natural resources and fishermen's mobility have reached their physical and geographic limits. As a response to successive failures and the resulting fishing crisis, state regulation is now proceeding with the implementation of participative measures and co-management programmes in local fisheries. This new policy seems to be a unique solution in that it is attempting to acknowledge the traditional, independent nature of the fishermen. Indeed, according to Trouillet et al. (2011), the main obstacles that prevent the appropriate governance of West African waters are a poor knowledge of small-scale fisheries and weaknesses in participatory processes. In this context, is the "participatory turn" a significant advance for sea regulation? The application of such a participative policy still remains problematic because of the government's incoherence in regulating and managing the sea space, and a lack of surveillance means and consideration for fishermen's practical knowledge. Although in some local fisheries this participative system seems to have started working (Ouakam), in the majority of fisheries, fishermen are reluctant to acknowledge state authority, afraid that doing so will see their freedom of movement constantly threatened.

The limits of the application of the law

Senegal adopted its first Fishery Code in 1976 to address the problem of an over-exploitation of the sea and to regulate industrial fishing activities (Bernard Camara, 2005). The version that was modified in 1987 regulates small-scale fishermen's access to the resource, requiring them to hold a fishing licence in theory. Before that, anyone could become a fisherman at

any time. In 1998, a more constraining law came into force which included a new fishery code. It clearly established the responsibilities of the state and of the small-scale fisheries' actors in the management of fisheries. Through this policy, both the national government and fishing villages are required to take part in this management through the creation of local committees for fisheries (CLP⁵³). At the head of these participative committees, a civil servant represents the state at the local level. The rest of the committee is democratically elected by local fishermen and constitutes an intermediary between the national administration and the local fishers (Code for Maritime Fisheries, 1998). In addition, this new policy reinforces the existing licence system and clearly forbids numerous unsustainable fishing techniques. Nevertheless, it was only in 2005 that the Senegalese state formally started imposing mandatory fishing permits for artisanal fishers (Decree no 5916, 2005). As a response to the fishing crisis, the then Senegalese Ministry for Maritime Economy⁵⁴ elaborated a sector policy letter in 2007 that aims to reinforce the entire national fisheries reform programme launched in 2000 (Sector Policy Letter, 2007). In order to maintain the sector's international competitive advantage and to create more employment and generate sustainable wealth and growth, the ministry has chosen several directions for the development of the small-scale fishing sector. This policy letter mostly targets the preservation of the resource through the creation of protected marine areas (PMA), artificial reefs for species reproduction and aquaculture development, in parallel with strengthening restrictions on fishermen's access to the sea (Sector Policy Letter, 2007). While local fishermen are increasingly included in the management of their local fishing areas, they are also supposed to start paying for an annual fishing permit. Sixty percent of the total funds generated by these permits have been collected at the national level in order to fund the co-management system and the new local fishery committees in Senegal. However, due to administrative delays, this funding system is still not in place. That the

⁵³ *Comité Local des Pêches*

⁵⁴ Senegal's institutions in charge of fisheries' management have successively been, from 1980 onwards:
– Secretariat for Fisheries (*Secrétariat des Pêches*), Ministry in Charge of Maritime Fisheries (*Ministère Chargé de la Pêche*) and Ministry for Fisheries and Maritime Transports (*Ministère des Pêches et des Transports Maritimes*) under the presidency of Abdou Diouf (1980 - 2000).
– Under Abdoulaye Wade's presidency (2000–2012), the Ministry became the Ministry for Maritime Economy of Maritime Transports, Fisheries and Inland Fish Farming (*Ministère de l'Economie Maritime, des Transports Maritimes, de la Pêche et de la Pisciculture*).
– Since Macky Sall's election in 2012, El Ali Haidar has been Minister for Fisheries and Maritime Affairs (*Ministre des Pêches et des Affaires Maritimes*)

system does not work causes great frustration among the fishermen, who have the feeling that the state has not complied with its commitments.⁵⁵ Access to the sea is undoubtedly more limited because of this new policy whose principal aim is to protect oceanic resources without jeopardising the traditional Senegalese fishing activities. The effective application of this participative management still leaves the fishing community very sceptical, so it has been very difficult for the state to impose its norms and rules for the conservation of resources. A Joal-based state agent complains about fishermen's arrogance; they have been refusing to respect biological recovery in the local PMA. He translates these two famous Wolof sentences he says he has often heard from these migrant fishermen⁵⁶: "*Guedje amoul thiabi, bagnou koye tethie*" which literally means: "the sea has no key and cannot be locked". The second one is slightly ruder, though very explicit: "*Bayou Kene sawoule pour guedje am*". It means: "nobody's father pissed so that there is the sea."

These two famous Wolof sentences reflect migrant fishermen's vision of the sea: a space without limits or borders which does not belong to anybody. In this context, applying the law remains challenging for the regulators. Furthermore, the lack of efficient application of the law has led to increasing competition over fish resources and over the development of contested fishing techniques. Despite the restrictions imposed by the 1998 Code of Maritime Fishing (Code for Maritime Fisheries, 1998), fishermen keep using dynamite and poison, spear fishing, reducing net sizes and using monofilament nets (PNUE, 2004). The use of monofilament nets has remained very common. One can still find many of these green plastic nets drying on the ground on many wharves and beaches (Photograph 10).



Photograph 10: Monofilament net drying on the beach, Ouakam fishing wharf, June 2011, J.H.

⁵⁵ Interview 69

⁵⁶ Interview 49

Despite their prohibition, these nets are imported freely and are far less expensive than the traditional nets. When fishermen lose them at sea, fishermen say that these nets “keep fishing”, as they are not readily biodegradable and threaten marine ecosystems.⁵⁷ Also, the introduction of these measures has had some impacts on fishermen’s mobility as fishermen adjust their fishing trips’ trajectories to avoid possible state controls at sea while using these techniques. Moreover, the lack of application of the law has led to conflicts between fishermen’s communities. Fishermen who work in their local area have to share resources with fishermen from other communities. It seems that this marine cohabitation is not problematic as long as the fishing techniques used by the different fishers are compatible and tolerated by the local community.⁵⁸ Fishermen seem to express a certain feeling of belonging according to their local area, although they do not explicitly claim an absolute control and proprietary right over their traditional fishing area. They identify themselves according to their fishing techniques, and friction can occur sometimes between users of different techniques.

At Ouakam’s fishing wharf, Alioune argues that the development of these forbidden practices has had important impacts on fish species’ reproduction. The fishery structure of Ouakam has been selected for a World Bank-funded environmental project (GIRMAC). In this context, the fishing in the local area has been restricted in order to restore the coastline’s ecosystem and encourage the reproduction of endangered species. In the framework of the co-management fishery policy, the community has chosen its own monitoring and surveillance agents, under the ministry in charge of fisheries’ supervision. Ouakam’s local fishing area has been divided into two sub-areas delimited by buoys. Fishing is strictly forbidden in the first area (ZIP), and restricted in the other (ZER). A map has been designed for the programme by local actors, based on fishermen’s local knowledge. This map shows the traditional Wolof names of the fishing places⁵⁹ and their depth and geographical coordinates. However, Alioune is a bit sceptical regarding the effectiveness of this system:

⁵⁷ Interview 17

⁵⁸ Interview 17

⁵⁹ Appendix 3

*You can see over there, there is a GIRMAC canoe; they gave us a canoe and a motor, and him, he is the president of the surveillance [he indicates one of the fishermen]. But we do what we can. We've inspected people who were using monofilament drift nets. ... When they come to our fishing area here, in the Ouakam area for example, they spread their nets and when the nets drift with the current, they hang upon the buoys [of our dormant nets] and instead of disentangling them, they [the fishermen] cut our nets. So we go with him, the president; sometimes we organise a unit – we pick them up, we bring them here like the local police, but we don't have the right to do that. We are told, "You can't do that" but we do it sometimes, because we are tired. We know that, sometimes, we know that the fisherman will have his dormant net cut and he won't be able to buy a new one. He is going to be poor for the rest of his life, I tell you, because the small amount he was earning, he doesn't have it anymore. These are things that happen between us, so sometimes, we just do it ourselves. We give them a beating, **we fight before the state comes**⁶⁰ [they laugh]⁶¹.*

It is not that clear how the role of the surveillance agent who has been designated by the fishermen can be effective. Local fishermen are aware they are responsible for the management of their local fishing area and that they have some legitimate control over the irregular fishing activities occurring there. However, they do not see themselves as representatives of state power, being aware that they cannot arrest people who are illegally fishing along the coastline. They find the legitimacy for their actions and for their occasional violence in their disillusion, tiredness and frustration towards both the state and the other fishermen's behaviour. However, Alioune attributes a role to the state, although in his story it comes up after the conflict has occurred. The state's role is not clearly identified, but it seems that it has some authority at some point. Alioune then adds the following about the direction of surveillance and protection for fisheries (DPSP)⁶²:

⁶⁰ My emphasis

⁶¹ Interview 17

⁶² *Direction de la Protection et de la Surveillance des Pêches*, Direction for the protection and surveillance of fisheries

*The DPSP, we call for their action, they know that, but sometimes they say they don't have enough resources, not enough fuel, they say they can't patrol and that their units are reduced [...] but sometimes, they actually do these controls, they patrol in the sea and sometimes perhaps they increase awareness of the trawlers that fish in certain areas.*⁶³

Alioune acknowledges that the local fishing sector needs state action for the management of conflicts and fishing resources, although he does not seem to give much credibility to its action, because of the lack of financial resources. As a compromise, he recognises that “they actually do these controls”, although he is not quite sure about the reality of the DPSP's actions. Also, he seems to believe more in the traditional fishermen's regulation:

*We say that the fisherman, when he fishes in an area, maybe when he was the first to go to this area, we don't say that he is the owner of the place, but if someone else then comes, he has to pay attention to the one who has already settled there. Here it is, this is a natural fishing regulation.*⁶⁴

The legitimacy of fish resources and fishermen's mobility regulation relies more in traditional oral agreements that tie fishermen together than in an external state authority. The state seems to struggle to impose its official and formal rules because of an apparent lack of financial resources. To fishermen, these oral regulations appear to be “natural” and in opposition to the obscure external state rules. These regulations mark spaces, places and fishermen's identity, and when they are effective, they enable a fluid regulation of the mobility. When these regulations are questioned, boundaries emerge through violent confrontations. State regulation seems to have no authority on this very local scale, although it is expected by fishermen. In 2005, migrant fishermen from Saint-Louis angered local Kayar fishermen while fishing in their traditional fishing places with nylon nets. Fishermen from Kayar mostly hand line and use fixed nets, whereas Guet Ndarians use monofilament nets that drift along with the currents, obstructing the local fishermen's activities and mobility. Kayar fishermen reacted strongly against Saint-Louis fishermen's lack of

⁶³ Interview 17

⁶⁴ Interview 17

concern regarding their traditional fishing organisation, techniques and places. The two communities engaged in an armed clash for a couple of hours on Kayar's wharves. There was a death and 20 fishermen were injured after some Kayar fishermen assaulted some Saint-Louis fishermen and ended up fighting against local police agents who tried to stop the conflict (Le Roux & Noël, 2007). Although this event has marked local memories, the local and migrant communities still cohabit during the fishing seasons.

Also, despite the state's efforts to regulate fishermen's mobility and practices in a participatory way, fishermen still give little consideration to fishing norms when they fish outside their local fishing areas. Ahmet and Alassane,⁶⁵ who are 27 and 23 years old respectively, are two pirogue captains I was introduced to by the owner of the boat they navigate on every day. When I interviewed them in March 2012, they had just come out of jail, where they had been imprisoned with their colleagues for one week for having illegally fished in Dakar's port (fishing in Dakar's port is forbidden mainly for security reasons). This purse seine fishing crew openly bypassed the official fishing rules. The experience of these fishermen shows a gap between their expectation of the state's actions and the flexible and – to them – incoherent application of the law. I meet with them in a very small and dark bedroom whose unique door gives direct access to the street. They share this narrow space with the other members of the crew. Comfort and hygiene are very basic: there is a mattress and a carpet on the floor, and there are a couple of shelves full of religious objects. Since they have no responsibility for their children and wives, they eat, live, sleep and go fishing together.

Ahmet and Alassane explain that they went fishing in the port area because they were coming back from an unfruitful fishing day. It had been three months since they had caught a "good shot" or literally got a "jackpot",⁶⁶ and they assumed they would have this opportunity in the port. "Good shots" generally happen when fishermen catch the whole of a big pelagic fish shoal at once. When there are "good shots", they call the other fishermen who are around to help them store all the fish on the boat. In This way, they can fill up to 10 pirogues, sell the equivalent of 300 boxes

⁶⁵ Interview 35

⁶⁶ The French words they use for this are "*un coup*" or "*un gros lot*"

on the local market and earn millions of francs. That day, Ahmet and Alassane and their crew had been following a fish shoal into the port and were arrested while emptying their net into the pirogue. As there were no other pirogues around to help them get everything out, they were not able to manage the whole quantity of fish trapped in their net and could not escape the police:

*We knew we didn't have the right to fish in the port, but we didn't want to go home empty-handed. Because, spending the whole day at sea and coming back with nothing, it's very hard. ... It wasn't the first time we went fishing there, but yes, it was the first time we got caught. But, we can say, it's not the first time, because sometimes, when we got caught, we negotiated it [...] well [...] But you see, here, it was overflowing.*⁶⁷

Their reaction when they were arrested shows the different strategies they use to find a way out:

*The policemen lectured us; we did everything to try to negotiate but they refused. We tried to calm down the situation; we asked for their forgiveness. They refused. We said, that, well, we didn't know we couldn't fish there. ... Then, they made us get off the boat. The policemen kept the fish catches and sold them.*⁶⁸

For the trial, they agreed to say the same thing for their defence: basically, that they were ignorant of the law, and that they were apologising. They were finally released, without any penalty or fine to pay. My local informant explains that he had helped them get out of jail with some courtesy visits he made to powerful state officials in Dakar. Although they had no fine to pay, crew members complain because while they were all in jail, they were not fishing and thus could not send money to their families. They all express their discontent towards the policemen who “arbitrarily” arrested them and “stole” their fish with impunity, though they seem to make a clear distinction between the policemen and the state:

We can say it isn't normal; they sent us to jail. They brought us to jail and then they stole our fish, which was worth 1,200 million francs. They shouldn't have done this. The state has done nothing ... I wished the state did justice to us, because it is not

⁶⁷ Interview 35

⁶⁸ Interview 35

normal. They kept us in jail 11 days, without working, and then they took our fish, 1,200 million francs.⁶⁹

To the questions, *What does the role of the state mean for you, in your everyday life at sea? and Are the state and policemen the same thing?*, Ahmet replies:

No, it is not the same thing: sometimes, policemen want what is not in the law. And the state must control this, it must control that we respect the norms and charters. ... It is important to have norms at sea [...] Sometimes they ask for money. Because, when they arrest us, they say, "If you want, if you have such amount of money, we can free you." Without having done something illegal, or for example if we don't have life jackets on board, they ask for money and let us leave. They don't apply the law.⁷⁰

This statement reflects the ambiguous relationships that exist between the fishermen and the state. First, Ahmet criticises the fact that he could not negotiate with the policemen in the same way he did previously, several times, while fishing in the port. This time, the crew had no choice other than accepting the arrest and going to jail. Secondly, Ahmet considers that the policemen did not respect the law and abusively arrested them, although he is aware they were illegally fishing in the port. For him, a more appropriate role for the state – which seems to be represented here by the court that judged them – would be to regulate these policemen's abuses, enable an efficient application of the law and be more tolerant towards the fishermen. This behaviour reminds us of what has been said previously about fishermen and state regulation: they skilfully divert the law according to their own interest. They do not ignore the law; on the contrary, they try to find and test its limits and take advantage of its weaknesses. Their ignorance seems to be used as a helpful excuse to legitimate their faults and ask for more tolerance from the state. Negotiation with the policemen appears to be the last determinant step before getting arrested. Fishermen count on this

⁶⁹ Interview 35

⁷⁰ Interview 35

flexibility of the application of the law. Moreover, the intervention of the external actor – my local informant – who apparently influenced the judgement shows an additional level of flexibility.

“Mundane arrangements” such as the application of the law produce the effect of an external structure that gives order to social practices (Mitchell, 2006: 180). The expressions of these “arrangements” lead people to identify the state as something apart from their lives that directs and shapes their movements and activities. In this case study, the state is perceived through fishermen’s discourses in their daily fishing activities. Paradoxically, fishermen do not consider the policemen as the state agents and would rather see the state as a superior, unclear, powerful frame that should control policemen’s actions. The fishermen community conceives of the Senegalese state as an external structure set apart from their lives whose effect is weak as its action is criticised yet expected.

These experiences demonstrate great ambiguities. Fishermen not only denounce the lack of state regulation and weak application of the law but also the lack of legitimacy of state agents who act in the name of the law’s application. The participatory policy has attempted to involve fishermen in the regulation of Senegal’s fishing resources. Nevertheless, because fishermen give little legitimacy to state practices in general, this policy has not proved successful yet. Personal and community interests as well as traditional regulation systems remain superior to state norms, although fishermen, paradoxically, expect an efficient state action for the protection of fish resources. Moreover, fishermen’s relationships to Senegal’s state have become increasingly ambiguous as a result of weak maritime governance and the surveillance of industrial fishing activities.

Weak maritime surveillance and state regulation’s legitimacy

Senegalese fishermen have expressed their discontent about Senegal’s industrial fishing governance. On one hand, Senegal’s governments have attempted to limit fishermen’s access to the sea since the end of the 1990s, while on the other hand, these same governments have increasingly allowed foreign companies to exploit Senegalese waters’ threatened resources (Le Roux & Noël, 2007) – at least until 2012. The ambiguity of Senegal’s maritime governance has generated

frustration among the fishermen, who got organised through a number of national professional corporations (such as Fenagie, Conipas or CNPS). These organisations call for more coherence, transparency and attention and often protest when they hear a rumour about obscure new agreements signed with foreign fishing companies.⁷¹ Fishermen denounce the sales of illegitimate fishing licences, the lack of surveillance of industrial ships' practices and regular incursions into small-scale fishing areas.

The Direction of the Protection and Surveillance for Fisheries (DPSP)⁷² is one of the branches of the Ministry for Maritime Economy and is in charge of monitoring sea activities. A plane, five 12-metre-long and two 20-metre-long patrol boats watch the whole Senegalese marine area and must monitor both the small-scale fishers and industrial boats.⁷³ The French navy provides the DPSP with 5 flight-hours a month and helps the DPSP arrest illegal industrial foreign trawlers or rescue artisanal fishers. DPSP's officials record industrial ships' routes, detect pirate fishers and keep track of vessels' movements on a 24-hour basis. Each licence-holder trawler carries a beacon connected to satellite systems, which enables the DPSP agents to follow their movement at sea. By recording ships' speed and geographical position, DPSP's agents know if ships are fishing in unauthorised waters or are simply navigating between two points. When ships' speed is between 2 and 5 knots for more than an hour, it is very likely that these ships are fishing. However, these surveillance resources seem to be very weak when one knows that more than 18,000 canoes and at least 143 industrial trawlers (FAO, 2010) operate in Senegalese waters along a 718 km-long coastline.

In fact, foreign industrial trawlers operating for joint venture companies often use illegal practices. When trawlers do not have freezing capacities aboard, they illegally trans-ship their catches at sea to bigger vessels, and the catches are then sold in markets outside Senegal (Niasse & Seck, 2011). Furthermore, Niasse and Seck report the bribes that ship-owners are willing to pay to Senegalese officials to avoid formal sanctions. Also, according to the code for maritime fishing, professional observers must embark in the ships. Again, this is rarely observed in practice (Niasse

⁷¹ IPS, 2011

⁷² *Direction de la Protection et de la Surveillance des Pêches*

⁷³ Interview 5

& Seck, 2011). Although industrial ships have been openly developing illegal practices, they were still sold licences until 2012, although since his election that year, President Macky Sall has sought to put an end to these practices. The arrest of the *Oleg Naydenov*'s crew in early 2014 demonstrates that the Senegalese navy is in fact able to detect illegal fishing in national waters and truly apply the law despite weak material resources.⁷⁴

Regarding the management of small-scale fisheries' activities at sea, the DPSP official acknowledges that the Senegalese sea surveillance system is clearly inefficient, because of a lack of financial means and the involvement of local small-scale fisheries' actors. According to this official, the participative turn which fishing policy practices have recently taken also works for sea surveillance and needs to be generalised:

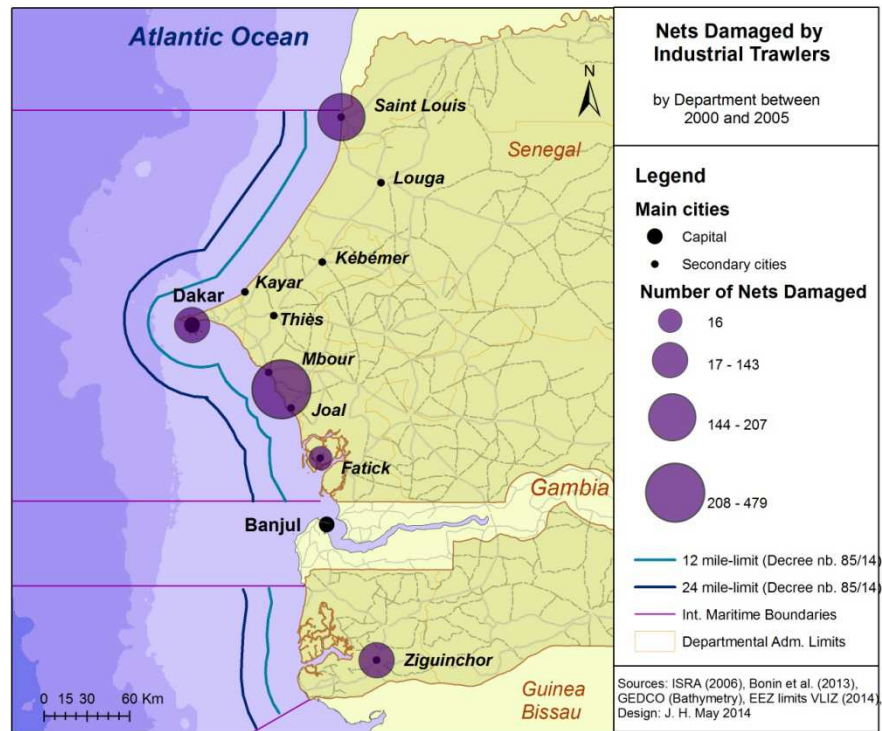
*Top-down practices [said in English] are not working; we'd rather practice bottom up practices: we must further develop the participative surveillance strategy in place. Actors are greatly involved in the implementation of such practices; they plan each day of surveillance. They themselves take part in the surveillance effort. Why is it interesting? We can't place an agent behind each fisherman; also, if fishermen do this, it reduces surveillance costs. We must take advantage of the sociologic power of surveillance.*⁷⁵

In practice, this participative management seems inappropriate regarding the management of industrial trawlers' movements at sea and their problematic interaction with small-scale fishers. Indeed, there have been an increasing number of fishing nets damaged by trawlers (Map 3). Fishermen leave their dormant nets overnight around the 6-mile limit and come back in the morning to get their catches out. They often cannot find their nets because they have been pulled out by trawlers. Conflicts between industrial and small-scale fishermen regularly occur and cause significant material damage for the fishermen (Dubois & Zografos, 2012). Although such conflicts

⁷⁴ BBC News, 2014

⁷⁵ Ibid.

are reported to the DPSP, which is in charge of resolving them, this institution's mediation role is rarely efficient (Dubois & Zografos, 2012). Destruction of fish nets by trawlers happens on an everyday basis either in the first 6 nautical miles or in the 6–12 nautical mile area. Between 2000 and 2005, the Senegalese authorities registered 983 nets that were destroyed by trawlers and 139 collisions between artisanal canoes and trawlers (ISRA, 2006: 112).



Map 3: Nets damaged by industrial trawlers (by department, and between 2000 and 2005), May 2014. Design: J.H.

Through the analysis of these conflicts, one finds contradictory responses from fishermen and government officials. Fishermen hold the state responsible for these conflicts as they denounce the industrial fishing agreements which have made possible the large number of trawlers in their fishing areas. Furthermore, fishermen perceive the state as being absent in the resolution of the conflicts caused by a supposed trawler's negligence. The comments of Modou reflect these feelings. This returned migrant discusses the reasons why Kayar fishermen decided to go to Europe in 2006. This statement shows how fishermen's movements are now confronted with tangible geographical boundaries; from the contact with the trawlers emerge the limits of Kayar's fishing area:

We didn't like fishing anymore. The youth were fed up with fishing; what they earned wasn't enough. Fuel prices were increasingly rising. And still, the fishing agreements, with the trawlers, it bothers us a lot. You know, here in Africa, there is bad governance. With the Minister of Fisheries, last March [...] there were problems all the time with the trawlers. There had been big trawlers that came 3 kilometres away from the coastline and they were fishing in big quantities; they damaged the fishing nets. We started to respond. We organised a protest. There were media, television. The big trawlers, it's part of the fishing crisis issue.⁷⁶

Modou's comments reflect a general frustration, or feeling, that has pushed a number of fishermen to choose to take the migration route to Europe. Modou's inability to fish in decent conditions is associated with the African "bad governance". He considers that this state failure pushed him to go to Europe illegally in 2006. This frustration has also resulted in protests organised by fishery leaders. These considerations contrast with the discourses of two officials of the Ministry of Maritime Economy. These officials confirm in interviews that these conflicts between fishermen and trawlers have increased over the last decade. They understand the conflicts as a sign of a growing competition over a scarcer resource. Fish species reproduce in these areas so they attract industrial fishers. The DPSP's director reported that on average there are 20 illegal intrusions detected per year. However, both of these officials consider fishermen to be responsible for these conflicts. Fishermen's ability to modernise and adjust to fishing regulation norms is in question. According to the Director of Maritime Fisheries (DPM⁷⁷):

We realise that, despite our delimitation system, we still cannot solve the conflicts because, and we have to acknowledge this, it is often the small-scale fishery with its very fast development and dynamism that moves offshore towards industrial fishing areas. There are often these kinds of conflicts and damage because the small-scale fishery does not respect navigation and fishing practice norms in general. For example, the nets: they generally let out their fishing nets without indication. Then,

⁷⁶ Interview 23

⁷⁷ Direction des Pêches Maritimes, which is a branch of the Ministry for Maritime Economy

*when the industrial trawlers pass, they can't see the nets, they are not visible to the naked eye, so they tear the nets up, which then causes all kinds of conflicts.*⁷⁸

For this official, lack of attention towards state norms combined with an uncontrollable dynamism characterise fishermen's behaviour and generate unavoidable conflicts. For the DPSP's director, this lack of education and maturity seems to be the main reason why the regulation of the system has been made more complex:

*It is hard to regulate this sector for several reasons: the small-scale fishery has always been an informal sector. ... Then, because most of the people working in the sector are illiterate and haven't been to school, they haven't learnt navigation and fishing rules and they often ignore everything. For this reason, and in order to regulate the sector, we are going slowly; we try to increase their awareness, to train them in order to avoid certain practices and the use of some fishing gear such as the monofilament, which is forbidden, and the use of some forbidden methods in Senegal. They don't know, so we approach them; we organise seminars, meetings, and also maritime controls. At the beginning, we didn't arrest these people, we tried to explain to them, "This is not good, the law forbids it".*⁷⁹

In both discourses, there is a gap that separates the officials from the fishermen's community. By pointing to fishermen as mainly responsible for the conflicts, the DPM's official questions the legitimacy of fishermen's rights to cross the 6-mile limit and go fishing in these areas. He suggests that fishermen could have avoided trouble by not crossing this limit. Although the DPSP director articulates a similar distance ("these people"), we can perceive a certain form of paternalism and affection towards the fishermen when he insists on showing goodwill by taking care of them and being indulgent towards their "ignorance". These officials consider fishermen to be part of an informal underdeveloped community that is unable to follow state rules and

⁷⁸ Interview 19

⁷⁹ Interview 9

regulations. Fishermen's mobility carries a negative meaning and is held responsible for these conflicts. Being unpredictable and invisible, mobility then becomes a problem: fishermen are moving in an irregular way, becoming increasingly "placeless" and detached from fixed points (Adey, 2010). Both their "fast development" and "dynamism" are obstacles for state regulation efforts, although these dynamics have paradoxically resulted from state action. Fishermen are expected to respect standard practices in order to make their routes and fishing places visible. Failure to adopt these practices keeps them invisible and outside the regulation system. The state's norms are both a way to make fishermen traceable and controllable and a way of providing them with some legitimacy – from the viewpoint of the state. In fact, the state reinforces its power over the small-scale fishermen by developing "techne" (Scott, 1998) and by ignoring fishermen's practical knowledge. Fishermen leave visible marks such as floating plastic bottles to spot their underwater nets. Although these marks are not easy to distinguish for trawlers' skippers, fishermen pay attention to these signs when navigating and fishing. For the state, making fishermen's mobility visible – in a more appropriate way – would make it more recognisable, stable and rationalised. These expectations of the state reflect the "simplification" process performed by the state while it deals with the complexity of the movements of the fishermen (Scott, 1998). By staying invisible, fishermen therefore affirm their resistance to the state's attempt at domination.

Although fishermen's ability to comply with state rules and regulations is questioned, we notice through Alioune's previous comments that he has a certain level of understanding of fishing regulations as, for example, he is able to confirm the kind of gear which is forbidden. As a leader, Alioune seems to be more concerned about the way these rules cannot be integrated by other fishermen and systematically applied by state agents. The distance he puts between himself and the state is due to the lack of credibility he gives to it. He seems to believe in the regulation, although he questions its application.

Fishermen's reactions to the state's action – or lack of action – reflect their independence and reluctance to obey any external and superior authority. Their responses are more than a simple sign of cultural, social and economic 'immaturity' – as understood by the government. It seems that the state failed to manage Senegalese fisheries more because of its negligence of fishermen's local

knowledge than because of fishermen's supposed immaturity. Although fishermen would agree with the aim of the state's policy to protect fish resources, they distrust state intervention. Two examples further exemplify the state practices' lack of pragmatism regarding the management of fishermen's mobility and security at sea.

Are mobility and security-related measures compatible with practical knowledge?

What arises from the study of fishermen's reactions to imposed new norms, are two examples of fishing regulation that exemplify Scott's notion of state "simplification" practices (Scott, 1998). Firstly, fishermen must wear a life jacket while at sea, and the quantity of life jackets aboard must correspond to the number of crew members. Although fishermen benefit from an important state grant to buy those life jackets, they do not respect this requirement. Fishermen observe that these life jackets limit their mobility on board because of their size and bulk. Because they need to be very reactive and mobile, especially for net fishing, they consider that the jackets make them lose time and the physical ability for the tasks they have to undertake on board. Fishers also consider that this requirement questions their ability to navigate safely and that wearing life jackets would also mean that they are interfering with God's will (Sall, 2007). Talismans, prayers and sacrifices are the safety practices that tradition allows fishermen to use in order to ward off fate and bad spirits at sea. Furthermore, on a fishing trip I undertook in April 2012, with a crew of 16 purse seine fishermen, I was the only one wearing a life jacket despite the swell's strength (Photographs 11 and 12). When I asked the crew why none of them were wearing one, they proudly replied that they did not need one because "they were experienced fishermen". On our route, we met 10 to 15 other boats full of fishermen who were all going in the same direction. I did not see any of them wearing a life jacket. Crews interact with each other while at sea; they recognise the boats of their fellow fishermen, teasing each other and engaging in competition. In these conditions, if wearing a life jacket is indeed seen as degrading, it can be understood why social pressure and control becomes superior to the official fishing norm. These life jackets are worth XOF 25,000 (£31): they are sold at XOF 5,000 to the fishermen, while the state funds the other XOF 20,000. It is commonly acknowledged that most of the time captain fishermen buy life

jackets for crew members, but as soon as fishing gets bad, they sell them back on the informal market and use the refund to pay for the fuel spent for the unfruitful fishing day.⁸⁰



Photograph 11: Looking for fish shoals, off Dakar coasts, April 2012, J.H.



Photograph 12: Crew members dragging the net, off Dakar coasts, April 2012, J.H.

Secondly, an anonymous respondent in the DPM explains why it has been so difficult for the Ministry for Maritime Economy to efficiently implement the national canoes registration programme. A wide programme to register Senegalese artisanal canoes was launched in 2008 by the ministry. In July 2012, this programme was still running, and the definitive number of canoes in Senegal still remained unknown.⁸¹ Each boat owner must register his canoe(s) with the administration through local fisheries services. The ministry's officials then compile these local statistics at the national level. In theory, every owner needs an administrative authorisation to be allowed to build and then register a new canoe. This programme seeks to track the exact number of canoes in Senegal in order to limit the number of fishing permits and canoes. These limitations aim to reduce the fishing efforts by regulating the sector and access to resources. Indirectly, these limitations would also enable better control of fishermen's mobility as this system enables state agents to identify and localise the fishermen when they control the boats: fishermen are supposed to report their arrivals and departures to local administrative representatives.

Nevertheless, in addition to institutional slowness, fishermen's traditional beliefs, reluctance, distrust and lack of comprehension have been great obstacles to this programme's

⁸⁰ Field notes, 2012 and 2013

⁸¹ Interview 69

implementation. Once registered, local state agents paint the registration number on the boat and insert a small chip into the boat hull that contains information about the boat's dimensions, date of construction, registration number, ownership and home port. However, my informant explains that fishermen often refuse to let the agents do so. Although the chip inserted in the frame of the boat only gives information about the characteristics of the canoe, fishermen think it allows the administration to localise them everywhere permanently and trace their routes at a distance:

They [the fishers] think that if there is an infringement, if they are illegal, if they go to protected areas, even if they flee, surveillance agents will give their position. They think the chip gives their localisation. Besides, they think that this registration system enables the state to identify them, to make them pay taxes. They are not aware of the programme's goals. If they understood that the programme aims to manage fisheries and resources, they wouldn't reject it. But they consider that if the initiative comes from the administration, they must distrust it.⁸²

This behaviour shows how essential freedom of movement is for the fishermen. They do not understand how official programmes and measures work, and tend to assume that these measures will jeopardise their ability to move and fish. In addition, fishermen have their own identification system, using the paintings of traditional, regional and/or familial signs on their boats. They generally paint the name of the boat on it. They choose a name according to the family story, for example, and draw specific signs on the wooden frame (Photograph 13). In this way, fishermen recognise each other at sea according to their region of origin, family and social groups and so forth. By imposing the painting of a registration number on the frame of the boat, the state is simplifying and ignoring this traditional identification system. These procedures have generated distrust among fishermen, especially because they think that this registration process would have an impact on their mobility and would enable the state to control their movements.

⁸² Interview 69



Photograph 13: Traditional paintings on Kayar local fishing canoes, Kayar, July 2011, J.H.

Conclusion

Fishermen and the Senegalese government are, today, facing a great dilemma. Fishermen want to keep being mobile and exploiting the sea. Fishermen's mentality seems to be more complex than reducible to a lack of comprehension and maturity, although state agents' considerations initially convey this feeling. In this chapter, statements and discourse analyses have shown how ambiguous fishermen's expectations of state action are. Resource scarcity and competition undeniably generate power struggles and conflicts between fishermen and state agents. Paradoxically, fishermen denounce an absent state, which is responsible for a lack of resources, and at the same time, they reject its intervention, which nevertheless seeks the protection of the same resources – despite the state's disproportionately lax attitude towards international industrial fishers. Participatory policies seem appropriate but only to the extent that state agents would coherently apply the law and regulate both industrial and small-scale fisheries in a fair and rational way.

Power struggles between state and non-state actors socially construct the Senegalese Atlantic, which makes the meaning of the ocean, the functions of state agents and the expectations of fishermen more confused. I have shown how fishermen have exercised a form of power over maritime spaces through their mobility. Spreading their movement across the Senegalese waters has constituted a powerful means to escape state domination as the government's control has

expanded. Mobility has been something more than a response to state intervention and has embodied a powerful way for the fishermen to express their inherent dynamism. Mobility carries power because it has enabled the fishermen to pragmatically elude state domination and strategically divert and overcome the measures originally intended to limit their movement.

Fishermen's mobility reflects their ability to appropriate new techniques and develop their activities, knowledge and experience of the sea. Day after day, the Senegalese maritime space consequently takes on new outlines: starting as a resource-rich, free-access space, it was first a space of freedom and growth, and was then changed into a limited and competed-for space where fishermen's trajectories have become more strategic. These mobility strategies at the Senegalese level and fishermen's interactions with state agents are valuable for the comprehension of longer mobility patterns and international border experiences. Fishermen have used similar strategies – that is, diverting the rules and taking advantage of the state system's weaknesses – for their long-distance maritime journeys. Rather than being an obstacle to the sector's development and dynamism, their quick adaptation and non-modernised structure has eased their expansion throughout the Atlantic Ocean. The following chapter explores the contemporary power-knowledge relationships produced by fishermen's everyday activities at sea, examining how the traditional functions and values they have attributed to the ocean have changed over time.

Chapter 5 –
Connecting Sea and Land Spaces
Through Mobility-related Practices

In Senegalese fishing communities, powerful families have become influential thanks to the use and spread of their specific knowledge, networks and mobilities. At first glance, family networks and hierarchies are not obvious to an outside observer. This social organisation lies in implicit cultural codes and is not claimed by members of the community or found in architecture and urban organisation. I realised that fishermen are all connected and that they are organised according to specific power relations. These connections need further exploration as they shed light on the whole organisation of the small-scale fishing sector and mobility patterns in Senegal. It seems that one misses a great part of the story when interviewing fishermen individually without looking for these connections.

In this chapter, I decrypt the way fishermen's mobility operates through specific power-knowledge relationships which connect sea and land spaces. I argue that through their mobility, fishermen project power onto the sea and fish resources' local management. At the same time, this mobility produces essential knowledge so that the fishermen can navigate and develop productive fishing activities. I will show how the control over economic resources is intimately linked to fishermen's maritime and territorial mobility. Being mobile and absent enables the fishermen, paradoxically, to manage their expenses and thus their independence better. Furthermore, when fishermen control their own resources and financial means, they gain greater control over their maritime mobility and production means. But when fishermen lack knowledge of and control over these expenses, their maritime mobility increasingly tends to rely on land-based wealthier and more powerful agents. These mechanisms participate in – and challenge – fishermen's geographical and “social construction of the ocean” (Steinberg, 2001).

I initially show how the naming of fishing places and the deployment of navigation knowledge reflect these power-knowledge mechanisms. Second, I look at distant control and

mediation of power that operate through –and give shape to – fishermen’s mobility. I analyse two mobility-related success stories which bring together elements of networks, power and knowledge in a complex way. Whatever shapes these mobility practices might take, these practices link together sea and land spaces.

1. Constructing local marine areas in relation to social constructions on land

Fishermen’s approaches to the sea inform us about the social construction of their maritime environment. For fishing communities, the ocean is, first, a space for the projection of power and the production of practical knowledge. These communities project power onto the sea spaces through the spiritual values and functions they give to the sea and through the practice of naming fishing places. As do most Senegalese communities, Lebou and Wolof fishermen’s communities mix Muslim and animist beliefs in a complex way. Fishing communities organise everyday life around syncretistic practices that are often performed by marabouts. Also, these traditional communities have kept their matrilineal culture through animist traditions. As Fatou Diome has shown in her novels (Diome, 2006, 2010), a gendered distribution of religious rituals makes women the main actors and perpetuators of animist practices, whereas men generally embody Muslim values. Furthermore, for traditional communities, a goddess inhabits the sea (Sall, 2007):

Among the Lebous and Guet-Ndarians, for example, the health of marine resources and fishermen’s security (insurance incomes and safety at sea) depend on the will of the sea goddess (*Leuk Daour* for Lebous and *Mame Coumba Bang* for Guet-Ndarians). (Sall, 2007: 160)

Balandier and Mercier (1952) observe that for the fishermen, the sea has long been filled with mystic elements and feminine powers because it is source of fecundity. Thus, the traditional work performed in order to keep control over these “feminine” elements is often carried out by women. For example, before Senegal’s independence, Balandier and Mercier (1952) reported that women made sacrifices just before the dry season in order to ensure a fruitful fishing season. These beliefs still play a big part in fishermen’s daily life; they often mention the presence of spirits in the

sea. They protect themselves with talismans,⁸³ sacrifices and Marabouts' advice and blessings before going fishing. This spiritual projection of feminine powers onto the sea balances the exclusive masculine use of maritime spaces.⁸⁴ Also, these beliefs shape fishermen's mobility and representation of the sea and secure a fair balance between maritime and land-based activities. These practices are a way for the community to exercise control over their environment, although this control remains fairly limited by mystic marine powers. According to Sall, for the fishermen, the decrease in fish resources is "part of the normal trials and tribulations of nature, which depend on the will of the holy powers they consult from time to time" (Sall, 2007: 157).⁸⁵ In addition to these spiritual practices, fishermen name their fishing places in a specific way.

In Senegal, new generations of local fishermen are very familiar with the names which the elders gave to their traditional fishing places. These names reflect the biological evolution of fishing resources and inform us about the way fishermen appropriate the coastal marine environment. These names generally characterise the fishing places by the type of species they usually provide. Names refer to the quality of these fishing places, their geographical position or the families who first discovered them. In Kayar, Modou⁸⁶ explains that elders gave some of these names according to the land-based elements they could see from the fishing places. For example, one of Kayar's oldest fishing places is called "*Thiès*" because when the elders were fishing there, he explains, they saw a big tree which they deemed was located near the Senegalese city of Thiès. This type of name is a support for navigation and helps the fishermen to orientate themselves according to the position of the land-based elements spotted from the sea (Map 4). Other names such as "*Mbayène*", "*Palène*" or "*Mbenguène*" were those of influential families who used to fish in these particular fishing places. Also, many names refer to the substantial fishing quality of the place: "*Takalé*" means "sparkling" whereas "*Amul Yagal*" literally means "no patience". Because these places are not so popular anymore, these names are not so relevant. For example, in "*Takalé*"

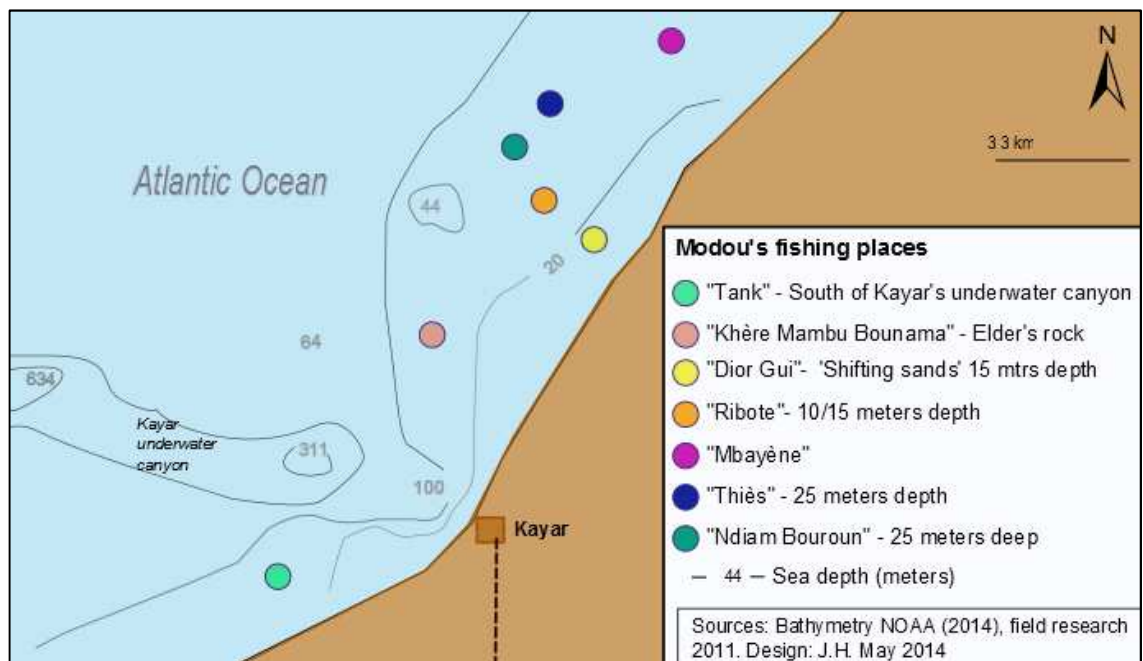
⁸³ Called "*Gri-gri*", these small talismans are worn as necklaces or bangles to protect against bad spirits

⁸⁴ See chapter 9 for further gender analysis

⁸⁵ Nevertheless, these assertions are questioned through fishermen's narratives. Most of the fishermen mention instead the use of inappropriate techniques, the increase of industrial fishing, growing competition and bad management of maritime resources as the first reasons for the decline of fisheries (field interviews in Ouakam, Hann and Kayar; see chapter 4)

⁸⁶ Interview 23

fishermen used to find groupers and sea breams in abundance. Octopuses are a less profitable species which fishermen now find there in great quantities. New fishing places are not necessarily more distant than older ones, though their “creation” is a sign of the increased mobility of the fishermen. The less poetic names of these new places indicate their recent discovery. Called simply “11 kilometres” or “6 kilometres”, their names refer to the distance that separates them from the shore and reveal the novelty of these fishing places. Fishermen discovered these places after the use of GPS devices had become popularised and enabled the distance to be measured in kilometres.



Map 4: Modou's geography of Ouakam's local fishing area, May 2014. Design: J.H.

The “social construction” of this maritime space reminds us of the Foucauldian heterotopia (Foucault, cited in Steinberg, 2001) to the extent that the sea acts as a mirror of the land both in geographic and social terms. Fishermen shape the sea space by reproducing the toponymy of land-based elements in fishing areas. They organise the marine space with reference to their territory, giving priority to dominant families or projecting the frame and marks of the territorial landscape onto the maritime space. By doing so, they reproduce social struggles and hierarchies, and domination as well, transforming the sea into a space of “alternate ordering” (Steinberg, 2001: 193). Thus far, this spatial organisation has not only reflected the wealth of Kayar's local fishing economy through this traditional toponymy but also the open access to fish resources which

traditional fishermen's communities have relied on. This heterotopia is unstable and has become a space where the new generation of fishermen challenges power struggles and social domination (Steinberg, 2001). In fact, the increased pressure on fishing resources jeopardises the balance of the traditional construction of this marine environment. When fishermen cannot exploit the traditional fishing places because of a lack of resources, the resulting higher competition encourages them to find new places.

Today, fishermen increasingly tend to keep their fishing places secret and give them personalised names – generally the name of a close relative they register in their GPS systems. They do not want to disclose their new fishing places in order to minimise competition.⁸⁷ In Ouakam, Alioune⁸⁸ reports that many fishers now hide themselves and go fishing early in the morning so that they can preserve their new discovery. These recent practices generate an individualisation of the fishing activity, which also enables greater control over the local environment. Names and new fishing places then belong to individuals or small groups of fishermen who do not wish to share their new information. These naming practices make possible the appropriation and shaping of the sea space, and are an instrument for the exercise of a greater control over resources. Controlling knowledge – such as information about fishing places – is for the fishermen a way to secure resources and maintain a fair balance in the exploitation of the sea; and on the other hand, managing navigation techniques and technologies enables the fishermen to unfold their mobility and cope with greater competition and decreasing resources. This “marine heterotopia” is a space for the production of practical knowledge and the exercise of control for the fishermen through navigating and fishing practices. The construction of this space is constantly moving, as are fishermen's practices. At the same time as fishermen challenge the traditional organisation of sea spaces through their maritime mobility practices, their increased mobility is a response to the economic issues their community has been facing recently.

⁸⁷ This has been observed in several fishing places while local CRODT agents in charge of surveying fishing activity report their difficulty in knowing where exactly fishermen went fishing. In addition, this kind of information is not shared between the fishermen either

⁸⁸ Interview 17

In addition to these geographical marks and naming practices, fishermen also localise their fishing places by measuring the depth of the sea. Ouakam's underwater canyon is known by the fishers for its exceptional depth, and it attracts many fish species (Map 4). In Joal, former fisherman Ahmed further informs us about "the fisherman's language", which reflects a local and practical knowledge demersal fishermen usually rely on to navigate and fish:

There is what we call the fisherman's language, with Kao and Kel. Kao is where the water is not very deep and Kel is where it is very deep. There is a time, for example, if it's cold, the fish tends to go to Kel, and if it's warm, they go down to Kao to better breathe the oxygen, so it depends on the time period. But there are specific fish which we don't find at Kel, such as, for example, the scorpion fish [...] we find it at Kel only, as black and yellow groupers.⁸⁹

When I ask Ahmed if this *Kao* and *Kel* orientation system corresponded to 'our' west and east, he replies:

Kao is the east and Kel is the west. North is Gop and south is Tank. Gop is always the north and Tank is always the south. The east is Kao and Kel is the sea, in the west.⁹⁰

Although this language can be transcribed into a more universal navigation language in this situation, it would not always be the case – were these fishermen navigating in other places where the sea would lie in the east, for example; they take the depth of the sea as a geographic reference rather than the universal cardinal points. Nevertheless, it seems that this specific navigation knowledge is based on a mix of universal norms and local techniques. For example, fishermen use the fathom unit to measure the sea depth:

You take the rope, you attach a weight and you let it down until it touches the bottom and you start measuring; it is what we call a fathom. A fathom is two metres. If you have ten fathoms, you have twenty metres; this is the way we measure it.⁹¹

⁸⁹ Interview 50

⁹⁰ Interview 50

⁹¹ Interview 50

This fisherman's language is based on a combination of practical local knowledge and more universal conventions. The way in which fishermen have constructed their own navigation knowledge has therefore been essential for the pragmatic construction of the maritime spaces they go to. The appropriation of maritime spaces therefore starts from the creation and appropriation of a pragmatic language that connects sea and land spaces. Other mobility-related practices produce similar connections. Distant control and mediated power enable the spread of mobility over the sea.

2. Distant control and mediation of power

While the funding of fishing activities had traditionally come from internal and informal family and community networks, today fishermen increasingly tend to seek external funding from independent fish traders, fish factories or external contractors (Le Roux & Noël, 2007). This financial dimension applies to the captain-fishers who hold capital and work for a land-based boat owner – as do 30% of the fishermen (ISRA, 2006 and chapter 2). As these financial investments make fishermen more dependent on external funders, fishermen partly lose their autonomy and freedom of movement at sea. These dependent relationships connect land and sea spaces through distant control practices and mediation of power. Networks and resources play a substantial role in the shaping of fishermen's mobility and are reminiscent of Latour's and Law's ANT theory (cited in Allen, 2011). Basing what he says on the analysis of the sixteenth century Portuguese navigation to India, Law argues that:

long-distance control depends upon the creation of a network of passive agents (both human and non-human) which makes it possible for emissaries to circulate from the centre to the periphery in a way that maintains their durability, forcefulness and fidelity. (Law, 2003: 1)

For Senegalese fishermen's maritime mobility, a similar system of distant control operates through non-human agents such as GPS systems, mobile phones and navigation techniques; sea currents and swell; or knowledge about the climate, the sea and the stars. Human agents take part in this mobility system to complete the decision-making process or for reasons relating to the workforce or because of financial investments: both mobile and immobile agents are involved in

fishermen's mobility (Sheller & Urry, 2006). For instance, for demersal long-distance fishing, boat owners may hire a first captain they trust and fund most of the navigation and fishing costs without going on the journey. At the end of the fishing trip, the crew negotiates prices with the fish traders and sells the catches on the local market. In some cases, the owner/funder who is in direct contact with the local fish traders – when this funder is not a fish trader himself – predetermines the ports where crews must land as well as the price of the catches. The smaller the captain's investments in the fishing costs, the more dependent he is on the land-based agents, and, consequently, the more restricted the trajectories he follows at sea. Rather than circulating, power is mediated through resources and at a distance (Allen, 2011). Networks, resources and agents form a supportive frame for this mediation of power.

Generally, agents who hold resources are former fishermen who convert themselves into port-based brokers. Ahmed observes that fishermen see this professional conversion as an achievement and consider that the less time their job requires them to spend at sea, the more successful their conversion is. This former fisherman who turned into fish trader took the lead of a national organisation – “the emergent actors”⁹² – which represents Guet Ndarians' international demersal fishers in six coastal villages in Senegal.

Ahmed used to go fishing in Mauritania, Guinea-Bissau and Guinea and progressively abandoned his sea activities in order to focus on the organisation he represents. This organisation aims to provide assistance to the fishermen when they have difficulties getting foreign fishing licences, for example, or when they are in trouble with Senegal's or neighbouring countries' administrations. This organisation works as a cooperative that mutualises capital, funds and resources in order to provide the fishermen with a reliable, organised structure in case of navigation accidents, for instance. Ahmed also fights for a greater autonomy for the fishermen. He first explains the dependent relationships binding fishermen to their funder – though he is mostly speaking of long-distance fishermen who use ice-box canoes and fish in Bissau-Guinea or Conackry:

⁹² Acteurs Emergeants

If you haven't got savings, you must look over there and ask the fish trader to lend you a small amount of money [...] but this is the greatest problem of the fishermen [...] because once the fish trader gives you money, he's your master, and you must give it back to him at any cost. Now, if you are autonomous, you can freely sell your product. ... Here, the owner is also very often the fish trader. It means that he both buys fish and provides the funding for it; he is at the same time fish trader/broker and funder. This is a problem. ... The best thing is to be autonomous. If you, you are autonomous, you can sell your product for the price you wish, but if you are not autonomous, you are obliged to follow the fish trader's prices.⁹³

The captain who is in debt can hardly sell his catches to someone other than his funder because the fish traders on the landing docks all know each other and would be aware of that 'unfair' transaction. Fishermen prefer to follow the oral agreement that ties them to funders rather than attempting to escape funders' control. In order to strengthen this long-distance control, land-based boat owners generally hire a close relative from among the crew members. Assane, a Joal-based boat owner who funds fishing expeditions to Guinea-Bissau, observes the following:

If you have a canoe and you haven't put one of your relatives on it, you're screwed. It's safer to do this.⁹⁴

Relationships and networks reveal all their meaningful function here as they enable a distant control from the land to the sea. In this way, the boat owner can oversee his crew's activity at sea. When captains are not boat owners, their trajectory is thus significantly controlled from the beginning to the end of the journey. These unbalanced relationships shape the connections that exist between land and maritime spaces, as the length and direction, and the departure and arrival places of the sea journeys depend on the funder's requirements. The exercise of such distant control has the qualities of "durability, forcefulness and fidelity", which conditioned Portuguese navigation in a similar way (Law, 2003).

⁹³ Interview 50

⁹⁴ Interview 52

From sea to land spaces: empowering land-based activities

There is a divide between sea- and land-based activities which has had significant consequences for the organisation of the fishing sector in Senegal. Ahmed reports that this divide has generated an division between the many fishermen who spend most of the year at sea and their land-based leaders, who are often retired or former fishermen. He mentions the difficulties fishermen meet because of Senegal's administration and explains why he feels that the state do not believe that fishermen's representatives are credible.

Today I am not going fishing. I have not been going to sea for one or two years. Because I wanted to diversify my activities, as my brothers fish and I'm a bit educated, I stay on land. I manage the canoes ... Also, there are those organisations, you know, you don't have the time to go fishing, you become a great 'responsible'. Professional organisations, meetings [...] it takes time.

Fishermen are not involved in decision making because, I think, on one hand, there is negligence by the fishermen who do not organise themselves very well [...] because if they were well organised, with a united voice, the state would listen to them. But, if there are a lot of voices, a lot of dispersion, but who is the state going to listen to? The only organisations recognised by the state are CONIPAS, the Union of the Mareyeurs, Unatrams, Unagem. But the real, real actors are not listened to by the state, because the state doesn't know them. Hence, the necessary creation of our organisation.⁹⁵

This "negligence" explains why fishermen are weakly represented and their interests inadequately defended. Fishermen lack the time and energy to organise themselves properly and elect efficient representatives because they spend most of their time at sea. For Ahmed,

The fisherman doesn't care a lot; he does not feel comfortable. If he comes, he just sells his fish and goes home, without thinking of tomorrow. But this is changing; fishermen start realising the benefits of getting organised. ... There is a problem, a lack of time and overall tiredness. That is why you have to [...] if you have an

⁹⁵ Interview 50

*organisation, if I don't stay on land to control business, it will be screwed. This is what encouraged me to stop going to the sea.*⁹⁶

Ahmed makes a clear distinction between land- and sea-based activities. He suggests that defending fishermen's interests requires full-time, land-based involvement. Fisheries' actors need active land-based representatives in order to keep control over – or at least get involved in – the decisions made at the institutional level regarding Senegal's marine activities. This move of activities from sea to land has been empowering for Ahmed. He considers himself to be an effective leader as his education and maritime experience legitimate his representative function: he says that “as my brothers are fishing and I'm a bit educated, I stay on land, I manage the canoes”. With his knowledge, Ahmed has become an active agent whose function links sea-mobile actors and land-immobile actors. As a boat owner, his personal financial resources and capital have enabled him to control at a distance the maritime mobility enacted by his brothers. As an organisation leader, his knowledge and land-based location embody efficient resources for the mediation of the power of sea-based fishermen who seek to have an influence on sea-related decision making.

Ahmed's understanding of fishermen's habits highlights their lack of awareness of the management of their income and inability to plan the future. Fishermen's difficulties in saving money and managing their income in the long term often lead them to seek this external financial assistance. Ahmed explains that this situation is changing and that fishermen are increasingly tending to save money and invest in houses or land tenure rather than making unstable investments in fishing and sea activities. His statements demonstrate that fishermen's personal savings make their maritime mobilities more independent. In fact, it is fishermen's mobility that, paradoxically, strengthens their ability to accumulate savings to the extent that fishermen's absences help them escape their demanding dependents and better manage their income.

⁹⁶ Interview 50

3. Mobility as a key step for success

Sharing is part of the solidarity system in place in Senegal, and fishermen can be overwhelmed by demanding dependents. Similarly, returning emigrants who are believed to have become rich in Europe are expected to give a share of their income to their Senegal-based family once back home (Diome, 2006; Fouquet, 2008). Leaving has proved to be an efficient way to provisionally escape this demand and better manage one's expenses. Nguyen-Van-Chi-Bonnardel recognises seasonal fishing migrations as a way for the fishermen to better control the family's expenses while away fishing for several months a year (1980). Seasonal migration is a long-established means for young fishermen to escape social pressures:

It is therefore thanks to migration that fishermen can save money and consider investments for personal interest: get a wife, or two or even three, build a house or improve living conditions (with a fridge, a TV), get gear (engine and canoe) which will enable them to work independently for the time of the seasons far from their village of origin.⁹⁷ (Nguyen-Van-Chi-Bonnardel, 1980: 274)

By the late 1970s, when Senegalese small-scale fishing economies started to be organised according to expanding migration patterns, families had developed a local economy ruled by the alternating seasons. When fishermen were working in their fishing villages' local waters, their profits used to be entirely shared within the extended family. During the rest of the year, when they migrated to other parts of the country's waters, these fishermen were entitled to keep and individually manage their entire income (Nguyen-Van-Chi-Bonnardel, 1980: 273). Through these arrangements, maritime mobility has become synonymous with independence and a new way for the fishermen to free themselves from the traditional – and sometimes pressurised – community-based system. The ability to save money has become a sign of progress and personal development in Senegal. However, despite these opportunities for the fishermen to develop their saving abilities, respondents of this research often mention fishermen's lack of ability to plan the future as a major

⁹⁷ My translation

issue for Senegal's coastal communities. A Saint-Louis-based Ministry for Fisheries retired official discusses fishermen's saving ability:

Fishermen don't manage capital. They aren't aware of their expenses... they just know what they earn. They struggle against boat owners but they ignore the nature of investment. Fishermen's lack education on how to manage expenses. If they have a good shot, all their relatives come and ask for their share. But they don't know how much they originally invested. The foreigner, the migrant, is better skilled at saving. Fishermen sell sardines at 1,500 francs [£1,90] and can't keep and freeze them. So, when the fishermen go back to fishing, they will repurchase sardines and spend 8,000 francs [£10].⁹⁸

In addition to what young fishermen usually owe to their family after their fishing day, it is very frequent for housewives, unemployed sisters and brothers or close relatives to knock at the worker's door and ask him for a bit of extra money. Refusals are socially denounced; money must circulate and be shared and distributed. Being at sea, absent and thus away from social pressure brings immediate autonomy and freedom to the sailor and leads to individual accomplishment. In this context, successful fishermen might avoid showing ostentatious signs of their wealth in order to minimise the potential jealousy of community members.

While walking throughout traditional Senegalese fishing villages, outsiders can barely notice wealth and success. The same really tiny and dusty streets can lead both to the poorest house in the village or to the house of the (unsuspected) richest fisherman in the country. One can learn after two weeks of regular visits to the same place that the lady who processes fish every morning sitting on the floor and with limited artisanal gear, surrounded by her four children and some goats, is in fact one of the wives of a very wealthy and influential fisherman in the region. In Hann, every path seems to lead to the same old fisherman, Faye. My respondents are all connected to this man and spontaneously mentioned him while telling their life stories. I found out that this man is the

⁹⁸ Interview 63. This informant is referring to the demersal fishermen who need to buy sardines as bait and who are different from the pelagic fishermen who fish these sardines.

richest fisherman in Senegal and owns no less than 40 houses in the village. He was born in Mbour 84 years ago, moved to Hann, where he started to work as a fisherman, and rapidly took the steps of what became a unique success story. According to my local informant, this success finds its roots in the fact that this old man had no family around, because he was an immigrant in this small village. As a foreigner, he was better able to manage his income, was freed from community pressure and enjoyed the distance that separated him from his home village. This distance enabled Faye to save the financial resources he earned from fishing and to avoid the temptation of spending everything in traditional celebrations and family events. His success story started from a migration experience, when saving money and migrating seem to go hand in hand.

This fisherman has had 33 children with four different wives. He trained his sons to be fishermen so that this new generation would manage his canoes once he retired. Faye's sons all worked on their father's boats and live in their father's houses in the neighbourhood. They have had different sea mobility experiences: they have fished or still fish in Guinea-Bissau and Guinea, or remained in Senegalese waters, and/or had an experience of illegal or legal migration to Europe. Faye's sons have hired and trained the local fishing community members, like their father did with the previous generation. They are linked by the knowledge and experience which their father has passed on to them. By training and hiring young fishermen and investing in fishing gear and activities, members of this family have encouraged the local fishing economy and the spread of sea mobility patterns. This family has strengthened an influential network throughout the village and has become an essential reference for fishing-related successes both on the village scale and at the national level.

The elder, Faye, welcomes me into his house in the middle of the old village. A tiny one-metre-wide dirt street leads to his house, where part of his family – a couple of wives, his daughters and grandchildren – live together in the greatest simplicity. His room is on the second floor, where he is waiting for me very simply dressed, seated on a mattress on the floor, although there are a couple of couches in the room. Apart from an honorific official distinction hung on the wall, nothing reveals that this old man has been a fishermen's leader on the national scale for the last 30 years. Although he is unable to speak French and can hardly read the Latin alphabet, he is one of

the closest advisers of the fishery minister and the founder of the National Federation of Senegalese Fishermen (FENAGIE). His lifestyle of material simplicity and non-ostentatious behaviour seems to have been essential for his personal success. When Faye came to Hann he was an external member of the community. This position enabled him to save his earnings because he was not expected to share his income with this community: it was well understood that his first priority was to provide a decent livelihood to his Mbour-based family. He explains how he was welcomed by the Hann community 60 years ago:

I was born in Mbour in around ... 1927. I grew up in Mbour... I didn't go to school. I spent all my youth at sea, that's why I know the sea. I came here [...] I have done more than 60 years in Hann. I fished in Mbour, Joal, up to Sangomar point [...] I fished langouste in Gambia [...] I also spent some time in Kayar, but not that much. Then I settled in Hann, where I got married. I was trained in Mbour, very young, and I came here with my knowledge and my skills at sea. I was very much appreciated by Hann's inhabitants... and that is why they were welcoming towards me. Everybody wanted my knowledge and that is why I then stayed in Hann after that. ... Here in Hann, I was one of the first [fishermen] to get my own canoe, to become a boat owner. At this time, all those who had a canoe were actually using their parents' canoe. I was the first in my generation to own a canoe.⁹⁹

When I ask him about the reasons why he succeeded and eventually became the owner of so many boats and houses, the main reasons he puts forward are related to a reflective and mature management of income and investments:

When I was young and working, everything that I was earning, I was investing it in land [...] At this time, there were people who were earning more than I was. Being reflective is better than being lucky [...] My houses make me live; whether the sea is working or not... Fishermen, even those who were earning more than me, all they did

⁹⁹ Interview 67

*was partying, getting married to women and distributing banknotes everywhere. Those who were wasting [money], they became poor before they died*¹⁰⁰.

On one hand, Faye gained better control over his expenses because he was a stranger in Hann's local community. He became a famous fisherman with a great financial capital in part because he was away from his region of origin. On the other hand, he was bringing specific knowledge which in turn enabled him to gain a respected position and powerful influence within the fishing sector in Senegal. This specific knowledge is transmitted orally and relies on navigation experience and fishing techniques and skills. Oral communication prevails over written and academic knowledge in traditional societies in Senegal and makes easier and quicker the circulation of information. Most of the Senegalese fishermen left school early. Therefore, oral communication is more efficient than written communication because traditional working techniques are never written down. Faye's skills were acknowledged, first by Hann's community and then at the national level when he became one of the main fisheries minister's advisers. Faye's mobility has enabled the spread of a specific knowledge, which was rare in Hann's new, welcoming environment. This knowledge has provided Faye with a secure and influential position among his new community. In turn, this mobility has also enabled the mobile actor to achieve independence regarding his financial resources management. This independence has been essential for him to become a multiple boat and house owner and an influential actor in the Senegalese fishing sector. Thanks to this mobility network, the old fisherman spread his knowledge and gained a respected position among his community. His position, in turn, assists the growth of his influence among other networks.

Finally, there are some parallels between the way fishermen manages their own expenses and the way they manage marine fishing resources. Through Alioune's remarks, we notice that, in relation to money management or the exploitation of fish species, young fishermen's behaviour reflects their inability to plan the future rationally :

¹⁰⁰ Interview 67

We try to educate the young fishermen and tell them the damage they are doing to fish resources. We have to insist and mustn't give up because the future is also for them. Everything we do, me, for example [...] the little I have earned from fishing, at least I have a wife, children, and a house. So if we locked the sea, today, I would still have two bedrooms to rent and would be able to have an income... but them [the young fishermen] they have nothing yet ... They are the future, these young people who are twenty, twenty-five years old. If we speak about protecting fishing resources, it's for them but they are not aware of this ... We know what brought us to this situation, it's because of us, the fishermen.¹⁰¹

Alioune's comments highlight the way in which the sustainable management of sea resources goes hand in hand with a necessary, firm ability to save money and invest in long-term plans. Like Faye, Alioune invested his earnings from fishing in immovable property, aware that sea resources will always be unpredictable and unstable. These narratives also show that, in theory, there is not such a contradiction between becoming a successful and wealthy fisherman and having sustainable fishing practices. In fact, the rational management of sea spaces involves reflexive behaviour and a rational transfer of sea-related earnings into land-based, stable enterprises.

Conclusion

Through these narratives, I have demonstrated how resources such as knowledge of fishing techniques, mobility and family networks enable the exercise of power on different scales. Family and community networks enable the exercise of power through the mediation function of resources such as knowledge and mobility. Sea mobility is controlled at a distance, while maritime mobile actors tend to gain greater control over land activities and decision-making processes. Senegalese long-distance maritime mobility is organised through networks composed of both mobile and immobile agents whose influence varies according to their social and economic position, education and geographical location. Long-distance control does not only express itself through fishing mobility patterns. Fishermen attribute a great power to their spiritual leader, who mediates long-

¹⁰¹ Interview 17

distance control over security and success at sea through talismans and other techniques. Networks between spaces, actors and resources enable the mediation of power and manifest the constitutive spatiality of power theorised by Allen (2011).

These life stories gather together the main elements of Senegalese fishermen's mobility and provide the basis for further study of today's maritime mobility patterns in Senegal. Fishermen reproduce these mechanisms of power knowledge at the level of international maritime border crossings. Through their expanding mobility, fishermen have used their knowledge in a pragmatic way. The analysis of their maritime mobility now moves on to explore border experiences. Fishermen actively take part in the creation of maritime borderlands through processes of appropriation of border regulation practices and the shaping of sea spaces.

Chapter 6 - Living at the Senegal–Mauritanian Border

Since the beginning of the 1980s, fishermen from the northern Senegalese border city of Saint-Louis have met significant difficulties at the Senegal–Mauritania maritime border. While local fishermen from Guet Ndar – Saint-Louis’ famous traditional fishing village – had been used to freely fishing in Mauritanian waters, Mauritania has questioned this traditional free access by strengthening border regulation practices and applying strict fish resources protection measures. Today, the Mauritanian authorities deliver no more than 300 fishing licences to Guet Ndarian pelagic fishermen per year, whereas 3,216 canoes¹⁰² circulate every day around Saint-Louis. In Guet Ndar, there are hundreds of other pelagic and demersal fishermen who still want to fish in the neighbouring waters but who do not have legal authorisation to do so. These fishermen have developed strategies and tactics to cross the border despite Mauritania’s access restriction policy. They fish illegally beyond the border, migrate permanently to Mauritania or sign temporary contracts with Mauritanian fish traders (Marfaing, 2005).

This chapter shows that these tactics reveal fishermen’s deep knowledge and appropriation of Mauritanian border regulation practices. I argue that rather than coping with strong border regulations in a passive way, fishermen have become active border performers by diverting the initial dividing and restricting function of the border into something more profitable to them. In other words, their mobility has been a substantial means for them to become familiar with Mauritanian border control and marine resources protection policy. Moreover, Guet Ndarian fishermen legitimate their cross-border illegal mobility through the romanticisation of their practical knowledge. Because they call themselves the “nomads of the sea”, they remind us of the Deleuzian metaphor (Deleuze & Guattari, 1988). Given the way fishermen strategically avoid border controls at sea, it is tempting to see them as maritime nomads whose mobility is used as a

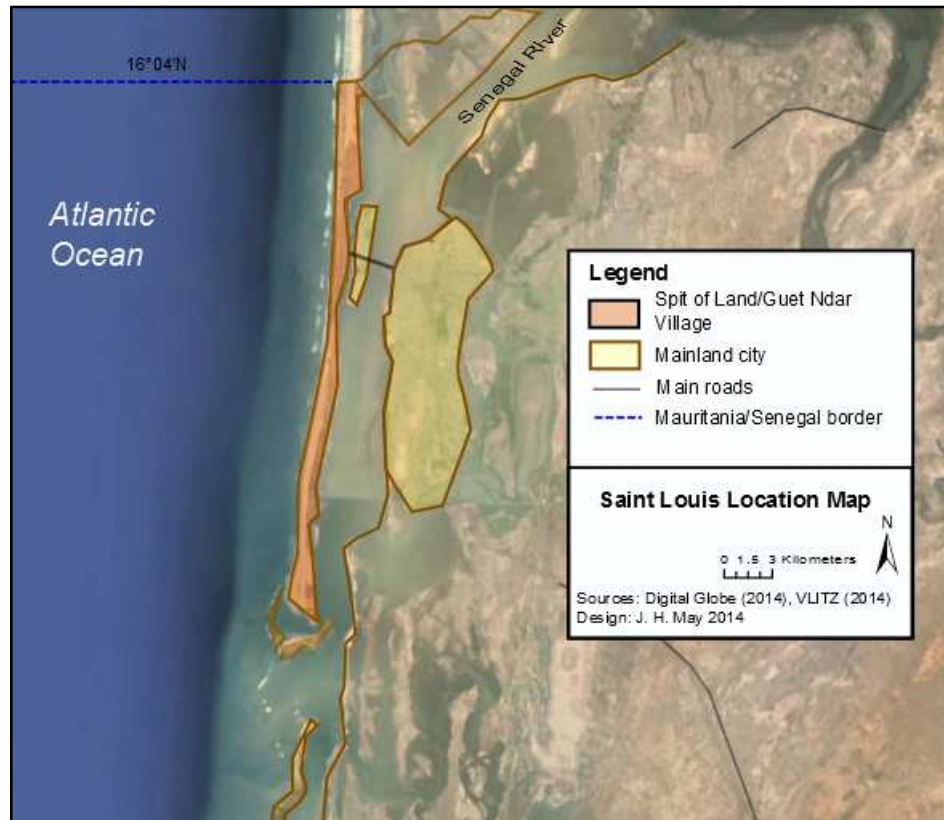
¹⁰² Field interviews in Saint-Louis and provisional results released by the Senegalese Fisheries Registration Programme – statistics collected during interviews with fisheries officials. Interview 69, Dakar, 21st June 2012

powerful means to escape state regulation. I argue that although drawing a parallel with the Deleuzian metaphor would give strength and meaning to fishermen's movements, this comparison would also dismiss essential practical elements of Guet Ndarians' mobility.

This chapter first explores the historical dimension of Mauritania's border restriction policy and the relationship between this border closure and the Senegal–Mauritania border conflict of 1989. I then shed light on the different border-crossing tactics of the Guet Ndarian fishers. Finally, I examine the way local fishers see their own mobility. I interrogate their claims to freely fish in Mauritania and question the nomadic nature of their movement.

1. The Senegal–Mauritania maritime border from 1981 onwards

The geographical specificity of the Guet Ndarian fishing village and its proximity to the border have made the local fishermen economically dependent on their access to Mauritania's waters and intensive exploitation of these neighbouring fishing grounds (Map 5). The 1989 border conflict between Senegal and Mauritania and Mauritania's recent interest in developing the national fishing economy instigated the progressive border restriction measures aimed towards the Guet Ndarian fishers.



Map 5: Saint-Louis location map, May 2014. Design: J.H.

Fishermen have settled on a long and narrow spit of land a couple of kilometres long which is located next to the former colonial city centre of Saint-Louis and called *la Langue de Barbarie*. On this spit of land, the famous traditional fishing village of Guet Ndar was created at the end of the eighteenth century (Chauveau, 1984), and it is known for its extremely high population density – one of the highest in West Africa, or even in the world.¹⁰³ Stuck between the Atlantic Ocean and the Senegal River, several thousand inhabitants, who are mostly fishermen, cohabit on this narrow space and live from the sea. While walking along the spit of land, one is overwhelmed by the dozens of children running and playing in the street, the noisy horse-drawn carriages and old taxis, groups of women occupying the street and fishermen proudly walking together in their working clothes after their hard fishing day. The limited space on which Guet Ndarian people organise their everyday activities makes the village life especially dense (Photographs 14 and 15). Thousands of

¹⁰³ It has been difficult to get a precise evaluation of the population density. According to the official website of Saint-Louis, there would have been at least 37,600 inhabitants in Guet Ndar in 2002. This would mean that the population density would be at least 37,600 inhab./km² (http://sipsenegal.org/saint_louis/ consulted on the 15 May 2014). In 1992, the population of Guet Ndar was around 15,000 habitants (Nguyen-Van-Chi-Bonnardel, 1992)

colourful boats (Photograph 16) occupy most of the shoreline all along the spit of land, which makes fishing a central activity and the sea a continuous stage for intense activity. Public infrastructures such as drinkable water, electricity, health, main roads or sewage facilities are extremely limited. The Guet Ndarian community suffers from high levels of poverty whereas its economy seems to be increasingly entangled in a vicious circle in which a growing number of fishermen compete over decreasing fishing resources. Land scarcity prevents the local villagers from alleviating this economic situation with agriculture, and the lack of fishing resources in the nearby Senegalese maritime grounds do not attract the local fishermen as much as the Mauritanian waters. Guet Ndarian fishermen have always fished in Mauritanian waters as the border is located only three kilometres away, in the north of the village. Whether territorial or maritime, the border has marked Guet Ndarian minds and the village's life mainly turns in its direction.



Photograph 14: Streets of Guet Ndar, Saint-Louis, July 2012, J.H.



Photograph 15: Getting ready for a fishing trip, Saint-Louis, July 2012, J.H.



Photograph 16: The many colourful boats on the spit of land, Saint-Louis, July 2012, J.H.

The Senegalese media often report troubles occurring at the maritime border between Senegal and Mauritania. These troubles are getting more serious and always involve Senegalese fishermen getting caught by Mauritanian coast guards because of their illegal fishing activities in Mauritania's waters. As fishermen like to say, the border is so close that it is difficult for them to realise when and where they cross it. The first decisive event revealing the tensions at the border occurred in 1997, when a conflict between Guet Ndarian fishermen and Mauritanian coast guards caused one death and several injuries among the fishermen (O. Diop, 2004). Although these conflicts at the maritime border reflect a specific local context, these troubles are related to the long-standing tensions between local Mauritanian and Senegalese populations, which resulted in an international border conflict in 1989.

Long-standing tensions at the Mauritania–Senegal border and the 1989 conflict

The Mauritania–Senegal border area has been shaped by land-based movements of populations between the two sides of the Senegal River since the pre-colonial period (Santoir, 1990). Local conflicts and tensions have marked the relationships between Fulani and Maures ethnic groups, which have long cohabited in the region. At the end of the nineteenth century, the relative peace brought by the settlement of French colonists encouraged the move of a number of Fulani peasants up to north of the Senegal River (Santoir, 1990). Willing to keep control of the ambitions of the Maures – who were mainly settled in the north – towards southern territories, the French encouraged a geographical and ethnical division and aimed to sedentarise Fulani farmers at the southern side of the Senegal River (Santoir, 1990). According to Santoir, through this ethnic governance, the French colonial power acknowledged the domination of the Maures on the northern side of the river. Despite this local governance, Maures and Fulani peasants still continued migrating to and from each side of the river. The cohabitation between these two different ethnic groups happened with a varying degree of peacefulness until the end of the 1980s. In 1973 and 1985, serious drought increased these migration patterns (Santoir, 1990), encouraging flows of Fulani peasants to move to the northern – thus Mauritanian – side of the river. From the mid-1980s, tensions arose in a context of drought, great pressure on land, pasture- and land-use-related

conflicts, political instability in Mauritania and import bans on Senegalese agricultural products in Mauritania (Stewart, 1989). These tensions were not only felt at the local level of the border; they spread among Mauritanian communities settled in Senegal and among Senegalese communities in Mauritania (Stewart, 1989).

On the 9 April 1989, two Senegalese (Fulani) peasants were killed during riots in the Senegalese border town of Diawara. This decisive event launched a series of repressive acts of violence upon Mauritanian immigrants in Senegal on the one hand, and Senegalese immigrants and Wolof communities in Mauritania on the other hand. The conflict spread on a national scale and led to an ethnic “purification”, generating the expulsion of 170,000 Maures from Senegal to Mauritania and 70,000 Senegalese from Mauritania to Senegal (OECD, 2010). Senegal argued for the redrawing of the border further north than the current border, legitimating its view of the supposed ambiguity of the original 1933 drawing of the border that divided – and still divides – the Senegal River into two parts (O. Diop, 2004; Stewart, 1989). Despite attempts at negotiation and the intervention of other African countries and Europe, diplomatic relations between Senegal and Mauritania were interrupted for around two years from August 1989. Although a large-scale war was avoided, these violent events traumatised both Mauritanian and Senegalese populations. These tensions undoubtedly affected the cross-border maritime movement of the Guet Ndarian coastal fishing communities.

Mauritania’s access restriction measures aimed at Senegalese artisanal fishers

Marfaing shows how the Senegalese fishermen progressively lose the lead they had been taking over the Mauritanian fishing economy until 1989. They have become simple migrant workers obliged to avoid and challenge border controls since then (Marfaing, 2005). In and around Ndiago, which is a village located next to Mauritania’s southern border, the Wolof population had spread independently from political and juridical constraints until 1989. Also, Mauritanian waters had been poorly exploited by its nationals until that same period. The Imraguen were – and still are – the only Mauritanian ethnic group who specialise in small-scale fishing, with a very small proportion of catches (1% in 2004, Marfaing, 2005), making the Wolof fishermen (originally

Senegalese) the leaders of Mauritania's fishing economy. Therefore, until the events in 1989, most of the fishermen fishing in Mauritanian waters in the border area were either Senegalese from Saint-Louis or from the village of Ndiago (Marfaing, 2005). After 1990, the Mauritians became the biggest group of fishermen exploiting these grounds (H. Diop & Thiam, 1991). Indeed, most of the Wolof population, including fishermen, had been deported back to Senegal in 1989, and Saint-Louis-based fishermen had then seen their movement limited by the border closure. In parallel to the 1989-conflict-related decline of the Wolof population in Mauritania and the restricted access of Saint-Louis-based fishermen to Mauritanian waters, Mauritania started developing a growing interest in the national fishing economy through the exploitation and preservation of its fishing grounds.

Through the declaration of the development policy for the fishing sector in 1987, Mauritania recognised the great potential of its national waters in terms of fishing exploitation and started developing its maritime activities. Later, through a sector policy letter in 1994, the Mauritanian government started encouraging private industrial fishing companies, developed its own national fishing fleet and launched the building of fishing infrastructures in Nouakchott in 1996 (Gouvernement of Islamic Republic of Mauritania, 2013; Marfaing, 2005). In this context, Mauritania has increased economic agreements with foreign countries and fishing companies for the exploitation of its fishing grounds in exchange for financial backing from the signatories (Catanzano & Rey Valette, 2002). In parallel to these developments, Mauritania sought better control and regulation of the national fishing resources and started establishing restrictions for access to its waters by implementing a fishing licence system, directed at Senegalese nationals, in 2001.

The 1983 maritime convention signed by Senegal and Mauritania is the first decisive step for the management of maritime resources and small-scale fishing in the borderland (Convention, 1983; Marfaing, 2005; Ouled Touileb & Hadj Sidi, 2009). This convention establishes the rules for the fishing activities of both countries in the territorial waters at each side of the border. It aims to ease cooperation and optimise the exploitation of natural resources in the area. This legal framework requires the Senegalese and Mauritanian fishermen to hold the valid authorisations that

are usually required by their respective countries in order to fish in the neighbouring country's waters. The fishermen who temporarily settle in camps must seek approval of the planning of their fishing activities from the authorities of the country whose waters they aim to fish in. Although this agreement has a limited scope and only aims to implement a bilateral juridical framework, it demonstrates Mauritania's emergent interest in the potential of its maritime environment and constitutes the premise of the further fishing licence system which the country launched in 2001.

Although diplomatic relations between Senegal and Mauritania had improved, tensions were still felt at the maritime border in 2001. Marfaing argues that further negotiations between the two states regarding the management of fishing resources truly started after a Senegalese fisherman was killed by a Mauritanian border agent while he was trying to flee back to his national waters in 2001 (Marfaing, 2005). Mauritanian agents circulate at the border, and have a right to pursue people, which allows them to follow the fishermen beyond the border and arrest them in Senegalese waters when necessary. On the 25 February 2001, Senegal and Mauritania signed a yearly renewable convention in Nouakchott that stipulates that 300 pelagic licences can be sold to Senegalese fishermen, thanks to which they are allowed to fish for a maximum of 40,000 tonnes of exclusively pelagic species, except mullet, per year (Application Protocole, 2008; Martín, 2010). The cost of these licences varies from €115 euros to €228 – depending on the size of the boat – and they are sold to the Guet Ndarian fishermen through the fishery services of Saint-Louis (Application Protocole, 2008). The protocols signed by Senegal and Mauritania after this are ruled by this 2001 convention. Each year since then, new protocols have amended the original regulation, and it seems that access to Mauritanian waters and resources has become more restrictive. These measures were enforced through the application protocol signed on the 26 March 2008 by the two states: in addition to what is stipulated in the 2001 regulation, fishermen must also land 15% of their catches in Mauritania before heading back to Saint-Louis' fishing wharf (Application Protocole, 2008). The fishermen who are entitled to buy a Mauritanian fishing licence must hold regular Senegalese fishing permits. As the last protocols stipulated that fishermen had to land and sell a part of their catches in Mauritania, they therefore organised themselves and take turns in fulfilling this obligation – except when they infringe the protocol.

Conflicts and arrests of fishermen at the border

Conflicts and arrests of fishermen at the Mauritanian border involve both pelagic and demersal fishermen operating illegally in Mauritania. The former either do not respect the clauses of the bilateral agreements or fish outside authorised fishing times, whereas the latter do not hold licences at all as the Mauritanian authorities do not sell demersal fishing licences.

The renewal of pelagic licences is conditional on their requirements being respected by Saint-Louis fishermen. For example, fishermen's disrespectful behaviour towards some clauses of the agreement led the Mauritanian government to suspend these licences for a month in April 2011.¹⁰⁴ After these licences had expired in August 2011, in December some Guet Ndarian fishermen who were still fishing in Mauritanian waters had been subjected to stronger penalties such as the seizing of catches, gear and fuel, and some of the boat captains were sent to Mauritanian jails. Mauritanian border patrols seized 15 boats in the surrounding areas of Ndiago that month. Once back in Senegal, the fishermen organised themselves and assaulted the Mauritanian border agents at sea in order to get their gear back.¹⁰⁵ As a response to the at-sea assault, the Mauritanian patrols fired on the fishermen, injuring 5 of them and arresting 23 others.¹⁰⁶ At the same time, the Saint-Louis fishing community was oppressing the Senegalese administration to negotiate new agreements with the Mauritanian authorities and release the fishermen and fishing gear.¹⁰⁷ In January 2012, the Mauritanian coast guards fired on 4 Guet Ndarian fishermen who were fleeing back to Senegalese waters, although they were about to get arrested because they were fishing illegally in Mauritania.¹⁰⁸ Licences were eventually renewed until August 2012. After that, fishermen had to wait until June 2013 to get new licences and be allowed to fish again in Mauritanian waters. This 2013 protocol is stricter than the previous one. The fishermen must pass back and forth past the Mauritanian land-based checkpoint of Ndiago in order to make their route visible to the Mauritanian border agents. Furthermore, the fishing period

¹⁰⁴ Ndarinfo (a), 2011.

¹⁰⁵ Ndarinfo (b), 2011

¹⁰⁶ Ndarinfo (c), 2012

¹⁰⁷ Jeune Afrique, 2012

¹⁰⁸ Afriquinfos, 2012

now extends from early June to August, while it could have lasted from 6 to 9 months in the previous agreements. In addition, the fishing area is reduced and covers the fishing grounds from Ndiago to the south of Nouakchott.¹⁰⁹

Purse seine boats represent only a small proportion of the entire small-scale fishing fleet of Saint-Louis. The issues raised by the pelagic licences are therefore only a visible part of this whole border problem. The invisible part of the problem is that most of the rest of this local fleet mainly target demersal species and fish illegally in Mauritania. In spite of the fact that the Mauritanian government restricted the licences for fishing for pelagic species, this major local fleet is potentially willing to fish in Mauritania. From June 2009 to December 2011, the Saint-Louis fishery services reported that 128 Senegalese fishing boats had been seized and were still detained by the Mauritanian authorities (SRPS - CSSC, 2011). This report stated that only 16 boats were purse seine boats belonging to fishermen who had been arrested while fishing without licences, whereas the other 108 boats were either net and line small fishing canoes or ice-box fishing boats. These statistics do not reflect the everyday illegal movements of hundreds of demersal fishermen at the border. They only reflect the disproportion existing between purse seine and small fishing canoes' activities: the latter are far more numerous and work extensively beyond the border. The election of President Macky Sall in March 2012 has had positive effects on these ongoing tensions. The president obtained from the Mauritanian authorities the release of 150 canoes and 180 engines which Mauritanian border patrols had been seizing from Senegalese fishermen who had been fishing illegally since 2008.¹¹⁰ Finally, these conflicts reveal the strategies fishermen have developed to win the game. In-depth narratives inform us about the way these distinct strategies operate.

2. Strategic adaptation scenarios: challenging the border

When they do not hold pelagic species fishing licences, fishermen use different routes to cross the Senegal–Mauritania border. The narratives of Guet Ndarian fishermen have revealed

¹⁰⁹ Afrique 7, 2013

¹¹⁰ Le Soleil, 2013

three main strategies¹¹¹ which involve risky long-distance maritime journeys off Mauritanian coasts, temporary migration to Mauritanian camps and everyday illegal movements of small demersal canoes. Through their everyday cross-border mobility, fishermen give meanings and functions to borders, sometimes in an unexpected way, and become active producers of borders. Fishermen develop what De Certeau calls “tactics” in response to border control strategies (Adey, 2010; De Certeau, 1984). Guet Ndarians challenge border control practices by spreading and using their own mobility in a pragmatic way that reveals a process of re-appropriation, a strategic use of the sea space and a deep knowledge of Mauritanian agents’ mobility. Moreover, for Rumford it is essential to “see like a border” rather than “seeing like a state” (2011; 2006) – reframing Scott’s famous title. Rumford discusses four arguments. First, one must adjust one’s “geographical” point of view while considering borders. Second, a scholar should not reduce borders to their state functions but should rather consider other border work, uses and effects:

Borders are not necessarily always working in the service of the state. When seeing like a state one is committed to seeing borders as lines of securitized defense. Borders do not always conform to this model. In a desire to shore up what may be perceived as the ineffectual borders of the nation-state border-workers may engage in local bordering activity designed to enhance status or regulate mobility. (Rumford in Johnson et al., 2011: 68)

Borders can generate unexpected effects and, instead of stopping mobility, they might in fact unwillingly encourage it. Rather than limiting the mobility of the fishers, Mauritanian border regulation has pushed the fishermen to take detours and become increasingly mobile in order to avoid controls. The third argument raised by Rumford puts forward the possibility that these non-institutional actors can become active “border producers” and take advantage of the border

¹¹¹ In 2012, I was invited to stay in Gokhou Mbat, the northern village on the spit of land, with the family of Abdoulaye, a retired fisherman who works as a fish trader in Dakar and whom I previously interviewed there. Abdoulaye moved to Dakar a couple of years ago and settled with his second wife, while Fatou, the first wife, remained in his family house in Saint-Louis, with her mother and sisters-in-law. Her sons and nephews came back and forth from their fishing trips while she was looking after the youngest children during the day

situation. In this sense, the empowering impact of organising or benefiting from border crossings will also be considered here. Guet Ndarians develop particular skills and knowledge while organising illegal maritime border crossings of which they can financially and socially take advantage. These advantages result in gaining better knowledge and control of marine resources and of their own mobility. Finally, for Rumford, “‘Seeing like a border’ leads to the discovery that some borders are designed not to be seen” (in Johnson et al., 2011: 68).

The invisible dimension of the border especially applies in the context of maritime borderlands where geographical and territorial border markers are particularly weak. As a result, this invisibility becomes an advantage for the everyday crossers as moving border practices adjust to the unstable marine environment in an unpredictable way. Fishermen not only play with the invisibility of the borderline at sea but also develop invisible border-crossing tactics to avoid potential controls.

Risky long sea journeys off Mauritania

Fishermen choose the strategies used to reach Mauritanian waters depending on their fishing techniques and habits. One of them consists of organising a long and risky sea journey and reaching international waters as far away as possible from border patrols. This strategy implies spending at least 10 days at sea in rough conditions and risky navigation in high seas. Fishermen generally use 20-metre-long wooden boats, 2 engines, navigation instruments such as GPS devices, a depth sounder and a compass, and they also have enough food supplies and water for the entire crew. Large crews of around 13 to 15 fishermen leave Saint-Louis with stocks of ice and fuel so that they can afford to remain for long periods of time at sea (similar to long fishing journeys to Guinea-Bissau). These fishermen line fish and target high-value demersal species which they sell on the Senegalese market. They circumvent the border area over hundreds of kilometres and then head north. Two young crew members about to embark in an ice-box boat who are used to fishing illegally off Mauritanian coasts explain how they avoid these controls:

We navigate 200 kilometres heading to the west and 500 kilometres to the north, almost up to the Moroccan border, next to Nouhadibou. It's a 48-hour journey. Then we spend 4 days fishing. We don't have licences. Mauritania only gives licences to net fishermen. ... If we had the possibility of getting licences, we would buy them, because our journey would be shorter. Instead of navigating 200 kilometres to the west, we'd only do 20 kilometres, without any trouble. ... If we get caught by Mauritanian patrols, they seize fishing gear, like fuel, engines and they keep it. They'll keep the captain as well and will say that it's a kind of "theft", that it's theft. They keep him in jail for around one month or two, I don't think it's normal.¹¹²

Circumventing the border area is expensive in terms of fuel, gear and food supplies. The farther fishermen go, the less likely they are to get arrested. Fishing-canoe owners can spend £1,300 in fuel and £400 in supplies for a 10-day journey, and the canoe generally costs £13,000. In relation to their investment, fishermen also consider the risks of getting caught or having their gear seized. The young fishers report that the captain's arrest causes trouble for his crew, who remain unemployed until the captain is released. These crew members consider Mauritanian penalties to be abnormal and claim that they are willing to pay licences and fish legally, were Mauritania to sell them demersal licences. What is not normal for them is the fact that it is impossible to get legal licences. For them, this impossibility gives legitimacy to their illegal fishing trips because, whatever the law says, it seems that they would go fishing in Mauritanian waters anyway. It was revealing in this interview that these two young fishermen almost never mention Senegalese border patrols and state agents. Management of fishing mostly remains a Mauritanian issue:

The Senegalese marine [...] I can't see it. But for me [...] in the case of the licences [...] the state must take its precautions. When we are asked to show a licence, we must give money. The two states must do the negotiation. Speaking about the [Senegalese] marine [...] some do that: they [the Mauritanian agents] ask you to come and fish in their area for two days. You will pay each day between 100,000 francs [£125,000] and

¹¹² Interview 38

*50,000 francs [£62,500] but beyond these two days, if you stay more than two days, they will catch you. ... It's like business, a manner of doing business. There are people [coast guards] who look after this area, over there, around Ndiago, almost 20 kilometres up to the north, they do this [the Mauritanian guards].*¹¹³

For these fishermen, the alternative to their long-distance fishing trips off Mauritania would be to agree to pay bribes for two days of illegal – but peaceful – fishing in Mauritanian waters. Nevertheless, for them, the longer and riskier 48-hour sea trip to the west is a safer solution in terms of arrests, although the initial investment is more important than for the other solution, which is the negotiation of bribes that are part of the initial investment. The Senegalese state remains quiet on the contested bribing practices of the Mauritanian agents, attempting to keep diplomatic relations with Mauritanian authorities in a favourable condition. What is striking is the impunity of these crew members' discourse. It would be legitimate for them to ask the Senegalese government to prevent Mauritanian agents from asking local fishermen to pay bribes, although these same fishermen are fishing illegally. These fishermen do not question the illegal nature of their mobility practices; rather, they complain about the way these “illegitimate” border regulation practices have pushed them to become illegal fishers.

In 2012, a Guet Ndarian informant reported that at least 11 ice-box canoes were regularly following this long-distance fishing trip strategy. In this case, border practices have a strong effect on fishermen's mobility. This strategy requires mental and physical strength as well as great navigation skills, but it is financially profitable and provides better opportunities for individual enrichment.

Contracts with Mauritanian fish traders

Secondly, some fishermen are legally hired by Mauritanian “businessmen” – as the Guet Ndarians call them – who hold valid Mauritanian fishing licences. These Mauritanian fish traders own private licences they buy from the Mauritanian government and use the Senegalese workforce and its reputed knowledge to fish in Mauritanian waters. They recruit in Saint-Louis. These

¹¹³ Interview 38

licences enable small crews of demersal fishermen to cross the border legally with their own fishing gear and reach one of the isolated camps along the coastline in Mauritania. Hired fishermen spend one or two months there, depending on the season and the availability of fish species. They fish in Mauritanian waters and sell the fish to the Mauritanian fish traders. Around 100 fishermen regularly live in each of these camps. Senegalese fishermen mention 3 of the 7 camps reported from the south to the north of Mauritania (Bakhayokho et al., 1988). These camps have names such as “PK 28, 65 or 105” – which refer to the distance that separates them from Nouakchott¹¹⁴ – and lie somewhere between the desert and the sea. The Senegalese fishermen who temporary live in these camps do nothing but work, eat and sleep during the time of their contract. They are dependent on their employers, who determine the prices of their catches and who keep a monopoly over the sales. Access to these camps is often restricted by their geographical isolation, which makes the fish traders the only potential buyers around. As a consequence, fishermen generally sell them the fish at a lower price than they would in Senegal.

Ibou is a middle-aged fisherman who has been working for the Mauritanian fish traders since 1981. I met him in his Guet Ndar-based family house. Although he lives in a remote area of Saint-Louis with his wife and children, he spends most of his time in Guet Ndar when not at sea, which enables him to maintain a strong link with his geographical and social roots in Guet Ndar. He describes the strategies he has been developing to face the decline of fishing resources in Senegalese waters. He started fishing in 1971, and became the owner of his first boat in 1981. Today, he owns three line-fishing boats and navigates up to the south of Nouakchott on a regular basis. According to him, Mauritanian fish traders keep full control of these camps:

Each month, I pay 260,000 francs to the Mauritanian authorities; it's a licence but they don't sell them directly to the fishermen [...] They control everything, via the Mauritanian marine who comes and controls the camp. I have already had troubles with the Mauritanian marine. They often come at sea; they find you, they look at the

¹¹⁴ Most of these camps have long been temporary as they moved according to the fishing conditions. This might explain why there are slight differences between the narratives of the fishermen and the scientific maps drawn in the 1980s (Chaboud, 1988). In the field, interviewees mentioned camp 91, which might correspond to camp PK 105 reported by Chaboud twenty years ago

*fish you caught and say that you were not allowed to catch this fish [...] when we get the net out we are not sure whether we can or cannot catch the fish. So, you pay, despite your licence, and if you don't pay, they take you with them and force you to pay a huge amount of money. But if you give money, they let you leave ... I don't like this life in the camps. But I have no choice. You go fishing, you come back, have a rest and do exactly the same the day after. ... We are obliged to live this life there; under the tents, you have no information, no right to get out, no right to speak with whom you want.*¹¹⁵

The Mauritanian camp “organisers” bring rations of bread, rice, biscuits and water every day to the crews and leave with the daily catches. Ibou complains that apart from playing cards and drinking tea, the hundreds of fishermen living in these camps do not have any other entertainment. Guet Ndarian fishermen are often tied by debt to the fish traders. If they have no funding for their fishing activities at the beginning of the fishing season, they might have to ask for a loan, so the fish trader will then take his money back at the moment of buying catches from his fisherman-employee. Indebted fishermen are obliged to work for him as long as money is due (Marfaing, 2005). Nevertheless, this austere way of life does not prevent the fishermen from keeping contact with their Senegal-based families. When I ask Ibou how easily he can call his family when he is the camps, he reports the following, with a very natural and familiar way of referring to the camps:

*Yes it's easy. Camp 65, you speak as you want. 93, it's not good, the quality is not good. 28 neither. But, 65, there are antennas [for mobile phones] everywhere over there.*¹¹⁶

Like other migrant workers who spend time abroad, away from their community of origin, these fishermen are a masculine workforce that has left the family behind, keeping in touch through communication technologies and doing nothing but working and expecting, on the last day of their contract, to go back home. To compensate for this constrained mobility, Ibou does not hesitate to infringe the law as well as break the agreement that ties him to the fish traders. In fact, despite this

¹¹⁵ Interview 44

¹¹⁶ Interview 44

legal framework which migrant Guet Ndarians benefit from for their fishing activities in Mauritanian waters, they easily circumvent it. Although they are not legally allowed to sell the fish in Senegal, fishermen might go back to Saint-Louis with some of their catches in their canoe and try to avoid border patrols. Ibou gives a precise account of his cross-border mobility tactics:

*Here [in Senegal], on a good day, I can sell up to 250,000 or 300,000 francs [£300–£360]. A fishing day sold here is worth 3 fishing days sold in Mauritania. So, sometimes, of course, I come back to Senegal if I have fished in Mauritania, of course. ... I have a licence, the border is very close, so if the marine guards [want to] arrest me, I can still go back to Nouakchott in the camps. If not, in the night, you pass, the border is very close [...] If I get caught, they take my fish catches, my boat, my engine, everything. But this has never happened.*¹¹⁷

Ibou takes advantage of the geographical position and economic role of the border. Although he is legally hired in Mauritania, he clearly states how valuable it is to cross the border illegally and go back to Senegal to sell his fish instead. Here, the border was at first an obstacle that forced him to leave his household for several months each time he signed a contract, but it has since become a way to give more value to his daily work. The risks of getting caught are lower than when using the first strategy. Crews always have the possibility of turning back and heading to their camps if the marine approaches once they are very close to the Senegalese border and about to cross it illegally and go home. Again, it is difficult to provide a precise assessment of these movements. According to Ibou's statement, if each of the three camps regularly hosts 100 fishers, then it can easily be assumed that at least 300 Senegalese fishermen follow this strategy. Like the first strategy of distant fishing off Mauritania, these cross-border migration movements remain minor. The less-organised, illegal cross-border movements which other Guet Ndarians undertake everyday are more frequent and are observable from the beach.

¹¹⁷ Interview 44

Gambling at the border every day

In the third scenario – the most common one – fishermen simply cross the maritime border by night on board small fishing canoes, hoping to escape coast guards. They do not even seek to get proper licences and just spend the night fishing on the other side of the border, coming back early the next morning. A locally active fisherman leader introduced me to Pape, a retired fisherman willing to share his experience of the border. Pape walks me to the northern fishing wharf of Gokhou Mbaté, next to the Mauritanian borderline. From our viewpoint on the beach, we can observe dozens of boats casting off in the sunset, as well as dozens of immobile lines of small fishing boats offshore, waiting for nightfall before discretely approaching the Mauritanian border (Photograph 17). He explains that hundreds of fishermen cross the border every night and come back early in the morning to sell the Mauritanian fish at Saint-Louis’ market.



Photograph 17: Guet Ndarian fishers who have just left the spit of land and are waiting for the sunset before heading to Mauritania, Saint-Louis, July 2012, J.H.

Pape has been fishing for the last 30 years. He explains the various techniques he has been developing to avoid border patrols. Pape confirms the two fishermen’s statements above, saying that fishermen can pay bribes of around £40 to be left in peace for 3 days by the border patrols they have been negotiating with. They are still arrested when “the supervisor of the border agents comes and controls”, he says. When I ask him what his techniques are to avoid getting caught, he explains:

I'm clever, I'm very clever. Me ... as a great fisherman ... if you are not a great fisherman like me [...] I know at what time you are on patrol, where you go out. I tried not to cross during patrolling times. Ndiago border patrols, they are on patrol one day, at the most, and over less than 50 square kilometres. A patrol boat never goes beyond 50 square kilometres. I know the limits of each camp control, I know what area they control. To catch me, you would have to spend two days at sea.... Two navigation days, [because] beyond two navigation days, I know a bit less about the patrol times.¹¹⁸

Pape is very familiar with the location of every Mauritanian checkpoint. As with many fishermen who take the risk of crossing the border illegally, he has adjusted his mobility according to the specific knowledge he has acquired over time:

There is a dangerous point [...] 18 kilometres away [...] It's Ndiago [...] the checkpoint [...] the Mauritanian guards [he points it on the map]. We're heading further west [...] We navigate 15 kilometres to the west [...] at night, not during the day. From Ndiago till Sam [...] there is another border checkpoint [...] there is another border patrol there [...] So we stay offshore. Sometimes we used to go fishing there until we saw border patrols starting pursuing us.¹¹⁹

When fishermen started using GPS devices, they could navigate away from the coastline by night to maximise their chance of not getting caught. Without GPS, they need to follow the coastline and take note of landmarks to orientate themselves. These new navigation technologies have enabled them to better escape controls as they now feel more comfortable navigating offshore. Once they reach latitudes they want to fish in, they head back in the direction of the coast, where fishing grounds are less deep and where rocks host valuable fish species. These strategies are very risky as fishermen turn their light off, navigate at night, in high seas and on board small fishing boats which are not appropriate for high-seas navigation. Like most of the

¹¹⁸ Interview 65

¹¹⁹ Ibid

fishermen on the spit of land, Pape is very proud of being a fisherman and a great sailor. He puts forward his knowledge of the sea and his experience to explain how he can escape border controls. His geography of the sea is clearly constructed according to his knowledge of controlled areas and patrol schedules.

These three strategies bring to the fore the ambiguous functions of borders. Borders are spaces of value, extraction and control, and are spaces of expertise and knowledge. They both unify and divide, and have an opening and closing function (James Anderson & O'Dowd, 1999):

They are at once gateways and barriers to the “outside world”, protective and imprisoning, areas of opportunity and/or insecurity, zones of contact and/or conflict, of cooperation and/or competition, of ambivalent identities and/or the aggressive assertion of difference. (James Anderson & O'Dowd, 1999: 595)

The Senegal–Mauritania border becomes an “area of conflict” for the fishermen who are arrested when they attempt to cross it illegally. By circumventing the closing function of the Mauritania–Senegal border, fishermen have changed the border into an “area of contact” and “opportunity”. Moreover, fishermen’s experiences demonstrate the ambiguous limits of the Mauritania–Senegal border. The borderline is certainly a geographical frame around which border patrols and fishermen organise and legitimate their mobility. However, this border area is better understood as

frontiers, territorial zones of varying width which stretch across and away from borders, within which people negotiate a variety of behaviours and meanings associated with their membership in nations and states (Martinez 1994; Prescott 1987; Herzog 1990 cited in Wilson & Hastings, 1998: 9).

The shape of this maritime borderland results from the relationships linking or opposing borders agents – whether they are state or non-state actors. Opportunities for negotiation provide flexibility for the application of border regulation practices – through bribes – which makes every border crosser a potential producer of a border. The moving nature of the maritime borderland makes more complex the drawing of an objective borderline. When, why and how

fishermen are arrested often remains obscure for the fishermen. In the Saint-Louis fishery services' report, for 51 of the 128 arrests fishermen are unable to explain the reasons why they were arrested. The other 77 knew they had been arrested because they were fishing illegally (SRPS - CSSC, 2011). One cannot affirm whether the fishermen pretend not to be aware of the current regulations or whether they were truly fishing in Senegalese waters and thus unfairly arrested by Mauritanian agents. What is more certain is that fishermen are fully aware of the border location at sea, as their narratives have proved. In fact, it seems that both the fishermen and the Mauritanian border patrols take advantage of the maritime nature of this borderland and the resulting lack of external control and transparency. Beyond these strategies and tactics lie fishermen's strong claims to fish in Mauritanian waters. Their determination to continue crossing the border illegally results from these specific claims and a strong local fishing identity.

3. When knowledge and experience justify illegal practices: romanticising mobility

One could be tempted to give the mobility of the Senegalese fishermen the value of a nomadic movement that avoids the sedentarising ambitions of the state authorities. Since the Guet Ndarian fishermen call themselves “the nomads of the sea”, a Deleuzian approach seems attractive. Contemporary mobility-related research stresses the way mobility has started taking a positive value (Adey, 2010; Cresswell, 2006; Sheller & Urry, 2006). Deleuze and Guattari's nomadic metaphor contributes to this valorisation of mobility by making mobile subjects idealised actors who resist state agents. Guet Ndarian fishers do celebrate mobility as a way of life, a meaningful strategy to avoid border patrols and look for fish catches, and, more indirectly, as a powerful means to gain autonomy and free oneself from community pressure. Their own romanticisation undoubtedly gives legitimacy to their illegal cross-border movement. I first investigate their claims and then discuss the application of the Deleuzian metaphor in this context. Although the metaphor is useful in the sense that it gives meaning and power to fishermen's mobility, its application entails dismissing the high risks fishermen are exposed to when circumventing border patrols.

Fishermen fish in Mauritania not only because – as they often repeat – they have no other option as Senegalese waters have been emptied, but also and mostly because they claim some kind

of moral and historical sovereignty over these neighbouring waters. They have acquired a specific practical knowledge of these areas over time, which they consider has been jeopardised by the political events of 1989. Furthermore, fishermen from Saint-Louis romanticise their own mobility and local identity. This romanticisation gives strength to their discourse and legitimacy to their movement.

In an interview I conducted in March 2012 in Saint-Louis, a national leader of the CNPS – one of the leading professional organisations of Senegalese fishermen – summarises in his own words the changes which have affected fishermen's movement at the border:

I can say that populations from Mauritania and Saint-Louis were parents, and still, they are still parents. If you go to Nouackchott, you will see my family there and Mauritanian people have family here as well. Once upon a time, there was no interdiction over the two areas. So, we did some research in Mauritanian waters because, at this time, everybody knows that Mauritanian people didn't want to be fishermen. They didn't like the fish. So, us Guet Ndarian, we did all the research, and we are those who showed them all the rich fishing places. ...

There was peace, we were going back and forth, and there was no difficulty. One day, in 1989, there was a conflict between Senegal and Mauritania, and this is when we started having trouble. The merchants who were living here in Senegal, they left for Nouakchott, and the Senegalese who were fishing in Nouakchott came back here; they were repatriated.

The Mauritians started getting interested in fishing [...] at this time, they were hiring Senegalese: when a Senegalese fisher left there, he was given four Mauritians so that could teach them how to fish ... and when they started to know how to properly fish, how they are supposed to do it, they started imposing the law forbidding access to their waters [...] and this is normal. So, they started doing this, and as we were not

*used to fishing in Senegalese waters, we started having trouble with the coast guards... we can say from 1992 on [...] until today.*¹²⁰

This narrative gives an account of how knowledge was transmitted from Senegalese fishermen to Mauritians through teaching practices. For this leader, this knowledge transfer enabled the Mauritians to recover sovereignty over the sea space and progressively regulate the mobility of the Guet Ndarians. Later on, this leader claims that Guet Ndarians should fully benefit from their “customary law” and be exempted from this “illegitimate” border regulation:

*Our ancestors [...] they were those who found the rocks, the fishing places of Mauritania. So, at least, if we look at the law, we have a customary right. This is it [...] One day, they say, “No, you cannot even enter into Mauritanian waters”. We know that Mauritania is a republic, like Senegal; we know that [...] but also, we have customary rights, at least, because if someone makes progress to find fishing places [...] since [...] let's say [...] before the creation of Mauritania and Senegal, before independence or even much before, we deserve this right. Then, the other reason [...] between Mauritania and Saint-Louis, we are not only neighbours, we are family. ... We need licences to go on fishing, like what they are doing with European boats. ... Whereas they speak about pelagic fish, whereas what we want are licences for demersal species [...] We want Mauritania to know that they should be selling licences to us [...] what Guinea-Bissau, Guinea Conackry and Sierra Leone do, why Mauritania doesn't do it?*¹²¹

Although this leader acknowledges the existing regulations, he places fishermen's practical knowledge above the legal norms and gives it legitimacy so that it justifies the cross-border mobility of him and his compatriots. The law he is referring to and that gives them a “customary right” is the fishermen's traditional regulation. This customary law he is referring to reveals

¹²⁰ Interview 40

¹²¹ Interview 40

power–knowledge relationships: their practical knowledge enables an appropriation of the border to occur. This viewpoint was shared by many of the fishermen I interviewed in Guet Ndar during this field session. For example, one of them – who is nicknamed “Rapat” in reference to his repatriation experience – confirms the leader’s statement:

I was repatriated in 1989 during the conflict. I had spent a lot of time in Mauritania. I had been going there back and forth since 1969. After the conflict, I was deported, and once in Saint-Louis, we were called “Rapat”: Mauritians didn’t know the sea. We were the first to show them. Without us, Mauritania wouldn’t know that the sea is interesting. Thanks to us, they became the first fishermen.¹²²

Because fishermen developed their skills there, because, as they say, they showed the Mauritanian people the value of their fishing grounds, they claim a “right” to freely go there. These statements give more complexity to the general assertions which are usually put forward regarding this border issue. Indeed, the fishermen do not ignore the norms; they acknowledge the existence of the border and its location. Rather, they question the legitimacy of its drawing. Also, Guet Ndarian fishers base their relationships to these foreign spaces more on the social and family links that tie them to the Mauritanian people than on external political constraints, which Guet Ndarians give less value to. The Guet Ndarian CNPS leader goes on with his explanations, and justifies fishermen’s illegal practices with reference to their reputed professional experience:

I can say [...] It’s the university of small-scale fishery, here in Saint-Louis. Any fisherman we can see [...] which we call a fisherman [...] he passed through Saint-Louis [...] But we knew nothing else; apart from fishing, we had no other experience. If we go fishing, you look at the sea and see it is not rich, but we have our experience, our own techniques to get fish even though there is nothing; it’s a gift of God. The others can’t do this; if you go on with your interviews, you will see that the other fishermen all had a field. Their ancestors were not fishermen, they were cultivators. When you go further south, each fisherman can show you his field. If the sea isn’t working, they go and cultivate their land. ...

¹²² Interview 43

We don't have this means, and we want it because if we had land, we wouldn't go on putting 5 million francs in Mauritanian waters and losing them when we get caught. They take 5 million; it is not a small amount of money. So the experience we have, we use it, and this is why people say we don't respect the fishing rules. Yes, we do respect them, because if we didn't respect the fishing rules, we would be those who would die [...] us [...] those who know nothing apart from fishing [...] So, the importance of preserving the fishing resource, we should do this. But yes, we have our experience to get the fish; it's a gift God gave us – this is it. For example, a pupil from primary school can't teach a student of the university or high school, it's impossible.¹²³

These lines show the relationships between several human and non-human elements which legitimate fishermen's movements at sea. This leader's discourse mixes practical knowledge and experience, financial resources, God, fish species, the sea, Guet Ndarian fishermen and the other Senegalese fishermen and the fishing rules. Indeed, because Guet Ndarian fishermen had no land they could exploit, they turned most of their activities towards the sea. This made them develop a specific experience and practical knowledge which the other fishermen – who were used to alternating their activities between sea and land spaces – did not develop. The God whom the leader is referring to has made them become highly skilled fishermen precisely because they originally lacked land spaces and had to exploit the sea. Consequently, they started to manage sea spaces much better than anyone else and have developed some abilities which enable them to cope with resource scarcity. Thanks to the fishing techniques this leader is referring to, Guet Ndarians have been able to find fish even in times of crisis. Also, according to him, Guet Ndarian fishermen do respect the rules and are unfairly accused of not doing so. In his opinion, fishermen have their own way of managing the sea and its resources and they do acknowledge Mauritanian rules, fully agreeing with the need to preserve the environment. Therefore, questioning their ability to follow the rules means questioning their experience and knowledge of the sea – and this leader seemed

¹²³ Interview 40

very sensitive on this point. However, state rules have less value than fishermen's own rules, although both the fishermen and the Mauritanian state aim to preserve the sea; he stresses how it is in the interest of the fishermen to protect their environment, as their livelihoods rely on it.

This narrative shows how the very strong identity of the Guet Ndarian fishermen has been constructed upon this practical knowledge. The leader compares the fishing village with the "university of fishing", which means that he is referring to a very specific and high level of knowledge transmission. As a consequence, the *other* fishermen who do not pass through Guet Ndar over the course of their career are not "real" fishermen. Guet Ndarian fishermen maintain their own reputation of being highly skilled, untouchable figures, and they construct a local myth. This romanticisation of their mobility legitimates their lack of consideration for state rules, giving them immunity – at least in the eyes of God.

The mobile response of Mauritanian border patrols to the intensified mobility of the fishermen is reminiscent of Atkinson's case study of nomadic Libyan populations whose mobility was used as a strategy against the Italian colonial power (Atkinson, 2000). In the 1920s, the Italian colonial army adopted mobility strategies similar to those of Libyan nomads and semi-nomads in order to impose its control over them. Mobility itself therefore became a powerful weapon against which the Italian army fought by deploying comparable strategies (Atkinson, 2000). Although here, fishermen do not explicitly claim their resistance to border controls, their mobility strategy produces the same effect: a mobile response constantly adjusted to their unpredictability. Do these similarities with land-based nomadic populations make the Guet Ndarians authentic maritime nomads? Atkinson and Sharp suggest a careful use of the nomad allegory. These authors highlight that the nomad metaphor should be set in a situated context in order to avoid the risk of "romanticism" (Atkinson, 2000; Sharp, 2000).

Maritime nomads?

For Deleuze and Guatarri, nomads progress in "smooth spaces" which are characterised by their absence of limits, points and lines. These smooth spaces are the opposite of "striated" spaces,

which are based on defined networks and routes whose fixity delimits and structures continuous movements (Deleuze & Guattari, 1988: 382). Because of its unpredictability, the movement produced by nomads represents a threat and has to be subjected to state control. Throughout Deleuze and Guattari's *Treatise on Nomadology*, the nomad is conceived of as a "war machine". The action of "striating" spaces can be illustrated by the way states organise, denaturalise and structure territories in order to spread their domination and control spaces. The nomad challenges states' spatial control by being in a continuous movement that leaves no tracks on spaces. The nomad progresses at a different speed and time and has a different way of moving which the states attempt to freeze by erecting "fortresses" that would "kill" the nomad movement, the nomad himself and his speed, and would annihilate at the same time the threat he represents (1988: 386).

Where are these smooth spaces? Deleuze and Guattari localise them as such:

Smooth or nomad space lies between two striated spaces [...] being "between" also means that smooth space is controlled by these two flanks, which limit it, oppose its development. (1988: 384)

Because the sea is a "smooth space par excellence" (Deleuze & Guattari, cited in Steinberg, 2001), the figure of the nomad progressing on maritime "smooth spaces" is comparable to the image of the Guet Ndarian moving across the maritime border. The regulation and tracing of the mobility of the fishermen would then be seen as an attempt by the Mauritanian state to "striate" the maritime border area through control and regulation practices. Furthermore, Deleuze and Guattari suggest that nomads may also control striated spaces. Fishermen's maritime knowledge produces a different kind of spatial control at the borderland and therefore constitutes another form of "striating" action. This metaphor brings to light the differences in the conception of spaces, and in the juxtaposition of spaces and the production of frictions and conflicts occurring on the marine surface. It can also explain the inefficiency of Mauritania's security practices aimed at controlling the Senegalese fishermen and the way they can exploit the flaws and loopholes of the border system through their unpredictable mobility.

Fishermen's strong local identity makes them proudly claim that they belong to Guet Ndar. Although their mobility spreads on a wide, limitless maritime environment, it always moves

according to fixed points. Guet Ndar's narrow village and high population density contrasts with the open ocean space, although it remains an essential, immobile step towards fishers' mobility. Moreover, Mauritanian border agents do not seek to sedentarise Senegalese fishermen. They rather seek to exercise control over the sea and its resources through their mobile border practices by indirectly attempting to control fishermen's mobility. Also, fishermen do not always successfully avoid these patrols. These risks involve serious consequences, as they might lose their boats, their engine or their crew members to Mauritanian agents. Needless to say, the weather conditions they are exposed to when navigating off the coast are further risks they must be prepared for. Stories of fishermen who get lost or in trouble when fishing in high seas are often reported in the Senegalese media. With no life jackets or radio aboard, risks undoubtedly increase. These practical elements nuance the nature of the "smooth" space and give the impression that the sea is a still surface which highly skilled nomads would manage anyway. Although fishers' extended knowledge and courage is celebrated every day among their community, they are also exposed to dangers and risks.

Despite their reputed knowledge of navigation techniques, Guet Ndarians often meet serious difficulties at the mouth of the Senegal River. When they are back from their fishing trips, they must find access to the Senegal River through its very narrow and moving mouth, paying attention to the strong tides and currents. They adjust their trajectory according to the moving sandbanks and breaking waves' line around the mouth. Boats must get through the mouth one by one and navigate slowly. There are no buoys, marks or visible signs that help navigation; fishermen orientate themselves according to the sand dunes and water depth. Once in the Senegal River, fishermen navigate up to Saint-Louis' local fishing wharf. In March 2013, 23 fishermen drowned when three boats collided with each other at the mouth of the Senegal River.¹²⁴ Local online newspapers reported that in a 10-year period, around 200 fishermen have died while trying to reach the Senegal River's unstable access point.¹²⁵ Local fishermen explain that the Senegal River's dam has generated the moving topography of the mouth. The dam traps the sediments carried by the

¹²⁴ Jeune Afrique, 2013

¹²⁵ Ndarinfo, 2014

river and prevents the sedimentation of the mouth. As a consequence, sea currents and swell more easily erode the coastline.¹²⁶

More generally, the 2005 census reported that over 5 years in Senegal, there were 2,622¹²⁷ serious navigation accidents involving artisanal fishers in and beyond Senegalese waters (ISRA, 2006). These accidents involved capsizing, collision, fire on board and drowning. In most cases, these accidents would have been avoidable had the fishermen been following minimum safety practices. According to the census, only 38.8% of the long-distance fishing boats registered in the cities located between Dakar and Saint-Louis (la Grande Côte) had communication means on board (ISRA, 2006). The report is not more precise on whether these communication means included radios and satellite phones or mobile phones only. During my two field sessions, I did not meet any fisherman who had a radio on board. In high seas, mobile phones do not work and radio and satellite phones would be the only reliable communication means in case of difficulties. Regarding navigation lights, the census reports a partial use of them by the fishermen; in la Grande Côte, only 50% of the boats had such lights on board (ISRA, 2006). The lack of consideration for safety practices reflects the way fishermen give significant value to their practical knowledge. However, the romanticisation fishermen apply to their own skills has generated tragedies at sea. Considering them to be maritime nomads would participate in this romanticisation and tend to minimise these significant empirical elements.

Conclusion

Guet Ndarian narratives take part in the construction of an idealised identity of great navigators, nomads of the sea, which political borders are not able to stop. For these reasons, they have been able to develop several adaptation strategies to circumvent the border and take advantage of its geographical situation and socio-economic value. Crossing borders and challenging political regulation not only means increased mobility and sophisticated navigating techniques. The wide ocean border space has become a space of freedom, knowledge production, opportunities and

¹²⁶ Interview 43

¹²⁷ The census reported 3,605 accidents, including 983 nets destroyed by trawlers (ISRA, 2006)

independence but also a space of insecurity, arrests, navigation accidents and death. Fishermen's romanticisation of their movement gives a powerful, positive meaning and value to their mobility. It is certainly true that the statements of the fishermen can influence one's perception and encourage this romanticisation. The discourses of the Guet Ndarian fishermen do not especially demonstrate that they openly resist the border regulation. Rather, they elude them, although this undoubtedly results in an increased mobility which might be indirectly apprehended as a resisting behaviour. They certainly contest the legitimacy of Mauritania's border regime, but would also agree to respect the rules, were they adjusted to their needs.

The Mauritania–Senegal maritime border issue brings to light the power–knowledge relationships which have shaped fishermen's mobility in a myriad of ways. Fishermen's narratives have illustrated their pragmatism through the different tactics they develop at the border. Nevertheless, the lack of consideration for safety practices and the overestimation of their knowledge make us question this pragmatism. In fact, fishermen's pragmatism seems to be more adjusted to border control practices than to the priority of protecting one's life. Beyond these borders, fishermen acquire expertise in foreign fishing grounds. The next chapter explores the construction of the geography Senegalese fishermen have made of the neighbouring waters, and compares their practices in Mauritania, Guinean and Bissau-Guinean waters. Crossing borders has produced a genuine knowledge of maritime spaces.

Chapter 7 -

Constructing Maritime Spaces Beyond Senegal

Senegalese demersal fishermen started to follow maritime routes to Guinea-Bissau and Guinea at the beginning of the 1980s (chapter 3). These mobility patterns increased at the end of that decade with the movement of some Guet Ndarian fishers who gave up their maritime activities beyond Mauritanian borders. Since then, several thousand fishermen have migrated by sea to these countries, coming back and forth from Senegalese shores without landing at any foreign wharf¹²⁸. As in Mauritania, fishermen have had to adjust to political regulation of sea resources in these southern countries' territorial waters, and they have accepted these regulation measures more easily than in the north, at the Mauritanian border. This chapter draws a comparison between fishermen's practices in Mauritania, Guinea-Bissau and Guinea's waters. Through this comparison, I aim to explore the meanings and functions fishermen give to their cross-border mobility in distinct economic and political backgrounds.

I first argue that whether in Mauritania or in Guinea-Bissau and Guinea, fishermen's practices beyond borders reflect both an individualisation and a rationalisation of their mobility. Furthermore, access policy measures relating to fishing grounds have an impact not only on the trajectories of the fishermen but also on the way that these fishermen apprehend foreign maritime spaces. In each of these foreign spaces, fishermen develop appropriation tactics in relation to maritime spaces as well as illegal practices. The way fishermen legitimate these practices varies depending on the political and historical background of the relationships between Senegal and the country in whose fishing grounds the fishermen operate, and on fishermen's own interests. Indeed, I will show that, for example, fishermen's mobility discourses on their practices in Bissau-Guinean and Guinean maritime spaces carry a more rational and less affective dimension than when dealing with the Mauritanian border. This comparison further expands the argument that fishermen are not

¹²⁸ Many fishermen settled in camps in Guinea and Bissau on a more permanent basis. This thesis is limited to the maritime mobility of the fishers and does not include long-term, land-based migration to the neighbouring countries of Senegal

marine nomads. Fishermen's mobility progresses according to lines, fixed points and "pragmatic geographies" of remote areas beyond national borders. Moreover, although fishers tend to disobey state regulation and fish illegally in restricted areas, they are not reluctant to accept state regulation per se. When they perceive profitable opportunities, they prove able to accept legal frameworks and are willing to make significant investments to fulfil legal requirements.

The chapter first examines the specific aspects of Senegalese fishing mobility in southern waters beyond Senegal's borders and then compares fishermen's appropriation practices in Mauritania, Guinea and Guinea-Bissau. Fishermen's appropriation of maritime spaces involves the creation of a practical knowledge which fishermen express through a powerful symbolic language that I decrypt on the basis of Michel De Certeau's work on the "practice of everyday life" (De Certeau, 1984).

1. Rationalising border crossings in Guinea-Bissau and Guinea

In Dakar, Mbour and Joal and the coastal villages of Casamance, Senegalese demersal fishermen prepare themselves for long fishing trips off Guinea-Bissau and Guinea all year long. What fishermen's experiences show is that these maritime journeys are profitable and rational strategies. This rationalisation is based on experience, knowledge and navigation techniques and implies their ability to adjust to and respect foreign regulations. This rationalisation makes the fishermen modern seamen connected to land-based needs. This image contrasts with the archaic, nomadic nature previously claimed by the Guet Ndarian in Mauritania – although in this case, a similar level of rationalisation is required for the long-distance fishing-trip tactics that aim to circumvent the Mauritanian border (chapter 6). In most cases, preparation for the fishing journey first involves buying a regular licence from Guinea-Bissau's and Guinea's respective administrations that gives them the right to fish legally there.

Legal access to southern waters

Although the drawing of the Senegal–Guinea–Bissau border was questioned by both countries after the independences (Diaité, 1995), today the borderland remains a peaceful space in comparison with the Senegal–Mauritania area. Conflictive interests in the potential exploitation of maritime resources at the border divided Senegal and Guinea-Bissau and led both countries to a common management agreement in 1993 (Diaité, 1995). This agreement establishes the rules for a common regulation and exploitation of the marine resources – such as oil, gas and fish, which might be found between the azimuths 220° and 268° – excluding territorial waters (Bilateral Agreement, 1993; Bonin, Le Tixerant, & Ould Zein, 2013). This agreement does not affect the regulation of foreign artisanal fisheries in Guinea-Bissau since these activities are ruled from elsewhere. Indeed, from 1996 onwards, Senegalese fishermen’s migration to Guinea-Bissau has been regulated by a protocol which Senegal and Guinea-Bissau jointly signed in 1995 (Application Protocole, 1995). Before this agreement, the Senegalese fishermen used to go to Guinea-Bissau’s waters independently from any political intervention. Like Mauritania, Guinea-Bissau started to regulate access to its waters by imposing fishing licences on both national and foreign fishers. Costs for these licences are higher for foreign fishers and increased every year until 2010. In that year, the Guinean authorities reduced the cost of these fishing licences from XOF 1.5 million (£1,880) to XOF 757,500 (£948) in order to make access to these licences easier for the foreign fishers and thus prevent illegal fishing (Deme, Bailleux, & Ndiaye, 2012).

Regarding Guinea, no protocol was signed; foreign small-scale fishers therefore directly depend on the national fishing regulation policy and must buy similar licences to the Guinean nationals (Papa Gora Ndiaye & Samba Diouf, 2007). Guinea’s small-scale fishing fleet has not developed as much as Senegal’s. Guinea’s national maritime grounds have mostly been exploited by international artisanal and industrial fishers. Following the discovery of nearly virgin demersal stocks in Guinean waters by foreign industrial trawlers, Guinea started liberalising its fishing economy from 1985 onwards. Since then, the country has mainly turned towards international exports, developed its national artisanal fishing fleet and signed international agreements with industrial and artisanal fishers (Papa Gora Ndiaye & Samba Diouf, 2007).

Apart from occasional conflicts between fishermen and border patrols within Guinea-Bissau, the management of Bissau-Guinean and Guinean waters has raised no major issue since 1995. Senegalese fishermen have regularly been seeking to buy legal licences so that they can fish in these foreign waters. Although they might be caught while fishing in forbidden spaces or catching species they are not entitled to, the Senegalese fishermen generally seek to regularise their activities in these waters. They buy licences from the authorities, either through Guinea-Bissau and Guinea-based brokers or through the Senegalese authorities. Although these licences are expensive, they are more accessible for the fishermen and less limited in quantity than the Mauritanian ones. Guinea-Bissau's licences allow the fishermen to fish demersal species for a year, from the 1 January to the 31 December. In 2010 and 2011, most of the Senegalese fishermen bought their licences through Bissau-Guinean brokers and some of them got into trouble, as although these licences were legal, they were originally meant to be sold to Bissau-Guinean fishermen exclusively. The Bissau-Guinean brokers sold these local fishing licences at the price of foreign ones; consequently, the Senegalese fishermen were convinced that they were fishing legally. Many of these fishermen were arrested at sea by Guinea-Bissau's border patrols, were sent to jail and had their catches and gear seized, and the Senegalese government attempted to negotiate with the authorities of Guinea-Bissau to release these fishermen.¹²⁹

Fishermen also reported that the local coast guards took advantage of this recurrent issue to arrest fishermen despite them holding legal licences.¹³⁰ Therefore, in January 2012, the Senegalese national fishery services started providing support to the fishermen so that they could get regular licences from the Bissau-Guinean authorities.¹³¹ All along the Senegalese coasts, from Dakar to Casamance, local state agents gathered the requests of the fishermen as well as the required financial funds so that they could get proper licences directly from the Bissau-Guinean authorities. The head of the small-scale fishery department in the Ministry for Fisheries reported that only 17 crews had formally requested this official service since the beginning of 2012. This official stresses

¹²⁹ Interview 48

¹³⁰ Interview 30 and 31

¹³¹ Interview 48

that since it was the first time this service was provided, some crews preferred to keep hiring a Guinean broker. The Senegalese administrative process is reputed to be long and would make the fishermen lose time out of their yearly time schedule of activities.¹³²

In Joal, Assane is a former fisherman who owns nine ice-box canoes and manages an informal company of international maritime fishermen. He negotiates legal Bissau-Guinean fishing licences for his crews with a reliable Bissau-Guinean broker he has been working with for a couple of years now. For him, as these arrangements have been proved to work, there is no reason why he would ask for the help of the state to get these licences. Also, he says, fishermen “*have been waiting for two months, while the [Bissau-]Guineans don’t wait. The Senegalese state should be responsible for this and have an office everywhere.*”¹³³ Another fisherman reports that when crews are ashore, waiting for these licences, costs can be up to XOF 30,000 (£ 37.50) a day to maintain them:

*The only fisher who contacted the administration [to get a licence] here in Joal had to wait for a month and a half; the others were not that patient. You know, the ice-box canoes are money-consumers [...] they waste money. You can’t stay a month without going fishing. Because charges increase every day, every day the crew is here, you can spend from 20,000 to 30,000 francs [£25 to £37.50] a day. If you multiply this by thirty... then this doesn’t suit us, so we are in a hurry to sort out the licence issue and go fishing. So if the administration is ready for next year, maybe we’ll consider this, if it is safer this way.*¹³⁴

This narrative reflects the level of rationalisation of international mobility, which has thus far not been compatible with the lack of reactivity of the Senegalese administration despite recent efforts at support by the state. Just as it does for the Mauritanian pelagic licences, the Senegalese state acts as an intermediary which seeks to ease the relationships between foreign administrations and small-scale actors. This role, although expected by the fishermen, is still weakly adjusted to fishermen’s realities. These weaknesses of the Senegalese administration in providing an efficient

¹³² Interviews 48 and 52

¹³³ Interview 52

¹³⁴ Interview 47

response to these long-distance fishermen reflect the lack of available and reliable quantitative data informing these maritime migration patterns.

The quantitative assessment of demersal fishermen's international fishing mobility

Assessing the precise number of fishermen who circulate between Senegalese and Bissau-Guinean and Guinean waters remains a difficult task and brings to light contradictory and unrealistic results. Failler and Binet estimate that around 15,000 migrant fishermen go back and forth from the Senegalese coasts today (Failler & Binet, 2010: 98). The authors do not indicate the sources of their estimations or the direction and fishing areas of these maritime migrations. Are these migrants temporarily migrating and settling in foreign countries in order to fish? Are they international maritime migrants going back and forth to Senegal without landing in foreign countries? We do not know either whether this estimation includes Guet Ndarian fishers who used to fish in Mauritania. A 2011 FAO report more realistically estimates that around 1,500 Senegalese fishers regularly go fishing in the Guinea-Bissau exclusive economic zone (Weigel, Féral, & Cazalet, 2011). Table 4 provides details of these migration patterns. However, a 2012 report based on official 2009 data gathered from the Senegalese scientific institution CRODT¹³⁵ contradicts these estimations and believes that 390 canoes go to Guinea-Bissau and Guinea with legal licences (Table 5). This quantity implies that around 3,120 fishermen are involved in these fishing trips – assuming that the minimum average number of crew members is 8. According to both reports, the demersal species fishermen usually target sharks, rays, red porgy, soles, sea breams, red snappers, groupers, barracudas, threadfins and jacks.

¹³⁵ Center for Oceanic Research of Dakar Thiaroye, *Centre de Recherche Océanique de Dakar Thiaroye*

Table 4: Senegalese fishing migrations in Guinea-Bissau and Guinea, 2011
(Source: Weigel et al., 2011: 21)

Origin	Quantity of canoes	Species targeted	Crew members	Time of year	Fishing areas
Niominkas from the Saloum Delta	130	Baracudas, threadfins, jacks	1100	From March to November	Bolama Archipelago Biosphere Reserve
				From December to February	Southern Guinea-Bissau's EEZ and north of Guinea
Lebous from the Cape Verde peninsula and Saint-Louis	50	Soles, sea breams, red snappers and groupers	300	From February to October	Bolama Archipelago Biosphere Reserve
				From November to January	Southern Guinea-Bissau's EEZ and north of Guinea
Casamance	20	Shark finning	150	All year long	Southern Bijagos Archipelago Biosphere Reserve
TOTAL	200				

Table 5: Senegalese fishing migrations in Guinea-Bissau and Guinea, 2012
(Source: Deme et al., 2012)

Area of origin	Quantity of Canoes	Species targeted
Mbour	175	Soles, coastal demersal species
Joal	50	Barracuda, sharks, rays
Hann	30	Grouper, sea breams, red porgy
Elinkine	60	Sharks and rays
Ziguinchor	75	Soles, barracuda
Total	390	

These assessments may be biased by the fact that the place of origin of the captain, the place where he was interviewed for the field researches for these reports and the places where he embarks and lands his catches vary greatly. However, those biases do not explain such differences. What is certain is that several hundred canoes and their respective thousands of crew members regularly reach the Bissau-Guinean and Guinean waters. Nevertheless, the results I gathered from local field actors are closer to those in the 2012 report.¹³⁶ Although according to field actors the

¹³⁶ For example, in interview 50, a Joal-based leader estimates that around 50 canoes go back and forth from Joal to Guinea-Bissau

number of ice-box canoes has increased over the past few years, the total number of fishermen reaches nowhere near 15,000, as mentioned by Failler and Binet (Failler & Binet, 2010).

Getting prepared for long fishing expeditions

The trajectory which fishermen take at sea depends on a combination of economic, political and social elements. Fishermen do not drift aimlessly at sea, looking for new fishing places each time they embark. Their mobility follows precise trajectories at sea adjusted to a limited time period. Departure places depend on the availability of ice and bait, whereas landing places are chosen – with the funders when the captain is in debt – according to the prices which catches can be sold at. The choice of the fishing route is made according to a combination of fishing licence requirements, relationships to state agents and regulation practices, and catches' market value. As I have shown in chapter 5, when boat owners or funders are not aboard, crews might be tempted to land their catches in fishing wharves other than those initially agreed with their funders and hide part of their profits there. In this way, crews that are in debt can earn more than the initial share calculated at the end of the fishing expeditions and after the sale of the catches.

These long and exhausting sea trips are empowering in terms of financial gains and acquiring expertise, although their apparent under-sophistication can sometimes be surprising (spending two weeks at sea without landing, with a crew of 12 people, on a 20-metre-long motorised wooden canoe, with no room to lie down properly and very limited hygiene facilities promises to be a rough trip). This striking ambiguity between an apparent archaism and lack of development of a traditional fishing community and a genuine dynamism and rationalisation of the fishing activity is visible at the local level of Hann's fishing wharf. Hann is a very crowded (and attractive) fishing wharf due to the proximity of ice factories, fish-processing factories, Dakar's central market and an international airport. It lies next to the fishing village of Hann, which is barely paved and is where the community slowly organises everyday life. In contrast, the wharf is very strongly connected to the rest of the world as thousands of tonnes of fish caught by traditional fishermen outside Senegal's EEZ are landed here every day (Photograph 18). Once back from their two-week fishing expeditions, fishermen hire local workers to hand carry (or rather "head carry" –

Photograph 19) the ice-boxes full of expensive fish species from the shore up to the wharf. The local fishing wharf's employees then take the temperature of the frozen fish and boxes are sent to the nearby conditioning factory and destined for export to Europe and Asia. There is a striking contrast between this apparent simplicity and lack of proper infrastructure of the fishing wharf and the international destiny of the valuable fish.



Photograph 18: Negotiating prices in Hann wharf's international section, June 2011, J.H.



Photograph 19: Landing catches in Hann, June 2011, J.H.

In Hann, I was introduced to long-distance fishermen by a local CRODT agent in charge of surveying the local fishing activity. Twice a week, with his small team, he interviews returning captains about their catches (species, weight), fishing places, routes, equipment and time spent at sea. This agent had been working with the fishers for more than 10 years. I took advantage of his position and followed him a couple of times on the beach. Usually at this time of the day, fishers are very busy and under pressure as they are negotiating the price of their catches. In Hann, fishermen who are back from a fishing trip to Guinea-Bissau know they can sell their catches at a good price as the local market is equipped to export products to inland Senegalese areas, as well as to West Africa, Europe and Asia. There, they can also prepare for their next voyage by stocking up on petrol, ice, food and other equipment.

These maritime expeditions are based on a rational calculation of the costs and profitability relationship that they involve. No matter how long and costly these fishing trips are, as long as they generate at least as much profit as needed to get the original investment reimbursed, fishermen consider these expeditions to be profitable. Assane started fishing abroad in 1983, leaving for a couple of days at first and then for up to 15 days, with ice on board to keep the fish fresh. In Joal,

he saved what he had been earning from fishing and progressively invested in fishing gear. He became one of the empowered land-based actors I described in chapter 5. He progressively gave up his sea activity to dedicate his time to the management of his fishing activities from land. Assane hires more than 120 people and provides the entire funding for these fishing trips (licences, fuel, gear and ice and so forth). The scale of this informal company implies that this former fisherman holds capital of at least XOF 20 million (£25,000) at the beginning of each working year. With this amount of money, he can provide funding for the yearly licences and expenses for the 15-day fishing expeditions of 9 crews, as each crew needs about XOF 1.5 million (£1,880) for expenses. This 20 million does not include the value of the fishing gear. For example, a 20-metre-long wooden canoe is generally worth XOF 10 million (£12,000). This former fisherman is leading a very profitable company; he has been able to buy new gear and houses each year despite the significant costs implied by this activity. Although fishing expedition costs have increased, Assane keeps investing in these trips.

Fishermen sometimes work in pairs (navigating with two canoes) during these expeditions and take turns in case there is a problem at sea. These methods also allow them to transfer their catches from one canoe to the other and commute between the remote fishing place and the landing area in Senegal so that they can sell the fish at a good price – although the fish is kept frozen in ice-boxes, the faster they sell it, the better the price they will get for it. Unless they are obliged to do so, during their expedition they never land at the country whose waters they are fishing in. In Guinea, the licence is slightly less expensive, with a cost of around XOF 200,000 (£250). However, reaching the Guinean fishing places involves higher fuel costs and navigation times and consequently less time spent fishing. As a result of these circular movements, the fishing expeditions never last more than 15 days as this is the maximum time for which the fish can be kept fresh.

Illegal fishing activities: anticipating risks

Although migrant fishermen generally seek to be in a compliant situation when fishing in southern countries, they might be tempted to circumvent the law. As in Mauritania, similar practices of illegal fishing – by the fishers – and abusive controls – from local border agents – occur in Guinea-Bissau and Guinea. Fishermen might catch species other than those they are entitled to (shark finning) or make incursions into protected and restricted areas. Whereas fishermen tend to legitimate these illegal practices by their claim on Mauritanian marine grounds, in Guinea-Bissau and Guinea, they instead justify their illegal incursions by citing their need to make the fishing trip profitable with regards to the initial investment. Fishermen include the risk of getting caught in the calculation of the fishing expedition's profitability. When they assume they hold a valid licence (but have very likely been sold invalid licences by their unreliable brokers), they are still exposed to possible gear and fuel seizure by border agents. One of the Hann fishermen reports:

There are problems with controls and surveillance. With the licence [...] [In Guinea], sometimes they come to tire you out because you are a stranger. We are obliged to give 200,000 or 300,000 francs [£260 or £400] They do this to scare us; it often occurs.¹³⁷

Since they are at sea in a foreign country, fishermen do not have a lot of breathing space for negotiation. All these interactions occur at sea and are thus hidden from social controls. Fishermen and maritime control agents are isolated on this marginal space, which gives the fishermen few opportunities to resist the agents' pressure. Although Senegalese fishers know a few words of Guinean Creole, they cannot express themselves very well in this language, which makes the negotiation even more difficult. When the fishermen do not respect regulations, the repression is stronger and fishermen risk fines which are worth the same price as the licence. This is explained by Assane:

¹³⁷ Interview 15

Once, we had a licence that expired on the 31st of December; on the first [of January] they [the Bissau-Guinean coast guards] found us there [...] without forgiveness, and merciless, four canoes! I paid 750,000 francs [£940] for each canoe in addition to the licences [...] and I lost all the expenses I had made, I had spent 1.5 million [£1,880] for each canoe. There is no relationship with the coast guards, they just do their job. If they find you but you're regular, there is no problem. But if they find you with problems [in an irregular situation] they take you; there is no explanation; there are shootings. ...

Yes, there are shootings. If you're being silly, they take you; they don't forgive... when you fish in forbidden areas. ... There, where there are parks, there are buoys, we don't approach the parks, and even if they find you out of the area but you're not in good standing, atcha! If you start explaining yourself, you're getting in trouble; they don't forgive. Sometimes, they take your fuel [...] You know in Guinea-Bissau, it's a huge issue to find fuel [...] they oblige you to give them fuel, 2, 3 or 4 fuel containers even if you're regular. Because most of the Bissau-Guinean coast guards on patrol, they just come randomly to get you in trouble. But generally, that is what pushed us to do the ice-box canoes, increase our fishing capacity, invest a lot to go 10 to 12 days at sea, sometimes even 15 days, and sometimes you don't bring back enough. Before, even if you spent 8 days in Guinea-Bissau, you could find lots of fish, but now it is a huge issue; you can spend 15 days there and to earn the 1,5 million francs that you spent, it's a huge issue.¹³⁸

Assane's statement is ambiguous. He first explains that as long as fishermen respect Bissau-Guinean fishing rules, they can navigate and fish peacefully and not worry about possible arrests. However, he later mentions that coast guards might seize fuel despite the fishermen holding valid licences. This ambiguity can be explained by the fact that although fishermen do respect local fishing regulation, they do so only partly. Bissau-Guinean coast guards might always be able to

¹³⁸ Interview 52

find some weaknesses regarding the fishermen's documents or practices which fishermen might not – or pretend not – to be aware of. What is also remarkable in Assane's discourse is the way he emphasises the impossibility of the fishermen "explaining" themselves to the coast guards in order to lower the penalty. Guards' reactions are non-negotiable, unlike in Mauritania, where we saw that border patrol agents often negotiate bribes with the Guet Ndarians. This lack of flexibility from the Bissau-Guinean coast guards makes their relationship to the fishermen less emotional and more professional. Finally, there is a direct relationship between the increase in and severity of these controls and fishermen's movements. As a consequence, crews have to spend more time at sea to find fishing areas where they will be allowed to fish. Although fishermen are certainly exposed to abusive practices from maritime patrols, they confess that they sometimes go fishing illegally in protected areas. They legitimate these illegal incursions by the fact that because they sometimes have not caught enough fish, they need to make their investment profitable and are thus "obliged" to fish illegally. Ousmane reports that:

*When there is nothing, I have a look around and I go fishing in the parks [...] I know this is illegal. What would you do? We have to take risks, when you spend 3 million.*¹³⁹

Hann-based boat owner and captain fisherman Ousmane explains that, during his various fishing trips, he was caught several times and had to pay huge amounts of fines because he was fishing illegally in national parks. These arrests and fines have a weak deterrent effect, since Ousmane and his crew continue these illegal practices. A protected marine area was created around a couple of southern islands of the Bijagos Archipelago within a wider biosphere reserve (Weigel et al., 2011). The surroundings of these protected areas have become very attractive to foreign fishers. These wide maritime spaces tempt the fishermen, who see opportunities to fill their canoe and avoid going back to Senegal empty-handed. These illegal incursions have been deadly for shark species because of the intensive and devastating practice of shark finning (Weigel et al., 2011).

¹³⁹ Interview 32

Despite recurrent negative statements referring to the decline in fisheries and the profitability of such fishing expeditions – including Assane’s, the businessman – these rational fishing strategies appear to be very lucrative. Through these maritime movements, fishermen have created specific geographies of maritime spaces in Mauritanian and Guinean and Bissau-Guinean waters which reflect their distinct practices in these respective fishing areas.

2. Producing knowledge beyond borders: pragmatic geographies

For their navigation beyond Senegal’s borders, fishermen have created seascapes both at the Mauritania–Senegal borderland and in southern waters. Rather than simply being an A-to-B journey depending on the movement of the fish resource, fishermen’s mobility is also constantly adjusted to their representation of the border and to their relationship to state control agents. In the narratives of their respective border experiences, distinct conceptions of the border come up. The following lines present a comparative approach exploring how fishermen construct spaces beyond borders in Mauritania and beyond Senegal’s southern borders. Whereas in Mauritania, the border issue is highly controversial and remains a very sensitive topic for local Guet Ndarians, the borders of Guinea-Bissau and Guinea seem to represent simple administrative processes requiring financial investments for the fishermen. As a consequence, fishermen socially construct the spaces lying beyond these borders accordingly. These genuine maritime geographies result from an appropriation of the remote maritime places and strengthen the legitimacy of the fishermen to exploit fishing grounds and transgress existing orders. The practices of the fishermen are comparable to those of De Certeau’s walkers through the city. Fishermen develop “tactics” and appropriate the maritime spaces by creating names – as they have been doing in Kayar and Ouakam (chapter 5). The creation of names results from a practical calculation in which profitability is achieved and from which a projection into the future is feasible. In other words, as soon as a fisherman finds a resource-rich place where his profitability needs are met, he gives it a name and records its location in his GPS device. This action necessarily implies a projection into a future journey and a mental construction of the local maritime space.

Although in Mauritania and Guinea-Bissau and Guinea, fishermen develop similar strategies to avoid controls, using their GPS and know-how, discourses on the location of borders and their political regulation greatly vary. On one hand, the way in which fishermen have socially constructed the maritime spaces lying beyond the border reflects the specific power–knowledge relations I described in chapter 6. On the other hand, the geography of the border near to where the fishermen operate in southern waters appears to be merely pragmatic and the result of the rationalisation of their movement. Again, this does not mean that fishermen in Mauritanian waters are not pragmatic and do not rationalise their mobility. What this comparative focus shows is that the discourses vary whereas the practices remain the same. The responses of fishermen to the way they identify the border at sea vary, interestingly, depending on whether they speak about Mauritanian or southern borders.

Apprehending borders

Fishermen's representations are produced by their mobility practices and discourses. Whereas in the north fishermen draw the border as a contestable, invasive and unclear limit, southern borders remain for them simple geographic coordinates that have closing and delimiting functions. In southern waters, border agents and maritime coast guards seem to represent a similar function from the perspective of the fishermen. Border agents are not clearly named, and throughout fishermen's interviews we are not sure who fishermen are speaking about. These agents are globally identified as state control actors whose function is to materialise borders and restricted areas and to control and arrest, and sometimes to abuse, their authority. They are perceived by the fishermen as limit markers between forbidden and open spaces. Aware of potential controls, fishermen move according to the existing risk of being caught.

In Wolof, there is no word to properly name the border that divides two countries. People use the French word "frontière" when referring to this kind of border. I have been asking many fishermen about how they would speak of the border in Wolof without using the French word. The common Wolof word I was given was *Digg*. The word *Digg* designates a dividing line between two territories, two neighbours or two farm fields. Of course, fishermen are aware of the existence of

international borders, but they might be moving in the sea according to their own cultural perception of the border – thus, it is a dividing line regardless of whether it divides countries or forbidden and open fishing areas, etc. This is even more possible at sea, where nothing is fixed, where everything is in perpetual movement and where limits are barely materialised. Moreover, when fishermen fish in Guinean and Bissau-Guinean waters, what matters is not the crossing of the border itself but rather the spaces beyond the border they wish to access.

Fishermen's discourses reveal how they identify international borders when they navigate in Guinea-Bissau and Guinea. They mostly reply that the maritime agents on patrol give them information on where they can and cannot fish and on the location of international borders. Fishermen also use their GPS to complete this information. These maritime limits are assimilated into the right to fish regardless of whether fishermen speak of international borders or simply of protected areas. These limits become meaningful and necessary for the fishermen to locate their position, from their point of view as long as they enable them to determine where they are allowed to fish. Fishermen are worried about fishing illegally, but it seems that this is more related to the amount of the fines they would have to pay than to illegality itself. Mohamed reports that:

It is not easy to know where the border is. But there are always people on patrol with their boats to tell you, "Here it's forbidden to fish." For example, they warn you when there are parks or where there are borders and that it's forbidden to fish there. ... In Senegal, there is no problem. It goes well; they only ask you if you have a fishing authorisation and a life jacket.¹⁴⁰

The intense use of GPS devices allows the creation of a unique geography of maritime spaces and international borders. Some of the fishermen seem to have a very accurate knowledge of the geographical coordinates of borders at sea. They quote from memory the geographic latitude coordinates of each country they usually cross. They use these coordinates as key numbers to identify their fishing places and routes. Among many examples, I retained the following statement:

¹⁴⁰ Interview 47

We can know where borders are with the GPS. Senegal is between the 14th and 15th latitude [north]. ... Gambia is from 13° 51'. ... Guinea starts at 11° 10' and 10° 16' and then Conackry is from 9° 32'. There are also protected areas where it is impossible to fish. For example, at 10° 07' and 10° 16', fishing is forbidden. If they find you, they catch you.¹⁴¹

With these key numbers, fishermen draw mental lines through the sea, and these lines determine their trajectories. When one locates these latitude coordinates on geo-referenced maps, they indicate that when fishermen cross international borders, they remain within territorial waters. The way in which fishermen refer to these coordinates shows an explicit appropriation of borders. Like the pedestrian who uses “proper names” to orientate and organise his way throughout the city (De Certeau, 1984), fishermen appropriate these key numbers in such a familiar way that they give these coordinates the function of names whose meaning becomes original, subjective and specific to their own way of moving. These maritime borders which were originally numbers have become names through the familiar and repetitive narratives of the fishermen. The discourses around these borderlines are neither contesting an existing order nor full of resentment, and appear to be as neutral as geographical coordinates can be. It seems that no manifest vexation has been strong enough for the fishermen to contest the existing borders and influence their mental construction of these southern borderlands. Therefore, by retaining geographical coordinates, fishermen seem to empty their discourse around borders and maritime limits of political connotations. These coordinates only seem to carry a practical function of navigation and orientation at sea.

The representation of the Mauritanian borderland is slightly more complex and reflects the complex local history (chapter 6). The mental maps drawn with the local Guet Ndarian fishers show a distinct perception of the border (Map 6). Their narratives around the drawing of the border are richer than for the southern borderlands. Fishermen are intimately involved in the description of the borderline; they describe the border with emotion and a sense of personal commitment. In Guet

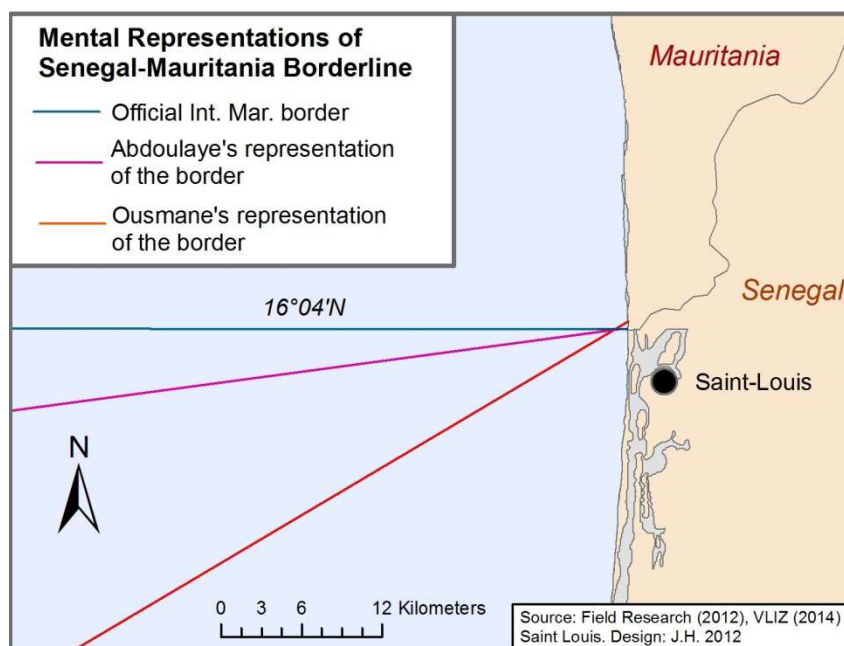
¹⁴¹ Interview 30

Ndar, Abdoulaye, a local leader who was a former fisherman and who now leads local projects in collaboration with the local authorities, first explains that:

You see, here, the line on the river, it's the border. From here [he shows how the border follows the shape of the Senegal River's mouth], it is completely broken and it is the same in the ocean. There is a need for a buffer zone without jurisdiction and which shouldn't be either Senegalese or Mauritanian. Hence the border needs to be made visible with beacons so that we know where it lies. Or put beacons here [...] and there [...] [he points to two imagined lines on each side of the borderland] and let there be a buffer zone in between.¹⁴²

When he points out the imaginary line which designates the border, he adds to his gesture a meaningful comment: “*It is completely broken.*” He is referring to the diagonal direction which the borderline takes at sea. For him, the borderline unequally shares the ocean space as it encroaches upon Senegal's EEZ in favour of Mauritania (Map 6). This representation is highly influenced by the perception of the recurrent struggles putting the Guet Ndarian fishermen in opposition to the Mauritanian authorities. This leader claims that he wants the necessary physical materialisation of the border to help fishermen orientate at sea. Nevertheless, his discourse shows that in fact he knows very well where the border really lies, but hopes that its materialisation would take into account his contestation.

¹⁴² Interview 64



Map 6: Fishermen's mental representations of the Senegal–Mauritania border, May 2014. Design: J.H.

Ousmane, A purse seine fisherman I interviewed the same day in Guet Ndar reports the following:

According to what I heard, the border is vertical, and lies from north-east to south-west... It lies before we get there around the mouth, at the level of the hospital which is above. For example, when we leave Sal Sal, we go on straight away like this [...] [west direction] a little bit, not even 800 metres, and then we take that direction [he shows a south-west direction]. You see this hospital there, there is a fishing place which is called "the hospital rocks"... in general we used to take our marks there [...] Before, we used to take landmarks such as the water tower to locate the border but it has disappeared.¹⁴³

In fact, the official maritime border is straight, but in the mental exercise I proposed to them, they draw a line which is exaggeratedly diagonal. This drawing reflects their perception of the border and the way they emotionally apprehend it. When Ousmane said, "*According to what I heard, the border is vertical,*" as well as the way he describes how he used to orientate with

¹⁴³ Interview 63

landmarks, he exemplifies the way the border starts to exist through repeated practices and experience. The outlines of the border progressively take shape with the repeated experiences local fishermen make out of it. The border is therefore first apprehended in a practical way rather than theoretically.

Creating geographies beyond borderlines

Fishermen's geography does not stop at the borderline. As they are used to fishing in foreign waters, they produce practical geographies beyond borders through the discovery of fishing places and the related creation of names. In both situations, they appropriate maritime spaces in different ways, according to their relationship to these spaces. In Mauritania, fishermen use both old and new names to refer to the fishing places, whereas in Guinea-Bissau and Guinea, the recent discovery of the fishing places is not shared among the fishermen. The names therefore vary from one fisherman to the other. Fishermen have proceeded similarly to the Kayar and Ouakam communities with the naming of their fishing areas and places, in Mauritania, Guinea-Bissau and Guinea. In those cases, these Wolof names certainly reflect a process of appropriation of the ocean beyond political boundaries. In Mauritania, the use of such names gives legitimacy to fishermen's practices. In Guinea-Bissau and Guinea, these names are more reflective of the individualist practices I also noticed in Ouakam and Kayar (chapter 5).

De Certeau describes the action of people walking in the street as a resisting behaviour based on an intimate and personal appropriation of the city. Throughout the city, walking becomes a way for the pedestrians to avoid the "urbanistic systematicity". The walker unfolds his/her trajectories around places which he/she appropriates through his/her subjective re-use of "proper names". These proper names participate in the creation of a "poetic geography" as "they make habitable or believable the place that they clothe with a word (by emptying themselves of their classifying power, they acquire that of 'permitting' something else)" (De Certeau, 1984: 106). At sea, it seems that fishermen proceed similarly, although the surface of the sea is constantly renewed by the everlasting movement of the water. Fishermen either appropriate an existing toponymy of the maritime spaces they go to (in Mauritania, with the traditional names of fishing places) or

create new names (Mauritania, Guinea-Bissau and Guinea) which work as essential keys to the mental appropriation of their destination places. Fishermen acknowledge that the political “partition” (De Certeau, 1984: 26) of the sea by sovereign states remains. Fishermen wholly integrate this “partition” into their intimate geography of the sea space; what they do is develop “tactics” (as understood by De Certeau) to elude them. The names created carry the powerful function of getting around these “systematic” bordering lines and practices and generating a “poetic geography” of these remote spaces.

Guet Ndarian fishers’ responses to their usual fishing places vary depending on whether they use purse seine or hand-line, drift or dormant net techniques. Pelagic fishermen have a more distinct representation of the sea space than demersal fishers. Because pelagic fishers move according to the movement of fish shoals, they do not orientate themselves around fixed fishing places but rather take the marks of wider and potentially rich fishing areas. On a mental map, a pelagic fisher symbolises his boat and the fish shoals not as points but as two lines. This representation is distinct from the drawings of Guet Ndarian demersal fishers. Because these fishers target deep-water, rock-dwelling demersal fish species, they move according to fixed points. Pape (see chapter 6) gives the names of the – demersal – fishing places where he used to go hand-line fishing:

Each area, from here up to Nouhadibou and close to the Moroccan border, each area has a name [...] it’s a mark. You look at the land to take landmarks. If you want to fish in Beul, you go up to Beul and then you take the direction of the areas where you want to fish, without seeing the coastline. But if you want to go to Beul without GPS, you take marks with the land. ... Takhale means “gathering” and Toundou Dalbi is a “pile of sand”. Thiolep is the “corner” [...] There is Madame Siou [...] It’s in Mauritania. In Saint-Louis it’s Diatara, at the border between Senegal on one hand and Mauritania on the other.... There, it’s Keur Rasal, and Madame Siou is there [he points on the map]. You can see tefess bi [the beach] from Madame Siou. It’s a big rock, a very wide one [...] Every rock, the elders [...] they gave a name which was

close to them. There is Salépère; it's the third site [...] same distance [...] When you are out of Takhale, you go to Toundou Dalbi then Salépère, same distance between each fishing place, from 38 to 60 kilometres. Then it's another area; it's Beul Khasan, from 78 or 79 kilometres.¹⁴⁴

Pape describes a south–north movement from Guet Ndar to the north of Mauritania and points out places which are more or less distant from the shore. Although he does not know the meaning of each of these names, he knows how to reach them, how long the journey will take and what kind of fish species he can find there. He goes on to say:

In Diatara, there is a place [...] we say “keur soeur y”. There is a place where sisters live; it means “the sisters’ house” [...] It is called this because when you’re up there, you can see the building of “keur soeurs y”, so in Wolof we give this name. On the Mauritanian side, it is called “Kane”; it means that there are bigger rocks than in “Keur soeur y”. It means that there are more fish than in the other rocks. It is a Wolof name. Each rock has its name. There is Kane, Kekhou ndao bi, etc. [...] Everybody knows these fishing places, either the ice-box fishing line, dormant nets, etc.¹⁴⁵

The Diatara area covers both sides of the border and is divided into two sub-areas, one Senegalese and one Mauritanian. Demersal fishermen all know this place, as it is only 10 kilometres up to the north-west and hosts a number of deep-water fish species. According to Pape, on the Mauritanian side of the rock more valuable fish species dwell than on the Senegalese side. This narrative demonstrates a genuine hierarchy of fishing places with specific internal subdivisions revealing the geographical location and resource quality. The way Pape describes his route and mental representation of the Mauritanian sea space is again reminiscent of, interestingly, De Certeau’s analysis of spatial practices (Map 7). Basing his work on a study of Linde and Labov

¹⁴⁴ Interview 67

¹⁴⁵ Interview 67

on the way New York walkers apprehend the city, De Certeau mentions two styles of describing spaces:

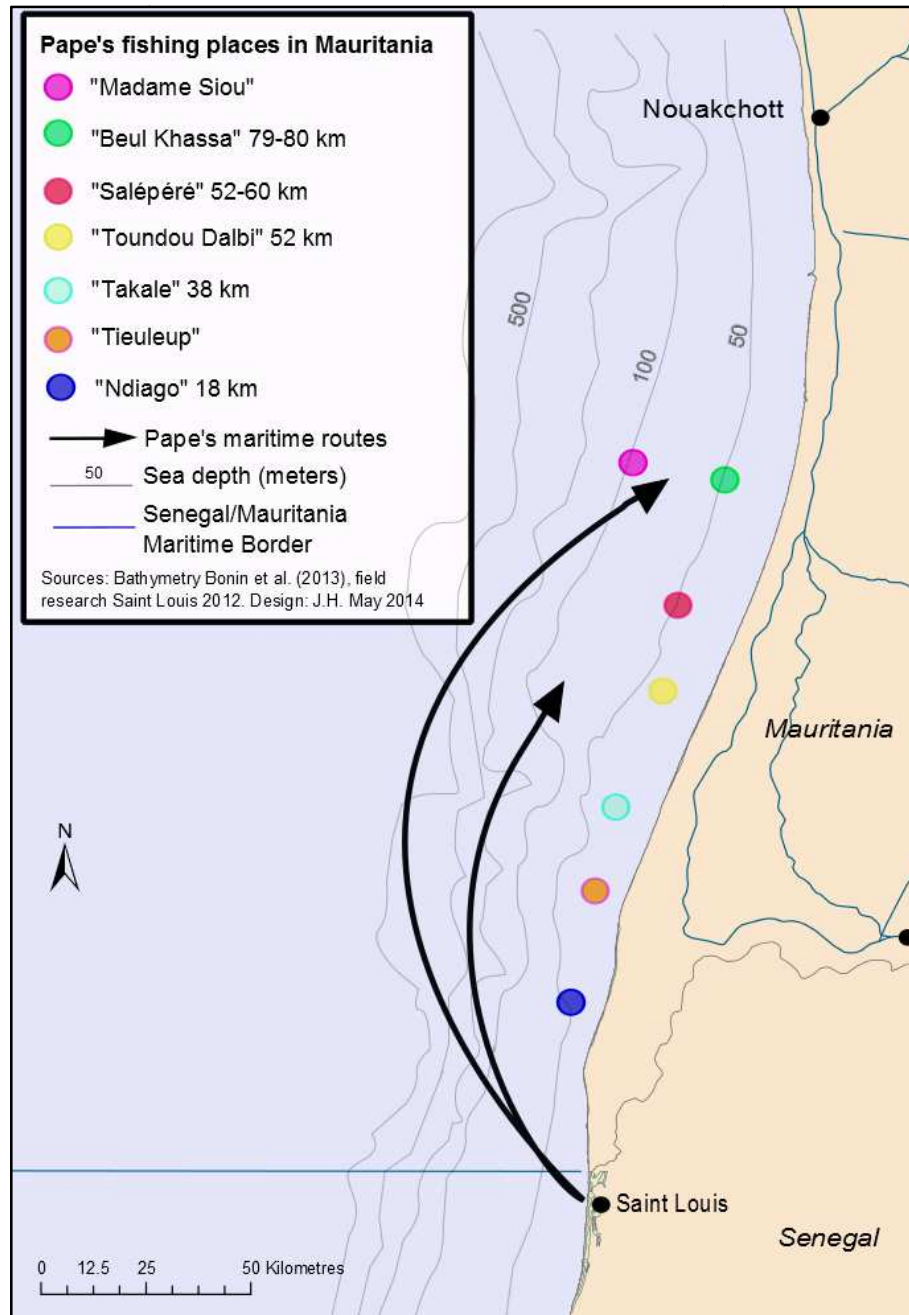
[...] description oscillates between the terms of an alternative: either seeing (the knowledge of an order of places) or going (spatializing actions). Either it presents a tableau (“there are ...”), or it organizes movements (“you enter, you go across, you turn ...”). (De Certeau, 1984: 119)

Pape’s way of describing the sea spaces according to his own “spatializing actions” indicates that he belongs to the second category of narrators. Pape invites his interlocutor to follow actively his narrative thread to learn about his own geography. The knowledge provided by this narrative is distinct from the language of maps. De Certeau adds:

[...] The question ultimately concerns the basis of the everyday narrations, the relation between the itinerary (a discursive series of operations) and the map (a plane projection totalizing observations), that is, between two symbolic and anthropological languages of space. Two poles of experience. It seems that in passing from “ordinary” culture to scientific discourse, one passes from one pole to the other. (De Certeau, 1984 : 120)

Although Pape does not wander in New York streets but rather in a natural and hostile environment in a foreign country, his everyday practice of the maritime space in Mauritania is comparable to the narrations of De Certeau’s New Yorkers. Pape gives meticulous details on his route and traces his movement in a specific spatial chronology. More generally, Guet Ndarian fishermen do not construct a “totalising” geography of the maritime spaces as a scientific map would do. Rather, they base their geography on a perpetual movement resulting from repeated experiences and the will to discover new routes and places. In other words, their representations of maritime spaces are constantly renewed and the limits of their practised spaces are challenged every day. This geography is not based on a scientific apprehension of spaces as it is rather pragmatic. Some places in the ocean have more values than others, and this hierarchy is not definitive as it is adjusted to fishermen’s changing needs and desires or to the local economy. Therefore, the unity and scientific neutrality of the map is not used as a knowledge resource by the

fishermen but rather remains external to their own geographical constructions. Fishermen were generally not comfortable with mental maps and drawing exercises, as I asked them to “pass” from one “symbolic language” to another (as De Certeau would call it) and to “totalise” their practical knowledge into one single objective plan. They obviously needed time to adjust their representation to the map I presented. I had to guide them and indicate where the coastline was represented on the map or where we were actually located at the time of the interview. Given the local background of the Senegal–Mauritania border, these names have a strong value and a meaningful function for the Guet Ndarian fishermen. These naming practices both reflect Guet Ndarian ancient traditional cross-border mobility habits and support these fishermen in legitimating their access to these neighbouring waters. These names reflect the specific knowledge of marine grounds which local Guet Ndarian have claimed and mentally represented.



Map 7: Pape's geography of Mauritanian maritime spaces, May 2014. Design: J.H.

All along West Africa's waters migrant fishermen have registered the richest fishing places. Traditional fishing places bear Wolof names which the elders originally created, and today's fishers do not always remember their significance. Although fishermen still go to these fishing places, they discover new ones. Just like in Kayar, this appropriation of the maritime spaces increasingly tends to reflect individualistic practices. For example, Mohamed explains how he

abandoned the traditional fishing places of the elders and instead goes to places he thinks he is the only one to know about:

Here, Diatara, you have seen, it's a Kher [Wolof name for "rock" – it designates the fishing place], but, well, it doesn't work. Diatara, it's a Kher, the elders use to call it this. It's a very old name. It is located in Mauritania. It doesn't work very well now. The elders used to fish there for Thiof [Wolof name for grouper] and other species. ... So now I go to Babacar and Fatou. Babacar is a friend of mine.¹⁴⁶

“Babacar” and “Fatou” are two names he gave to fishing places he discovered. This naming process is not systematic; he explains that for the other “Kher” he goes to, he just uses the geographical coordinates he registered in his GPS device. He also claims that he is the only one to know them and would not share them with close relatives or extended family. For Ousmane, the West African coasts have been entirely discovered by the Senegalese fishermen and “*from here [Hann] to Conakry, [he] know[s] the names of every fishing place*”. Ousmane mentions the fishing place “Diarama”, which lies on the route to the south, and he explains the meaning of this name:

*Diarama, it's a saleng [in Wolof], a boat cemetery. Diarama means “thank you” [in Peul]. They called it “Diarama” because each time they go there, and find lots of fish, they say “Diarama”.*¹⁴⁷

Finally, in Guinean and Bissau-Guinean waters, there are not such elders’ names for the fishing places. So it seems that the farther they go, the more individualised the appropriation of the sea space is. This is especially true in southern waters. The Joal-based fishermen’s leader explains that, as for borders, the geographical coordinates have taken the function of names for these new remote fishing places:

There are GPS positions [...] I mean, instead of thinking in terms of fishing places, fish habitat, etc., there are only positions. I say, for example, I want to go to 10, or 20 degrees, these are positions. Then you can chose a name, you register a position and

¹⁴⁶ Interview 61

¹⁴⁷ Interview 32

*put Juliette or Ahmed or Fatou. If you have a friend and you really want him to get some fish, you can give him the position, but this is very rare [...] sometimes you can even have the same father, but not sharing a good position [...] this is very rare.*¹⁴⁸

Conclusion

In conclusion, fishermen have produced a specific knowledge using their language and their own geographical and cultural references to appropriate and “colonise” foreign spaces. This pragmatic language involves specific navigation techniques and words, a genuine representation of borders and the limits of forbidden spaces, and the creation of specific names for fishing places. Whether in Mauritania, Guinea-Bissau or Guinea, Senegalese fishers organise the sea space and rationalise their mobility according to their economic needs and opportunities, marine resources and environmental constraints, personal interests, and historical claims or administrative requirements. In Mauritania, the naming practices have strengthened fishermen’s feeling of belonging and legitimated their illegal fishing trips to forbidden spaces. Because they have named these places, they consider they have some right to exploit them independently of the foreign legislation.

The geography of Mauritanian spaces slightly varies from fishermen’s social construction of southern waters. In Mauritania, this appropriation is older, and carries a heavy historical weight. Names are more ancient and fishermen tend to represent the border with emotion and personal involvement, leading them to romanticise their mobility. On the scale of the fishermen, there is not such a history with Guinean and Bissau-Guinean authorities. I have shown that the neutral dimension of fishermen’s mobility in these waters is noticeable in the way fishermen represent borders and maritime limits within these countries. Fishing expeditions in southern waters are more reflective of individualistic practices based on a rational organisation of mobility. Foreign marine spaces are spaces for power struggles about claims over the exploitation of fish resources, personal enrichment, self-achievement and acquiring skills, and for local and practical knowledge production. Whether fishermen unfold their mobility as a contesting tactic towards Mauritanian

¹⁴⁸ Interview 50

fishing regulation or in order to make their investments profitable, they rely on their practical knowledge and at the same time produce knowledge. Whatever meaning their mobility takes, fishermen use this knowledge for the exercise of power and the control of sea space.

Through these maritime mobility patterns, fishermen have developed significant expertise relating to the sea and navigation techniques. This expertise has been a means of support that encouraged the increase of boat migration to Europe from Senegal in the mid-2000s. Fishermen have played a significant role in the organisation of such journeys. This mobility pattern has given the ocean the meaning of a bordering space giving access to Europe – in other words, to self-achievement, professional opportunities and independence, which West African maritime mobility had so far been providing through multiple migration patterns.

Chapter 8 -
Risky Sea Crossings:
Irregular¹⁴⁹ Migration to the Canary Islands

Between 2001 and 2010, more than 90,000 illegal migrants departed from West Africa and reached the coasts of the Canary Islands (Ministerio del Interior, 2011) after a perilous sea journey across the Atlantic and with the hope of a better life in Europe. The West African maritime route to Europe became the main path to Spain not long after the 2005 events of Ceuta and Melilla, when an “assault” of irregular migrants to the fences surrounding the enclaves was strongly repressed by the Moroccan and Spanish authorities (Carling, 2007b; De Haas, 2007). These events led to the organisation of new departure routes further south, first from Western Sahara and Mauritania, and then from Senegal, from where Senegalese fishermen started to undertake these journeys. The Senegalese fishermen involved in these journeys were either the long-distance fishermen who had spread their fishing routes all over the ocean and could use their navigation skills for these maritime crossings or the local small-scale fishermen who saw in these migration journeys a strategy to cope with the decrease in fish resources in their local waters.

In this chapter, I argue that through this maritime mobility pattern, fishermen have given a new meaning to the sea. The ocean itself has become a border space, a gate giving access to a better life or – more dramatically – to death. The dangers and risks involved in this maritime crossing have given to the mobility of the fishermen an emotional dimension and the values of bravery and devotion to their community. The choice of crossing the sea has embodied fishermen’s strong commitment towards their families. The border function that fishermen give to the ocean contrasts with the conception of borders that is reflected through European migration policy. As a response to increasing migration flows to Europe, European states spread their border control

¹⁴⁹ In this study, I follow De Haas in his choice of using the term “irregular migration” to designate the status of the migrants who transit through West Africa and who sometimes reach Europe (De Haas, 2007). This term is useful in that it reflects the migrants’ changing status regarding legal requirements and does not reduce their identity to their illegal status.

practices beyond their respective national waters through externalisation and cooperation measures with third countries. These distinct uses of the sea bring to light paradoxical responses to the question of what borders really are and where they truly lie, either for the fishers or for policymakers.

This chapter first examines the connections between this maritime migration route to Europe from Senegal and the regional background of migration patterns in West Africa, bringing to the fore the multiple scales implied by the study of this mobility trend. Second, the chapter explores these maritime crossings from the perspectives of the fishermen. Finally, I shed light on the disillusion of the many fishers who failed to reach Europe and/or were deported back to Senegal. Because fishermen were emotionally and physically involved in these maritime crossings, their failure and disillusion made them powerless and vulnerable once they were back in their community.

One has to bear in mind that although fishermen were the main protagonists of these journeys, they were not the only passengers on these boats. Fishermen represented around 38.2% of the participants (Mbow & Bodian, 2008). Malian, Nigerian, Ghanaian and Guinean migrants reached the Senegalese coasts as well and joined the Senegalese would-be migrants in these adventures. Needless to say, for the non-fishermen Senegalese migrants, but also for the foreign migrants who passed by Senegal, local scale factors driving their own migration projects had other specificities, which this study does not cover. For the purpose of this thesis, I strictly focus on the experiences of the Senegalese fishermen.

1. Local crisis within a global background

When they aim to reach Europe, West African migrants have followed changing routes since the end of the 1990s. They have crossed many deserts, seas and towns in Sub-Saharan Africa and followed trajectories which were always adjusted to account for police controls and existing opportunities and infrastructures. When these routes led the willing migrants to Senegal, fishermen seized the opportunity and started organising and taking part in maritime journeys to the Canary Islands.

Complex migration routes to Europe

The opportunities for legal migration to Europe have considerably reduced since the 1990s, which has encouraged Sub-Saharan migrants to follow alternative paths. West African migrants started to take irregular migration routes to reach Europe when European visa procedures were strengthened in the 1990s (Carling, 2007b; De Haas, 2008). The creation of passages to Europe adjusted to Europe's border controls at a global level and occurred at a local level by the quick reactions of local actors who temporarily become smugglers. Carling's article from 2007 addresses a precise description of the different migration routes leading Sub-Saharan migrants to Europe from West Africa. From their countries of origin, migrants mainly head to Agadez in Niger or Gao in Mali, from where they go to Mauritania, Morocco, Algeria or Libya (2007b). The journeys of the migrants are not smooth and uninterrupted adventures, and it can take months or even years before they reach a final destination. They usually settle for a while in transit in North African cities such as Kouffra in Libya or Tamanrasset in Algeria in order to capitalise enough resources and wait for an opportunity to reach Europe (Bredeloup & Pliez, 2005). In many cases they set off in boats and attempt to cross the sea to reach either the island of Lampedusa, Malta, in the Mediterranean Sea, southern Spain and the Balearic Islands, or the Canary Islands. Carling shows how the strait of Gibraltar had long attracted African migrants since the 1960s as this is where the distance which separates the African continent and Europe is the shortest, although strong sea currents and intense ship traffic make this crossing extremely risky. Carling reports the many maritime routes around the strait which smugglers took in order to avoid Spanish border agents and reach the other side of the strait (Carling, 2007b). The number of migrants who crossed the strait increased at the beginning of the 1990s in parallel with the strengthening of Spanish migration policy and border controls.

During that same period, migrants started to enter the enclaves of Ceuta and Melilla, where they could apply for asylum or attempt to get transferred to mainland Europe (Carling, 2007b: 24). As a result of the growing number of irregular migrants attempting to get into the enclaves, borders were reinforced with fences and extensive controls. While many Sub-Saharan migrants attempted to get into the enclaves by climbing the surrounding fences, many got shot or arrested and were

deported by the local authorities. One of these “assaults” was extensively covered by the international media in 2005, and it seems that this had a deterrent effect on the prospective migrants, whose smugglers soon started to look for less controlled routes (De Haas, 2007; Dünwald, 2011; Pian, 2006).

In parallel to these routes, migrants started leaving West Africa from Morocco and Western Sahara, aiming to reach the Spanish archipelago of the Canary Islands in the mid-1990s. While arrivals increased, the Spanish authorities responded by using stronger and more sophisticated controls in the form of the new system, SIVE (Sistema Integrado de Vigilancia Exterior). This technological surveillance system which the Spanish government put in place in 1999 aims to detect illegal maritime movements into Spanish waters (Carling & Hernández-Carretero, 2011; Carling, 2007a). Radar first covered the main coastal areas of southern Spain and were then deployed around the Canary Islands. Migrants reaching the Canary Islands by sea – and who were sometimes successfully intercepted by the SIVE radar – had arrived either on board small wooden boats or had hidden themselves within large cargo ships (Carling, 2007b). At the beginning of the 2000s, the routes to Europe got longer as they started further south, from the surrounding area of Nouadhibou in Mauritania, where dozens of migrants embarked in small boats which local fishermen drove to the Spanish archipelago over three days. Until the beginning of 2006, Nouadhibou was known by Sub-Saharan migrants as a transit city where they were expecting opportunities for departures to arise. Choplin and Lombard describe how the Mauritanian city has progressively lost its transit function as a consequence of the strengthening of border controls off Mauritanian coasts (2008). It became almost impossible for the smugglers to leave the Mauritanian coasts without being intercepted. Therefore, thousands of migrants temporarily settled in Nouadhibou, expecting that a maritime journey was now unlikely, and progressively took part in the local economy of the city.

As a result, the sea journeys started further south, from Saint-Louis in Senegal, then from Kayar, Dakar peninsula, Mbour, Joal, Casamance and, finally, Guinea-Bissau (Nyamnjoh, 2010). In 2006 alone, a total of 31,678 irregular migrants reached the Canary Islands (Ministerio del Interior, 2013). They were either deported back to their country of origin or transferred to mainland

Spain – depending on the ongoing repatriation agreements with sending countries at the time and the personal situation of the migrant. Most of the migrants arrived that year in the archipelago. The flows progressively decreased after a series of policy measures – including externalised border controls and Spain’s Plan Africa – succeeded in deterring the migrants from undertaking the journeys (Carling & Hernández-Carretero, 2011). Indeed, the Spanish authorities reported 9,181 migrant arrivals in 2008 (Ministerio del Interior, 2009) and only 173 in 2012 (Ministerio del Interior, 2013). The joint efforts of European member states made possible the prevention of migration flows, although they first had the effect of pushing the smugglers to consider longer and riskier routes to avoid controls.

The externalisation of European border controls

Migration trajectories and Europe’s border controls and migration policies are interdependent. For Abdelmayek Sayad, immigration and emigration are two sides of the same coin (2004). In this sense, West African migration patterns to Europe are shaped by European policies, and vice versa. Migration policy measures were operated through the externalisation of Europe’s border controls and the multiplication of bilateral agreements between sending and receiving countries. As research has shown, the constant adaptation of migration movements was generated by the externalisation and reinforcement of such border controls (Audebert and Robin, 2009; Lalhoul, 2006; Whitol de Wenden, 2002; Bredeloup and Pliez, 2005; Haas, 2006). The Treaty of Amsterdam of 1999 transferred migration management to the European level. This transfer has enabled member states to count on an intergovernmental framework that protects their national borders and ensures their internal security. Member states now commonly spread their police force outside their own borders and externalise their border control by seeking support from neighbouring states in order to anticipate migratory movements.

On the European scale, management of migration issues and protection of borders seem to go hand in hand. This translated into the creation of the European Agency for the Management of Operational Cooperation at the External Borders of the Member States of the European Union – more commonly known as Frontex. Frontex is a “depoliticised” external body which aims to

support member states for the protection of their external borders (Carrera, 2007). These European measures reinforce Spain's Plan Africa, which is a wide policy programme that largely focuses on the prevention of irregular West African migration patterns (Manzenado, Guzmán, & Azkona, 2011). Operations such as Hera I, II and III were developed from 2006 onwards in order to strengthen Spain's border controls capacities. While for Hera I the support mainly consisted of the consultancy of experts from member states and sending countries, Hera II and III also involved bilateral agreements and technical cooperation with sending countries (Carrera, 2007: 22). Through this cooperation, European member states such as Portugal, Italy and Spain supplied 2 helicopters, 2 ships and around 10 patrol boats to Mauritania, Senegal, the Gambia and Cape Verde.¹⁵⁰ This cooperation mainly helped Senegal and Mauritania to prevent boats' irregular departures from their shores. These countries both took part in the surveillance of their coastal waters and legitimated the presence of European patrols in their national waters so that the coast guards could direct the intercepted boats back to their countries of origin (Dünwald, 2011: 6). This externalisation process has relieved European countries of their responsibility to take irregular migrants in. By giving third countries the responsibility of assisting Europe in the management of irregular migration flows, these agreements participate in the externalisation of European borders (Audebert and Robin, 2009; Vaughan-Williams, 2009).

The efforts deployed to struggle against West African migration flows reflect the way in which European member states have based their respective national migration policies on the perception of immigrants as threats. For instance, Frontex's operations developed according to "risk analyses and threats assessments" (Carrera, 2007: 14). In this sense, the strengthening of migration controls seems to be the direct result of the construction of fears, threats and danger (Bigo, 2000; Hartmann, Subramaniam, & Zerner, 2005) from which society and the population must be isolated and secured. The construction of fears translates into immigration being depicted as a security threat in Western countries over the last few decades (Bigo, Carrera, Guild, & Walker, 2008; Hartmann et al., 2005; Van Houtum et al., 2005). As Bigo puts it, the figure of the migrant has been turned into a socially created threat to society: "we need to understand the social

¹⁵⁰ BBC News, 2006

construction of fears. And why they are now converging on the figure of the migrant, as the key point inside a continuum of threats” (2000 : 174).

These powerful fears are deeply rooted within society and have given border controls the functions of dividing individuals into categories and qualifying flows of populations according to their origins. To contemporaneous scholars of borders, it seems that the traditional understanding of a border as a territorial limit whose main referent object is space is not accurate and cannot reflect the contemporary complexity of European borders (Bigo, 2000; Vaughan-Williams, 2008; Walker, 2000). Borders are, rather, characterised by their biological dividing function that operates through certain kinds of territorialised materialisation. Therefore, the externalisation of European border controls reflects this shift in the meaning and locations of European borders that has been questioned in the literature (Vaughan-Williams, 2008, Bigo, 2000: 185).

These considerations distance themselves strikingly from the perspectives and experiences gathered on the field among Senegalese fishermen. While on one hand, European policymakers and media assimilate migration to danger, fears, threat and the “invasion” (De Haas, 2007), on the other hand, from the migrants’ points of view, the journey to Europe appears as a positive – though risky – perspective that will make a better life tangible.

Discussing the origins of boat migration from Senegal to Europe

Maritime migration from Senegal to Europe is a local phenomenon which greatly involves the fishermen and responds to a national, regional and global background. Sea migration to the Canary Islands became an interesting opportunity for the fishermen, as, on one hand, the organisation of the journey appeared to be much more profitable than fishing and, on the other hand, for the successful migrants, it would provide long-term job opportunities in Europe (Nyamnjoh, 2010). There is a debate on the way boat migration started in Senegal. Sall and Morand situate the first departures from Senegal in 2002 and argue that it was first smugglers – and not artisanal fishers – who proposed that migrants cross the ocean from Saint-Louis beaches, in the extreme north of Senegal, as a result of the strengthening of sea controls in Morocco and Mauritania (Sall & Morand, 2008). However, narratives gathered in the field instead involve

fishermen as the first instigators of these routes, as they were already using their wooden canoes to reach remote places, navigating in a well-known environment for days and relying on traditional skills. Moreover, Sall and Morand find the origin of the maritime migration from Senegal to Europe in the dynamism of the fishing sector rather than in its decline. For them, this dynamism is reflected through the exponential growth of the fishing sector since the 1950s (chapter 4). The authors argue that the Senegalese economy therefore turned towards the sea, which made coastal areas a step towards temporary settlement and short-term enrichment, before migrating to Europe (Sall & Morand, 2008). International fishing migrations, the use of new technologies and the development of navigation skills are other signs of this dynamism. This dynamism constituted a favourable background for boat migration to the Canary Islands, allowing highly qualified captains to sail boats throughout the Atlantic. Sall and Morand's hypothesis contradicts Nyamnjoh's argument, which emphasises the sectoral crisis and lack of resources as the main factors responsible for Senegalese fishermen's migration to Europe. Nyamnjoh also suggests that these migration routes are the expression of a growing revolt of the fishing communities, expressing anger both against the weak involvement of the government in artisanal fishing and against the archaism of their traditional community system (Nyamnjoh, 2010: 50).

Nevertheless, because different kinds of fishermen were involved in boat migration from Senegal to Spain, neither of these arguments are mutually exclusive. The role fishermen took in the development of the migration routes to the Canary Islands greatly varied according to their socio-economic position. The organisation of boat migration benefited from the dynamism of the fishing sector through the involvement of highly skilled fishermen. Most of them had been navigating throughout West Africa for years and had been able to quickly adjust their activities according to the evolution of the fishing sector. Their familiarity with the maritime environment enabled them to consider these long sea trips and gave them a major role in the development of the West African irregular migration routes to the Canary Islands. By contrast, the local fishermen who embarked in these boats and paid for the trips were suffering from a lack of perspective and resources. They mainly took part in these journeys in order to compensate for the decline in the profits earned from fishing activities. These willing migrants were daily fish workers, net fishers or local-scale line-

fishers who were suffering from the fishing crisis on an everyday basis and were unable to earn a decent living from fishing. In other words, the highly skilled captains who were sailing the boats were reminiscent of the figure of the “sailor-fishermen” identified by Cormier-Salem (1995), whereas the “peasant-fishermen” would fill a great part of these boats, being less active than the captains. Though the socio-economic conditions differed for each of these actors, both categories of fishers shared the similar objectives of settling in Europe, finding a job and sending remittances to their families.

As an example, Ousmane is a young Dakar-born boat owner and captain fisherman who has been organising fishing expeditions to Guinea and Guinea-Bissau since 2001 (chapter 7). In 2006, following the example of his 4 brothers, he recruited 75 people and hired 4 captains to assist him in navigating to the Canary Islands. Apart from the captains, the migrants on board all paid him XOF 400,000 (£500). They went up to Morocco, but as they were fleeing a violent storm, the crew decided to come back to Senegalese waters, where they were arrested by the Senegalese navy and tried in Senegal for having smuggled migrants. Ousmane and his crew received a conditional sentence of 2 years. Ousmane claims that before organising this trip, he was satisfied with his financial situation, attesting that he was able to save up to XOF 11 million (£13,760) a year thanks to what he was earning from fishing. Though he was in a comfortable financial situation at that time, he decided to organise that journey mainly because, he said, “*We saw that everybody was leaving so we decided to leave as well.*”¹⁵¹ He wanted to follow his 4 brothers who had left for Europe by boat and was convinced that “in Europe you could easily make a living there”. Ousmane embodies this category of fishermen who took advantage of their socio-economic position to organise a migration journey to the Canary Islands very well. He had the skills and the experience of navigation, gear and capital such that he could safely invest in these trips. He seized an opportunity and provided a “service” to the prospective migrants. De Haas suggests that instead of seeing the organisers of irregular migration as smugglers trafficking human beings, we should instead focus on the “high level of interdependence between migrants and smugglers” and better understand this process as a service provided by the smugglers rather than as trafficking (De Haas,

¹⁵¹ Interview 32

2007: 25). The local Senegalese fishermen turned into smugglers for a limited period of time and responded to the high demands of prospective Sub-Saharan migrants willing to reach Europe. The growing demand for Senegalese fishermen and local would-be migrants to embark in those boats generated a rational organisation of the trips. The experiences of the returned migrants tell us about their strategies and tactics to circumvent police patrols' controls and on the rational dimension of boat migration.

2. Meaningful adventures

Boat migration from Senegal to Spain involved a complex combination of rational and less rational elements. The “marine culture” (Sall, 2007) of the fishermen has influenced the organisation of boat migration. This marine culture involves great expertise concerning the sea, the ability to manage sea-mobility-related financial investments and long-standing habits of circumventing state regulation practices at sea. Thus, the organisation of boat migration relied on this knowledge or marine culture. Overall, fishermen are flexible; they have proved that they can adjust their habits to changing marine environments and constraints. Furthermore, the obsession of many local fishers about migrating to Europe was a driving force for the conveyors organising such trips. The fishermen were emotionally involved in their migration project and invested all their expectations in these sea crossings.

Boat migration and lucrative businesses

In Senegalese fishing villages, boat migration progressively emerged as a sophisticated local economy based on potentially lucrative investments and on a strict hierarchy of land and sea-based actors fulfilling specific tasks. The conveyors of the journeys were former or active fishermen, land-based boat owners and/or fish traders, though they did not always take part in the journeys, like Ousmane. Conveyors hired what Nyamnjoh calls “middlemen” (2010: 36) to assist them in recruiting prospective migrants. These middlemen were generally local fishermen willing to migrate as well. They were exempted from paying for their seat and took part in specific tasks aboard. Conveyors either provided one of their own boats and engines – either an ice-box or a

purpose seine canoe – or constructed a purpose-built boat. On average, a hundred passengers embarked in one of these large canoes. As for long-distance fishing trips, the conveyors had to deal with logistics and hire crew members. Despite the significant logistics-related expenses (on average XOF 12 million – £15,000), conveyors generally made significant net profits, which Nyamnjuh estimated at around XOF 40 million (£50,000) for an extreme sea journey involving 170 passengers (Nyamnjuh, 2010: 36). Migrants paid around XOF 400,000 (£500) to XOF 800,000 (£1,000) to get a “seat” on board and food and water for around seven days of navigation from the Senegalese coasts – depending on the departure point. Although the fishermen made their own decision to leave, they were greatly encouraged by their relatives and the ongoing excitement about these new migration opportunities. Family members, friends, boat owners or the fisherman himself paid for the journey.

Most of the time, the organisation of these sea crossings involved important family businesses relying on community networks and oral communication. In Hann, Idrissa’s family includes a returned migrant, a retired migrant fisherman, a fisherman who organised irregular sea journeys to Spain, and three emigrated fishermen living in Spain and their respective Dakar-based wives. Those three emigrated fishermen are the brothers of Idrissa and, before leaving, they used to navigate in distant waters. They went to Europe by sea in 2006:

My three brothers left, before me, in 2006. They left with different pirogues. It’s been a while ... The elder one was with my dad; they used to fish in Guinea, Mauritania and so forth, and the other one used to fish around Mbour and Joal. One of my elder brothers was with a boat owner. He was the one who set the prices, but he didn’t finance it [...] this was the job of the boat owner. When they left, my two elder brothers didn’t pay for anything, except that one of them gave an engine to the boat owner. The other brother sent more than ten pirogues and earned a lot of money with this. But he has never left. He was looking for captains, crew members [...] He used to be an ice-

*box fisherman; he is Guet Ndarian. He's forty years old. He works in Dakar, has got three wives, one in Saint-Louis and the other around here.*¹⁵²

The economic position of Idrissa's father and elder brother provided an ideal situation for them to invest in the boat migration business. The whole family's organisation has long been based on international maritime mobility, and Idrissa naturally refers to his father's successful background in fishing:

*Each weekend, he [his father] used to have contracts with white people. He had a lot of white friends. He used to earn lots of money with fishing. As soon as he got money, he got four or five ice-box canoes, and lots of small fishing boat; he had six to seven small fishing boats.*¹⁵³

Idrissa's father bought a pirogue with the aim of organising a migration journey to Europe, but he eventually changed his mind about doing it: *"It was very likely that he would get a lot of people but he said that money is not the most important thing,"* Idrissa says. It seems that when these journeys were organised by wealthy actors who were external to the fishing community, they tended to pay less attention to the quality of the boat and engines and to the skills of the crew members they hired. In these cases, mobility was especially driven by the power relations at stake on land and organised by actors who either held capital or knowledge, or both. Fishermen's narratives emphasise the connections between these empowered land-based actors and hired fishermen. It was said that "experienced fishermen" generally did not insist on leaving if the weather conditions were too risky, whereas the "less skilled" captains were often accused of "forcing" the trip despite storms or problems occurring on the boat. As explained by Alassane, a migrant- fisherman who took part in a boat trip to Europe in 2006:

I was in Saint-Louis, and a friend of mine who had a boat ready to go to Spain asked me to help him. There were 70 of us on the boat and there were 10 captains, I was the only one from Yoff. There are people who take advantage and earn money from these trips despite them not knowing anything about the sea, but they take advantage, they

¹⁵² Interview 57

¹⁵³ Interview 57

*stay in Senegal and pocket the money. Those from Saint-Louis, it's different; they know the sea very well. They don't risk their life; if there is a storm they come back. The others force it and it is a catastrophe.*¹⁵⁴

Fishermen developed a series of appropriation “tactics” in relation to the maritime space which turned the ocean into a border space – in the sense of De Certeau’s notion (De Certeau, 1984). As they had been doing at the Mauritanian borderland or in remote southern waters in West Africa (chapter 5), fishermen have been using tactics to elude border controls and find their way to Spain. These tactics rely on practical knowledge and involve a series of practices reflected through their know-how of the maritime environment and religious and “naming” practices.

Appropriation tactics: risks and limits

On their route to the Canary Islands, fishermen circumvented European and West African states’ control practices that aimed to prevent or deter maritime migration flows. These strategies to elude controls involved greater risks, which the fishermen nevertheless considered to be worthwhile taking. These tactics first involved adjusting the departure point according to police patrols. Boats first left from Saint-Louis, on the northern coast of Senegal. Between 2004 and 2008, departure points progressively moved further south while controls were getting stronger. Boats left from Kayar, Dakar, Mbour and the Gambia and finally from Casamance. The further south the departure point, the longer – and thus riskier – the journey was. Rather than confronting patrols at sea, they avoided them and took detours, doing their best to remain invisible. Boats secretly left the coasts at night and crews were aware of the Senegalese police patrols’ schedules. Fishermen reported that conveyors sometimes had useful connections with local Senegalese policemen. Conveyors used to pay bribes so that they could launch the boat without getting arrested. Once off the coasts, crew members were following a pre-programmed route on their GPS device which the conveyors had previously bought from other conveyors or well-informed actors. Captains managed to take routes to the Canary Islands, which were far enough from the coasts so that they could stay invisible. They initially headed to the west, and once in international waters, they could more easily

¹⁵⁴ Interview 25

escape controls and reach the Canary Islands.¹⁵⁵ The motorised wooden canoes were not easily detectable by radar and satellite systems. However, when they got lost in Spanish waters, ran out of fuel or had a mechanical breakdown, as in the case of Mustapha, they did everything to be seen by border patrols so that they could be rescued. Mustapha is a fisherman from Kayar who travelled to Zinguinchor from the southern region of Casamance in September 2006.¹⁵⁶ With 171 other people aboard, they spent 11 days at sea. When boats departed from Casamance, risks increased as they had to cross a far bigger distance to reach the Canary Islands than when leaving from northern areas of Senegal. Mustapha's crew had a mechanical problem not far away from the archipelago and were found by the Spanish navy, who brought them to Hierro Island in the Canaries, where they spent several weeks in camps before being repatriated.

Another example demonstrates how the strategies developed by the captains led to situations that seriously affected crews and their passengers. In 2007, the International Organisation for Migration's Dakar-based team took in 89 migrants whose boat had nearly sunk off Mauritania and who were rescued by a Spanish fishing ship. Being part of this IOM team, I conducted interviews among these migrants who got lost at sea and had spent 28 days drifting aimlessly after having departed from Casamance. The captain and crew members started to get lost in international waters when their GPS device broke down. They ran out of fuel after a few days of navigation but were able to survive with the food and water supplies that were left, although 10 of the passengers died during the crossing. Most of the migrants suffered from hallucinations as a result of a lack of quality sleep, food and drinkable water; the experience turned out to be a nightmare which traumatised the migrants. Only a third of the passengers were fishermen used to navigating in local Senegalese waters. Their navigation experience helped them to cope with the terrible conditions of their journeys as they were lost at sea.

Staying invisible has been a recurrent strategy in the deployment of illegal migration routes. These strategies were strengthened by the "powers" of the marabouts, who had central roles in the spiritual preparation for the sea trip to Europe. Some migrants stated that thanks to the many

¹⁵⁵ Field Interview, Dakar, 2007

¹⁵⁶ Interview 25

talismans located in several parts of the boat, they were able to become “invisible” and escape police checks.¹⁵⁷ Sophie Bava stresses the complex relation linking spirituality, migration and the influence of the marabout on his *taalibé* (disciples)’s mobility: “the marabout works as ‘a material and religious comprehensive insurance’ [Salem, 1981, in Bava 2003] helping his *taalibé* by providing them with Baraka, advices to live in France and blessings”¹⁵⁸ (Bava, 2003). For the mystic work performed, marabouts in charge of those pirogues easily earned XOF 1 million, which is an appreciable share of the comprehensive budget of the trip. The marabout’s decision was the last step of the planning of the trip, as conveyors never launched a boat without their spiritual blessings. These strategies rely on fishermen’s practical knowledge and are reminiscent of their fishing mobility experiences in Senegal waters and beyond. The local fishermen who were not involved in the preparation of the journeys and only took part in the sea crossings proved to be less organised, although their familiarity with the sea made Europe feel closer to them.

Getting familiar with the ocean and the spaces beyond the sea

None of the fishermen I interviewed ever attempted to apply for a visa to get legal access to Europe. Local fishermen generally said that they had heard how difficult it is to be issued with a visa and did not even consider this possibility. The proximity to the ocean and the maritime habits of the fishermen somehow made their choice easier. Although they would never cross the desert or apply for a visa, they would definitely cross the sea to reach the Canaries. For them, Spain became closer, and the ocean took on a new function. They sometimes tried several times to cross the sea and eventually gave up after several unsuccessful attempts. Indeed, going to the Canary Islands became an intense obsession, and nothing seemed powerful enough to deter them from leaving. When covering the news related to boat migration, Senegalese media often used the slang expression “mbeuk mi” in reference to the sheep that bumps obsessively into its fences.¹⁵⁹ Crossing the sea was, too, the most affordable means of getting to Europe and the most direct route from West Africa. Those who were used to fishing every day at sea did not consider this adventure to be

¹⁵⁷ Field interviews, Yoff, Dakar, 2007

¹⁵⁸ My Translation

¹⁵⁹ Courrier International, 2012

frightening and perilous. When boats started to leave from Senegal, the sea journey raised great expectations. Europe eventually got closer, until it seemed as if it was just beyond the sea. The sea space suddenly provided new resources to be taken advantage of. Now that the marine grounds had been emptied, its surface became a meaningful path to reach Spain. In addition, the whole background of European border controls' move and the resulting shift of migration routes brought the European doors closer to these prospective migrants. Thus, because fishermen were familiar with the sea, Europe became more concretely reachable.

There is an absolute contrast between the rationality of the organisation of the trips by the conveyors and the immediacy and unpreparedness of the willing migrants' decisions to cross the sea. That particular behaviour is related to the changing function of the sea and the maritime habits of the fishers. Fishermen seemed to take the decision to leave for Spain as if they were deciding to leave for a fishing trip. Two striking examples of returned migrants help understand this point. First, there is Mohamed, a young fisherman and nearly professional football player who attempted to leave in 2007. What he was expecting from the journey's conveyor was a signal, a phone call which would inform him that the crew was ready to leave as soon as possible. He received that phone call while he was at his football training. He immediately reached the crew on the beach without letting anyone around him know that he was about to leave. He was only wearing his training clothes, as he had not even passed by his house. Idrissa told another astonishing story. When he took his decision to leave, he was studying at home. All of a sudden, he made all necessary preparations to leave his village and cross the ocean when he heard the rumour that a boat was about to leave:

It was the 28th of October 2006; I remember it very well. It was on a Sunday. I had an assignment in geography; I was studying something about the inequalities in development. All my older brothers had left, all my friends; all had left by sea and gone to the Canary Islands. I didn't pay anything, I forced my way. The pirogue was over there [he points towards the sea, next to the shore]. They were trying to put everything in place. We got told; we ran over and reached them. They said, "No, it's an ice-box canoe, we're going to work," and we said, "Well, we're going to work as

well,” and we imposed ourselves on them. They eventually accepted us on board the boat because they didn’t want us to denounce them. ... The same night, there were almost 80 people aboard. ... I had no more hope; our right to education had been mortgaged; I no longer knew what to do. I wanted to leave to go abroad, but unfortunately I failed.¹⁶⁰

The people who were preparing the boat for a journey to the Canary Islands first pretended that they were about to go for a fishing expedition. Idrissa knew this was not true and threatened that he would call the police if they did not take him and his friends aboard. The argument he put to them is very symbolic: “We’re going to work as well” implies that no matter whether they were leaving to go fishing or to go to Europe, embarking in these boats remains synonymous with work.

These two stories reflect how Europe became a close place which could be reachable like any local fishing place. In both cases, the migrants talked about how rough the journey was, how cold and uncomfortable it was and how afraid they were in the boat. They did not expect these huge waves and violent storms to shake the boat in such an impressive way. They did not expect either that spending seven days with nearly a hundred people – many of whom were not used to navigating at all – would be so long and rough. They were clearly underprepared for such journeys, although they knew the sea because they had been fishermen for a while. But because they heard that some relatives had succeeded in this adventure, they attempted it as well. This unpreparedness of the local migrants is clearly distinct from the rational dimension of the organisation of the whole journey. These narratives demonstrate that fishermen were investing more than their personal or family savings in these adventures. Their sudden decision and unpreparedness reflect a strong physical and emotional commitment that seems to give them enough strength to cross the ocean. It is their obsession and personal involvement that gave the ocean the meaning of being a wide border space to cross.

Finally, the appropriation of the oceanic border space is revealed through specific language practices as well. The phenomenon of irregular migration was often phrased as “Barça or Barsakh” meaning “Barcelona or the Beyond” (see Bouilly 2008). This expression combines the spiritual and

¹⁶⁰ Interview 59

cultural value of the migration journey and converts the ocean either into a pathway to Europe – better nicknamed as Barça, in reference to the football club of Barcelona– or, more tragically, to the Beyond. There is a strong symbolism in this expression, as, in three words, Senegalese people had powerfully summarised the sea journey to Europe. These words can be interpreted in many different ways. Barça is not simply Barcelona. This expression crystallises the many hopes of a number of prospective migrants who had in mind the successful expatriation of Senegalese football players to Europe. It reflects as well a process of appropriation of the Spanish city through oral language practices. Similarly, Madrid was naturally nicknamed “Real” or “Real Madrid”, as in Idrissa’s comments on his brother’s emigration:

*Two of them live together, and the other one lives elsewhere. One is in Barcelona, and the others are in Real Madrid.*¹⁶¹

This naming practice is reminiscent of the way fishermen have been giving personalised names to their fishing places throughout the ocean. These nicknames seem to be a way to bring these distant spaces closer and make them more familiar to the prospective migrants. With this journey, there were two possibilities. Reaching Barça – meaning succeeding in Spain at least as well as the soccer players – or dying. Death would be either concrete, and involve drowning into the sea, or more symbolic, in that migrants would fail or not even attempt to leave Senegal. This “social death” was formulated by De Latour in a study on Ivorian migrants whose migration projects failed (E. De Latour, 2003: 188). The alternative, “Barsakh”, adds a spiritual value to the journey and participated in its mystification and romanticisation. This spiritual dimension helped the migrants to get mentally prepared for an acceptable death as well – although their death would not depend on them but rather on their destiny and God’s choice.

With these migration routes to Europe, mobility strategies relied on the combination of spirituality, knowledge and experience at sea. Migrants were empowered by the prayers, advice and mystic objects provided by their spiritual leaders. Once they eventually reached the Spanish coasts, they felt they had succeeded and had survived the maritime experience. They did not expect to be repatriated straight away to Senegal.

¹⁶¹ Interview 57

Disillusioning returning experiences

When they reached the Canary coastline after having spent one week at sea, migrants all felt relieved. Instead of trying to hide themselves and looking for a convenient place to secretly land, they openly looked for assistance. They were expecting to eat and sleep and had the feeling that the worst was over. They became visible due to the media coverage. When they arrived in Spanish waters, migrants were taken in either by the local authorities or by the Spanish Red Cross. However, after some identification processes and official procedures, the Spanish authorities sent them to detention camps, where their case would be sorted out within the next 40 days. After agreements had been signed between Senegal and Spain in September 2006, Senegalese nationals were systematically repatriated. Nevertheless, although they were aware of their likely repatriation, they believed there was still a chance to be accepted in Europe – that their fate would decide for them.

Once in the Canary Islands' camps, migrants found themselves in a temporary closed space where they had suddenly been imprisoned after having first been received as victims. In camps, they reported they “were treated like slaves” or “dogs”.¹⁶² Most respondents stated that after almost 40 days in camps, they still did not know whether they would be released in Spain or sent back to Senegal. They occasionally found out that they were being deported back to Senegal, only once they were boarding the plane, handcuffed and surrounded by two policemen; or, in the worst case, while landing in Dakar. Mustapha reports:

We stayed in the camps until the 18th of October, two days before our repatriation. We were not allowed to get out. The 19th, very early, they took us out of the cell; there were 100 people in the cells. They made us line up. My brother was in the opposite cell. I wanted to be with him but I was behind in the row. They tied our hands with nylon thread. We were brought to the airport and two rows of policemen were facing the stairs. There, I knew. If we were separated, I knew we were leaving. We were divided into two groups: one for Malaga and the other for Madrid, but just before we left, we heard we were going back home. Each of us got into the plane with a

¹⁶² Interview 23

*policeman. After 20 minutes of flight, they cut our thread. Before we arrived, the captain announced we were about to land in Saint-Louis. Then each of us received 50 euros from the Spanish government.*¹⁶³

The camp plays the role of a border, as this is where the regulation process has stopped migrants' mobility. According to Simon Turner's analysis of a refugee camp in north-western Tanzania, "apart from being a place of 'no longer', the camp is also a place of 'not yet'" (Turner, 2005: 333). This space is "suspended" and holds the migrants for a determined period of time after a rough sea trip and before a reachable life in Europe. Their imminent repatriation to Senegal is kept secret until the last moment by the authorities in order to maintain order and security and avoid protests. The camp embodies here an external surveillance structure in which information and movements are carefully controlled. A border, as a producer of space, "can be understood as a permanent state of exception" (Salter, 2006: 169). Migrants' lack of awareness of migration rules makes them vulnerable and exposes them to possible abuses within the strictly organised camp structure. Their criminalisation gives the authorities of the camp a legitimacy to exercise power in the name of security. Being criminals for having transgressed the law, the migrants represent a threat to security. Keeping them uninformed in order to minimise the threat they represent becomes a legitimate strategy that justifies these practices.

When Senegal signed readmission agreements with Spain in 2006, other West African countries had still not accepted the repatriation of their citizens who had illegally migrated to the Canary Islands. Senegalese migrants therefore did not understand why they were sent back to Senegal whereas migrants of other nationalities could eventually go to Spain. Moussa, a returned migrant I met in Kayar in 2011, explained that they were told by the Spanish police:

*During these 40 days, you can be free and go to the Spanish territory. But if during these 40 days, your president, your government, needs you, you will return to Senegal.*¹⁶⁴ [In fact, to be more exact, it is not "during" forty days, but rather 'after'.]

¹⁶³ Interview 23

¹⁶⁴ Interview 25

They identify their repatriation as a decision that came from the Senegalese state. This interpretation was reinforced by the presence of Senegalese policemen who were sent to the Canary Islands in order to identify their compatriots in case they pretended they were not Senegalese.

While migrants had crossed the sea and felt relieved to safely reach the Spanish shore, they faced the disillusion of their arrest and suddenly lost all control of their personal situation, future and expectations. Their repatriation was perceived by many of them as a failure, which was morally and physically “too hard to handle”.¹⁶⁵ They felt dispossessed of their own future and betrayed by their own government, and could hardly imagine how they would be able to face their family, who counted on them. What is striking in fishermen’s narratives is the way they apprehend the Senegalese state’s practices with their own feelings and emotions. Their personal interpretation translates into a lack of comprehension and a distance towards Senegal state’s decisions.

Once back, most of the migrants had no choice other than going back to fishing. Moustapha had to contract debts and borrow fishing gear from his uncle to go back to sea in Kayar. He benefited from navigation training in Saint-Louis through an international NGO programme. Generally, returnees often complained of being ashamed of being deported back to Senegal. They were not ashamed of having crossed the border illegally but rather of having failed their migration projects and of having been unable to satisfy their family’s expectation and financial investment. At the beginning, this migration strategy was perceived as a last chance to go to Europe and the courage of the would-be migrants was greatly celebrated. They were brave would-be migrants, willing to sacrifice themselves for their family. Being a returnee in Senegal was perceived as a shameful moral failure which migrants could hardly stand, rather than as a condemnable act in that they had broken the law. Some of them became seriously depressed and traumatised by these forced returns and were sometimes unable to speak for months. Anik Pian stresses how the repatriation of the Senegalese migrants was often perceived as a “rupture” in their life and their migration projects (Pian, 2006: 88). Returned migrants had been both psychologically and physically marked and needed time to rebuild themselves (Pian, 2006).

¹⁶⁵ Interview 23

Returned migrants created organisations in the most affected parts of the country and tried to form a national network. In the fishing village of Kayar, almost 500 migrants registered with the local organisation. When he came back from the Canary Islands, Moussa did not want to go back to fishing and decided to take part in the local returnee organisation. He proposed creating alternative projects of selling cosmetics in his village. Returnee organisations embody migrant fishermen's European border experiences and give temporary social recognition and psychological support. The inability of the Senegalese government to propose alternatives after these massive repatriation movements encouraged the returned migrants to create these independent organisations (Marx, 2008). The status of migrants has changed as these organisations give them the visibility and legitimacy they had lost during the repatriation process or camp experiences. They are also a response to the weak state response they had been confronted with on their arrival. In July 2006, with the aim of settling a young rural population and preventing irregular migration, the Senegalese government launched the agriculture development programme "REVA plan"¹⁶⁶ (IPAR, 2006). Senegalese fishing villages were the places most affected by irregular migration to Europe. In the surroundings of Dakar, the villages of Thiaroye, Hann and Yoff suffered the loss of several hundred fishers who attempted to reach the Canary Islands by sea. By fostering the development of agriculture as a response to these maritime movements, which mainly involved fishermen, the Senegalese government was greatly criticised for its lack of pragmatism by the fishing communities. Respondents ironically reframe the name of the REVA plan as "*c'est du rêve*" (literally, "it's a dream").

Conclusion

This chapter has highlighted the power-knowledge relations at stake in the organisation of irregular migration from Senegal to Europe. A few put trust in the reputed knowledge of others, others held capital and invested in boat migration, and some individuals used their practical knowledge to avoid controls. These movements involved either vulnerable or empowered actors, experienced but illiterate fishers, and unskilled and poor prospective migrants. The narratives of the

¹⁶⁶ *Retour Vers l'Agriculture* – Back to Agriculture

fishermen have demonstrated how they gave the ocean space the function of a border space giving access to Europe. On the routes of fishermen, the ocean had at first taken on the meaning of a frontier through their constant efforts to push spatial limits away and access more resources. When fishermen decided to convert themselves into conveyors and use their boats in order to carry African migrants to the Canary Islands, the ocean itself had been changed into a wide border space giving access to Europe. Fishermen have shaped this changing geography of the ocean by using similar strategies, appropriation practices and tactics to those that they had been developing over time throughout their maritime mobility in Senegal and beyond borders. This genuine geography of the sea entails both a rational and an emotional apprehension of the ocean and challenges the border practices of European and West African states. Through maritime military operations, the sea has been used as a bordering surface on which the states involved in migration prevention could exercise their sovereignty and unfold border practices, while for the fishermen, the ocean was playing the role of a gateway to Europe.

The way the migration experience has empowered the fishermen among their community by giving much more significance to their absence is further explored in chapter 9. I will show how the commitment of these individuals to their community is paradoxically balanced by their own perspectives of self-emancipation provided by this mobility. This last chapter introduces a reflection on the gendered construction of fishermen's spaces and mobility and explores the tensions at stake between the intimate and limited place of the household and the spaces lying behind the open oceanic space.

Chapter 9

Places in Tension:

Meaningful Absences and Gendered Mobilities

The absences of the mobile fishermen have affected the organisation of their land-based community. In the case of long-distance fishing migration in West Africa, fishermen spend most of the year at sea with regular returns home, while for the many fishermen who settled in Europe for several years, in the best cases they sporadically come back to Senegal for holidays – when they obtain legal status, at least. In any case, fishermen increasingly tend to be absent from their community. Their longer absence, either at sea or in Europe, has taken the value of courage and become synonymous with hard work and remittances for the land-based women. Far from being weakened by this absence, the role fishermen have played among their family has become crucial. Men's long absences have had an impact on the mobility of their wives, daughters and mothers, whose everyday experience of spaces and places has taken new shapes and values. Leaving has therefore been assimilated to a greater autonomy and a possibility for self-affirmation and emancipation: the distance and absence generated by the migration paradoxically enabled the fishermen to recover control over their life and community. This chapter explores the tensions between the narrow, intimate place of fishermen's households and the external spaces to which the household is connected. These external spaces are the ocean and the places to which it gives access. Although their respective geographical natures oppose the household and these external spaces, both types of space interact together and influence and reflect each other. These external spaces, which are mostly known and practised by men, are as central as the intimate "feminine" home.

Senegalese fishermen's families construct their intimacy on ambiguous power-knowledge relations. Each actor, whether mobile or immobile, has control over its own field of information and one sphere hardly interacts with the others. It seems that whether on the unlimited ocean space and beyond or in the narrow household place, the actors involved in male mobility negotiate their freedom of movement according to their own skills, possibilities and socio-cultural limits. As with

De Certeau's walkers, women and men develop specific tactics to appropriate a superior order, which is embodied here by the oppressive community system and the traditional gendered distribution of social functions and geographic frames. I argue that individuals, both males and females, negotiate practices of emancipation and self-accomplishment by circumventing or adjusting to this traditional structure. For men, this translates into mobility and absence, whereas women seek to mediate power through male mobility.

This chapter first explores the gendered construction of spaces around which male and female members of fishermen's communities progress every day. I then examine the tensions existing between these spaces from the perspective of fishermen's households and through the narratives of the household-based actors who are affected by the mobility of others. Finally, the chapter deciphers the relationship between polygamy and mobility. While male mobility certainly encourages polygamy and strengthens gendered social constructions, it also provides the fishermen with the means to escape the tensions generated by polygamy practices.

1. Gendered geographies

The organisation of spaces develops according to the gendered division of social functions in Senegalese fishing societies. Male mobility has strengthened these existing geographical and socially gendered constructions. These constructions progress in tension between a traditional community system and the perspectives of self-emancipation and individualisation made achievable through male mobility. The way fishermen move is influenced by the nature of the space on which they move, and this is similar for women. The traditional gendered understanding of mobility has long opposed a supposedly powerful masculine mobility and a powerless feminine immobility (Cresswell & Uteng, 1994). Both men and women have developed distinct ways of exercising power through this mobility. Fishermen's narratives bring to light these specific aspects and corroborate Cresswell and Uteng's argument:

How people move (where, how fast, how often etc.) is demonstrably gendered and continues to reproduce gendered power hierarchies. The meanings given to mobility through narrative, discourse and representation have also been clearly differentiated by

gender. Similarly, narratives of mobility and immobility play a central role in the constitution of gender as a social and cultural construct. Finally, mobilities are experienced and practiced differently. (Cresswell & Uteng, 1994: 2)

The discourses of the mobile and immobile actors – both men and women – on mobility bring to light the connections between the different places and spaces at stake in the migration experience – the household, the ocean and the remote foreign places. These narratives reveal the gendered construction of mobility practices as well as the power struggles which shape the relationships between these distinct actors. Although men are the exclusive mobile actors, the actions of both women and men make mobility possible. Women financially or morally supported male maritime migration to Europe, and long-distance fishing migration might operate on board boats belonging to women. Although a traditional gendered dichotomy between spaces in Senegal has long been marked, female immobility and confinement at home or to their immediate environment is not necessarily a mark of powerlessness. Women keep control over the intimate and closed places.

While males are dedicated to hard work and securing livelihoods for their families, women generally stay home and look after the children, although in some cases they are dedicated to fish-processing tasks at the local market. Few women turn into fish traders and boat owners (Photograph 20). Nevertheless, in any case women's work does not necessarily involve a high degree of mobility – at least it is not comparable to that of men at sea. They never go to sea, which is a space of danger traditionally restricted to men. I observed that when fishermen are not working, they avoid staying at home with their wives and instead meet with friends in other places in the village. Unless their presence is justified, males' place is not at home (Photograph 21).



Photograph 20: Women attending fishers' landing in Hann, July 2012, J.H.



Photograph 21: Men's daily meeting in Guet Ndar, Saint Louis, July 2012, J.H.

Men's place is elsewhere, somewhere where they can get whatever is needed to earn a living. Fatou is the Saint-Louis-based wife of a long-distance fisherman who settled in Dakar with his second wife. Her statement reflects the socially accepted gendered division of tasks and the resulting physical male absence in households:

*It is better that men are absent. Men are born to work, to take care of women and work. It is not a problem if they are absent; it is better. If he is not here, it is good, it means he's working.*¹⁶⁷

Male mobility is based on this gendered construction of spaces which progresses according to a specific tension between a visible, uncomfortable and useless presence and a meaningful, positive absence. Fishermen's mobility brings to light the tension between the desired, remote place and their rejected sense of immobility in their Senegalese household. Fishermen do not want to reflect the visible image of immobile and passive unemployed people. For example, the Guet Ndarian leader (chapter 4) reported how he encouraged his son to leave for Spain a few years ago. In the same interview, he mentions three times how it was difficult for his son to "*stand idly by with his wife and children*".¹⁶⁸ Moreover, for Idrissa, women's level of expectations of men's duty is high and makes men's life hard. His narrative highlights the social pressure community members put on active male workers:

You see, here, we have our realities. Women clean the house, all they must do is cleaning and looking after the children ... Women spend their time making themselves pretty [...] wouh! That's a pity. ... "Sama djeukeur dafa sagal". What it means in

¹⁶⁷ Interview 41

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*French... hum, it's very rich Wolof, I don't know... "I hold my head high thanks to my husband", that is what it means.*¹⁶⁹

Idrissa's comments reveal the ambiguity of men and women's relationships. Although the traditional distribution of social functions makes women dependent on men, the expected role of men, which is to provide a decent economic and social status for women, nearly puts them in an inferior position to women. Also, women's expectations of their husband's duties prove to be socially accepted, as they are even codified in Wolof. Idrissa goes on to say:

*Senegalese custom [...] Senegalese people, they spend too much money. But it depends, if you are a disciple like me, I'm humble and I do what I can, you see, I don't need to get in debt [...] I avoid getting in trouble [...] But women, they say they want to show off, showing extraordinary things so that people say, "Wouhouu, the baptism was exceptional!" Then, the day after, you will try to find solutions to repay your debts. ... They don't buy the sheep. [for traditional celebrations] We, the men, we do buy the sheep. They only spend their time making themselves pretty, wearing new clothes, new shoes; this is extraordinary! [he laughs] Sheep? They don't even buy vinegar or mustard to cook the meat! They don't buy anything at all! We must rack our brain to find a sheep. And if you're unfortunate enough to find a slightly too skinny sheep [...] ohhh you're getting in serious troubles [...] "Your sheep there [...] it looks like a carcass!"... This is nonsense, it's too hard.*¹⁷⁰

Being absent is crucial to men as this is not only synonymous with work but also with better control over the personal earnings they get from fishing or from working abroad. I have shown in chapter 5 that when fishermen are away, either at sea or in Europe, they can hide the amount of their income and free themselves from this community pressure. Migrating keeps them away from the community pressure, which enables them to better manage their income and expenses. From Spain they are still morally obliged to send remittances, though they can better

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manage their investment. They send remittances on a monthly basis and manage their sending as a whole rather than sharing it in small quantities on a daily basis. They divide remittances into expenditure for the household, education, building extensions for the house and traditional ceremonies. Leaving appears to be an opportunity to make their powerlessness less visible. Fishermen report that when they have no money to invest in fuel and fishing gear for a fishing trip, they are forced to stay on land and feel judged by their family. De Latour observed a similar tension in the context of emigrated young urban Ivorian people:

Leaving courageously is a saving act which pushes back general hostility, bringing a kind of reconciliation around the beneficial absence which takes precedence over the invasive presence. (E. De Latour, 2003: 178)¹⁷¹

Here, fishermen expect their absence to be “beneficial” and to produce the effect of a distraction from their too visible and passive presence. What they expect from their mobility is strengthened by the gendered construction of their community. As men, they are supposed to be mobile and to use their mobility to make their family survive. The expected absence produced by a migration journey to Europe reproduces these social constructions. Fishermen’s families have pushed the young male generations to leave and escape their too visible and forced immobility. Sea migration to Europe became a powerful means to provide a calculated absence and relieve the young unemployed fishermen from their unwanted and too visible presence.

By avoiding being physically too visible within their community, fishermen gained opportunities for individual emancipation. Fouquet has shown how the young Dakar-based prospective migrants projected themselves into migration plans to reach social recognition (Fouquet, 2008). Migration gives access to new steps in the social hierarchy and is synonymous with social success. Fouquet stresses the way migration – as a delocalised experience – is considered by the young Senegalese as a powerful way to reach personal emancipation. This experience can be either lived or imagined; it acts as a symbolic detachment that frees young individuals from their traditional communal system so that they can “grow socially”(Fouquet, 2008: 267). Although traditional West African societies consider individualistic practices to be

¹⁷¹ My translation

potential threats to the values of solidarity and community systems (Marie, 2007), by encouraging and depending on male mobility they indirectly foster the self-emancipation of their mobile members. Marie shows how this paradox has led to a new social compromise that enables individuals to become autonomous without jeopardising the community systems on which such traditional societies are based:

The community solidarity remains assumed like a value and a duty, but it becomes conditional of a conscious win-win relationship (helping those who help, have helped or will be able to help) and to an arbitration based on the new needs of the couple and its children. (Marie, 2007:179)¹⁷²

For the fishing community, mobility proves to be the only socially accepted way in which self- accomplishment can be achieved; individual mobility is celebrated in some forms only. By encouraging this mobility and counting on the likely success of their sons or husbands, the women indirectly encourage a certain kind of personal emancipation. The community tolerates this emancipation only from the perspective of the benefits that this enrichment would provide in return to its land-based members. As a consequence, this individualisation process strengthens and reproduces the community system in place through the dependence relationships binding the absent individuals to their close and extended families. One can observe these mechanisms from the perspective of the households in which members are involved in international mobility.

2. Observing mobility from the fishermen's households

At the heart of their households, fishermen make visible the marks of wealth and success. Through their narratives, the land-based community members reveal the ongoing tensions that shape their relationship to the absent emigrants. Either the women or "failed" migrant fishermen negotiate their own freedom of movement according to the new social hierarchies generated by the expatriation of their community members. Idrissa's household is significantly involved in international mobility (chapter 8) and progresses in a concrete tension between different spaces: the household, the sea and remote places (Europe or West African fishing places). I was introduced to

¹⁷² My translation

Idrissa by my key informant in Hann. Idrissa himself became a valuable informant as he speaks both French and Wolof fluently. As a spiritual leader, he made making contact with other community members easier. On the local scale of the household, Idrissa's narrative exemplifies the tensions between the example of his successful emigrated brothers and his own immobile experience. Idrissa is the only one who "failed" – as he put it – and could not reach Europe. The way he describes each of his family members and their successful life contrasts with his own experience.

What is remarkable is the way his father and brothers greatly encouraged Idrissa's maritime mobility by giving less credibility to his school activities and encouraging sea migration to Europe in general. Idrissa is a young fisherman whose position slightly differs from his brothers. He is in fragile health and he is the only family member who went to school for a long time and does not dedicate his entire time to fishing. Idrissa reports how he has been earning less and less money with the jobs he has been doing over the past years, while his three emigrated brothers seemed to succeed in Europe. Contrary to his brothers and father, Idrissa fishes in the waters surrounding his village and has never taken part in a large-scale fishing expedition. He simply line-fishes next to the Dakar peninsula, with no GPS, on board his small motorised canoe. When not fishing, he works at the local fishing wharf and earns no more than XOF 15,000 a month (£18).

Idrissa has an extended knowledge of his brothers' way of life in Spain, for which he gives precise descriptions. Like many fishermen, Idrissa constructed his migration project to Spain upon the narratives of his emigrated brothers and returned relatives. The equipment his brothers brought back to Senegal as well as the bedrooms they have been building on the upper level of the house have contributed to the construction of solid narratives of successful emigration experiences:

Two of them live together, and the other one lives elsewhere. One is in Barcelona, and the others are in Real Madrid. All this equipment [...] they brought it, the television and all this [he shows the hi-fi equipment in the bedroom]. They also built three bedrooms. ... It's been six years. We talk by Skype here; there is a computer there, in my elder brother's bedroom; we regularly talk. They send money at the end of each month, for the everyday expenses, the electricity and water charges [...] well, they get

*organised, to take charge of all this ... Because their wives are all here, and their children as well. They rent a house there, they get organised together, for the food, the cooking; they live in good conditions.*¹⁷³

Idrissa is in a permanent tension between the visible results of his brothers' expatriation and his own immobility. He must also cope with the great paradox between his higher level of education and reduced mobility and the successful mobility of his brothers, achieved despite a lower level of education. These tensions are revealed in his answers when I asked him whether Omar – his brother who lives in Spain – could speak Spanish:

*He doesn't use proper grammar rules [he laughs]. We were chatting together, because when he was back, he told me: "Well, over there in Europe, you say "buscar trabajar, buscar trabajar". I said, "No, you shouldn't say 'buscar trabajar, buscar is an infinitive verb' you understand? Then he told me, "No, you don't know anything, you know nothing." So, it's "yo busco un trabajo", I'm sure [...] But he doesn't know how to read, this is for sure; he can't read. I don't know how he does, but he makes it anyway [...] So, because there, the computer, it's too easy, and there are lots of computers there... one of his friends might help him [...] I don't know [...] to manage a little bit on his own, but no, he can't read.*¹⁷⁴

Idrissa's behaviour during the interview is ambiguous. On one hand, he seems very enthusiastic about talking of the life of his brothers in Spain, doing his best to stay as close to the truth as possible, while on the other hand I notice he is feeling nervous, impatient and slightly envious. This piece of conversation he reports shows very well how his own academic knowledge is not worthy of international maritime mobility. Although Omar is illiterate, he managed to go to Spain, got documented after one year and very soon started sending remittances to his family. His brother disagrees with Idrissa's answers when he says, "*You don't know anything.*" Although Idrissa learnt Spanish at school and is able to correct his elder brother, this knowledge has less value than the real experience, there, in Europe. Through Idrissa's narrative, one can perceive

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¹⁷⁴ Ibid

different sorts of valuable and less valuable knowledge shaping this international mobility. The migration experience both requires and produces knowledge. A symbolic competition based on these different types of knowledge seems to oppose the two brothers. Although their relationship is intense – Idrissa reported a number of calls every week – there are great tensions and power struggles between them. This is reminiscent of Mills’ reflection on power – which she bases on the work of Joanna Thornborrow. She acknowledges the juxtaposition of different values of power–knowledge frames which individuals can negotiate with:

You may be relatively low in the hierarchy within an institution, but you may be able to locally negotiate a more powerful position for yourself because of your skills and ability. This distinction between two types of power is important in being able to assess which positions of power are negotiable and which are not. (Mills, 2007: 50)

Over the course of my repeated visits, I observe how the present family members use the space in the house. International mobility is at the heart of Idrissa’s family story as the family house has been built thanks to what was earned *elsewhere*. The house space’s use clearly reflects the mobility habits of the different family members. The old respected father – a retired migrant fisherman – has one of the upper bedrooms, whereas Idrissa’s room is the smallest one, next to the kitchen, downstairs. The front door opens into a main courtyard surrounded by a couple of bedrooms, the kitchen and the living room. The house has two levels, which can be reached from the main courtyard. While men generally sit and chat together in the dark living room, women are dedicated to cleaning or cooking tasks in the courtyard or kitchen. Idrissa’s bedroom is a very small and dark place, with a mattress on the floor. Like the old father, Idrissa’s brothers’ families live upstairs, in comfortable bedrooms facing the sea.

In this house, one feels the tensions between an intense communal way of life and the celebration of individual mobility and success. The emigrated brothers both actively take part in the community life of their Senegal-based family and emancipate themselves from the community pressure. In this sense, migration reinforces the community system and at the same time gives more strength to personal achievement. Idrissa seems to be alone in this enterprise, looking for a valuable place between the absent successful males and the present busy women. Also, besides his unusual

level of education, Idrissa is a local spiritual leader and permanently wears religious clothes. I interpreted this strong and ostentatious religious identity as a way for him to find a legitimate and genuine place among his family. Beyond the house's architecture, Idrissa's brothers left signs of their successful expatriation on the walls and through the photographs they sent to their family.

Meaningful pictures

Later on, while we are speaking with Aida – Omar's wife – Idrissa starts discussing a series of photographs which Omar printed out and sent to her. Both Aida and Idrissa have a little explanation for each picture which Aida had gathered into a small chronological album. Idrissa explains his brother's lifestyle in Europe from the pictures and describes the way he moves, works, eats, prays and sends money and so forth. Through these photographs and messages, Omar filters the information about his life in Spain. He successively pauses while he is cooking, phoning from the landline and eating a sandwich, sitting on the floor with a dozen other black men. We also see Omar either giving money to the cashier at the supermarket for the groceries or praying in the middle of his Western-style living room. For every detail of his daily life, there is a photograph with an explicit message, which Idrissa is aware of:

*My brother sends signs on the pictures [...] he wants to transmit a message each time. He wants to show that he keeps the link with Senegalese traditions, that he goes on praying and eat in the community. ... Here he wants to show that he lives in modernity, with the computer, the phone [...] and there, that he goes to the supermarket. ... In that one, he wants to show that he sends money.*¹⁷⁵

These twenty photographs are carefully put together into what looks like a self-representation gathering the elements of a lifestyle Omar wishes to have. A striking photograph shows him at a cash machine. He is about to insert a bank note into the slot of the machine in a very explicit manner. Aida explains that through this picture, Omar wants to demonstrate to her how he sends the remittances. She states that she does not know how money is sent via the MoneyGram system in Spain and that she believes in the message of the picture. Through these

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photographs, her husband overly simplifies his everyday life in Spain, converting a cash machine into an automatic money transfer system. These photographs reveal the way Omar manages information and knowledge about what is happening over there, in Spain. Sending these photographs have allowed him to construct a representation of a lifestyle he would like his family to believe he has in Europe. It doesn't matter if he is actually illiterate; he is able to demonstrate his successful experience through the pictures and become someone else. These representations remind us of McKay's work on the photographs taken by Filipino migrants which show

how people deploy photography as a technology to bring into being their desired future selves. By making present ghosts of the future, photographs of the self shape distinctive translocal subjectivities. (McKay, 2008: 381)

In addition, international mobility is celebrated through the pictures on the wall showing the emigrated brothers proudly posing in European-style clothes. In Aida's bedroom, a picture has been enlarged and hung above the bed (photograph 22): Omar is posing for the picture, driving a motorbike. Aida confesses that she knows the motorbike does not belong to him and that he cannot drive a motorbike, but she likes the picture. This picture strongly suggests a successful and enviable migration experience. Idrissa adds:

*But I'm not a fool [...] I know very well that my brother doesn't have a motorbike or that car in the picture.*¹⁷⁶



Photograph 22: Aida and Omar's bedroom, Hann, June 2012, J.H.

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The relationships between the household and the remote places are based on a great tension, which the visible signs of the successful expatriation of the brothers remind the family of throughout the house. Idrissa's narrative sheds light on both the different values of knowledge and the social and geographic hierarchy produced by the migration experience. These representations participate in the construction of a male identity based on the celebration of mobility to the extent that the successful emigrants are able to provide decent livelihoods for their families in an ostentatious way. Despite his illiteracy, Omar is able to manage and filter information about his distant life and take great advantage of his absence. Through mobility, the absence becomes a valuable means to better control the household and at the same time to become emancipated from the weight of the community. This tension is explicit in the pictures. Omar wishes to maintain a strong link with his community, traditions and religion by showing how he prays and lives in the community. Similarly, he also demonstrates how he belongs to a modern world and emancipates himself as a male and an individual somewhere else. More specifically, this mobility has affected the lives of many women like Aida, who are waiting for their husbands or sons who are either at sea or have gone to Europe.

Coping with male absences

In her not-yet-translated French novel, *Celles qui attendent* (*Those who wait*), Senegalese writer Fatou Diome extensively describes the life of the Senegalese wives whose husband or sons have gone to Europe (Diome, 2010). These women organise their everyday life around the men's uncertain but very much expected return. Women bear the absence of men thanks only to the perspective of their expected return. Senegalese mothers sold their belongings and secretly gave their sons everything they had so that they could leave and, in the future, send money back to their community. Traditional mutualised funding systems called "tontine" gather women together: the women who take part in these local groups all put small amounts of money in on a regular basis. Once in a while, one of the women members wins part of these mutual savings by drawing lots. The amounts of money the mothers could gather from these funding systems helped them fund their sons' journeys. Of course, the risk of their sons dying in the sea was considered, but the

temptation was too strong. The initial investment would be compensated for by an “easier” life and remittances sent from Spain. Before being able to go back to Senegal for a holiday, the successful emigrants first needed to obtain legal status. For the women, the expectation was huge. Women sometimes waited for months until they found out that their son or husband had died at sea. Others were still expecting an unlikely return although they have been left without news for years. Sometimes, men did not want to call their family until their situation in Europe was sorted out, and waited for long periods of time before telephoning and announcing that they had obtained legal status and got a proper job or, more simply, that they were coming back to Senegal for a holiday.

In Saint-Louis, Fatou and Amy live on the second floor of their mother-in-law’s house. Fatou’s husband, now in Dakar, used to be a long-distance fisherman who had been fishing everywhere in West African waters. He is now a fish trader and lives with his second wife in Dakar, sending money to Fatou on a regular basis. Fatou speaks and understands French much better than many fishermen’s wives in Senegal. She introduces me to Amy, who is the wife of her husband’s brother and who also shares a bedroom with her children in the same house. Amy’s husband went to Spain six years ago and only came back to Senegal for the first time after five years. Their mother-in-law is a famous fish trader in Senegal; she owns many boats and became a great leader of women fish traders. She had four sons, among whom three had gone to Europe and for whom she helped organise the migration projects. According to Fatou and Amy, despite her comfortable financial situation, she still receives money from her sons on a regular basis.

Fatou and Amy explain that their respective husbands call every two or three days and send money when necessary. Amy feels her situation has improved since her husband has been in Europe. When he used to fish in Guinea-Bissau, he was earning less. When she needed something, she could not call him since he was always at sea. Now, and since her husband got legal status in Europe, it is easier to reach him. He makes decisions on the phone regarding the education of the children and the use of the remittances he sends. Amy is proud that her husband is in Europe, although she does not know what he does there every day, how he lives or when he will come back. She finally confesses that she finds it hard to be separated from him for such a long time but that her complaint is discreet. What is striking in the relationships between women and men is that

women never ask questions of their husband. If a man leaves the house, women cannot ask him where he has gone and when he will come back. These questions will affect men's freedom of movement. Paradoxically, women, when they are mothers (and more rarely wives), remain greatly respected figures. However, although they have a direct influence on the mobility of the men, they can hardly ask them about their life *outside* the household. Women therefore play an ambiguous role in the mobility of the men; they can both actively influence it and passively endure it. They embody powerful immobile agents who keep control over the household, manage the children's education and support their men's mobility. At the same time, they have no control over their men's return and have to deal with their absence.

Fatou lives in the northern part of Guet Ndar's spit of land, 500 metres away from the border with Mauritania. Economic exchanges take place on an everyday basis at the border. Sugar, tea and other goods are sold there by Mauritanian merchants who cross the desert and clandestinely make use of the border. When her sons are at sea, Fatou sends her nephew there to buy sugar and tea. Although she has been living in the same house for the last 20 years, she has never walked to the border. She does not know what the borderland looks like although it is located only half a kilometre away. She does not question this surprising fact as, for her, it is a man's job to walk in the sand and buy things at the border. Her own mobility is reduced to the strict neighbourhood, the marketplace and, once in a while, the city centre – though this is really exceptional. Rather than interpreting this limited mobility as an imposed condition, I prefer to see it as a personal choice. Fatou instead makes use of the mobility of the men who live in the house to achieve her everyday tasks and manage her household. Through this mediated mobility, she builds her own imagined geography of the border space from her intimate, closed home place.

In Dakar, Aida saw her husband, Omar, leave in 2006. They were not yet married when he decided to go to Europe with his elder brothers. Once he settled in Spain, Aida insisted in arranging the wedding as soon as possible in Senegal. She says that now that Omar was in Europe, he represented a "strong value" or somehow a "guarantee",¹⁷⁷ and could easily be asked to marry by other women. She states that she had to seize this opportunity and become his official wife. Their

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mutual families arranged the ceremony in 2007 in the village, a year before her future husband obtained legal status in Spain. The wedding celebration took place without Omar – men’s absence at their own wedding has become a common thing among Senegalese families. When he became a documented worker in 2008, Omar started working as a fisherman in European waters and sending remittances on a regular basis. Since then, he has been coming back for a month once a year. Aida used to work as a hairdresser in the neighbourhood, but as soon as the couple’s situation got better and she had a child, Omar asked her to stop working and stay at home to take care of the family. On average, he sends 30 euros (£24) a month to his wife. As long as he is sending her money, she says that she does “*not have any problem with his decision*”.¹⁷⁸ In addition, Omar did not wish to involve his wife in the house extension works. Aida does not know anything about this enterprise and has not been asked to manage the money transfer. Omar’s mobility has enabled him to have greater control of his wife’s mobility by asking her to stop working. In addition, he could take advantage of the immobility of his wife and the resulting lack of knowledge of foreign places to create an imagined lifestyle elsewhere – as I demonstrated above with the book of photo. Despite Omar’s requirements, Aida does not look like a powerless agent. With the support of her family, she proved to be able to arrange a wedding despite the absence of her future husband – though with his agreement – and seems partly aware of Omar’s wish to magnify his lifestyle in Europe.

These narratives bring to light the specific power–knowledge relationships generated through men’s mobility. Being absent is normal, even at one’s own wedding ceremony. Absences remain synonymous with prosperity and successful mobile experiences. Visible passivity is socially and culturally coded in a negative way, whereas invisible activity is lived as an essential driving force for communities. Men and women have constructed intimacy at a distance. Men’s role in the family seems to be better socially accepted and constructed as technologically and economically mediated. These mechanisms remind us of McKay’s work on Filipino migrant families whose emotional exchanges have been changed by the absence of mothers and mediated through the sending of remittances (McKay, 2007). Furthermore, men’s information-filtering action shapes female imagined mobility. Aida has constructed her transnational imagined mobility through

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Omar's narratives and self-representation. She sees foreign spaces through her husband's eyes, creating a specific imagined geography of these places. As a matter of fact, when I ask her whether she is thinking about joining Omar one day in Europe, she replies that he would not let her come, and, in fact, that she would not even consider this possibility. She is surprised by this question and says that she is supposed to be here, at home, in Senegal. As I sense that she is feeling uncomfortable with my questions, I do not push the conversation any further. She seems to take for granted the balanced organisation of her household between her absent husband and her housewifely duties and would not question this order. Finally, polygamist practices have encouraged male mobility to a lesser extent. These marital practices are socially accepted and are ambiguously linked to mobility.

3. Polygamy and mobility

In her novel, Fatou Diome tells the story of the husband who comes back to his Senegalese village after several silent years of absence spent in Europe (Diome, 2010). His faithful wife had been waiting for him all those years and welcomes him impatiently. In Europe, he married a second wife, a white woman he brings back to his village and introduces to his family and first wife. Polygamy is usual among Senegalese men. Islam is said to allow them to marry up to four women. Although these practices tend to disappear in urban Senegalese societies, traditional fishing communities still foster it. Having four wives and ten children are a mark of prosperity and power. Successful men can demonstrate that they are able to feed as many mouths as they wish to. I have shown in chapter 5 how one of the most respected Senegalese fishers has had five wives, more than thirty children and as many houses. Nevertheless, respondents report that many fishermen marry two to three wives although they do not earn enough to provide decent livelihoods for the extended family. Sometimes, their wives are even obliged to live together under the same roof and "share" their husband every day. Women barely complain of this widespread situation. Fishermen's mobility has greatly fostered this polygamy as it has enabled the fishermen to develop a "network" of places between which they can commute and organise their fishing activity. Polygamy wholly takes part in the mobility system of fishermen; "immobile" wives constitute nodes which men's

mobility unifies. This polygamy also provides the fishermen with the possibility of being absent from the other household and therefore benefiting from the advantage of this absence. In addition, when a fisherman has two wives under the same roof, being mobile helps him escape the family pressure and tensions generated by this situation.

In Saint-Louis, the second wife of Amy's husband lives in the room next to her mother-in-law, on the first floor of the house. As for Fatou, her husband is now living in Dakar with his second wife. Not allowed to say anything, they must deal with this situation without complaining. Fatou's fatalist statement regarding her husband's second wedding says a lot about her emotions:

*It doesn't matter as long as I don't think about it. I have already seen her, his second wife, but I deal with it.*¹⁷⁹

Fishermen from Saint-Louis' spit of land are strongly attached to their land of origin. They often do their best to remain on the spit of land or at least to maintain links with family members in Guet Ndar. However, the extremely high population density of Guet Ndar village does not allow them to build new houses and territorially extend their family. Therefore, marrying a second wife outside the village has enabled them to build their own house without being disconnected from their village of origin. They land their catches in Guet Ndar, organise their fishing trips from there, carry on their relationship to their close family and commute between the external house where the new wife lives and the old familial house. In this way, polygamy enables them to maintain a link between the territory of origin and a more modern lifestyle away from the oppressive traditional pressure of Guet Ndar. Fatou's husband settled in Dakar with his second wife but is always happy to prove his belonging to Guet Ndar effectively by mentioning his first wife's presence there. Mobility and polygamy are connected in several complex ways. In these particular cases, one naturally assimilates female immobility to passivity and powerlessness in coping with the mobile husbands who are taking advantage of their freedom of movement. Nevertheless, women still find spaces of negotiation in these situations.

The "co-wives" negotiate a particular breathing space which enables them to cope with the accepted hierarchy which structures the organisation of the polygamist household. In some

¹⁷⁹ Interview 41

families, the many co-wives can openly struggle together and exercise pressure on the male members of the household. Aziz is the first-born son of a large family – his father had four wives – and before migrating to Europe at the beginning of the 2000s, he was working for his father, who owned a couple of purse seine boats at that time. Aziz explains how he had to leave for Europe to escape the intense pressure the four wives were putting on him:

There is competition [...] and jealousy between the co-wives and their children. For that reason, I was in trouble and had to give up my father's gear. I was the one who caught the fish, brought money, and from that money we used to pay for the family expenses, to eat, drink, pay for the electricity, etc. I was taking the risks at sea, but when I came back, my father's wives wanted to have greater responsibility over the catches and fishing gear. The co-wives wanted to have more fish, and to do whatever they liked whereas I was the one who goes to the sea, who takes the risks. They wanted to make the decisions for the sharing of the catches.¹⁸⁰

Later on, Aziz explains how his father refused to sell him one of his boats once he came back from his first migration trip to Europe:

He refused because he didn't want to be in trouble with the wives, because it's a polygamous family, because he didn't want people to say that I was favoured or that I had been offered the canoe.¹⁸¹

Aziz had funding for a canoe, though he was unable to find one at that time. He decided to leave again for Europe and take advantage of his long-term, multiple-entry visa. Although he used to be a recognised fisher with a decent income, he was now struggling as a street merchant in Italy for a couple of years and was then hired as a welder in a factory. Aziz's personal situation sheds light on the power struggles he encountered when opposing the co-wives and his father. On one hand, he looks like an empowered agent who successfully manages to feed the extended family thanks to his fishing activities, while on the other hand, his mobility experience reflects his need to

¹⁸⁰ Interview 33

¹⁸¹ Ibid

escape the growing ambitions of his mothers-in-law and gain greater control over what he would earn, buy and decide on in his life.

Conclusion

In conclusion, the relationships between gender and mobility are revealed in a myriad of ways through fishermen's mobility patterns in Senegal. Male mobility raises questions of power-knowledge relations and reveals the way households are socially and geographically constructed in relation to external spaces and values of mobility. Seen as a whole, fishermen's mobility demonstrates the ambiguity of these power relations and questions the powerlessness generally associated with women. My data have shown that male's mobility greatly shapes the imagined mobility of women and of the land-based male members of the community. Mobility is certainly used as an empowering strategy for men and encouraged by the less mobile women. Nevertheless, women have proved to be able to negotiate with their supposedly imposed immobility. They foster men's mobility, which they might use for their own personal interests, as in the case of Aida, who hastily arranged her wedding with her absent husband, or of Fatou, who mediates the mobility of the house's males at the Mauritanian border. Mobile and immobile actors progress according to the many tensions between the places from where they structure their everyday life.

This chapter has also raised the paradoxical dependence of traditional community systems on the emergence of individualistic practices. Traditional societies celebrate individual enrichment according to the benefits that may arise from these individual mobile experiences. In fact, from the perspective of the Senegal-based households, one can observe that these tensions have led to many kinds of compromises. These compromises entail not only finding a balance between maintaining the traditional solidarity system and tolerating individualisation, but also between coping with the extreme mobility of absent husbands and finding opportunities to take advantage of this mobility – for the women. In other words, the less mobile community members have, like the fishermen, proved that they elaborate subtle means – or De Certeau's tactics – in order to negotiate

possibilities of freedom, power and individual emancipation without openly resisting or challenging existing social orders.

Chapter 10 -

Conclusion: Modern Seamen, Free Subjects?

This research has investigated the experiences of individuals and provided a different view of mobility and, to a larger extent, of West African mobility patterns. I have attempted to overcome the traditional push-and-pull factors that traditionally explain migration patterns. My approach has revealed the dynamics inherent in the organisation of a particular traditional West African community through the analysis of the power struggles at the heart of its mobility patterns. This research has challenged a too European-centrist view of West African flows which tends to keep West African subjects out of modern times and history, as suggested in President Sarkozy's Dakar speech in 2007 (Bergson & Ngnemzué, 2008). Investigating these microphysics of power has revealed that there are constant negotiations of power resulting in compromises within traditional communities and between state actors or the fishers themselves. My results raise a discussion on the dichotomist representations that oppose modernity to tradition, archaism to technology and "powerless" actors to dominant, powerful actors. Through their mobility, the seamen produce "hybrid" knowledges that question these oppositions. Fishermen are resilient actors who must cope with more sophisticated mobility-related state control practices. Fishermen consider themselves to be modern seamen and are surprised not to be considered as such, as this last narrative suggests:

The toubab [white people] sails around the world, but we want to go to Spain with our canoes and we are told that these are shaky boats [pirogues de fortune]! There is this toubab who paddles up to Guyana and people are surprised that we go to Spain with our engines. There is a problem!¹⁸²

This research has not proposed to romanticise fishermen's mobility, and in fact does the exact opposite, and instead looking at the fishermen as individuals, and not as a mass, inquiring

¹⁸² Interview 43

into subjectivities rather than globalising statistics. President Sarkozy's provocative speech interestingly emphasises the dichotomies which my research has sought to nuance:

The African tragedy is that the African is not sufficiently integrated in history. The African peasant [...] whose ideal is to live in harmony with nature, only knows the ever revolving wheel of time punctuated by the unending repetition of the same gestures and the same words. In this mindset whereby everything always starts afresh, there is neither room for the human adventure nor for the idea of progress. In such a universe where nature reigns supreme, the African remains immobile amid an unchanging order in which everything seems to be predetermined. Here human beings never take a leap into the future. It never dawns on them that they can get out of the humdrum repetitiveness and forge their destiny. (Sarkozy in Bergson & Ngnemzué, 2008)

President Sarkozy gave this speech on the 26 July 2007 in Dakar, shortly after he was elected. At that time, the images of irregular Sub-Saharan migrants landing in the Canary Islands had reached the French media and contributed to the construction of popular fears about immigration. Sarkozy made this speech in the context of the emerging debates on national identity in France and on the role of colonialism in Africa and an increase in irregular maritime migration flows from Senegal to Europe. These lines from his speech have been highly criticised for their racial tone, and it is not my intention to thoroughly analyse them. Bergson and Ngnemzue have already proposed an efficient reading of their ideological roots (2008), emphasising the way this speech reflects a high degree of ignorance of African realities and the pre-determinism that seems to characterise African people. Sarkozy's words could be seen as an interpretation of fishermen's mobility, as the "African" peasant reminds us of the Senegalese fisherman. Here, Sarkozy opposes the ideas of modernity, progress, mobility and individualism to the idea of an archaic, immobile and unchanging Africa. His speech reproduces the identity of a supposed African unity unable to comprehend the complexity and multiplicity of modernity and progress. The "African" is stuck in repetitive rhythms of life which keep him away from the emancipatory power of modernity, novelty and progress. Sarkozy's condescending tone simplifies African realities, knowledges and

adaptations. This research has provided some key ideas with which to overcome these provocative simplifications by showing how the fishermen have used their mobility as a means to reach personal freedom, self-emancipation and independence. Because fishermen are not determined by their physical environment, they remain free subjects whose movements cannot be reduced to the repetitiveness of nature's cycles.

Free subjects

I have shown that fishermen are not environmental migrants whose movements are constantly adjusted to natural constraints. Although these seamen apprehend their natural environment in a familiar way and adjust to ecological constraints, they move as free subjects. Through this research, I have provided convincing knowledge about the meanings, origins, limits and implications of fishermen's mobility, both in West African waters and beyond, when they reached Spain. Immersions in the field and ethnographic data have helped apprehend the tensions between the mobile actors and their community. Through fishermen's narratives, I understood that mobility is not a simple movement but rather a meaningful enterprise. Mobility is not reducible to migration as it takes the shape of local and international maritime mobilities, cross-border illegal movements, land-based mobility or women's and failed migrants' imagined mobility. I have shown that fishermen are not environmental migrants. Rather, their mobility carries political, economic, geographic and social meanings which the concept of environmental migration does not appropriately address.

I have demonstrated how the dynamism of fishermen's maritime mobility first finds its roots at the national level of Senegal. The limits of Senegal's governance have participated in the expansion of fishermen beyond national borders by making possible overfishing practices throughout Senegalese waters. Indirectly, Senegal's governance fostered fishermen's mobility ambitions. Fishermen developed their expertise relating to the sea, took advantage of mobility-related state policy and first learnt how to circumvent or take advantage of state regulation at the level of Senegal's waters. Furthermore, the socio-economic organisation of mobility has generated connections between sea and land spaces and has resulted in the projection of fishermen's power

onto the sea and the creation of knowledge and geographies of maritime areas. By inquiring into fishermen's mobility through the perspective of borders, I raised the question about the social construction of maritime borderlands. Fishermen actively use borders and spaces beyond borders, in Mauritania, Guinea-Bissau and Guinea. Whatever political and economic constraints these border practices put on them, fishermen always find ways and means to make their mobility legitimate, profitable and meaningful. I have shown that through international fishing mobility, the sea is a space of political struggles, dangers and confrontation – in Mauritania. Border-crossing strategies changed the ocean into an area of opportunities, enrichment and emancipation, negotiation, knowledge and expertise production. This whole maritime border geography took new shapes when fishermen started undertaking journeys to Spain. The crossing of the ocean made possible their migration perspectives in Europe. The sea then became a whole border space to be crossed. All these mobility practices have strengthened the gendered organisation of the spatial practices of fishermen's communities. Women's narratives have demonstrated how they take advantage of men's mobility to affirm themselves even though they have no direct control over this masculine mobility. Like the fishers, they pragmatically develop tactics to benefit from this mobility without challenging existing orders.

This study has demonstrated that mobility provided opportunities for mobile subjects to affirm themselves. Whether they are citizens, international irregular migrants, husbands, sons, local or national leaders, seamen or local or international fishermen, the subjects seek means and compromises for the affirmation of the self through their mobility. Their mobility is a means to circumvent institutional structures through either negotiation practices or taking detours. Through these practices, fishermen affirm their claim, existence, needs and knowledges. Because they are mobile *by nature*, they consider their mobility to be the only means to affirm themselves. Through their mobility, fishermen live and experience what their unwanted presences on land in the households prevent them achieving. In Mauritanian waters, they legitimate their mobility by their historical use and knowledge of Mauritanian grounds. Mauritanian waters have been traditional spaces of mobility; jeopardising this "legitimate" use means questioning fishermen's identity as mobile subjects. Similarly, opportunities for maritime migration to Europe provided them with the

possibility of using their mobility as a means to reach self-emancipation and autonomy vis-à-vis their community. Their failures to reach Spain and the resulting loss of control over their mobility have made the fishermen question their identity as mobile subject. As a result, they got depressed and were deeply and emotionally affected. Because fishermen are emotionally self-invested in the representation of their mobility, they consider external attempts to stop and slow down their mobility as invasive and illegitimate practices. Their lack of distance regarding state regulation practices reveals this emotional investment and their emotive reactions. I have shown how fishermen's complains of abusive arrests and fuel seizure in West African waters and the repatriation measures on the Canary Islands reflect their emotional apprehension of state practices. However, the rationalisation of their fishing expeditions in Guinea and Guinea-Bissau's distant waters and the relatively peaceful political background of their access to these fishing places have provided the fishermen with more distance and less affective involvement in their mobility – as I have shown through their appropriation practices of naming the sea.

Most of the time, the mobile subjects avoid confronting the actors who embody these structures and institutions. In fact, confrontation constitutes the last step fishermen consider when the situation is too difficult to handle and makes negotiation and detours inefficient, as when Guet Ndarian openly confronted the Mauritanian border agents. Although by circumventing these institutions fishermen do not openly challenge existing orders, their mobility produces this effect by creating new orders and generating institutional responses adjusted to their mobility. One might ask why fishermen use their mobility as a pragmatic way to elude institutional pressures and constraints rather than openly resisting and confronting them. Precisely because fishermen feel confident about using their mobility, knowledge and expertise for their own interests, no other methods seem to be as efficient to achieve their goals. I have shown how professional organisations of fishers lack credibility and cohesion and can barely get the state to pay attention to their interests. Similarly, they have no means to revolt against the institutional structures that prevented them reaching Europe. The solidarity system on which their community is based is too strong for them to efficiently struggle against it. Fishermen are not only too weak to struggle. They pursue their own interests with the tactics they deploy in order to circumvent these institutional structures.

Fishermen satisfy their interests by becoming brave migrants willing to sacrifice their lives by reaching Europe for their community. They can exercise power through these tactics and become respected individuals. Their community is certainly demanding and oppressive, though it is paradoxically thanks to this oppressive solidarity system that fishermen meet their personal goals of self-emancipation through their mobility. Revolting against this system would jeopardise their opportunities of achieving the object of their revolt. Instead, taking advantage of and coping with these systems is a pragmatic compromise that enables the fishermen to reach their goals.

Inquiring into fishermen's emotions provides further responses. This research has shown that in many situations, lack of trust between the mobility-related actors generates bitterness and vulnerabilities. To compensate for this lack of trust and give more balance to these situations, actors develop power-knowledge mechanisms. The Senegalese state invested in mobility-related practices to control fishermen's mobility. Land-based funders and fish traders control fishers' mobility at a distance. Moreover, fishermen do not trust state practices and legitimate their own illegal practices because of the lack of trust they have in the Senegalese state. Because fishers do not trust in anything other than their own mobility, they are unable to consider revolting against the institutional systems. Their lack of confidence strengthens the power relations between the mobility-related actors and the state agents, and results in more illegal practices, strategies and tactics. Indirectly, these mechanisms reflect and reproduce individualisation practices. I have shown how, in many situations, when fishermen do not trust the other fishermen, they secretly exploit their newly discovered fishing places. Their lack of trust of their fellow fishermen engages them in competition and individualist practices which the solidarity system paradoxically seeks to prevent. These mechanisms have given a strong value to different kinds of knowledges and control of such knowledges.

Controlling and producing knowledge are essential to these individualisation processes. Mobility involves different kinds of knowledges: knowledge of the sea, expertise in relation to mobility, and navigation and fishing techniques and practices. Mobility also involves knowledge of state regulations in order to maximise the benefits of taking advantage of these regulations. There is also the knowledge of what fishermen should invest in their fishing expeditions and the awareness

of economic and political constraints and requirements. Moreover, knowledge is also about what fishermen should let others know or keep to themselves, such as the exploitation of secret fishing places, illegal fishing practices or earnings and savings, or what fishermen's Senegal-based relatives should know about their lifestyle abroad and what their neighbours and families should know about their economic and social status. Fishermen either let their community know about their wealth, and are exposed to the demanding community members, or make the choice of hiding signs of wealth and prosperity. Similarly, through their absence, fishermen let the land-based community know about their working activities. Their attempts to remain invisible, either to the eyes of their community or to coast guards at sea reflect their wish to let others know – or not – about their own mobility. Fishermen base their relationship to others on these “knowing” and “letting-know” practices. These knowledge-related practices enable them to gain control over their life, mobility, expectations and ambitions. In other words, fishermen affirm themselves through the control of what they know, claim to know and let others know. Knowing how to manage technologies as well as the knowledge provided by technologies are other means that support fishermen's control of their social, economic, political and natural environments.

I have shown how engines and GPS devices first help the fishermen to explore remote fishing areas and navigate off shore and at a distance. With GPS, fishermen orientate themselves at sea, circumvent borders and restricted fishing areas and finally go to the Canary Islands. They also register their fishing places with the intention of coming back. Using mobile phones and Skype, fishermen maintain links with their land-based families and filter the information related to their mobility and emigration. We have seen that sometimes they can be informed about where they should best sell their catches and negotiate the prices of their catches before landing. Conveyors of boat migration to Spain organised the whole journey through their mobile phones, hiring middlemen and recruiting would-be migrants. Technologies reproduce and strengthen the function of ‘knowing’ and ‘letting-know’ practices that give shape to fishermen's mobility. Through these technologies, fishermen efficiently mediate power and better control their mobility and trajectories at sea. Fishermen's practical knowledge is certainly based on “mêtis” but has not always excluded “techne” (Scott, 1998). In many situations, fishermen have proved that they can divert the state's

intentions of acting on their mobility. Their mobility tactics demonstrate that they have appropriate state regulation measures – such as the spread of motors – and border practices. The fact that they seek to buy proper fishing licences for their maritime expeditions in Guinea and Guinea-Bissau shows that they are willing to adjust to state requirements. Again, when these requirements do not prevent them from fulfilling their own interests and freely unfolding their mobility, fishermen have proved to pragmatically adopt them. The state's lack of consideration for fishermen's practical knowledge only reinforces and reproduces the power relations I have described.

Simplifying metaphors

The study of fishermen's mobility has attempted to take into account the multiple dimensions of maritime spaces (Peters, 2010; Steinberg, 2013). Through their mobility, fishermen have not only proved that they can make use of the sea as a surface upon which they unfold their mobility or from which they extract valuable resources; their mobility is pragmatic to the extent that it fully addresses the various dimensions of the sea. The way fishermen apprehend and progress on the ocean first involves a specific knowledge of marine-rocks grounds for demersal fishers or moving shoals for the pelagic fishers. Fishermen sometimes look for sea currents so that they can trap fish shoals. I have shown how they navigate according to the sea depth and landscape they can see from the sea. Their knowledge entails managing high swells, currents and rough conditions in high seas. This knowledge also implies being aware of when to take the decision to turn back to Senegal to avoid accidents. I have shown how, on both sides of the Mauritanian maritime border, different fish species dwell in different sea grounds and offer different opportunities to the fishermen. I have emphasised how maritime borders are better apprehended as borderlands than strictly reduced to maritime borderlines. These borderlands involve sea grounds, moving surfaces and fish shoals, landscapes seen from the sea and mobile actors – either fishermen or border agents. For the Guet Ndarians who fish in Mauritania, their mental cartography of the maritime borderland has indicated that they progress according to a combination of sub-marine references and coastline landmarks rather than to the mere surface of the sea. For the fishermen who went to Europe by sea, it is the entire ocean – that means the changing combination of its

surface, winds, waves, currents and risks of drowning – that fishermen took into account or experienced in their sea journeys and that constitutes the border function of the ocean. This thesis has sought to take into account the material complexity and fluidity of the ocean through the interpretation of fishermen’s narratives on their navigation experiences.

Finally, this thesis has questioned the limits of the use of metaphors to address mobilities and sea spaces, which have been explored by Steinberg and Blum in their respective works on oceanic spaces (Blum, 2010; Steinberg, 2013). Steinberg follows Blum’s argument that “the sea is not a metaphor” (2013: 156), emphasising the needs for scholars to avoid “overtheoris[ing]” (2013: 157) the ocean space. Indeed, I have shown how these metaphors tend to crystallise representations of the oceanic spaces and dismiss practical realities. There is no metaphor efficient enough to address the meaningful mobility and maritime geography of the fishermen, their changing representation of the sea and adaptation to changing environments and constraints as well as the risks they are confronted with through their mobility. What the “marine heterotopias” and the representation of the fishermen as Deleuzian nomads certainly bring to the fore are the many mechanisms involved in fishermen’s mobility. These metaphors shed light on the ability of the fishermen to project power onto the sea or progress as powerful actors who avoid state practices. Although these metaphors undoubtedly give to their mobility meaningful functions, such theorisations have limits.

Through their crystallisation effect, the metaphors tend to romanticise the mobile subjects. I have instead emphasised the pragmatism of the fishermen and the resulting pragmatic geographies. This idea of pragmatism gives strength to the constant changes to which fishermen adjust. Their practices rationalise their conception of the sea space and mobility according to fluctuant elements and in relation to what they expect their mobility will provide them with. Fishermen are pragmatic to the extent that they know how to produce and control knowledge so that they meet their own economic and social interests. Fishermen have learnt how to make use of familial and social networks to make their mobility possible. As Steinberg puts it, the theorisation of the ocean strengthens the “binary division between land and sea” (2013: 163). Indeed, seeing the fishermen as nomads progressing on maritime spaces would ignore the meaningful and necessary

connections that their mobility establishes and on which their mobility organises between sea and land spaces. I have shown how fishermen's mobility depends on and progresses according to fixed points and land-based actors. Moreover, I demonstrated how the idealisation of their mobility dismisses their practical realities and the risks they must cope with every day. Because the sea "is a space that is *constituted by* and *constitutive of*¹⁸³ movement" (Steinberg, 2013: 165), the practice of such space remains unpredictable and unstable, making even the most experienced seamen forced to reconsider and adjust their movement to the sea in a permanent way. Theorising this movement therefore only results in stabilising this inherent instability. Fishermen's pragmatism reaches its limits precisely when its adjustment runs up against these unpredictable events. I have shown how fishermen have been struggling with the changing configuration of the mouth of the Senegal River, or how they have faced strong storms and rough navigation conditions on their maritime route to Europe. Their expertise and spiritual beliefs have constituted the only supports for them to cope with the risks of drowning and death at sea. Theorising their mobility fails to fully address these risks; this is even more valid in that precisely these risks have been the basis of fishermen's own idealisation of their mobility. Because coastal communities are aware of the risks involved in navigation, fishermen have become idealised figures in Senegal. Moreover, because fishermen have romanticised their mobility, they have overestimated the value of their skills and knowledge and have been exposed to greater risks. The disillusion relating to failed mobility is the limit of fishermen's pragmatic mobility and demonstrates that mobility is not always a successful enterprise.

Suggesting pragmatic alternatives

Despite the ambitions of recent participatory policies, Senegal state's lack of pragmatism and ignorance of fishermen's practical knowledge have proved to provide inefficient responses to manage Senegal's fishing sector. The state might first find its legitimacy in the establishment of stable relationships with the actors of the fishing sector. Involving fishermen's practical knowledge within participatory policies appears to be a first, essential step for the implementation of

¹⁸³ Original emphasis

successful fishing resource management programmes. Because the fishermen and the state share similar interests – that is, the sustainable management of marine resources – there are possibilities for compromises and negotiations relating to the building of stable, trusting relationships. In Ouakam, the local team of fishermen has proved to be sensitive to the state’s participatory policy as they are willing to fulfil their commitment regarding the participatory programme.

Lack of financial means and infrastructures remain important constraints that have prevented efficient participatory surveillance. These participatory surveillance structures are not to be questioned per se as they originally aimed to give legitimacy to the local actors. Both the Senegalese state and the fishermen are responsible for the management of maritime fishing resources. Therefore, participatory programmes appear to be coherent directions to take. But because these structures imply that fishermen still financially depend on the state to efficiently perform surveillance at sea, local actors do not fully integrate these systems. In Ouakam’s restricted fishing areas and Joal’s protected marine area, local fishermen often run out of fuel for patrolling the local areas. A participatory sailing surveillance system would appear to be a practical alternative. I have shown that fishermen now exclusively move on the sea with engines and certainly consider sailing as being archaic. However, fishermen assimilate the use of engines into their fishing performance. Thus, suggesting the use of sails exclusively for surveillance aims would not jeopardise their fishing performance, question their ability to be modern seamen or take them back into an archaic era. Sailing would considerably reduce costs – though such alternatives cannot fully exclude the use of engines – and constitute a coherent, sustainable alternative for the surveillance of protected marine areas. Some traditional wooden canoes are still equipped for sailing. Implementing such ideas entails consulting the fishing communities and their leaders and adjusting the participatory sailing surveillance to their needs and habits, and the marine culture. Also, sailing boats would be less reactive than motorised boats, and the ability to approach illegal fishers at sea would certainly be limited. However, patrolling on board sailing boats would initially have a significant deterrent effect. Moreover, fishermen recognise each other at sea thanks to the traditional paintings on their wooden boats. In this way, they can take advantage of the “social

power of surveillance”¹⁸⁴ which the DPSP informant put forward. Such a programme requires the regulators to take into account fishermen’s emotional investment in their mobility and sea activities. Compensating for the power struggles between the fishermen and their institutions by building strong, trusting relationships must be considered.

¹⁸⁴ Interview 5

References

Newspaper Articles

Afrique 7, 2013, 18 June, *La pêche source de discorde entre la Mauritanie et le Sénégal*, Issa Sumai, <http://www.afrique7.com/economie/7074-la-peche-source-de-discorde-...3>, consulted on 14 December 2013

Afriqinfos, 2012, 13 January, *Quatre pêcheurs sénégalais blessés par un tir de la marine mauritanienne*, <http://www.afriqinfos.com/articles/2012/1/13/afrique-occidentale-194616.asp>, consulted on the 13 December 2013

BBC, 2012, 9 March, *Oxfam warns of West Africa drought 'catastrophe'*, BBC News Africa, , <http://www.bbc.com/news/world-africa-17308913>, consulted on the 20 March 2014

BBC, 2014, 9 January, *The unequal battle over West Africa's rich fish stocks*, Thomas Fessy, <http://www.bbc.com/news/world-africa-25660385>, consulted on the 20 March 2014

Courrier International, 2012, 5 November, *Sénégal, Les Veuves de la Mer*, Abdoulaye Thiam in Sud Quotidien published in Courrier International, <http://www.courrierinternational.com/article/2012/11/05/les-veuves-de-la-mer>, consulted on the 7 January 2014

Guardian.co.uk, 2012, 2 April, *Senegal's fishing community will act on foreign fleets if government doesn't*, John Vidal, Joal, Senegal, guardian.co.uk, <http://www.theguardian.com/global-development/poverty-matters/2012/apr/03/overfishing-foreigners-senegal-fishermen-piracy>, consulted on the 13 March 2014

IPS, 2011, 2 April, *Bras de fer entre gouvernement et pêcheurs*, Souleymane Faye, IPS International, <http://ipsinternational.org/fr/note.asp?idnews=6452>, consulted on the 30 July 2013

Jeune Afrique, 2012, 2 February, *Sénégal – Mauritanie : La vie entre pêcheurs n'est pas un long fleuve tranquille*, Rémi Carayol, <http://www.jeuneafrique.com/Article/JA2663p043-045.xml0/#ixzz1lPTeAlwm>, consulted on the 13 December 2013

Jeune Afrique, 2013, 24 March, *Sénégal : 8 morts et 15 disparus après le naufrage de pirogues*, <http://www.jeuneafrique.com/Article/DEPAFP20130324172115/> consulted on the 15 December 2013

Le Soleil, 2013, 11 December, *La Mauritanie restitue 180 moteurs hors-bords et 150 pirogues aux pêcheurs sénégalais*, Boubou Saw, http://www.lesoleil.sn/index.php?option=com_content&view=article&id=34262:la-mauritanie-restitue-180-moteurs-hors-bords-et-150-pirogues-aux-pecheurs-senegalais&catid=78:a-laine&Itemid=255, consulted on the 23 January 2014

Ndarinfo, 2011 (a), 5 May. *Pêche : les guet-ndariens de nouveau autorisés à mener leurs activités en Mauritanie*, http://www.ndarinfo.com/Peches-les-guet-ndariens-de-nouveau-autorises-a-mener-leurs-activites-en-Mauritanie_a374.html consulted on the 15 April 2014

Ndarinfo (b), 2011, 13 December, *15 pirogues saisies à Ndiago : les pêcheurs guet ndariens dans tous leurs états* http://www.ndarinfo.com/15-pirogues-saisies-a-Ndiago-les-pecheurs-guet-ndariens-dans-tous-leurs-etats_a1404.html, consulted on the 13 December 2013

Ndarinfo (c), 2012, 17 January, *Sénégal – Mauritanie : De nouvelles zones d'ombre à dissiper*, http://www.ndarinfo.com/Senegal-Mauritanie-De-nouvelles-zones-d-ombre-a-dissiper_a1696.html, consulted on the 13 December 2013

Ndarinfo, 2014, 23 March, *Saint-Louis : 207 morts sur la brèche, en 10 ans*, http://www.ndarinfo.com/Saint-Louis-207-morts-sur-la-breche-en-10-ans_a8156.html, consulted on the 25 March 2014

RFI, 2014, 6 March, *Haïdar el-Ali, ministre Sénégalais de la Pêche et des Affaires Maritimes*, Christophe Boisbouvier, <http://www.rfi.fr/emission/20140306-haidar-el-ali-ministre-senegalais-peche-affaires-maritimes/>, consulted on the 13 March 2014

Internet Websites

NOAA, 2014, *Illegal, unreported, and unregulated Fishing IUU*, NOAA Fisheries <http://www.nmfs.noaa.gov/ia/iuu/faqs.html>, consulted on the 13 March 2014

Greenpeace, 2014, *Exposed: Illegal Fishing in West African Seas*, Greenpeace, <http://www.greenpeace.org/africa/en/News/news/Exposed-Illegal-Fishing-in-West-African-Seas/>, February 24, 2012, consulted on the 13 March 2014

World Bank, 2014, *World Development Indicators, Data*, Senegal, Sub-Saharan Africa, http://data.worldbank.org/country/senegal#cp_wdi, consulted on the 13 March 2014.

World Bank, 2014, *Poverty headcount ratio at \$2 a day (PPP) (% of population)*, Data, Sub-Saharan Africa <http://data.worldbank.org/indicator/SI.POV.2DAY>, consulted on the 13 March 2014.

Cartography

VLIZ (2014). Maritime Boundaries Geodatabase, version 8. Available online at <http://www.marineregions.org/>. Consulted on the 13 May 2014

GEBCO, 2014, General Bathymetric Chart of the Oceans, GEBCO One Minute Grid, <http://www.gebco.net/>, consulted on the 13 May 2014

Bonin, M., Le Tixerant, M., & Ould Zein, A. (2013). *Atlas Cartographique du Droit de l'Environnement Marin. Sénégal, Mauritanie, Guinée* (112pp). Dakar.

Bibliography

Adepoju, A. (2002). Fostering free movement of persons in West Africa: achievements, constraints, and prospects for intraregional migration. *International Migration*, 40(2).

Adepoju, A. (2005). *Migration in West Africa*. Global Commission on International Migration, Lagos.

Adey, P. (2010). *Mobility. Key ideas in geography*. London: Routledge.

Alder, J., & Sumaila, U. R. (2004). Western Africa: A fish basket of Europe past and present. *Journal of Environment and Development*, 13(2), 156–178.

Allen, J. (2011). *Lost geographies of power*. London: Blackwell.

Anderson, J., & O'Dowd, L. (1999). Borders, border regions and territoriality: contradictory meanings, changing significance. *Regional Studies*, 33(7), 593–604.

Anderson, J., & Peters, K. (2014). *Water worlds: human geographies of the ocean*. London: Ashgate.

Appadurai, A. (1996). *Modernity at large: cultural dimensions of globalization*. Minneapolis; London: University of Minnesota Press.

Application Protocole. Protocole d'application de la convention entre la République de Guinée-Bissau et la République du Sénégal en matière de pêche maritime (1995). 22 December 1995, République de Guinée-Bissau, République du Sénégal, Dakar.

Application Protocole. Protocole d'application de la convention en matière de pêche et d'aquaculture signée le 25 février 2001 à Nouakchott (2008). Gouvernement de la République Islamique de Mauritanie Gouvernement de la République du Sénégal.

Atkinson, D. (2000). Nomadic strategies and colonial governance. Domination and resistance in Cyrenaica, 1923–1932. In J. P. Sharp (Ed.), *Entanglements of power: geographies of domination* (pp. 93–301). London: Routledge.

Bakhayokho, M., Chaboud, C., Diop, H., Mustapha, K., Nguer, A., Ahmed, O. M., & Mathoeung, S. (1988). *Les ressources halieutiques de la ZEE Mauritanienne. Description, évaluation et aménagement* (pp. 1–19). Nouakchott.

Balibar, E. (2002). *Politics and the other scene*. London and New York: Verso.

Bates, D. (1989). Environmental refugees ? Classifying human migrations caused by environmental change. *Sciences-New York*, 23(5), 465–477.

Bava, S. (2003). De la « baraka aux affaires » : ethos économique-religieux et transnationalité chez les migrants sénégalais mourides. *Revue Européenne Des Migrations Internationales*, 19(2), 69–84.

Bear, C., & Eden, S. (2008). Making space for fish: the regional, network and fluid spaces of fisheries certification. *Social & Cultural Geography*, 9(5), 487–504.

Beauchemin, C., Kabbanji, L., Sakho, P., & Schoumaker, B. (2013). *Migrations africaines : le codéveloppement en questions: Essai de démographie politique*. Armand Colin.

Bergson, A., & Ngnemzué, L. (2008). French policy on immigration and co-development in light of the Dakar speech. *CODESRIA Bulletin*, 1 & 2, 62 – 67.

Bigo, D. (2000). “When two become one.” In M. Kelstrup & M. Williams (Eds.), *International relations theory and the politics of European integration : power, security, and community*. New York: Routledge.

Bigo, D. (2010). Freedom and speed in enlarged borderzones. In V. Squire (Ed.), *The contested politics of mobility. Borderzones and irregularity* (pp. 1–25). London: Routledge.

Bigo, D., Carrera, S., Guild, E., & Walker, R. B. J. B. J. (2008). The changing landscape of European liberty and security: the mid-term report of the CHALLENGE project. *International Social Science Journal*, 59(192), 283–308.

Bilateral Agreement. Accord de gestion et de coopération (1993). Dakar, Senegal: Gouvernement de la République du Sénégal et Gouvernement de la République de Guinée Bissau.

- Binet, T., & Failler, P. (2010). *Aperçu de l'histoire des migrations de pêcheurs artisanaux en Afrique de l'Ouest de 1880 à 1980. Revue bibliographique. Management*. CSRP - IUCN, Dakar, Senegal.
- Binet, T., Failler, P., & Agossah, M. (2012). *Migrations contemporaines des pêcheurs artisans en Afrique de l'Ouest. Synthèse et axes de recherche*. UICN- CSRP, Dakar, Senegal.
- Black, R. (1998). *Refugees, environment and development*. London: Longman.
- Black, R. (2001). Environmental refugees: myth or reality? *Working Paper No 34, New Issues*.
- Black, R., Kniveton, D., Schmidt-Verkerk, K., & Smith, C. (2008). Climate change and migration : improving methodologies to estimate flows. *IOM Migration Research Series*, (33).
- Blum, H. (2010). The prospect of oceanic studies. *PLMA*, 125(3), 670–677.
- Boely, T., Chabanne, J., & Fréon, P. (1979). Schémas migratoires, aires de reproduction des principales espèces de poissons pélagiques côtiers dans la zone sénégal-mauritanienne. *Report of the ad hoc working group on coastal demersal fish stocks from Mauritania to Liberia*. FAO Fisheries and Aquaculture Department.
- Bonin, M., Le Tixerant, M., & Ould Zein, A. (2013). *Atlas cartographique du droit de l'environnement marin. Sénégal, Mauritanie, Guinée*. CSRP - IUCN - IRD - Terra Maris: Dakar.
- Bouchard, G. (1996). Le savoir-pouvoir de/du sexe. *Laval Théologique et Philosophique*, 52(2), 527 – 549. doi:<http://id.erudit.org/iderudit/401009ar>
- Bouilly, E. (2008). La couverture médiatique du collectif pour la lutte contre l'immigration clandestine de Thiaroye-sur-Mer (Dakar- Sénégal). Une mise en abîme du discours produit au « Nord » sur le « Sud ». *REVUE Asylon(s)*, 3.
- Bredeloup, S., & Pliez, O. (2005). Migrations entre les deux rives du Sahara. *Autrepart*, 36, 1–17.
- Calvès, A. E., & Marcoux, R. (2007). Présentation : les processus d'individualisation “à l'africaine.” *Sociologie et Sociétés*, 39(2), 5.

- Calvo, M., Javaloyas, D., Albero, D., & Garcia-rossello, J. (2011). The ways people move : mobility and seascapes in the Balearic Islands during the late Bronze Age (c . 1400 – 850 / 800 BC). *World Archaeology*, 43(3), 345–363.
- Carling, J. (2007a). The merits and limitations of Spain ’s high-tech border control. *Migration Information Source*, 1–5.
- Carling, J. (2007b). Unauthorized migration from Africa to Spain. *International Migration*, 45(4), 3–37.
- Carling, J., & Hernández-Carretero, M. (2011). Protecting Europe and Protecting Migrants? Strategies for Managing Unauthorised Migration from Africa. *British Journal of Politics & International Relations*, 13(1), 42–58.
- Carrera, S. (2007). The EU border management strategy: Frontex and the challenges of irregular immigration in the Canary Islands. *CEPS Working Document*, (261). doi:http://www.ceps.eu
- Castells, M. (2009). *The rise of the network society. Social Change* (Vol. I). Oxford: Wiley-Blackwell.
- Catanzano, J., & Rey Valette, H. (2002). Histoire des pêches, accords de pêche & politiques publiques en Afrique de l’Ouest. In *Proceedings of the International Symposium of Dakar - 24-28 June*. Dakar.
- Chaboud, C., & Kebe, M. (1991). Migratory movements in marine fisheries. In M. C. Diaw & J. M. Haakonsen (Eds.), *Round Table on Fishermen’s Migrations in West Africa, Kokrobite (GHA), 1990/11/6-9* (pp. 52–74). Cotonou: FAO.
- Chalk, P. (2010). Piracy off the Horn of Africa : *The Brown Journal of World Affairs*, 16(2), 89–108.
- Chauveau, J.-P. (1984). La pêche piroguière sénégalaise, les leçons de l’histoire. *Revue Mer*, (Special), 10–15.
- Chauveau, J.-P. (1986). Une histoire maritime africaine possible ? Historiographie et histoire de la navigation et de la pêche africaines à la côte occidentale depuis le XVe siècle. *Cahiers d’Études Africaines*, 26(101), 173–235.

Chauveau, J.-P. (1989). Histoire de la pêche industrielle au Sénégal et politiques d'industrialisation. *Cahiers Des Sciences Humaines*, 25(1 -2), 237–258.

Chauveau, J.-P. (1991). Géographie historique des migrations de pêche dans la zone du Copace. In J. Haakonsen & C. Diaw (Eds.), *Migration des pêcheurs en Afrique de l'Ouest* (pp. 13 – 28). Cotonou: FAO, DANIDA, NORWAY.

Chauveau, J.-P., Jul-Larsen, E., & Chaboud, C. (2000). *Les pêches piroguières en Afrique de l'Ouest. Dynamiques institutionnelles: pouvoirs, mobilité, marchés*. Paris: CMI; IRD; Karthala.

Chauveau, J.-P., & Samba, A. (1989). Market development, government interventions and the dynamics of the small-scale fishing sector: an historical perspective of the Senegalese case. *Development and Change*, 20, 599 – 620.

Choplin, A., & Lombard, J. (2008). Migrations et recompositions spatiales en Mauritanie. *Afrique Contemporaine*, 228(4), 151 – 170.

Code for Maritime Fisheries, (1998). Code de la pêche maritime. Loi no. 98-32 - 14 April, Senegal.

Conradson, D., & McKay, D. (2007). Translocal subjectivities: mobility, connection, emotion. *Mobilities*, 2(2), 167–174.

Convention, (1983). Convention entre le Gouvernement de la République du Sénégal et le Gouvernement de la République Islamique de Mauritanie dans le Domaine de la Pêche Maritime. 1983, Nouakchott: <http://faolex.fao.org/docs/pdf/bi-1860>.

Cormier-Salem, M.-C. (1995). Paysans-pêcheurs du terroir et marins-pêcheurs du parcours. Les géographes et l'espace aquatique. *L'Espace Géographique*, 24(1), p. 46–59.

Cormier-Salem, M.-C. (2000). Appropriation des ressources, enjeu foncier et espace halieutique sur le littoral ouest-africain. In E. Chauveau, Jean-Pierre; Chaboud, Christian; Jul-Larsen (Ed.), *Les pêches piroguières en Afrique de l'Ouest. Dynamiques institutionnelles: pouvoirs, mobilité, marchés* (Karthala., pp. 205–229). Paris.

Cresswell, T. (2006). *On the move*. New York: Routledge.

Cresswell, T., & Uteng, T. P. (1994). Gendered mobilities : towards an holistic understanding, 1–12.

Cury, P., & Roy, C. (1988). Migration saisonnière du thiof (*epinephelus aeneus*) au Sénégal : influence des upwellings sénégalais et mauritanien. *Oceanologica Acta*, 11(1), 25 – 36.

Dahou, K., Deme, M., Thiam, D., Douguitigui, C., Ndiaye, P. G., & Sène, A. (2007). *Libéralisation du commerce et gestion durable des secteurs halieutiques en Afrique de l'Ouest. Etude de cas du Sénégal*. Enda - REPAO - WWF, Dakar, Senegal.

Dalby, S. (1996). Environmental security: geopolitics, ecology and the new world order. In T. S. Ulen (Ed.), *Environmental policy with political and economic integration: the European Union and the United States* (pp. 453–475). Carleton U: New Horizons in Environmental Economics series; Ashgate.

Dalby, S. (2009). *Security and environmental change*. Cambridge: Polity.

Dasgupta, S., Laplante, B., Meisner, C., Wheeler, D., & Yan, J. (2007). *The impact of sea level rise on developing countries: a comparative analysis*. Washington: World Bank Policy Research Working Paper 41 36.

De Certeau, M. (1984). *The practice of everyday life*. Berkeley: University of California Press.

De Haas, H. (2007). *The myth of invasion. Irregular migration from West Africa to the Maghreb and the European Union*. Sierra. IMI. International Migration Institute. University of Oxford.

De Haas, H. (2008). *Irregular migration from West Africa to the Maghreb and the European Union: an overview of recent trends*. IOM migration research series ; no. 32. Geneva: International Organization for Migration.

De Latour, E. (2003). Héros du retour. *Critique Internationale*, 19(1), 171 – 189.

Decree no 5916, (2005). Arrêté n° 5916 en date du 25 octobre 2005 portant instauration d'un permis de pêche artisanale. Dakar: Ministère de l'Economie maritime, des Transports maritimes, de la Pêche et de la Pisciculture.

Decree no 90/970, (1990). Décret n° 90-970 du 5 septembre 1990 modifiant le décret n° 87-1045 du 18 août 1987 portant application du Code de la Pêche maritime et relatif aux zones de pêche. , Pub. L. No. 90-970. Senegal.

Deleuze, G., & Guattari, F. (1988). *A thousand plateaus. Capitalism and schizophrenia*. London: Athlone Press.

Deme, M., Bailleux, R., & Ndiaye, K. (2012). *Migrations des pêcheurs artisans sénégalais : état des lieux*. UICN, CSRP and PRCM, Dakar, Senegal.

Deudney, D. (1991). Environment and security: muddled thinking. *Bulletin of the Atomic Scientists*, 47(3).

Diaité, I. (1995). Le règlement du contentieux entre la Guinée-Bissau et le Sénégal relatif à la délimitation de leur frontière maritime. *Annuaire Français de Droit International*, 41(1), 700–710.

Diome, F. (2006). *The belly of the Atlantic*. London: Serpent's Tail.

Diome, F. (2010). *Celles qui attendent*. Paris: Flammarion.

Diop, H., & Thiam, I. (1991). Quelques aspects des migrations de pêcheurs du secteur artisanal maritime en Mauritanie. In J. Haakonsen & C. Diaw (Eds.), *Migration des Pêcheurs en Afrique de l'Ouest* (Programme., pp. 39 – 48). Cotonou: FAO, DANIDA, NORWAY.

Diop, O. (2004). Migrations et conflits de pêche le long du Littoral sénégal-mauritanien : le cas des pêcheurs de Guet Ndar de Saint-Louis (Sénégal). *Recherches Africaines*, 3(3), 1–16.

Direction des Pêches Maritimes. (2014). Situation de la pêche artisanale et mesures de gestion en cours. Retrieved April 04, 2014, from http://www.dpm.sn/index.php?option=com_content&view=article&id=173:situation-de-la-peche-artisanale-et-mesures-de-gestion-en-cours&catid=35:actualites

Dubois, C., & Zografos, C. (2012). Conflicts at sea between artisanal and industrial fishers: Inter-sectoral interactions and dispute resolution in Senegal. *Marine Policy*, 36(6), 1211–1220.

Dünnwald, S. (2011). On migration and security: Europe managing migration from Sub-Saharan Africa, 22(2011).

- Englebert, P., Tarango, S., & Carter, M. (2002). Dismemberment and suffocation: a contribution to the debate on African boundaries. *Comparative Political Studies*, 35(10), 1093–1118.
- Failler, P., & Binet, T. (2010). Sénégal. Les pêcheurs migrants: réfugiés climatiques et écologiques. *Hommes et Migrations*, 1284, 98 – 111.
- FAO. (2008). *Vue générale du secteur des pêches. La République du Sénégal*. Fishery and aquaculture country profiles, FID/ CP / SEN. Rome: FAO Fisheries and Aquaculture Department.
- FAO. (2010). *The state of world fisheries and aquaculture*. World review of fisheries and aquaculture. Rome: FAO Fisheries and Aquaculture Department.
- Findley, S. (1994). Does drought increase migration? A study of migration from rural Mali during the 1983-1985 drought. *The International Migration Review*, 28(3), 539–553.
- Foucault, M. (1975). *Surveiller et punir. Naissance de la prison. Gazette*. Paris: Gallimard, Nrf.
- Foucault, M. (1978). *The history of sexuality. Volume 1: an introduction. Nineteenth Century* (Vol. 1). New York: Pantheon Books.
- Foucault, M. (1980). *Michel Foucault: power/knowledge. Selected interviews and other writings, 1972-1977*. (C. Gordon, Ed.) (Pantheon B.). New York: Harvester.
- Foucault, M. (2001). *Power. The essential works of Foucault, 1954-1984*. (P. Rabinow, Ed.) *History* (p. 252). New York: New York Press.
- Fouquet, T. (2008). Migrations et “glocalisation” dakaroises. In M.-C. Diop (Ed.), *Le Sénégal des Migrations: Mobilités, Identités et Sociétés* (pp. 241–273). Dakar: Karthala Editions.
- Gascuel, D., Laurans, M., Sidibé, A., & Barry, M. D. (2002). Stock diagnosis & abundance trends for demersal resources in the countries of the CSRP. In *Actes du symposium international, Dakar (Sénégal), 24-28 juin 2002* (pp. 206 – 222). Dakar.
- Gemene, F. (2007). Migration et environnement : brève introduction à une relation méconnue et souvent négligée. *Etopia, Revue D'écologie Politique*, 3, 213–226.

Gemmeke, A. (2011). Enchantment, migration and media: marabouts in Senegal and in the Netherlands. *European Journal of Cultural Studies*, 14(6), 685–704.

Gonin, P., & Lassailly-Jacob, V. (2002). Les réfugiés de l'environnement, une nouvelle catégorie de migrants forcés ? *Revue Européenne Des Migrations Internationales*, 18(2), p. 139 – 160.

Gouvernement of Islamic Republic of Mauritania. (2013). Politique de développement du secteur de la pêche.

Retrieved from <http://www.mauritania.mr/fr/index.php?niveau=4&coderub=35&codesousrub=42>

Hartmann, B. (2010). Rethinking climate refugees and climate conflict: rhetoric, reality and the politics of policy discourse. *Journal of International Development*, 22(2), 233–246.

Hartmann, B., Subramaniam, B., & Zerner, C. (2005). *Making threats : biofears and environmental anxieties*. (B. Hartmann, B. Subramaniam, & C. Zerner, Eds.). Lanham, Md. ; Oxford: Rowman & Littlefield Publishers.

Henry, S., Schoumaker, B., & Beauchemin, C. (2004). The impact of rainfall on the first out-migration: a multi-level event-history analysis in Burkina Faso. *Population & Environment*, 25(5), 423–460.

Homer-Dixon, T., & Boutwell, J. H. (1993). Environmental change and violent conflict. *Scientific American*, 268(2), 38.

IPAR. (2006). Le plan REVA. Retour vers l'agriculture. *Initiative Prospective Agricole et Rurale*. Retrieved from http://www.ipar.sn/index.php?option=com_content&view=article&id=192:le-plan-reva-retour-vers-lagriculture&catid=93:documents-de-references&Itemid=95

ISRA. (2006). *Recensement national de la pêche artisanale maritime sénégalaise*. CRODT/ ISRA. Dakar, Senegal: Centre de Recherches Océanographiques de Dakar - Thiaroye - Institut Sénégalais de Recherches Agricoles.

Janin, P. (2008). La micro-géopolitique des ressources : nouvelle dimension exploratoire de la sécurité alimentaire. In IRD (Ed.), *Colloque international de géographie politique "L'Espace politique : concepts et échelles* (pp. 1–13). Dakar, Senegal: URCA.

- Johnson, C., Jones, R., Paasi, A., Amoore, L., Mountz, A., Salter, M., & Rumford, C. (2011). Interventions on rethinking “the border” in border studies. *Political Geography*, 30(2), 61–69.
- Jul-Larsen, E. (1992). Attitudes towards modernization in African small-scale fisheries. In I. Tvedten & B. Hersoug (Eds.), *Fishing for development: small-scale fisheries in Africa* (pp. 70–90). Uppsala: Nordic Africa Institute.
- Jul-Larsen, E. (2000). Prolifération des institutions et performance économique: l'accès aux ressources des pêcheurs migrants à Pointe-Noire (Congo). In J.-P. Chauveau, E. Jul-Larsen, & C. Chaboud (Eds.), *Les pêches piroguières en Afrique de l'Ouest. Dynamiques institutionnelles: pouvoirs, mobilité, marchés* (pp. 167–203). Paris: CMI; IRD; Karthala.
- Kebe, M., & Deme, M. (2000). *Revue sectorielle de la pêche au Sénégal: aspects socio-économiques*. ISRA Institut Sénégalais de Recherches Agricoles - CRODT; Dakar, Senegal.
- Kibreab, G. (1997). Environmental causes and impact of refugee movements: a critique of the current debate. *Disasters*, 21(1), 20–38.
- Kohnert, D. (2007). African migration to Europe: obscured responsibilities and common misconceptions. *GIGA Working Papers*, 49.
- Lambert, D., Martins, L., & Ogborn, M. (2006). Currents, visions and voyages: historical geographies of the sea. *Journal of Historical Geography*, 32(3), 479–493.
- Latour, B. (1993). *We have never been modern*. Cambridge: Harvard University Press.
- Latour, B. (2005). *Reassembling the social: an introduction to actor-network-theory. Clarendon lectures in management studies*. Oxford: Oxford University Press.
- Law, J. (2003). On the methods of long distance control: vessels , navigation , and the Portuguese route to India. *Centre for Science Studies, Lancaster University*. doi:<http://www.comp.lancs.ac.uk/sociology/papers/Law-Methods-of-Long-Distance-Control.pdf>
- Le Roux, S., & Noël, J. (2007). Mondialisation et conflits autour des ressources halieutiques. *Ecologie & Politique*, 34, 69–82.

- Manzenado, C., Guzmán, M. T., & Azkona, N. (2011). *Políticas de control migratorio y de cooperación al desarrollo entre España y África Occidental durante la ejecución del primer Plan África*. Alboan, Entreculturas; Madrid.
- Marfaing, L. (2005). Du savoir faire sénégalais en matière de pêche sur les côtes mauritaniennes : une approche historique. *Stichproben. Wiener Zeitschrift Für Kritische Afrikastudien*, 8(5), 69 – 98.
- Marie, A. (2007). Communauté, individualisme, communautarisme : hypothèses anthropologiques sur quelques paradoxes africains. *Sociologie et Sociétés*, 39(2).
- Martín, J. I. (2010). *Fisheries in Mauritania and fisheries agreements with the EU* (p. 74). Policy Department Structural and Cohesion Policies, European Parliament - Brussels.
- Marx, N. (2008). Réseaux locaux, nœuds de solidarité et jeunes associations : comment s'organisent les migrants rapatriés face à ce retour forcé ? *Asylon(s)*, 3(Migrations et Sénégal).
- Mbow, P., & Bodian, M. (2008). *L'émigration clandestine: le profil des candidats* (pp. 1–19). Caritas; Dakar, Senegal.
- McKay, D. (2007). “Sending dollars shows feeling” – Emotions and economies in Filipino migration. *Mobilities*, 2(2), 175–194.
- McKay, D. (2008). Ghosts of futures present: photographs in the Filipino migrant archive. *Visual Anthropology*, 21(4), 381–392.
- Meadows, D. H., Randers, J., & Meadows, D. L. (2005). *The limits to growth: the 30-year update*. London: Earthscan.
- Mechlinski, T. (2010). Towards an approach to borders and mobility in Africa. *Journal of Borderlands Studies*, 25(2), 94–106.
- Mercier, P., & Balandier, G. (1952). *Les pêcheurs lébou du Sénégal: particularisme et évolution*. *Sciences-New York (Études Sén.)*. Saint-Louis: Centre IFAN-Sénégal.
- Mills, S. (2007). Geography, gender and power. In S. Campton, Jeremy W.; Elden (Ed.), *Space, knowledge and power* (pp. 49 – 51). Aldershot: Ashgate.

Ministerio del Interior. (2009). *Balance 2008: Lucha contra la inmigración irregular*. Madrid. doi:www.interior.gob.es

Ministerio del Interior. (2011). *Balance 2010: Lucha contra la Inmigración Ilegal*. Madrid. doi:www.mir.es

Ministerio del Interior. (2013). *Balance 2012: Lucha contra la inmigración irregular*. Madrid. doi:www.interior.gob.es

Mitchell, T. (2006). Society, economy, and the state effect. In A. Sharma & A. Gupta (Eds.), *The anthropology of the state: a reader* (pp. 169–410). Malden, Mass. ; Oxford: Blackwell.

Myers, N. (2005). *Enviornmental refugees: an emergent security issue* (pp. 23–27). Session III – Environment and Migration-13th Economic Forum, Prague: 13th Economic Forum.

Ndiaye, P. G., & Samba Diouf, P. (2007). *Libéralisation du commerce et gestion durable des secteurs halieutiques en Afrique de l'Ouest. Etude de cas de la Guinée*. Enda - REPAO - WWF, Dakar, Senegal.

Ndiaye, P. G., Samba Diouf, P., Sow, M., Ndiaye, R., Mbaye, M., Mendy, A. N., ... Dahou, K. (2007). *Trade liberalisation and sustainable management of fishery's sector in West Africa*. Enda - REPAO - WWF, Dakar, Senegal.

Neiland, A. E., & Béné, C. (2004). *Poverty and small-scale fisheries in West Africa*. Dordrecht: Springer Science and Business Media.

Newman, D. (2006). Borders and bordering: towards an interdisciplinary dialogue. *European Journal of Social Theory*, 9(2), 171–186.

Nguyen-Van-Chi-Bonnardel, R. (1980). L'essor de l'économie de pêche artisanale et ses conséquences sur le littoral sénégalais. *Cahiers d'Études Africaines*, 20(79), 255 – 304.

Nguyen-Van-Chi-Bonnardel, R. (1992). *Saint-Louis du Sénégal: mort ou naissance?* Paris: L'Harmattan.

Niassé, M. L., & Seck, M. (2011). *L'accaparement des ressources marines ouest Africaines : sociétés mixtes de façade et licences de complaisance*. Collectif Pêche et Développement; Dakar.

Nyamnjoh, H. M. (2010). “*We get nothing from fishing*” : *fishing for boat opportunities amongst Senegalese fisher migrants*. Bamenda, Cameroon: Langaa Research and Pub. Common Initiative Group.

OECD. (2007). *Glossary of statistical terms*. OECD, Paris.

OECD. (2010). *Case no. 1: Senegal-Mauritania conflict* (pp. 1–6). Security Implications of Climate Change in the Sahel Region; Paris.

Ouled Touileb, C., & Hadj Sidi, M. A. (2009). *Etude des aspects juridiques et institutionnels de la gestion concertée des stocks partagés des petits pélagiques en Afrique Nord Ouest. CSRP* (pp. 1–91). Projet BBI 13286 - CSRP/Wageningen International; Dakar.

Peters, K. (2010). Future promises for contemporary social and cultural geographies of the sea. *Geography*, 9, 1260–1272.

Pian, P. A. (2006). Trajectoires de rapatriés: éléments pour une réflexion en termes d’expérience. *Hommes et Migrations*, 1286 - 128, 86–97.

PNUE. (2004). *Pêche et environnement: mise en oeuvre de mesures de conservation et gestion durables des ressources halieutiques. Le cas du Sénégal*. ENDA, PNUE-UNEP; Geneva.

Rabinow, P. (1977). *Reflections on fieldwork in Morocco* (p. 172). Berkeley: University of California Press.

Riccio, B. (2006). “Transmigrants” mais pas “nomades”. Transnationalisme mouride en Italie. *Cahiers D’études Africaines*, (181), 95– 114.

Rieth, E. (2010). *Tous les bateaux du monde* (p. 208). Grenoble: Musée National de la Marine - Glénat.

Rumford, C. (2006). Theorizing borders. *European Journal of Social Theory*, 9(2), 155–169.

Ruming, K. (2009). Following the actors: mobilising an actor-network theory methodology in geography. *Australian Geographer*, 40(4), 451–469.

- Sall, A. (1999). Le nouvel esclavage en mer: le problème des bateaux ramasseurs. *Credetip*. Retrieved October 29, 2013, from <http://base.d-p-h.info/fr/fiches/premierdph/fiche-premierdph-4825.html>
- Sall, A. (2007). Loss of bio-diversity: representation and valuation processes of fishing communities. *Social Science Information*, 46(1), 153–187.
- Sall, A., & Diallo, C. M. (2001). *Etude sur la participation des communautés de pêcheurs artisans dans les systèmes de suivi contrôle et surveillance (SCS)* (pp. 1–83). FAO; Dakar.
- Sall, A., & Morand, P. (2008). Pêche artisanale et émigration des jeunes africains par voie piroguière. *Politique Africaine*, 109(2), 32–41.
- Salter, M. B. (2006). The global visa regime and the political technologies of the international self: borders, bodies, biopolitics. *Alternatives: Global, Local, Political*, 31(2), 167–189.
- Santoir, C. (1990). Le conflit mauritano-sénégalais: la gènèse. *Cahiers Des Sciences Humaines*, 26(4), 553–576.
- Sayad, A. (2004). *The suffering of the immigrant* (p. 340). Cambridge, UK ; Malden, MA, USA: Polity.
- Schutt, R. K. (2011). *Investigating the social world: the process and practice of research*. Thousand Oaks, CA: Sage Publications.
- Scott, J. (1998). *Seeing like a state : how certain schemes to improve the human condition have failed*. *Yale agrarian studies*. New Haven, Conn.: Yale University Press.
- Sector Policy Letter, (2007). Lettre de politique sectorielle des pêches et de l'aquaculture. Ministère de l'Economie maritime, des Transports maritimes, de la Pêche et de la Pisciculture; Dakar, Senegal.
- Sharp, J. (2000). *Entanglements of power : geographies of domination*. London: Routledge.
- Sheller, M., & Urry, J. (2006). The new mobilities paradigm. *Environment and Planning A*, 38(2), 207–226.

- Silverman, D. (2010). *Qualitative research* (p. 464). London: Sage Publications Ltd.
- Solana Madariaga, J. (2008). *Climate change and international security*. Council of the European Union and Common Foreign and Security Policy: Brussels.
- SRPS - CSSC. (2011). *Situation des pirogues arraisonnées en Mauritanie (RIM) entre le 12/06/2009 et le 15/12/2011* (pp. 1–10). Service Régional des Pêches et de la Surveillance de Saint-Louis: Saint-Louis, Sénégal.
- SSNC. (2009). *To draw the line: EU fisheries agreements in West Africa*. Swedish Society for Nature Conservation; Stockholm.
- Steinberg, P. (2001). *The social construction of the ocean*. Cambridge: Cambridge University Press.
- Steinberg, P. (2013). Of other seas : metaphors and materialities in maritime regions. *Atlantic Studies*, 10(2), 156 – 169.
- Steinberg, P. (2014). On thalassography. In J. Anderson & K. Peters (Eds.), *Water Worlds: Human Geographies of the Ocean* (p. xiii). Ashgate.
- Stewart, C. (1989). Une interprétation du conflit sénégal-mauritanien. *Revue Du Monde Musulman et de La Méditerranée*, 54(1), 161–170.
- Tacoli, C. (2009). Crisis or adaptation? Migration and climate change in a context of high mobility. *Environment and Urbanization*, 21(2), 513–525.
- Tacoli, C. (2011). Not only climate change: mobility, vulnerability and socio-economic transformations in environmentally fragile areas of Bolivia, Senegal and Tanzania. *Human Settlements Working Paper*, 28.
- Trouillet, B., Guineberteau, T., Bernardon, M., & Le Roux, S. (2011). Key challenges for maritime governance in West Africa: fishery-based lessons from Guinea and Mauritania. *Marine Policy*, 35(2), 155–162.

Turner, S. (2005). Suspended spaces. Contesting sovereignties in a refugee camp. In T. Blom Hansen & F. Stepputat (Eds.), *Sovereign Bodies : citizens, migrants, and states in the postcolonial world* (Vol. Sandbjerg., pp. 312– 366). Princeton: Princeton University Press.

Van Houtum, H., Kramsch, O. T., & Zierhofer, W. (2005). *Bordering space*. Ashgate Pub Ltd.

Vaughan-Williams, N. (2008). Borderwork beyond inside/outside? Frontex, the citizen-detective and the war on terror. *Space & Polity*, 12(1), 63–79.

Walker, R. B. J. (2000). Europe is not where it is supposed to be. In M. Kelstrup & M. Williams (Eds.), *International relations theory and the politics of European integration : power, security, and community*. New York: Routledge.

Weigel, J.-Y., Féral, F., & Cazalet, B. (2011). *Governance of marine protected areas in the least-developed countries. Case studies from West Africa*. Fisheries and Aquaculture Technical Paper 548. Rome: FAO.

Wilson, T., & Hastings, D. (1998). *Border identities: nation and state at international frontiers*. New York: Cambridge University Press.

Appendices

Appendix 1 - Ethical Clearance

2011 fieldwork session



KEELE
UNIVERSITY

ACADEMIC SERVICES DIRECTORATE
RESEARCH AND ENTERPRISE SERVICES

4 May 2011

Ms J Hallaire
2 Kelso Place
Apartment 269
Manchester
Greater Manchester
M15 4GQ

Dear Juliette

Re: 'Migration and the Decline of Fisheries in Senegal, West Africa'

Thank you for submitting your revised project for review.

I am pleased to inform you that your project has been approved by the Ethics Review Panel.

Amendments to your project after a favourable ethical opinion has been given or if the fieldwork goes beyond the date stated in your application (31 August 2011) you must notify the Ethical Review Panel via Michele Dawson.

If you have any queries, please do not hesitate to contact Michele Dawson in writing to m.dawson@uso.keele.ac.uk

Yours sincerely

Dr Roger Beech
Chair – Ethics Review Panel.

cc RI Manager, Supervisor



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T: +44(0)1782 733371 F: +44(0)1782 733740 E: res@uso.keele.ac.uk
W: www.keele.ac.uk/businessenterprise
Dorothy Hodgkin Building, Room 1.13

Keele University, Staffordshire, ST5 5BG, United Kingdom
T: +44(0)1782 732000 W: www.keele.ac.uk

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2012 fieldwork session

Re: Application to amend study

Subject: Re: Application to amend study
From: Michele Dawson <m.dawson@uso.keele.ac.uk>
Date: 12/01/2012 17:46
To: Juliette Hallaire <j.m.hallaire@ilpj.keele.ac.uk>

Dear Juliette,

The Chair of the Ethical Review Panel has reviewed your amendment to your study and has given ethical approval. I will keep your amendment on file.

Kind regards
Michele

--
-

Michele Dawson
Administration Assistant
Research & Enterprise Services
Room: DH1.13
Dorothy Hodgkin Building
Keele University
ST5 5BG

Tel. 01782 733588

m.dawson@uso.keele.ac.uk
<http://www.keele.ac.uk/researchsupport/>

On 11/01/2012 16:22, Juliette Hallaire wrote:

Dear Michele,

As I am returning to Senegal for a longer fieldwork session, I am applying for an amendment to my study. You will please find attached a completed amendment to study form, the revised information sheet and consent form for fishermen and the revised structured interview guide. All changes and precisions are in red.

Many thanks for your attention,

Best wishes,

Juliette

--
Juliette Hallaire

Doctorante / PhD Candidate
Research Institute for Social Sciences
Keele University

Appendix 2 – Information on Respondents

1/ List of respondents

2011:

- Eight interviews with representatives of public institutions such as Direction des pêches maritimes (direction of maritime fisheries), Direction de la protection et de la surveillance des pêches (direction of the protection and surveillance for maritime fisheries), Centre de recherche Océanique de Dakar Thiaroye (CRODT – centre for Oceanic Research of Dakar – Thiaroye), Institut de pêche et d’aquaculture (Institute for fisheries and aquaculture), Consejería de Trabajo e Inmigración (Embajada de España, Dakar).
- Nine interviews with representatives of non-governmental organisations (WWF, ADEPA, REPAO, Collectif Pêche et Développement), professional organisations for fisheries (FENAGIE) and local fishery structures (Comité Local de Pêche – local committee for fisheries, Aire marine protégée - Marine protected area)
- Five individual interviews with long-distance fishermen (captains)
- Five individual interviews with returned migrant
- Two individual interviews with local demersal fishermen

2012:

- Seven interviews with representatives of fishery-related public institutions
- Seven interviews with representatives of NGOs and professional organisations (including five were fishermen leaders)
- Three interviews with members of fishery structures (including two key informants)
- Four interviews of fishermen’s wives (of either international fishermen or migrants living in Spain)
- Several interviews with a local demersal fisherman who was also returned migrant and key informant
- One group interview of local pelagic fishers (fishing trip with them)
- One group interview with pelagic fishers used to go to Mauritania
- Six interviews with long-distance demersal fishermen fishing in Southern West-Africa (including four boat owners, two crew members)
- Six interviews with demersal fishermen fishing illegally in Mauritanian waters (including three boat owners, three crew members)
- Two interviews with fish traders (including a retired long-distance fisherman)
- Two interviews with ice-box boat owners (retired/former fishermen)

- Several interviews with a pelagic-fishing boat owner who was a former pelagic fisherman, used to migrate legally to Italy
- Among all these interviewees, two were returned migrants

2/ **Table 6** provides details about the respondents' categories, both in 2011 (from number 1 to 29) and 2012 (from number 30 to 69). As shown below, one respondent could belong to several categories at the same time (in red), especially the retired ones (in brackets):

Table 6: Respondents' categories according to their main function, status, professional activities or personal migration history (below).

	Boat owner	Fish trader	Captain and boat owner		Pelagic Fisherman		Local Demersal fisher	Failed /Returned migrant	Fisherman's wife	Member of Fishery Structure	Prof. Org./ NGO	Members of institutions							
			To Mauriti.	To South Senegal	Local	Mauritania						DPM	Fisheries		Migration	Local participative			
													DPSP	OTHER					
N/A		54							41 - 42 - 58 - 59	10 - 34 - 36 - 51	4 - 20 - 27 - 29 - 46 - 60	7 - 8 - 19 - 45 - 48 - 49 - 66 - 68 - 69							
Crew member			38 - 61 - 62	31 - (56)	35 -	64 -	21 - 22												
Captain / boat owner			39 - 44 - 65	12 - 13 - 14 - 15 - 16 - 30 - 32 - (37) - 47 - (50) - (52) - (55)	(39)		17												
Boat owner	52 - 53	37 -																	
Fish. leader	67							18 - 25		11	11 - 40 - 43 - 47 - 50 - 53							2 - 3 - 17	
Failed / Returned migrant	33				18 -		23 - 24 - 26 - 25 - 57												

Appendix 3 – Ouakam restricted marine area

