Innovation as Resistance:

Grabbing Back Life on the Coast in the Blue-Green Economy

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Abstract:

This thesis explores how coastal communities in Denmark respond to socio-economic marginalization through locally anchored innovation within the emerging blue-green economy. Drawing on Ethnographic fieldwork in and around Hirtshals, North Jutland, it examines how social innovation initiatives leverage belonging as a spatial, temporal, affective, and political quality to resist depopulation and peripheralization. The thesis focuses on three cases: The North Sea Free Trade School, the Workforce of the Future program, and Hirtshals Winter Festival. These efforts reveal how future imaginaries, rooted in the lived experiences of coastal life, serve as tools for ”grabbing back” agency and value locally. By extending the concept of adjacency beyond geography to include the politics of belonging, this thesis illustrates how innovation becomes a means of resistance, serving both diagnostic and reparative function in coastal spaces. The findings contribute to broader discussions on sustainability, marine governance, and equitable participation in the blue-green economy.

Project Group: 8

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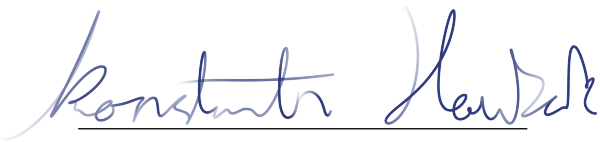

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Contents

Introduction

I have always lived close to the sea.

This is not an unusual statement for a Dane, seeing as our relatively small country sports 7300 kilometers of coastline and an estimated 40% live within just 3 kilometers of it (Fitton, Lehmann, and Major 2019, p. 1042). The west coast of Jutland, in particular, holds a special place in my heart; summers spent at the harbor in Thorsminde fishing for crabs with nothing but a clothespin on a string, using mussels scavenged from between the rocky breakwater for bait, watching the fishers land their catch and purchasing armfuls of plaice for my mother to clean, bread, and fry for dinner, going sailing with my grandfather inside Nissum Fjord to check the nets, and scaring my friends with ghost stories while exploring German bunkers slowly but surely being consumed by sand and sea.

I also saw how life by the sea could be difficult and dangerous; while we never found any long-dead soldiers still at their posts, bones would occasionally tumble from the dunes around Thorsminde after especially strong storms, though these belonged to much older casualties of the Danish west coast. A museum dedicated to the stranding disaster of HMS St. George and HMS Defence on Christmas 1811, where almost 1.400 people perished (Strandingsmusem St. George 2025), has been a fixture in the town for as long as I can remember – while you stand there looking inside a glass case holding the neatly arranged bones of the chief mouser, you cannot help but be keenly reminded that the North Sea can be as ruthless a life partner as she can be comforting.

Not every tragedy is that dramatic, but loss is a reoccurring theme for those of us who live with and by the water, be it losing family members at sea, as my grandmother lost her own father, losing one's home to storm surges, as my mother did, or losing entire communities when traditional life-paths become too difficult to sustain, as I sat on the pier with my clothespin and string watching ten fishing boats turn to five, turn to one, turn to none.

As grim a picture that paints, another recurring theme I see is resilience. This is generally described as the ability to recover from and/or adapt to negative changes, and this is precisely an ability the sea teaches you early, and reinforces regularly. Between her fickle temperament on one side, and the ever-shifting demands from society on the other, the people of the coast are challenged on many fronts, putting this *resilience* to the test.

What I soon discovered while working on this thesis, whether speaking to representatives of fisheries, other sea-side businesses and institutions, entrepreneurs, or simply life-long inhabitants and newcomers to Vendsyssel's coasts, is that while adversity is indeed an old companion, so is an attitude of perseverance in spite of it: *"If we won't invest in ourselves, why should anyone else?"*.

What *investing* looks like in the age of technologically mediated blue economies, green transitions, and urbanization, is what I will explore through this thesis – how you can leverage the lessons you have learned from living with and by the sea to foster growth in your community and meet the future head-on.

To answer this question, I will be examining three cases from North Jutland; the North Sea Free Trade School, the Workforce of the Future program, and Hirtshals Winter Festival. One aspect these initiatives have in common is resisting out-migration – something Hirtshals and many other coastal communities suffer from as people increasingly gravitate towards urban centers – though they do so through different avenues. While the first two are oriented towards (re)connecting the younger generations with maritime professions as a way to retain knowledge, skill, and value locally, and the third is a cultural festival and innovation hub celebrating local heritage, what caught my attention is how this aspect of *belonging to a particular community* is continuously created, adapted, and utilized as a tool by local actors in different – but interconnected – innovation contexts.

Problem Analysis/Background

> ”Life was born in water and is carrying on in water. Water is life’s *mater* and *matrix*, mother and medium. There is no life without water.”
>
> (Szent-Györgyi 1971, p. 239)

Albert Szent-Györgyi wrote the above for a lecture on the biology and pathology of water, of how it makes up about 60% of the human body and serves many essential functions for growth and functioning (Mitchell et al. 1945), demonstrating how we are deeply dependent on it in order to sustain life. Beyond its fundamental biological necessity, access to water has, in the form of coasts and waterways, for thousands of years served as the life nerve of civilization, being both a source of nourishment, but also making possible the establishment and growth of permanent human settlements, as well as facilitating migration and trade across the globe (Griggs 2017, pp. 3-20).

Today, coastal zones are hubs of human activity, with 20 of the 25 most populated cities in the world defined as coastal (Day et al. 2023, p.3). Part of the reason for this is that seaports serve as vital gateways to participation in an increasingly globalized economy, with maritime water transport and exploitation of ocean resources being strong urbanizing forces (Pomianowski and Doburzynski 2021).

As of 2024, over 80% of global trade volume was being carried by sea, with the United Nations Conference on Trade and Development projecting a continuing annual growth rate of 2.4% on average between 2025 and 2029 (UNCTAD 2024, p. 25). In contrast to marine water transport, fisheries have remained relatively static in production since the late 1980s, yielding between 86-93 million tons of catch a year (FAO 2024, p. 27), though an increase in vessel size, tonnage, and power has been observed in several fleet segments in the last 20 years[1] (Van Anrooy et al. 2021, p.121). In spite of the yield seeing little growth over the decades, overfishing continues to be an issue on the global level, with the percentage of marine fish stock fished unsustainably having risen from 10% in 1974 to 37.7% in 2021[2] (FAO 2024, p. 42).

1. Detailed registration of vessel characteristics on a global scale is relatively poor, with only 37% of those reported to the Food and Agriculture Organization of the United Nations (FAO) having that information available, so there is a degree of statistical uncertainty present (FAO 2024, pp. 56-59)

2. There are great regional variations in the proportion of fish stock harvested unsustainably, but intensive assessment and management is directly linked with the presence of more robust stocks (Hilborn et al. 2020)

What this means is that while demand for seafood continues to rise as the world population increases, it is doubtful that capture fisheries will be able to rise to meet it, with aquaculture being projected to represent a higher share of seafood production in the coming years to compensate (ibid. pp. 208-219). Another point of interest in the figure is that Europe is estimated to face a decrease in population by 2050, and therefore also a decrease in consumption of seafood by almost 1 million tons, equivalent to almost 30% of the total tonnage of fish caught by EU members in 2022, for reference (Eurostat 2023).

As of 2022, aquaculture has already overtaken capture-fisheries in yield for aquatic animal products at 94.4 million tons, 50.9% of the combined production for the year, distributed among both inland facilities and mariculture (FAO 2024, pp.12-26). While the vast majority of these are used for human consumption, it is estimated an average of 35% of that is wasted (Gustavsson et al. 2011; EUC 2025), and with fisheries being limited in their ability to simply increase production by dwindling wild stocks and fisheries management policies implementing quotas – total allowable catches (TACs) as they are called in the EU – in response, finding ways of generating additional value from each fish landed has been gaining traction in recent years.

One example comes in the form of the Icelandic Ocean Cluster (IOC), a private-sector initiative with the aim of strengthening collaboration between different industry actors with an interest in byproducts from Iceland's extensive Atlantic cod fisheries (Sigfusson et al. 2024). In a little over a decade, the IOC has managed to reduce waste in the Icelandic cod industry to only 10% by demonstrating its value in other industrial contexts, such as biomedicine and -energy, cosmetics, nutritional supplements, and textiles (ibid.).

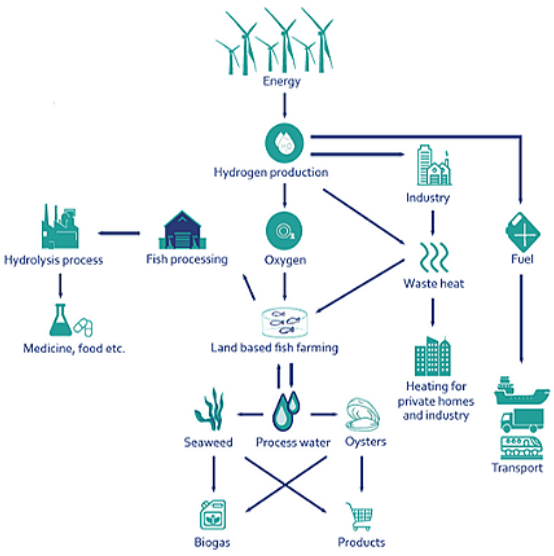


Figure 2.1: Model of industrial symbiosis at the port of Hirtshals.
Source: Icelandic Ocean Cluster (IOC 2024)

With such impressive results, it is perhaps unsurprising that the initiative has inspired the formation of sister clusters in the US, Namibia, and even one based in Hirtshals, Denmark (IOC 2025). As illustrated in figure 2.1, the ambition is to combine several side streams between actors from across a wide range of sectors to minimize waste and generate additional value from capture fisheries and aquaculture enterprises (Port of Hirtshals 2024).

2.1 The Blue-Green Economy

Through initiatives like the IOC and its sister clusters, one can surmise the *blue economy* encompasses far more services and businesses related to the ocean than simply fisheries, aquaculture, and marine water transport. It includes shipbuilding and -repair, navigational and safety services, port operation, the extraction of other marine resources such as seabed mining, construction in- and underwater, research and environmental protection entities, and coastal tourism enterprises (Pomianowski and Doburzynski 2021). As the world's largest carbon sink, the ocean is also deeply entwined with what is commonly referred to as *the green transition*, which is broadly speaking a term for policy initiatives with the purpose of reaching climate neutrality through reducing (and eventually eliminating) greenhouse gas emissions by embracing renewable energy, and creating more resource efficient and environmentally sustainable industry, energy, transport, and social infrastructure (EUC 2024).

In many iterations of 'Green Deals' created to enact the energy transition, such as with the European Green Deal (EGD), there is also a strong economic ambition, seeking to turn *"climate and environmental challenges into opportunities"*(E. C. EUC 2025) alongside the overarching goal of climate neutrality. Some of the ways in which new initiatives emerge to take advantage of these opportunities are illustrated in figure 2.1, and come in the form of offshore wind manufacture and installation, carbon capture and transport, and hydrogen- and biofuel enterprises, of which seaports and the surrounding coastal areas are attractive as potential sites (Bolton and Patrinos 2024). Being areas of heavy industrial activity, with shipping alone being responsible for 10% of global transport emissions(EIT InnoEnergy 2022, p. 5), transforming ports into 'green energy hubs' is one way in which attempts are made to meet demands for reducing emissions *and* generating economic activity in the process – building on already-existing infrastructure to facilitate the management, storage, and distribution of new energy- and resource streams as part of developing circular value chains for dockside industry – as the Danish Ocean Cluster is planning for the port of Hirtshals – being just one example showing promise (Dirzka et al. 2024, pp. 18-30).

To capture this intersection between the blue economy and green transition, the term *blue-green economy* will be used in this paper, encompassing dimensions of policymaking, as well as coastal development and innovation under the economic, environmental, and social sustainability principles present in the aforementioned concepts. While *economy* is indeed a strong driver, elements of justice and equity are also integral, as coastal communities, especially those who have historically relied on fisheries, often see increased levels of economic marginalization, social displacement, and more limited educational and employment opportunities compared to urban centers (Jentoft and Eide 2011; Bunting 2023; Asthana 2021; Alfiyah 2023).

2.1.1 The Blue Frontier

By introducing new technologies, and reconfiguring established technical processes to new contexts, working waterfronts and coastal zones are thus bound to change as the blue-green economy develops, and care must be taken to ensure that *"development does not turn the sea into an arena for power struggle between the strong and the weak (mare liberum) [and] avoid developing plans that are biased towards technocracy and do not incorporate the local and traditional knowledge held by coastal communities"* (Ridwanuddin in Alfiyah 2023). New forms of expertise will be required on the part of the local workforce to take advantage of emerging opportunities, and in the management of ports to balance the needs of prospective, new, and established stakeholders in increasingly interdependent systems (Dirzka et al. 2024, pp. 70-82).

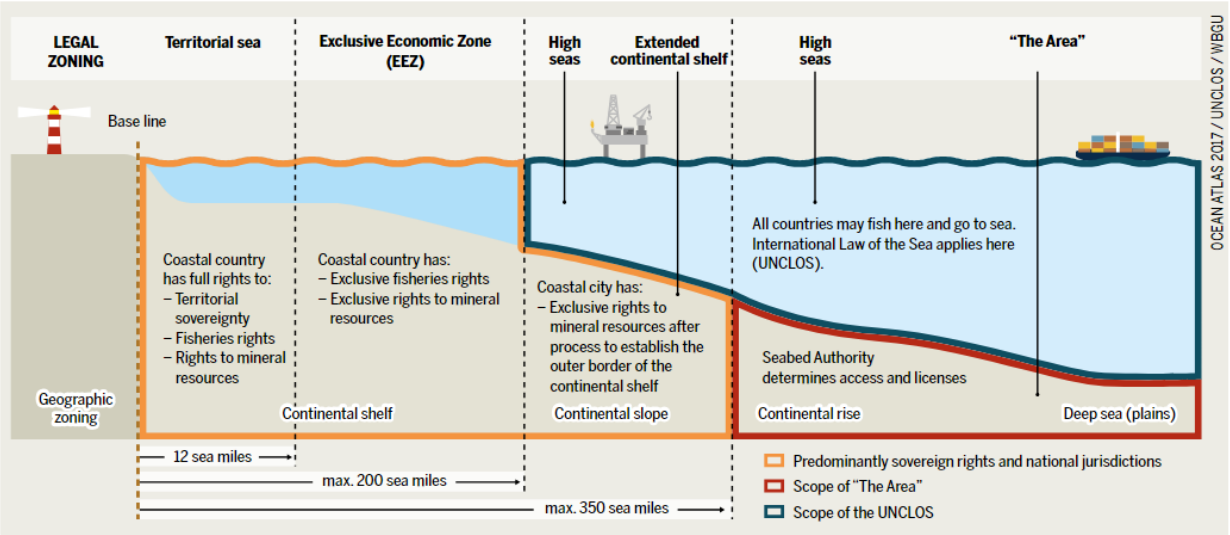
Tensions around coastal development and ocean access – including their resources – have existed for about as long as human civilizations have, with the concept of *mare liberum*[3], mentioned above, standing in contrast to *mare clausum*; free seas versus closed seas. One approach can be encapsulated in the concept of *res communis* as it existed in ancient Rome – the idea that certain resources and spaces should be exempt from private ownership, such as oceans, running water, coasts, and air, and thus freely accessible (Buckland 1921, pp.183-184) – while others argue that a certain level of closure is necessary as *commons* will be over-exploited and inevitably destroyed as economic actors seek to maximize gain without care for the long-term sustainability of the space and its resources (Hardin 1968).

As put by marine science journalist Olive Heffernan in her book 'The High Seas' *"A general truism of any mistreated commons is that those causing the damage never bear the full cost – hence, their apathy over changing tack. [...] This is undeniably true of the unclaimed ocean. Flotillas of vessels – armadas even – patrol the high seas squeezing what they can from every inch of unregulated space."* 2024, p. 25 though not without the acknowledgment that humanity also benefits greatly from expansion into 'the blue frontier', as new technological advancements make possible the discovery and utilization marine resources for scientific purposes – alongside commercial ones – at a scale and depth hitherto impossible (ibid.).

Today, a combination of the two perspectives are represented in the governance of the world's coasts and oceans through the UN convention on the Law of the Sea (UNCLOS), with countries reserving fisheries and mineral rights to adjacent waters based on a combination of distance from the coastline, and borders drawn over continental shelves, as illustrated in the figure below:

3. The title originally a book on international law by Dutch jurist and philosopher Hugo Grotius from 1609, arguing for the sea being free for all, forms the foundation of the modern concept of international waters not under the jurisdiction of any one nation or state.

How the Lawyers Think—Maritime Zones and the International Law of the Sea



Today, humanity's inheritance is solely limited to the mineral resources of the parts of the seafloor that lie beyond national jurisdictions ("the Area"), which is administered by the Seabed Authority.
The UN Convention on the Law of the Sea (UNCLOS), together with its existing implementing conventions, defines the framework for ocean governance. The regional fisheries management organizations (RFMO) organize the cultivation of the fish stocks in the high seas as well as the trans-territorial and far-ranging fish stocks in the Exclusive Economic Zones (EEZ).

Source: Ocean Atlas (Pösel, Bähr, and Kronfeld-Goharani 2017, p. 32)

On the one hand, recognizing oceans entirely as a "frontier" being under the stewardship of no one runs the risk of unchecked exploitation damaging local ecosystems beyond the ability to recover, and by virtue of covering 70% of the planet's surface, ultimately causing far-reaching harm (Heffernan 2024). On the other, oceans are of great geopolitical and economic interest to both coastal states and private actors, and claims of adjacency can thus quickly become tools of 'aqueous territoriality', where whoever has the power and force necessary to defend their claim stands to solely control its space and resources, thereby limiting not only physical movement, but also the exchange of *"people, ideas, goods and cultures"* (Campling and Colás 2021, p. 318) which ultimately risks stifling initiatives promoting economic, social, and environmental cooperation (Su 2021).

2.2 Rural Flight & Hirtshals

Declining fisheries, declining town

> *"When [Denmark] joined the EU in 1972, the fisheries were hit hard, because of quotas, and a quota doesn't necessarily fit the size of the vessel, which is to say, they could no longer exist. And that's why we see from between the 1970's and until now that the number of vessels has fallen from around 300 to perhaps 80, but the tonnage remains about the same, because some of the remaining vessels are very large. You can see, then, why things went awry, because the surrounding industry on the harborfront – the machine workshops, the net makers, the carpenters – they also got hit hard, because no matter the tonnage, 80 vessels cannot make up for the economic activity of those 300 vessels, even if the tonnage is more or less the same. At that time, there in the 1970's, we realized we had to try and find something else to make up for the declining fisheries."*
> (Knud, 21/10/24, pp. 8-9)[4]

Coastal towns like Hirtshals, once supported by a large fleet of small-scale fishery vessels and a broad range of supporting services – such as net makers, machine workshops, shipbuilders and more – now face depopulation as traditional occupational pathways shrink. Even as the tonnage of vessels in Denmark remains comparable to previous decades, the reduction in fleet numbers and the associated job loss in associated industries has undermined the economic resilience of these communities (Jentoft and Eide 2011).

Figure 2.2: Fishers in Hirtshals landing a dinghy in the early 20th century.
Source: Vendsyssel Museum of History, Hirtshals

With fewer opportunities and points of entry into maritime occupations and limited alternatives locally, younger generations increasingly find themselves either pushed or drawn away by the promise of education, employment, and social mobility in larger cities (S. Hansen 2014). This process is often called *urbanization*, though in another perspective may be called *rural flight* in order to highlight that it is an active process of depopulation happening in peripheral areas. In Denmark, internal migration has steadily favored urbanized areas, such as the capital re-

4. Excerpts from my fieldwork in the form of ethnographic vignettes and quotes from interviews have been used throughout this paper, see section 4.2.2. Page numbers reference interview transcript appendices.

gion, whereas rural municipalities, such as those of Northern Jutland, continue a trend of population decline even today (DST 2025a), which is consistent with an overarching "urban turn" towards concentrating economic activity in larger cities, leaving rural areas inversely diminished (Hansen and Winther Larsen 2012; Korsgaard, Müller, and Tanvig 2015, p. 10).This is also the case with Hirtshals, which has experienced depopulation since the decline of the fisheries – from about 7.500 inhabitants at its largest to around 5.400 today – losing almost 1.000 people between 2010 and 2025 alone:

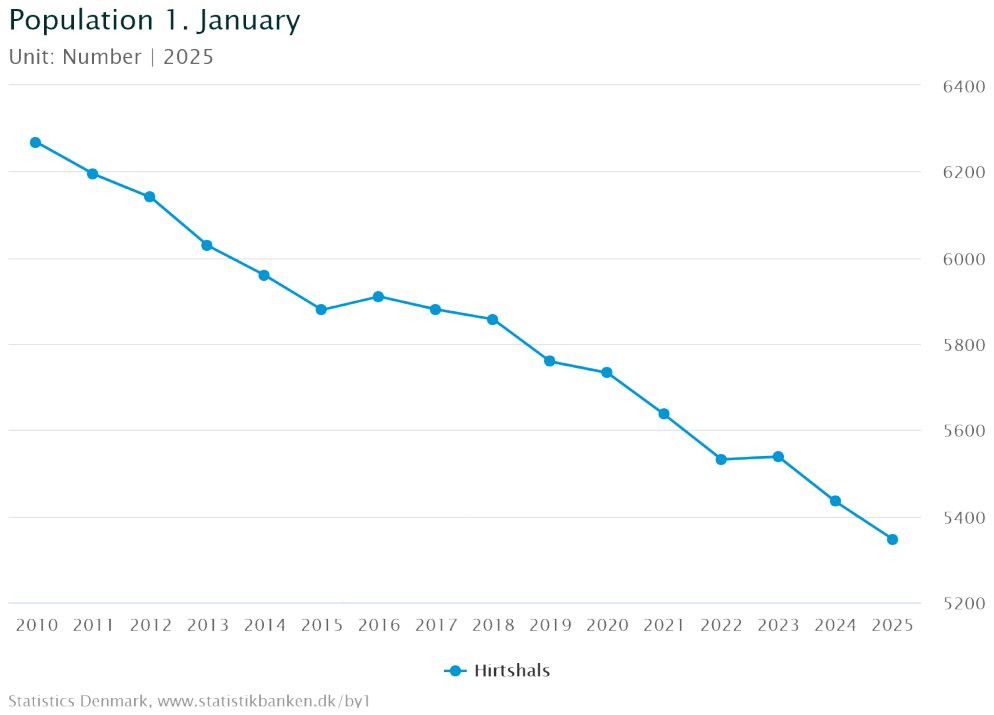


Figure 2.3: Population trends of Hirtshals between 2010 and 2025
Source: Danmarks Statistik, www.statistikbanken.dk/by1

Hirtshals is an old settlement, and its location was known already in the early 19th century as one which could be beneficial to develop for fisheries and maritime trade, something which could form a strong connection to Norway in the north, and the rest of Europe to the south (Lindhardt and Tovgaard-Olsen 2016). By the beginning of the 20th century, Hirtshals had a lighthouse, stone pier, telegraph cables, factories, a school, an inn, a bathing resort, and vacation homes, strengthening aspects of maritime industry and heralding the beginning of the area as a tourist destination (ibid.). By the 1960s, a proper harbor environment with multiple docks, a fish auction, wharves, and ferry connections had been established, a rapid trend of growth that would continue until the effects on the fisheries of Denmark joining the EU began showing themselves by the 1980s (Nordsøposten 2020).

People in Hirtshals were not idle, however, and between the 1980s and early 2000s, efforts were made to strengthen Hirtshals' position as a transportation hub of people people and

goods with the addition of a highway connection, as well as establishing what would later become the North Sea Oceanarium and Science Park[5], connecting maritime occupations with research and education (Knud, 21/10/24, pp. 10-11). This was made possible in large part thanks to Hirtshals becoming self governed, first with the municipality taking ownership of the geographical space from the state in 1970, and later the harbor administration itself becoming a municipally owned but self governing enterprise around the turn of the millennium (Lindhardt and Tovgaard-Olsen 2016; Nordsøposten 2020).

As fisheries continued to decline, focus shifted towards other forms of economic development, and today the harbor maintains extensive maritime transport connections – ferry *and* cargo between Norway, Iceland, and the Faroe Islands, especially – fisheries and aquaculture – including the processing of organic marine proteins for both food and other industrial purposes – maritime services of many kinds, and circular development projects (Port of Hirtshals 2025a).

Figure 2.4: Aerial photograph of Hirtshals, centering the harbor. *Source: Hans Ravn*

Development of Hirtshals is not limited to industry, transport, and research, however. Education initiatives are also among those undertaken by and with the harbor administration, local industries, and schools in the municipality, of which Workforce of the Future and the North Sea Free Trade School[6] are part.

5. from Danish: Nordsøen Oceanarium og Forskerpark.
6. from Danish: Nordsøen Fri Fagskole.

2.2.1 Workforce of the Future

Capturing the youth

> *"After the municipal merge, it was very important for us that people know the port of Hirtshals is Hjørring municipality's port. It's very important they claim ownership too. So, we started inviting schools. Hirtshals always participates but we invite the other schools [in the municipality] in shifts. Now, the schools are calling* ***us*** *to ask if they can participate, and we have around 230 students every time, so it's a huge success. We really get to spread some positive messages, and now that we've been doing it for so many years, we are beginning to see some of the first children participating, who are now studying, coming back to write assignments about it. Another part is that some get after school jobs, too. The school reform that the Danes developed, not everyone fits into this very rigid box, they just don't, so [Workforce of the Future] is also about showing that there are also opportunities* ***here****. Here are some programs you can join; with Fjordline alone you can come in with basically nothing and get an education, we have some fantastic fishers that want to take in the youth, you can start as Cosmos Trawl. That's a skilled trade. And then work your way up and get a really nice job, a good education – in house – because you can't get a formal education in net making, so it is as much a way to recruit because a lot of the tasks necessary for the fisheries don't have formalized education today."*
> (Linn, 27/11/24, pp. 4-5)

Figure 2.5: Businesses are encouraged to let the students get "hands-on" experience. *Source: Erhverv Hjørring, Nordsøposten*

The Workforce of the future program was established in 2014, and is an annual event hosted in Hirtshals for eighth grade children during September. The program is a collaboration between the Port of Hirtshals, Dansk Metal, FH Nordjylland, EUC Nord, Hirtshals Service Group, Hjørring Municipality, Ungegarantien, and Erhvervsservice Nord. In its first iteration, about 80 students and three businesses participated, but today that number is around 200 and 30, respectively (Port of Hirtshals, n.d.). The purpose of the event is to raise awareness around career and educational opportunities present in the Hirtshals area by introducing them to a variety of maritime occupations, as well as strengthening collaboration between economic operators on the harbor with schools in the municipality. While the event itself takes place in the harbor environment, with the students visiting local businesses and being told and shown how they operate, but prior to that, the schools are visited by the organizers, who have also developed a board game for the students to play to help them learn about maritime occupations and the working waterfront prior to their visit (ibid.).

2.2.2 The North Sea Free Trade School

Making the informal formal

> *"We need to be active in both preserving and elevating fisheries. So in that context we have also worked with MARTEC and EUC Nord, with all of them, to make courses but also establish formal educations within the fisheries industry. So we established a school down here, the North Sea Free Trade School, for youth between the ages of 16 to 22, with the blue, maritime. We renovated an old workshop, so we have carpenters, welders, and a commercial kitchen, which is sort of the entire concept; to recruit into fisheries and maritime occupations."*
> (Linn, 27/11/24, p. 5)

Established in 2022 and utilizing the newly renovated buildings of the former North Sea Motel – and harborside classrooms – the trade school is a relatively recent addition to the educational landscape of Hirtshals (Elling 2021). As a boarding school, students are living at the facilities for the duration of their education – one year – while the schooling itself operates from the perspective that *"the work of the hand and the spirit are equal, and that it is possible to recognize, understand, and develop life through tangible, practical, and business oriented activities."* (Nordsøen Fri Fagskole 2024, p. 4). Designed as an alternative to book-heavy education options after the ninth grade, a third of the classes are practical in nature; maritime skilled trades, metal- and woodworking, gastronomy, surfing, hospitality, rock climbing, hiking, and internship periods with local businesses are all part of the curriculum, distributed between the three school profiles of Harbor Trades & Fisheries, Outdoor Tourism, and Gastro & Event (ibid.).

Figure 2.6: The old harborside machine workshop-turned-classrooms for the trade school. *Source: Facebook page for The North Sea Free Trade school*

2.2.3 Hirtshals Winter Festival

Birdsong in the middle of winter

> It's a chilly February evening as I enter the Swedish Sailor's Church – the local cultural center – eyes wet and clothes somewhat disheveled from the strong winds outside making a noble effort to rip the scarf from around my neck on the walk there. The winter festival is in full swing, and on tonight's schedule is a musical event about 'Maria and the Hero from Norway', a historical musical play based on the first underwater telegraph line between Denmark and Norway, established in 1867, right here in Hirtshals.
>
> Inside, a good handful of people are seated around a long table, some with instruments in their hands, others drawing with pen and paper, and others still simply chatting with each other. The assembled are all adults, from around my own age and to somewhere around twice that; the event has been running all day, with the more family-oriented sections having taken place earlier in the day. I immediately recognize Otto – stage name of Odder von Clodder, and author of the play – a tall and slender man with kind eyes and a shock of white hair under the brim of a black fedora, with a colorful scarf knotted around his throat. He's a new resident of the town whose acquaintance I made some months earlier, when I joined the local winter bathers' club in celebrating his birthday with a chilly early-morning dip in the ocean. A younger, bearded man with his hair in a bun, who – besides a loose and comfortable-looking outfit – is wearing a guitar, its strap a pink length of rope slung over his shoulder, intercepts me first, however. This is Otto's band mate and co-author, Anders – stage name Tordenskjold.
>
> Together with their recently added third, on bass, they form the band 'Odder von Clodder with Tordenskjold and the Brave Birds'[7], with the brave birds being those of us invited to sing along – I realize we are not to be a passive and anonymous audience, but active participants in shaping the evening to come.

The winter festival – also called Artic Marley – is an annual event celebrating the culture, community, and ingenuity of Hirtshals, taking place during the month of February. Running on its third year by 2025, it was born in response to the idea that "it's a shame summer ends", as quoted by Mads – the founder – and is fundamentally about bringing people together across ages, professions, and institutions, in order to establish new social relations and support innovation initiatives using a permaculture and sustainability framework (Mads, 5/5/25, p. 25). Artists, musicians, craftsmen, businesses, schools, hobby clubs, or anyone else willing to take on the 'Artic Challenge' is welcome to participate, and the 2025 festival offered music and theater, art, communal dining, music bingo, a knitting festival, a tea house, winter bathing, nature walks, and more.

7. More information can be found on their site, here: https://odderogtordenskjold.blogspot.com/

The festival is an entirely volunteer-driven initiative, with interested parties organizing at workshops during the fall, where the resources brought by each potential participants are attempted matched with others in order to foster creativity and sustainable product development – be that product an activity or material goods (Surf & Natur 2024). Those products can then be tested in a live setting during the winter festival, which is conveniently timed before Naturmødet – a public event in Hirtshals about biodiversity, sustainability, governance of natural spaces, and innovation related to nature (*NATURMØDET* 2024) – combining cultural festival and sustainable innovation hub into one event, embodying one of the festival's core goals of creating new synergies across sectors with the local community and natural environment as the main focus.

Figure 2.7: A mindmap illustrating various themes and ways to participate in the winter festival.
Source: Artic Marley 2025

2.3 Research Questions

To explore the intersection of local innovation, coastal resilience, and the evolving dynamics of the blue-green economy, this thesis is guided by four interrelated research questions.

First, the overarching question of: **How do future imaginaries, articulated through belonging and adjacency, shape locally anchored social innovation in Danish coastal communities facing marginalization through rural flight and socioeconomic restructuring?** This centers the role of spatially anchored community identity and imagination in driving efforts to reconfigure coastal futures in the face of decline.

The second asks: **How does an expanded understanding of adjacency beyond the spatial – using the politics of belonging – reveal new dimensions of local participation in the blue-green economy?** By broadening the concept of adjacency beyond legal and geographic proximity, this thesis seeks to capture the nuanced ways communities claim influence and agency in the context of the blue economy and green transition processes.

The third: **How are social innovation efforts mobilized as acts of resistance against narratives of peripheralization and decline in rural coastal towns like Hirtshals?** This frames innovation not simply as adaptation or development but as a form of contestation; an attempt to ”grab back” place, value, and future orientation from dominant narratives of rural flight.

Finally, the fourth asks: **How do innovation initiatives function simultaneously as diagnostic and reparative within the context of coastal Denmark?** This last question examines how innovation can be analyzed through a dual perspective; not only as *addressing* specific systemic challenges and threats, but also *identifying* them through ”nudging” at established parameters, thus making visible implicit understandings of place and identity for examination and potential contestation.

Together, these questions ground an ethnographic and theoretically informed study into adjacency, belonging, and innovation in Denmark’s coastal periphery.

Theoretical Background

3.1 Adjacency, Maps, & Control

At its most general definition, adjacency means *"the fact of being very near, next to, or touching something"* (Cambridge Dict., n.d.). An adjacency *claim* can, as a theoretical concept, be described as asserting a relationship between an existing and emergent norms to generate acceptance – legitimacy – for new norms, often in the context of spatial justice (Bradley 2019; Forde 2024). In marine social science scholarship, adjacency refers to the spatial dimension of being adjacent *to the ocean*, and whether claims to such should, or does, confer entitlements for accessing, controlling, protecting, and utilizing its resources (Foley and Mather 2018, p. 299). The tensions between conservation and resource extraction have been a central topic of both marine policy and scholarship for over half a century (Couper 1978), and as described in section 2.1.1, the drawing of borders has been one way in which they have been attempted managed. Water is much less static a quality than land, however, with the resources contained within it subject to a complex geophysical system of wind, currents, tides, and temperatures perpetually nurturing and moving them around the planet, which significantly complicates the spatial and temporal dimensions of marine governance.

Still, *ocean proximity politics* as put by Foley 2022 continue to characterize policy conversations around marine governance, and are only expected to become more complex as climate change alters ocean biomes, and by extension the coveted resources within them. As illustrated in figure 2.1.1, adjacency *does* provide certain legally recognized rights for coastal *states*, though this does not necessarily translate to conferring coastal *communities* in those states any particular privileges in accessing and governing their adjacent waters (Foley and Mather 2018). *Geographical* adjacency is thus entwined with governance of the ocean – 'adjacent' appearing in no less than 12 articles of the UNCLOS (Su 2021) – even if the concept's recognition and use in the *legal field* has historically been, and continues to be, somewhat controversial. The UNCLOS is thus exemplary of a critique as well; adjacency can be overly legalistic and state-centric in its application, leading to a form of 'bureaucratic universalism' failing to adapt to and account for the myriad governance challenges emerging in local contexts (Bradley 2019).

This phenomenon has also been conceptualized by political anthropologist James C. Scott as *seeing like a state* (James C Scott 1998, 2009), where maps and borders serve as in-

struments of control by those who have them drawn, and not necessarily those who live in the spaces depicted upon them. The map captures and renders legible only that which ”the state”, the entity seeking to establish and assert control over a given territory, finds relevant to ”see” in order to govern, which ultimately risks blinding it to that which exists beyond this abstracted representation. This is also the case with marine governance, where ever-mobile aquatic animal stocks are rendered legible for policymakers through months spent by marine biologists aboard seafaring research vessels – like Denmark's own DANA, which calls Hirtshals its home (J. Hansen 2025) – with numbers and equations estimating and projecting their health to inform future decision-making (Christensen 1989).

Exemplary of the issue with 'seeing like a state', governance efforts remain complicated by a significant gap present in the understanding and conceptualization of marine spaces between fishers and biologists, for instance (Grip and Blomqvist 2020; Bellanger et al. 2020). The salient point is not whose understanding is ”correct”, but rather that there is a *difference* in how actors engage in coastal development and marine governance, and that this difference has both temporal, spatial, and relational qualities worth exploring further to ensure equitable and just coastal development in the green-blue economy.

Staying with adjacency, Scott's criticism of the state and its appropriation of space, Bradley's bureaucratic universalism, and Foley's ocean proximity politics, it becomes clear that issues of power are deeply embedded, and the risk of further marginalization of coastal communities requires novel approaches to examine and address. One such approach comes in the form of a research agenda by Ounanian and Howells 2024, opening up the concept of adjacency to the study of coastal displacement and in which way, and to which degree, adjacency claims can function as forms of resistance. Though physical proximity remains an important dimension, the concept is expanded to include those of belonging, occupancy, and mobility in order to analyze their strength in local efforts to ”grab back” coastal and marine spaces appropriated by both private and state interests (ibid.). Where proximity relates broadly to spatial adjacency, and mobility access to the sea, occupancy is concerned with 'length of tenure' – that is presence in a space over time – while belonging concerns who is or is not considered part of the community, and identity as a relational property. While the dimensions do overlap, the ability to be in, occupy, belong in, and move through a space are inevitably going to be linked in various configurations, the primary focus of this thesis is on the dimension of belonging.

3.2 Belonging

Frying Fish - field diary, Hirtshals, 20/02/2025

> As we take our seats around the long table in the Swedish Sailor's Church, waiting for the evening's winter festival event to begin, my fish-shaped pencil case draws the attention of a woman a few seats over.
>
> *"Do you know why people who live on the Coastal Road*[1] *only fry their fish on one side?"*
>
> I take a moment to think. I know the street, it runs parallel to the beach on the west side of the town, but I cannot say I know where the joke is going.
>
> Ib – family friend and Hirtshals native sitting between us – leans back in his chair, the hint of a smile tugging at the corner of his lip. *"I know this one,"* he says, but otherwise leaves me to my fate.
>
> Eventually, I concede. I do not.
>
> The twinkle in the woman's eye gets brighter and she can barely contain her mirth. *"Because no one lives on the other."*
>
> As we all have a good laugh at my ignorance in the moment, it later occurs to me that, in some way, that exchange was both a test and a welcome; were I native to the town, I would have heard that joke a thousand times – or could deduce the answer to from having passed that particular street daily and known that there were no houses on the beach-facing side – but because I was an outsider, I did not.
>
> In the simple act of having had the opportunity to fall victim to the friendly ribbing, however, I feel just a little more in on the joke. A little more like I, too, belong.

Though *belonging* may at its most basic definition refer to emotional attachment to a social context or space – feeling at home – it still hints at much deeper connections to concepts beyond the individual's feelings. Yuval-Davis 2011 makes a distinction between belonging as an affective, emotional condition, and *the politics of belonging* concerning the structured and institutionally-mediated mechanisms of inclusion and exclusion; *"specific political projects aimed at constructing belonging to particular collectivity/ies which are themselves being constructed in these projects in very specific ways and in very specific boundaries."* (Yuval-Davis 2011, p.19). The boundaries are not limited to social groupings, however, as people are bounded by physical bodies as present in a particular physical space, and as such, materiality is entwined with the social and vice versa (Massey 2005; Rowe 2005).

1. translated from Danish 'Kystvejen', a street in Hirtshals.

Yuval-Davis identifies three analytical facets through which belonging as a relational, social, and political property can be analyzed:

Social Locations

Citizenship, nationality, ethnicity, gender, class, race, religion, age, occupation, and kinship groups are all examples of what can be referred to as *social and economic locations*, which determine access to resources and influence, and are shaped by broader societal power structures. Importantly, social locations are not static objects, and neither are the affordances or limitations they may provide, as they are in a perpetual state of change across both temporal and spatial dimensions. Additionally, the different aspects making up the social locations, such as gender, race, or class, do not operate along a single axis of power alone, nor are they additive, they are co-constitutive of *intersectional*[2] categories that operate differently than merely as a sum of their parts.

Relevant to this thesis is the mutable nature of social locations as described by Yuval-Davis as the following: *"Much depends on people's ability to move up those grids of power and the extent to which locations ascribed at birth can be transcended, either by moving from one category of location to another [...] or becoming assimilated into a different [...] collectivity."* (ibid. p. 22). The aspect of (partial) assimilation between what can be considered traditionally working-class locations into those connected to the middle-class have the ability to change the potency of the former while also influencing the latter, enabling new forms mobility through their intersection. This will be expanded upon further in section 5.1, with the example of integrating education about marine occupations into formal schooling contexts in order to take advantage of the power afforded by the social location of student.

Identifications & Emotional Attachments

While narratives around identity do not necessarily involve belonging to a particular social grouping, they often relate to others' perception of one-self, and what being a member of said social grouping means. In anthropological scholarship, the study of identity can broadly be identified as split along these two definitions; the individual identity relating to the self and personhood, and identity as it relates to collectivities on the other (Finke and Sökefeld 2018). Yuval-Davis' definition of identity moves beyond the personal and into the collective, as something that is continuously reproduced, although selectively and by no means definitively; *"[identity narratives] can shift and change, be contested and multiple. [They] can relate to the past, to a myth of origin; they can be aimed to explain the present and probably; above all, they function as a projection of future trajectory."* (ibid. p. 22). Collective identity narratives thus serve to create a sense of order and meaning to the individuals belonging to it, not necessarily in the sense of coherence, but rather through

2. from intersectional Feminist theory, created by Kimberlé Crenshaw 1991

a perception of *agency* and *continuity* encompassing both changes, disagreements, as well as the disruption and reconstruction of boundaries for the individual or collective subject. The distinction between self, other, and social grouping is not entirely settled, nor ”innocent”, as boundaries are constantly shifting and being contested, sometimes by force through epistemic violence, and it is in these tensions that the processes through which the narratives are constructed become obvious: *”In such cases, identities and belonging/s become important dimensions of people's social locations and positionings, and the relationships between locations and identifications can also become more closely intertwined empirically.”* (ibid. p. 25). That identity and belonging can be contested and change is precisely where the possibility of resistance lies, as the possibility of different selves enable the envisioning of different futures.

In the context of this thesis, the ways in which identity as a member of a coastal community are created, reproduced, dismantled, and reconstructed are actively incorporated into facilitating visions of the future; respect for both past iterations, as well as a recognition that *changing how we see ourselves and each other* is necessary to persist as conditions change and former identity markers become obsolete. This point will be analyzed further in section 5.2.

Ethical & Political Values

Belonging is thus not only a question of who you are and where you belong, but also how these identities are evaluated on the individual and collective level. Which social locations or identifications matter, in which way, and how much, reveals attitudes and ideological perspectives about how they *are* or *should* be constructed, as well as where boundaries *are* or *should* be drawn (Yuval-Davis 2011, p. 25)

This facet is one which permeates efforts concerning the future of Northern Jutland, be they fifty years ago during negotiations around establishing a highway connection to Hirtshals, or today as new industries vie for coveted coastal space to take advantage of the opportunities presented by the emerging blue/green economy. Each innovation process undertaken by and for the community is an expression of a distinct set of political values that, while not monolithic and static, nonetheless offer insight into important aspects of what characterizes successful collaboration, development, implementation, and management processes in this context, as expanded upon in section 5.3.

The Politics of Belonging

The politics of belonging are thus, like adjacency claims, drawing on both existing norms, and resistance against undesirable impositions of such, to bring about some form of transformation in both those making the claims *and* their environment. By examining how belonging relates to identity as part of a particular material and social space, and the way belonging is furthermore an expression of ethical and political values, it provides a more nuanced perspective into the foundations on which decisions are and could be made concerning the future of said spaces. In short, the perpetual process of defining and renegotiating belonging is one which can inform policymaking and innovation efforts, and by expanding the concept of adjacency claims to include the facets of belonging, engage with the flexible and co-creative force between the social and material as they appear in a local context.

3.3 Sociotechnicity & Innovation

To describe how the resistance aspect of adjacency takes shape this thesis, innovation is central. Where an adjacency claim can be described as a way of generating acceptance towards a new norm through appeals to proximity, mobility, occupancy, and/or belonging, *innovation* can be a form that claim takes in practice. In this perspective, innovation is best understood as *"emerging from the complex interplay of multiple, partly autonomous elements and processes (e.g., technologies, regulations, practices, markets, cultural meanings, and networks of distribution and support) at different scales."* (Spijkerboer et al. 2022, p. 4) for the purpose of bringing about change.

It is thus not limited to *"a new idea, method, or device"* (Merriam-Webster.com) divorced from the broader circumstances of its creation, but rather as a highly politicized construct which, while potentially transformative, can also be used to reproduce or reinforce existing social and economic orders (Suchman and Bishop 2000). Similarly, this understanding also aims to counter narratives of innovation as a universally applicable fix to any socioeconomic problem – and its implementation a simple question of 'how well' it is adapted to a given context – instead highlighting how it is co-constituted as *"part of a collectively held imaginary of sociotechnical progress that accompanies a complementary diagnosis of a deficiency in the receiving environment."* (Pfotenhauer and Jasanoff 2017, p.786).

In this sense, visions of the future, and the ways in which they are articulated through the interplay between technologies and technical processes, institutions, cultures, and the material and social context in which they arise, are part of larger struggles of power, agency, and legitimacy. This makes sociotechnical imaginaries well-suited to analyze resistance as articulated through innovation efforts, spanning both spatial and temporal dimensions, and making visible the frictions between different visions of the future through their enactment; imaginaries of innovation. The specific model of interest to this thesis is that of

social innovation, concerning *"the dynamics of ongoing societal change, with key roles for social entrepreneurs, local communities and knowledge brokers."* (Lente 2021, 9. 32) understanding innovation as an active part of social transformations, with an emphasis on addressing socioeconomic inequality.

At its most fundamental definition, imaginaries are *"collectively available symbolic meanings and values"* (p. 23), and when used in social theory, denotes a co-constitutive force between ideas about reality and reality itself. While *imaginaries* have an undeniably social-constructivist origin, the term has been expanded upon to include the ways in which material factors, such as digital technologies, also influence which imaginaries are even possible (Mager and Katzenbach 2021). *Sociotechnical* imaginaries as they are called are thus *"collectively held, institutionally stabilized, and publicly performed visions of desirable futures, animated by shared understandings of forms of social life and social order attainable through, and supportive of, advances in science and technology"* (Jasanoff and Kim 2015, p. 4).

Like the facets of the politics of belonging, sociotechnical imaginaries are not monolithic despite being "institutionally stabilized", but rather dynamic and multiple, subject to constant contestation and transformation as they travel between sociopolitical contexts (Mager and Katzenbach 2021). What the analytical qualifier of stabilization means is that not all visions of possible futures are necessarily sociotechnical imaginaries; there must be an *embeddedness* into cultures, institutions, and materialities in order to qualify as an imaginary over that of a discursive construction (ibid.). Finally, sociotechnical imaginaries are also subject to 'the state appropriation of space' mentioned in section 3.1, though the actors are not necessarily *nation states* – increasingly globalized private financial interests also take advantage of collectively imagined futures in order to push their own technologically-advanced agenda (Jasanoff and Kim 2015, p. 27) – and the space being appropriated is that of imagination. A commodification of futures, where collectively held values can be (mis)used for the enclosure of spaces both physical, digital, and imaginary (Srnicek 2019; John 2017; Katzenbach 2017).

Methodology

Fieldwork Overview

The empirical foundation for the cases used in this thesis is based primarily in multiple rounds of ethnographic fieldwork conducted in and around Hirtshals in North Jutland between fall 2024 and spring 2025. During this time, I engaged in participant observation and informal interviews with other participants at local events, such as through joining the winter bathers for their morning soak, and the winter festival, supplemented by semi-structured one-on-one and group interviews with several local community actors. By the end of the fieldwork period, I had recorded interviews with seven informants, and field notes from two informal group settings featuring between 10 and 15 participants. Given the close-knit nature of the communities involved, there was minor overlap between participants – one or two prior connections present at each, and new interview prospects acquired through the group settings – as a deliberate choice was made to utilize referrals through key persons for recruitment purposes, expanded upon further in section 4.1 below.

I also explored the possibility of including other locations in Denmark by going to Lolland-Falster, because this region is in a similar position of trying to resist outmigration and leveraging belonging and local identity in innovative blue-green economy initiatives, but I ultimately decided to limit the scope of the thesis to North Jutland, and more specifically Hirtshals, on grounds of access.

Besides the physical fieldwork, I have gathered data from the websites of local, regional, and marine-related news entities such as Nordjyske, Vores Hirtshals, SkagaFM, and Fiskerforum, as well as from public authorities like the Port of Hirtshals and Hjørring municipality, and social media pages related to the town and local events like the winter festival. In addition, I was fortunate to receive two books detailing history, policymaking, urban development, and prominent actors of Hirtshals, courtesy of the local chapter of the Danish Fishers' PO, and mayor in the town between 1978 and 2007, Knud Størup, which have served as both sources of data, and material methodological elements during interviews.

4.1 Access to the Field

Coastal communities can be difficult to reach, not only due to a relative geographical isolation, but the *people* may also be inaccessible due to mistrust of governing and research institutions (Gustavsson 2021b, pp. 3-19), especially those who might suffer research fatigue – the experience or feeling of having been over-studied, having seen little benefit or impact from participation, or the expected effort for participation having been too high, all leading to lower engagement and poorer quality data (Ambler, Herskowitz, and Maredia 2020; Jeong et al. 2023). Hirtshals, being both a rural coastal town and one with a long history of collaboration with marine science and governance institutions, thus heavily informed my approach to the field.

Aware that this is a community that sees frequent research participation requests, I used snowball sampling, also known as chain-referral sampling, relying on *"the dynamics of natural and organic social networks"* (Noy 2008, p.329) for participant recruitment. This particular method is especially useful for reaching marginalized populations, linking researcher to trusted contacts within the community and thus easing the process of establishing rapport with potential participants (Cohen and Arieli 2011).

By having multiple starting points from which to recruit participants, I attempted to overcome one of the limitations of snowball sampling, namely the potential for selection bias, hindering the representativeness of the data collected. Accessing members of a community through chain referral provides less control over the demographic variety of the sampling process, depending largely on the skill and judgment of each "referrer" and the ability and willingness of each potential participant to engage (Valdez and Kaplan 1998; Heckathorn 1997). Though bias is not eliminated entirely through simply having multiple starting points for the sampling process, having perspectives from different positionalities on the same topics and events *can* be used to either support the validity of the data, or bring an awareness to potential points of contestation to explore further, discussed further in section 4.2.

Key Participants

Though I have engaged with many people during the course of the project, the following have been central, their contributions forming the foundation for the subsequent analysis chapters:

- **Linn**, Head of Fishery & Maritime Services at Hirtshals Havn, and chairman of the board of the Danish Ocean Cluster and Nordsøen Fri Fagskole. She is very involved in blue and circular economy initiatives, with a particular focus on symbioses between actors in aquaculture and fisheries (Nordsøposten 2024).
- **Ib** and **Birgit**, Hirtshals and Lønstrup locals respectively, have been instrumental in participant recruitment. Ib was born and raised in Hirtshals, is a recreational fisher,

and worked in the furniture industry prior to retirement. Birgit is a family friend, works as a physical therapist in Hjørring, and kindly provided housing for me during my fieldwork. Both have provided valuable insights and served as gatekeepers for my entry into the field.

- **Knud** moved to Hirtshals with his family as a child, and started his political career in the local parish council before eventually becoming mayor from 1978 and until Hirtshals and Hjørring municipality merged in 2004.
- **Mads**, Hirtshals native, is a local entrepreneur and the mind behind Hirtshals Winter Festival. Besides the festival, he runs 'Surf & Natur' with his business partner, Lars, offering a variety of recreative water-based experiences in the local area (surfognatur.dk).

Consent

All participants referenced in this thesis have been given a verbal presentation of both myself, the knowledge institution I represent, the purpose behind their participation, how their data will be processed, stored, and used, and the final product in which it will be present. They have provided verbal consent to participate and been informed of their rights to withdraw at any time, both during and after publication, and given the contact information of myself, the author, if they wish to exercise this right. Additionally, out of consideration for the field being that of a relatively small community, anonymization was discussed with each informant prior to participation, though none opted for this option.

4.2 Data Collection

The style of interviews conducted for this thesis is that of 'ethnographic interviews' as described by James Spradley; *"a series of friendly conversations into which the researcher slowly introduces new elements to assist the informants to respond as informants"* (Spradley 1979, p. 58), containing the dimensions of *explicit purpose, ethnographic explanations,* and *ethnographic questions*. That is, both participant and interviewer are aware that the meeting has a specific purpose, even if the exact direction the conversation will take is not completely clear, explanations are offered (and reiterated) as to that purpose and of the associated research project, and finally, questions are angled towards understanding the cultural knowledge of the participant.

As such, I leveraged my position as a student in more ways than one; being both someone with an academic curiosity, but also one towards their culture. By approaching the field with humility and curiosity – the role of an ignorant outsider – I hoped to encourage participants to teach me, in their own words, what is going on in their community and what is at stake (ibid.).

As mentioned above, the interviews were performed with a specific purpose, yet remained loose enough in questions and themes to allow participants the ability to also partially guide the conversation; semi-structured interviews (Bundgaard et al. 2018).

A significant limitation of the semi-structured interview is that the researcher still approaches it with only their own prior knowledge and idea of what is at stake – even if the interview guide is loose enough to allow deviation – and as such, might fail to broach topics of relevance to the participants if they are not actively prompted. Rapport between interviewer and participant also has much to say about what, and how much, the latter feels comfortable sharing (Spradley 1979), and given the close-knit nature of the community in my chosen field, I used a combination of one-on-one interviews and two-on-one interviews in this style. This was done in part to lessen the potential hesitation for participation through the inclusion of trusted persons, and in part to encourage participants to prompt each other, thus discovering and making explicit points of corroboration or contention with the narratives unfolding throughout the interview.

Transcription & Quotes

Interviews were transcribed first through CLAAUDIA's[1] automated transcription service, developed using OpenAI's Whisper model. The interviews chosen for further processing were then manually transcribed for accuracy, since the auto-generated transcriptions possessed a significant degree of divergence from the recordings, with only filler words and unfinished sentences edited or removed for clarity. The interviews were conducted in Danish, with quotes manually translated into English for the paper. Furthermore, bolded text was added to quotes to indicate speaker emphasis.

4.2.1 Participant Observation

While interviews have provided the majority of the data utilized in this thesis, participant observation has also been a way to immerse myself – quite literally in one case – in the materialities, technical practices, and social dynamics present in my chosen field (Kristiansen and Krogstrup 1999; Mogensen and Dalsgård 2018). My position was not one of a passive observer, but actively present in and engaging with the activities undertaken during the course of my fieldwork; from being up to my waist in choppy, pitch-black water before the sun has even risen to celebrate a birthday, to being one of the 'brave birds' singing along at the winter festival. As such, I was engaged in a form of "deep hanging out", conscious of my dual position as a student collecting data as part of my thesis, but also as an individual deliberately mixing with and entwining myself in the social and material space I am occupying (Clifford Geertz 1998). The relation between myself and those in my field is thus not innocent, and the data is perhaps not so much *collected* as it is *created* in our interactions, subject to a similar mutability as the very concept of belonging I am studying.

1. Aalborg University's Research Data Services.

Positionality

As such, my own position in relation to the people in my field has thus been a persistent subject of 'critical reflexivity' throughout the creation of this thesis, as it cannot be assumed entirely equal, nor without impact on both my field, the data collected, and subsequently the creation of this report (Gustavsson 2021a). Introducing myself to potential participants, I made the decision to emphasize my complicated position as someone blending both the personal and academic; while by no means a local, I have been in the area before for both personal and academic purposes, and have deliberately involved personal connections in gaining access to the field and recruiting participants. Furthermore, I have involved my own background of growing up on the west coast of Jutland and familiarity with "fisher culture", though with an awareness that my own sort of claim to belonging is different by virtue of also being a student at Aalborg University with a specific purpose, as well as the loss of those who connected me personally to that environment by the unrelenting passage of time.

Leveraging my own position responsibly has thus required a great deal of reflection in order to balance the personal and professional aspects, clarifying to both myself others when I was "working"; the presence of a notebook and recording equipment visually signifying that I was acting in my capacity as a student and their removal that I was no longer doing so, for example. Due to the entwined nature of the professional and personal for me in the field, transparency over what constituted data collection and what constituted friendly conversation was important so as to not risk abusing the good will of the professional connections, friends, and acquaintances I invited to participate in this project.

4.2.2 Fieldnotes

A field diary was kept during the entirety of my fieldwork periods, and as mentioned in the previous section, I opted to record my observations in situ. This was done for the sake of transparency, making visible my position as a student to others in the field – as mentioned above – but also to capture a more detailed "closer-to-the-moment" record of events as they occurred (Emerson, Freitz, and Shaw 2011). In order to not detach myself entirely from the context I was in to write, however, I limited myself to 'jottings', that is, abbreviated words or phrases, which would later be elaborated upon to create full field notes at the end of the day.

Ethnographic Vignettes

One way in which I have utilized my field notes is as the foundation for the *ethnographic vignettes* scattered throughout the paper. Since one of the central concepts of this paper is belonging, something deeply entangled with *affect* and *emotion* as mentioned in section 3.2, short narratives seemed an appropriate inclusion to the text of this report. Pulled from events in the field, they are constructed for the purpose of inviting the reader into sharing my experiences, and through that, gain a deeper understanding of the insights gained (Schöneich 2021). By elaborating on these moments, I also invite the reader to reflect on my data and retrace my steps to draw their own conclusions.

While vignettes *are* based on empirical data, there is a certain degree of fictionalization involved in their creation, and they should thus be understood as an *affective* narrative to support my theoretical and analytical points, rather than an attempted neutral retelling of events; *how writing not merely seeks to transport lived affects from the field onto paper, but how it aims to evoke a sense of these affects* ***in the reader*** (Bloom-Christen and and 2024, p. 787).

4.3 Data Analysis

As part of analyzing the collected data, I have employed thematic analysis. This method was chosen for its theoretically agnostic nature, complementary to a partially inductive research approach; *"reading and rereading the data and by looking for patterns that emerge"* (Bucher 2021).

Though I started the thesis work with an idea to work with themes of adjacency and belonging, I deliberately avoided further conceptual specificity prior to conducting fieldwork so as not to narrow my vision to only that which "fits" into my chosen theoretical framework – turning analysis into simply a matter of proving or disproving a predetermined hypothesis – instead opting to let the data inform the hypothesis, aligned with grounded theory methodology (Glaser and Strauss 1967). The reason I refer to my approach as *partially* inductive is that while I may attempt to rid myself of inclinations towards certain theoretical positions, *"data are not coded in an epistemological vacuum."* (Braun and Clarke 2006, p. 12) and my process of producing knowledge will inevitably be influenced by my particular embodied position, as discussed in the prior section.

Still, by performing thematic analysis on the data *before* settling on a theory through which to further analyze it, the goal was to avoid locking myself into which specific themes I would work with in advance; using the emerging patterns to inform the subsequent literature search, and then returning for another pass with a more focused vision to capture finer analytical detail. Some of the themes highlighted through these different rounds of analysis were; change, survival, loss, identity, community, human-nature(water) relations, class conflicts, social values, depopulation, local pride/shame, stereotyping, out-

sider/insider dynamics, gentrification, green transition, ”NIMBYism”, blue economy, resistance, innovation, local knowledge, centralization/peripheralization dynamics, preservation, climate change, regulation, future visions, and sustainability (economic, environmental, social).

Not all themes would go on to becoming *main* themes, though through examining the relationship between them, many went on to becoming sub-themes, as will be explored further in the following analysis sections.

Document Analysis

A variety of documents were collected and utilized to enrich interviews, as described in section 4.4, but documents also serve as sources of data themselves. As ”witnesses to past events”, documents – be they text, video, or audio, digital or physical – can complement interview and observation data, helping *”understand the historical roots of specific issues and [...] indicate the conditions that impinge upon the phenomena currently under investigation.”* (Bowen 2009, pp. 29-30).

Used in combination with other qualitative research methods, document analysis is also a means of *data triangulation*; supporting events, claims, or facts through multiple sources of evidence (Yin 2002, pp. 97-101). Since this thesis is occupied with adjacency claims as a form of resistance to peripheralization, having not only interviews and observations as sources of data, but also documents, helps fulfill the quality criteria of embeddedness and continuity for collective identity narratives as connected to the *politics of belonging*, and *sociotechnical imaginaries*.

Document analysis is not without its limitations; documents are crafted for a purpose other than research – a memoir for a specific audience of readers or public records – and as such rarely possess enough detail to answer a research question alone, which only highlights the need for incorporating them into data triangulation. Along that vein, they are not necessarily an objective recounting of events, but reflective of the author’s own *situated knowledge*, and should be treated as a partial perspective on the subject at hand. Finally, an issue I personally encountered in my own collection endeavors looking up information on the winter festival after the fact, documents may have limited availability. Besides the potential difficulties in accessing physical materials from organizations, libraries, or other repositories, data on web pages – be they news articles, personal blogs, podcasts, or videos – may be subject to editing or removal for a variety of reasons, complicating collection and analysis (Bowen 2009, pp. 31-32). As an example from my own thesis work, collecting data on the specific events happening each day during the winter festival was complicated after the fact when the schedule was removed.

4.4 Epistemology, Objectivity, & Situated Knowledge

In a sense, all anthropological writing can be considered a form of fiction, as argued by Clifford Geertz (1973; 1988), though as Lila Abu-Lughod (1991) adds, that does not necessarily equal *fictitious*. A process of interpretation takes place by simple virtue of the sensory apparatuses through which we absorb and make sense of the world being *embodied*. The act of ”observation”, for instance, is not merely a matter of passively recording visual stimuli; vision, whether biologically or technologically mediated, does not record from a position of nowhere but is limited by that which the lens is primed to capture. As put by Donna Haraway: *”Vision is **always** a question of the power to see – and perhaps of the violence implicit in our visualizing practices.”* (Haraway 1988, p. 585). The argument being that claims of being able to capture some whole, perfect objectivity – completely disengaged from the interpretation and decoding of the (un)knowing self through which it is perceived – are in reality privileging one particular embodied position over others.

The solution, according to Haraway, is not simply falling into relativism, but rather embracing *”partial sight and limited voice – not partiality for its own sake but, rather, for the sake of the connections and unexpected openings situated knowledges make possible.”* (p. 590). Taking accountability and responsibility for scientific production by working *with* the uncertainty of objectivity as ’positioned rationality’, acknowledging that our understanding will always be partial and incomplete. This should not be taken to mean that the pursuit of knowledge is hopeless – that we can never really know anything – but rather remind us to remain receptive to the reality that there is always more to learn.

Materials & Futures

One way in which the limitation of my own partial perspective was attempted addressed, was through the involvement of materiality during interviews. Since temporality is a central element of this thesis, I utilized physical and digital objects as a method for ”anchoring” narratives of both past and future as expressed by participants (Ravn 2022). While the past may be conceived of as part of a linear narrative leading towards the present, *where* emphasis is placed, and on what, as it unfolds during an interview is representative of how subjects of time are filtered through ”the perspective of the present” (Järvinen 2004). Where an individual is in the present moment influences how both past and future are conceived of and expressed, meaning that there can be a multitude of life stories told by the same person drawing on the same memories of the same events, which can then prove challenging to subsequently interpret in a research context (Lyon and Carabelli 2016). Using objects important to participants, either from their surroundings or those they, themselves, have made and/or brought, can then help both facilitate and (temporarily) ”solidify” these narratives (Hurdley 2013; Ravn 2022).

As part of my own preparations, I thus opted to collect news articles, books, images, and video excerpts by and involving my participants to either reference or present during interviews in order to explore both the past *and* how *"objects may also be 'building blocks' for an imagined future"* (Ravn 2022, p. 612). Since all of my interviews took place in the field, either at public locations or at the homes and workplaces of participants, I also took the opportunity to incorporate objects from our immediate surroundings; paintings, posters, photographs, and even the view from a window, all serving to prompt conversation and reflection on both past, present, and future.

Figure 4.1: Biographies can serve as valuable aids for anchoring interviews in specific events or topics related to the participant's personal and professional life, as well as introduce a comparative element in case their views have changed since being written down.

Anchoring narratives to objects does not necessarily solve the "problem" of multiplicities of both recalled pasts and imagined futures – nor is the purpose of the method in this context to do so – and the kind of narratives provoked by the objects are naturally limited by the objects themselves, but using this method, alongside a narrative approach, has nonetheless aided in making dimensions of time more tangible and explicit for the subsequent analysis of the interview data.

Representation

Similar to the issue of representation related to ”seeing like a state” as mentioned in section 3.1, this thesis is also based upon only my own observations in a limited period of time, and my conversations with a handful of local actors, in Hirtshals. However, in working from the standpoint of Haraway's situated knowledge, that the Hirtshals represented through my specific interactions in the field, and as expressed in this paper, does not diminish the validity of the knowledge produced. Like maps are only partial representations of the territory they depict, so is this thesis work a partial representation of Hirtshals in a specific moment in time, as experienced by and expressed through specific people – including myself.

The idea that there is one ”culture”, or that places and communities can be captured as a perfectly bounded and isolated whole, is one which has been cause for much discussion within the field of anthropology since the 'crisis of representation' began questioning the concept of culture itself (Akhil and Ferguson 1992). Here, the naturalisms of cultural unity as associated with territory were challenged, encouraging a willingness to *”interrogate, politically and historically, the apparent ”given” of a world in the first place divided into ”ourselves” and ”others.” [...] [A move] away from seeing cultural difference as the correlate of a world of ”peoples” whose separate histories wait to be bridged by the anthropologist and toward seeing it as a product of a shared historical process that differentiates the world as it connects it.”* (ibid. p. 16). By incorporating the perspectives of different actors in this thesis, I hope to demonstrate a continuity in the shared histories of Hirtshals without necessarily portraying them as an uncomplicated unity.

Belonging in Hirtshals

This chapter examines how belonging is negotiated, leveraged, and enacted in the context of the coastal community of Hirtshals in response to socio-economic marginalization and structural peripheralization. First, it explores how social locations, identity narratives, and community-held values shape local sense of place and collective agency. Through the lens of the three cases – the North Sea Free Trade School, the Workforce of the Future program, and Hirtshals Winter Festival – the analysis highlights how locally anchored innovation initiatives operate not only as economic development tools, but as forms of resistance against peripheralization. These initiatives are analyzed as expressions of sociotechnical imaginaries that reconfigure technical processes to direct future trajectories and (re)claim local agency and influence in the face of spatial and sociopolitical marginalization.

5.1 Social Locations, Mobility, & Assimilation

> *"Hirtshals reminds me a lot of my hometown, Ålesund. I'm out of a fisher family and I'm extremely proud of where I'm from, and when people hear I'm from Ålesund, immediately, I can see them become like [crosses arms approvingly, nodding] 'Ah, yes. Alright.' It's a stamp of approval, at least in the fisheries world. But then I come to Hirtshals, and here it is the other way around! Here I discovered – and this is less than 10 years ago – that when you came as a parent with your small child to enroll in school, they asked 'do you want your child to achieve something or are they going to the fish?', and then that determined which class they would be placed in. So already there it's like...the ones who aren't good for anything, they get assigned to the fisheries. And it has been this way for many generations, so it's persistent."*
> (Linn, 27/11/24, p. 7)

As the above quote demonstrates, the *social and economic location* constituted from being out of the shared occupation of fisheries – being part of a particular socioeconomic class – as connected with a geographic location, can in one context be considered a "stamp of approval" and grant you access to resources and influence, but in a different one deny them. Denmark and Norway are both *geographically* adjacent, as part of Scandinavia, and *societally* as social democracies under what is often dubbed the 'Nordic Model'(Andersen et al. 2007), as do they also share extensive histories of rural coastal fisheries, and history

in general – once displaced in both space and time, however, the affordances of what appears to be similar social locations vary. These boundaries become clear in the clashes between understandings, as Linn has felt in her contact with the education system:

> *"I remember being at some school function and said to the guidance counselor 'My son just got an apprenticeship as a ship's electrician down in Hirtshals,' and I was rambling with pride, but she was like [sighs] 'Well, I suppose he could always pursue higher education...' and I was thinking, 'How stupid are you? You have no idea – and you are sitting there as a* ***guidance counselor*** *with that opinion?'"*
> (Linn, 27/11/24, p. 16)

Linn herself identifies this as a problem of a growing class divide in Scandinavia, where political focus in the educational field has overwhelmingly favored "white collar" occupations over the skilled trades, a point also supported by historical documents from the Danish Ministry of Education:

> *The government's globalization-strategy places a particular focus on education and lifelong upskilling. A high educational level and good opportunities for lifelong learning are some of the most important prerequisites for high competitiveness and for everyone actively participating in the workforce and society.*
>
> *It is the government's aim for Denmark to have world-class educations, and everyone participating in lifelong learning.*
>
> *The overarching goals for the educational reforms are:*
>
> - *All children have a good start in school.*
> - *All children achieve good professional competencies and personal competencies.*
> - *95% of all youths in 2015 complete tertiary education.*
> - *50% of all youths in 2015 complete higher education.*
> - *Everybody educates themselves their entire lives.*
>
> (Undervisningsministeriet 2007, own translation)

The effect of these policies prioritizing formal education in Denmark are clear – with 52,3% of adults between 25-45 in 2023 having completed higher education, compared to 33,8% in 2008 (DST 2025b) – narratives presenting higher education as the "only way" to handle the challenges caused by globalization, climate change, and geopolitical uncertainties, populating the public consciousness (Nielsen 2003; Wiegand and Schacht 2011; Frederiksen and Hansen 2024; Waagstein B. 2025). These narratives have also been present among the youth of Hirtshals, with many finding difficulty retaining connection to their coastal heritage, and the occupations associated with it, with the shift towards higher education being the only way to "achieve something" (S. Hansen 2014).

Given the status afforded higher education on a sociopolitical scale, it is perhaps not unsurprising, then, that occupations which have traditionally relied on informal constellations of apprenticeship and practical education – as is the case with many maritime occupations – may have been devalued by comparison, exemplarized by the guidance counselor's comment towards Linn, above. That this strategy has had deleterious side effects for certain segments of youth is something which is now being "diagnosed" by public institutions as well:

> *"Here in Hjørring Municipality we have this thing called the Youth Guarantee[1], where we have to look at how to make things better for our young people. [...] We see that we have a lot of young people slipping through the cracks, but who we could actually pick up and get into some of these areas where we really need more working hands. So I think the Danish government has also realized that we have been pushing too hard on 'go to university and achieve something' because now we're starting to see the opposite. [...] We need you out in society."*
> (Linn, 27/11/24, p. 18)

So the access to resources afforded the social locations at play in coastal communities like Hirtshals has been limited, one could argue even actively starved through decades of national policies prioritizing higher education, with the consequences being an increasing motivation to abandon both location and community in order to achieve greater mobility along what Yuval-Davis calls "grids of power". The effects have been significant on the community:

> *"See, I served my apprenticeship at the machine workshop, there's no machine workshop anymore. Next to that, the net maker, there's no net maker anymore. [...] And when I think back to when I was young, it was teeming with activity, and it just isn't anymore."*
> (Ib, 21/10/24, p. 15)

Connections towards the issue of rural flight thus begin to appear, the social locations related to living and working traditional occupations along the coast diminishing in influence as young people have increasingly been encouraged to pursue formalized higher education for a chance to "achieve something" better than what their surroundings are perceived able to facilitate:

> *"I know there are a lot of people here spending absurd amounts of money because they want to enroll their child to HPR[2] in Hjørring, because then their children get the right friends, the right network, but then they forget that a lot of those things already exist here! So, we need the pride in where you come from back."*
> (Linn, 27/11/24, p. 7)

1. From Danish, 'Ungegarantien', a policy providing alternative 'educational journeys' in close collaboration with local economic actors (Hjørring Kommune,), of which the Free Trade School is a partner.
2. Hjørring Private Realskole, a private school.

What Linn describes here is what the politics of belonging call attempts to *transcend* social locations, using what mobility is available – both physically moving from Hirtshals to Hjørring but also movement through economic means – to assimilate into a more advantageous social collectivity. While no parent can be faulted for wanting what is best for their child, what exactly constitutes *best* is not an entirely innocent matter; assimilation is the process through which something is absorbed into a larger organism until it is indistinguishable(Pauls 2025), and in terms of social groups, necessitates relinquishing identity, culture, heritage, and emotional attachments – belonging. While assimilation can thus be a means of easing movement between social categories, it is not a process undertaken without sacrifice, and in the case of Hirtshals, this sacrifice comes in the form of continuing to perpetuate the devaluation of coming from and living on the coast.

In this perspective, public education policy can thus risk becoming part of *"state sponsored clearances"* (Ounanian and Howells 2024, p. 4-5), though in a more abstract sense; instead of oceans being directly targeted for enclosure, the educational avenues through which adjacent communities *sustain access* to them are systemically peripheralized until they are no longer viable. Another nuance of this form of clearance is that when a social location now offers little in terms of resources, influence, or mobility, displacement might outwardly appear as voluntarily undertaken migration when assimilation into more advantageous locations occur. The forces driving displacement through devaluing belonging – as a part of adjacency – can thus be subtle in that they are not necessarily the product of direct enclosure efforts but instead a side effect of otherwise 'benign' policy initiatives across a given society. A form of epistemic violence occurs, in which the knowledge associated with the skilled trades is neglected in favor of that associated with higher education. Another one such example comes from municipal reforms, where municipalities were merged into fewer, and larger units:

> *"We went from being a municipality with 15.000 inhabitants to one with 65.000 in the merge, from being a city council of 19 to one of 31. One thing we lose is the close democracy. Ask someone in town who's on the council in Hjørring, they may be able to mention one or two from here, no one else. Another is that, if the inhabitants had anything they wanted to talk to the mayor about, my door was open 24 hours a day. Today? Today, people barely dare call the town hall in Hjørring and ask. That's why I say the close democracy disappears – there's no connection between the political system and citizens, except maybe during elections."*
> (Knud, 21/10/24, p. 5)

By being absorbed into Hjørring Municipality, belonging to *specifically* Hirtshals comes to matter less, being now one of many towns in a larger collective. The connection between politics and inhabitants becomes distanced, addressing issues relevant to the area now needing to travel through different – and more convoluted – technical processes than before. Peripheralization then happens through multiple – but interconnected – avenues through processes of assimilation, voluntary or otherwise.

This, in turn, only highlights how expanding adjacency to include aspects of belonging – and how belonging is constituted as part of a particular social and economic location – provides the ability to examine participation (or lack thereof) in the blue-green economy. By drawing attention to how social locations are constructed, reproduced, contested, changed, or even abandoned, and in which arenas, otherwise subtle forces of displacement become visible, as do potential ways of ”grabbing back”.

This is not to deny that there are tangible internal reasons for outmigration, and Hirtshals has, like many predominantly industrial rural communities, had its fair share of troubles:

> *”I’m one of the people who stayed, even though when I was young, everyone fled. I think it’s also part of what drives me to want to create a town that I want to live in, because I have been here when it wasn’t a nice place to be. [...]There was a lot of crime. Drinking. Drugs. It’s like, all we had here were these big industries and giant workplaces which had a really unhealthy culture. We got a lot of tragedies out of that.”*
> (Mads, 5/5/25, p.1)

So, the social group around which the location is constructed is not entirely uncomplicated, and the history of poor, and at times even dangerous, living conditions in the past still conjures associations in the present:

> *”A bad reputation, that kind of thing lasts. We have a reputation here in Hirtshals called ’it smells like money’, because the fish industry stinks – literally. [...] It has two dimensions. One is that it’s okay that it stinks because it means someone is making money, where I am more inclined to the other, where I think that we shouldn’t ruin things to make money – money isn’t that important – because when the party is over, Hirtshals will still be here. [...] When I’m not here anymore, someone needs to be willing to take over and carry on, they can’t just be left with the bill.”*
> (Mads, 5/5/25, pp. 8-9)

Forces transforming a given social location into one from which people may choose to escape may then also come from within during periods of contestation, which demonstrates the significant quality of mutability. Opposed to transcending the location through assimilation into another, more advantageous one, the winter festival, Nordsøen Fri Fagskole, and Workforce of the Future represent another way; trying to change it from within. (Re)claiming both material and social space for the purpose of demonstrating their value.

5.2 Identification, Imagination, & Innovation

> Knud: *"In towns like ours, that aren't any bigger than they are, we get to know each other. You don't do that in the bigger cities – you barely know your neighbor."*
>
> Me: *"Why is it important to get to know each other? Why can't we just go around, not caring?"*
>
> Knud: *"A lot of the people who move here from the bigger cities, they are so deeply surprised by how they're received by the local population."*
>
> Ib: *"Yes, you're noticed. You aren't just some silhouette walking around."*
>
> Knud: *"If you knew how we receive someone new in the winter bather's club...you can't just* ***not*** *care. It isn't just a polite nod to one another. We walk over and bid them welcome, and so on[...] The way you're received when you move here, that would never happen in Aalborg."*
> (Ib & Knud, 21/10/24, pp. 25-26)

As illustrated in the quote above, the ways in which belonging is signaled and practiced through identity narratives display a conscious connection between the self, the other, and the collective. Identification as an ongoing process of relational constitution; one might originally be from Aalborg, but through both movement in both physical and social space, come to belong in Hirtshals. This may seem an obvious point, but examining how an "I", "us", and "them", is constructed, enacted, and contested, can offer insight into mechanisms of exclusion and inclusion, and by extension, how resistance is expressed through their tensions. A relational understanding of identity is not a foreign one to coastal communities, either, far from it:

> "My last name tells you where I come from. It's the name of a place – that is where my entire family lives – and within fisheries, the work is very family related, with a lot of people being involved in one context or other."
> (Linn, 27/11/24, p. 27)

Here, a very strong connection between place, people, and occupation is established, hinting at a social location as discussed in the previous section, but where identification offers something different in the context of resistance, analytically, is by delving into how the *self* as part of a collectivity is constructed:

> *"We see quite often school being this box, and if you don't fit in, you're a loser. That's the first wrong thing we do because a lot of those who are labeled that way, we have a special occupation that they would be fantastic for. [...] But the thing making the system so vulnerable is that you need to find the teacher who can see that value, that little Lisa or Ole can get there, they just need a different path."*
> (Linn, 27/11/24, p. 17)

When such strong emphasis on success is placed on thriving in formal schooling contexts, for instance, failure thus risks reflecting back on the self with the label of *loser*. Internalizing the idea that one's value as a person is tied to (economic) success is one which is contentious even within the collectivity of Hirtshals – as discussed in the prior section by Mads with the reputation *"it smells like money"* – but also in innovation contexts:

> *"And I think in these fisher communities it has become this 'oh, you're **just** a fisher?', but then if someone comes into money it's 'oh, you're a **fisher?**' because you have a society measuring success commercially – in money. And it's a little funny because I have worked with people who have been seen as 'yeah, they're a little bit **special** and we're tired of them,' and they've then researched or developed something new for fisheries and then all of a sudden, once it's a commercial success, 'wow, they're a genius,' and that's when I say '**Now** you think it's the most genius thing, but last week you didn't want to invest in them, you were actually laughing at them' "*
> (Linn, 27/11/24, p. 16)

An argument can then be made that the internalized construction of *success* equaling *worth* is strongly perpetuated in a relational capacity as being part of a community – be it personal, educational, or economic. In fact, these dimensions have a strong overlap in coastal communities especially, since occupation and identity are so strongly linked:

> *"When you're a fisher, and you have that lifestyle, it's not like you think 'well, I've been doing this for fifteen years so now I'll become a truck driver' or something. I mean, I can just speak for myself; my job is also my lifestyle. Right now I'm sitting here working at the harbor office, but I have always worked in [fisheries], and I'll never do anything else."*
> (Linn, 27/11/24, p. 13)

By involving emotional attachments, the issue of rural flight in coastal communities thus becomes multiple. It is not only that a concerted societal focus on higher education to the detriment of skilled trades has exacerbated class divides – motivating people from social locations relating to the latter to assimilate into the former – but also due to the relational nature of identification. Professional worth being measured largely in economic success risks negatively informing internal constructions of identity in social groupings where occupation and self are deeply entwined. This is why social innovation initiatives around *"need[ing] the pride in where you come from back"* (Linn, 27/11/24, p. 7) are so significant as acts of resistance. Recognizing that *emotion* is a powerful driver of action, with pride, especially, as it pertains to *"social hierarchies and the value attached to political categories"* (Nixon 2017, p. ii) being one worth leveraging in building both personal and collective identity, as well as sociopolitical influence.

Even *with* demonstrable economic success, identity narratives of "Udkantsdanmark" – peripheral Denmark – and the perceived lack of opportunities and value continue to circulate:

> *"Back when I came here, I heard 'Udkantsdanmark', and I was just thinking, "they call this **Udkantsdanmark?** This is where value is created! Look at the wharves, look at how much value they generate. Just look at Karstensen in Skagen; they have more apprentices through their system every year than there are children in all of Skagen! And it's the same here!"*
> (Linn, 27/11/24, p. 7)

That the narratives can be multiple and sometimes contradictory does not diminish their significance, in fact, that Hirtshals can be perceived as both impoverished and wealthy, a place of tragedy and fortune, only serves to reiterate that the coastal town, and its people, are in a perpetual state of becoming – change – and that multiplicity is precisely what enables the envisioning of different futures. That in the confrontation between conflicting narratives is where identity and belonging are expressed, embodied, and contested:

> *"There was some meeting where we were discussing depopulation and I said, 'I would like to see those numbers.' Because what was done was just projecting the past, and it's fine that you do that so can say 'this is where we end up if we don't do anything', but there were some boys out in Løkken, for instance, who wanted to do something for the town, and now schools are opening and people are moving out there – didn't have in your predictions that something else happened, did you?"*
> (Mads, 5/5/25, pp. 22-23)

and continuing,

> *"What's the **story?** What's the **pride** in being here? What's **my** role in being here? Because if that isn't there, **then** we can project that [future], but if something else happens...There's a festival, and now local artists are showing up who want to do things – suddenly our buildings increase in value. I mean...In Hirtshals, the homes are so cheap you can live off of your dreams."*
> (Mads, 5/5/25, p. 23)

Identity narratives are thus something deliberately incorporated into the technical processes – the way activities are operationalized for the purposes of achieving a specific goal – underpinning initiatives like the winter festival for the purposes of countering the negative associations of peripheral Denmark. Still, this does not necessarily involve rejecting peripherality, but rather reworking it into something that serves the narrative of the festival:

> *"The problem, and this is also something I've learned, is that I need to be careful regarding tourism. I can't tell the tourist office to present it as if there's a big festival coming – people will be disappointed because that isn't what happens –*

> *but you can come to Hirtshals, and you can meet some people, and the fact that it's this underground thing...I believe that is much stronger because if you come to Hirtshals and make a good friend, you will also want to come back if you otherwise enjoy being here."*
> (Mads, 5/5/25, p. 4)

Trying to implement an initiative that aims to actively influence the process of identification is not without its challenges, however. It ultimately involves an evaluation of current constructions of identity, which may invoke resistance:

> *"I've encountered a lot of resistance because a lot of people tell me 'can't you just do something we know? Can't you just set up some music and beer and food in a tent?' Sure, I* ***could*** *do that, but it's not what I* ***want****; I want to nudge the parameters we're measuring on."*
> (Mads, 5/5/25, p. 3)

Yet, it is precisely the act of "kicking up dust", as Mads also puts it, through confrontation with conceptions of self and community that visions of the future are engaged, and imaginaries are made visible; which futures are embedded, desired, and supported within the collective of Hirtshals, and why?

> *But then I change the premise every year, and people don't understand.[...] [the new] also becomes a point of comparison against what we already know, helping us appreciate that, or fight for it a little. When someone comes along, stirring the pot, we have to account for why things* ***should*** *stay the same.* (Mads, 5/5/25, pp. 5-6)

Between the festival and the educational programs, there are thus dimensions of time; how the past informs challenges in the present, and how in order to not simply reproduce the present in the future, it is necessary to challenge internalized constructions of identity that may have been forced upon a social grouping – such as the label of *loser* to a self not fitting into a formalized educational context, or *peripheral Denmark* onto the geographical location of Hirtshals and people living there. The tension created through social innovation initiatives actively seeking to "nudge the parameters" on which belonging is measured thus bare the sociotechnical imaginaries already embedded into culture, institutions, and materialities, as well as whether they are truly representative of the desires of the community, or perhaps indicative of displacement – taking place through an appropriation of imagination.

5.3 Values & Politics

That is not to say that appropriation and power relations are only a question of outside forces exerting pressure. Even within the collectivity of Hirtshals, a certain stubbornness – or perhaps better described as respect for one's own and others' agency as part of it – is an ever-present consideration when developing and deploying innovation initiatives:

> *"We also have to show humility and know our place. We are not to walk up to [the maritime industries] and lecture them on anything. We can inform them of plans that we have, and how things will be, but we shouldn't kid ourselves into thinking 'here comes the harbor and we'll...' – forget about it!"*
> (Linn, 27/11/24, p. 24)

> *"If anyone tries to force me to do anything 'you should do that in Hirtshals', I'm just like 'That's not for you to decide'. When something is coming from outside, trying to tell us what to do...we're just masters of that in Hirtshals; no one tells us what to do."*
> (Mads, 5/5/25, p. 13)

The same respect for agency was also part of Knud's approach to politics during his career, and part of why he split with the social democratic party in the 70s and became unaffiliated:

> *"The local unions wanted to decide what opinions I should have, so they approached me and figured I should do such and such things. And you know,* ***I*** *was the one who was elected, so I wasn't about to have a union board sit there and decide what my stance should be. That's why I left the party – I couldn't live with that."*
> (Knud, 21/10/24, p. 4)

So there is a strong tradition for self-determination in Hirtshals, and an awareness for it when it comes to attempts to enact change, be it through the establishment of a festival, educational initiatives, or politics. The values embedded in social locations and identification, as well as efforts to transform them in some manner, are evaluated both individually and collectively. Social innovation initiatives will invariably have ideological values embedded within them, and not all of them survive the encounter with reality:

> *"For this third year [of the festival] I thought, let's try and introduce a little economy. I said 'this year, we have to be willing to invest in others. You might be supplying a location, and you supply materials, and then someone else makes the money.' That was a total no-go.'someone else shouldn't be making money if I'm not also doing so'. It wasn't greed, nothing crass like that, just 'I will allow you to set up what you want to do here, and you don't have to pay anything, but don't send in someone else to make money, that's not the kind of contract we have.' I*

> *learned something there, so I have to come up with something else."*
> (Mads, 5/5/25, p.17)

So, while a great degree of grace is extended towards entertaining experimentation with different dynamics through various initiatives, certain values around *fairness* are persistent, and become especially evident in matters of money and agency. While attitudes prizing personal liberty and those prizing social responsibility can often seem at odds – and indeed, rural communities are frequently observed to lean more fiscally and socially conservative than metropolitan areas, often called the urban-rural political divide (Zakaria 2018) – in Hirtshals, such divisions along political lines have a history of being blurred:

> *"I by and large did not care when it was about Hirtshals Municipality's well-being. I did not care if it was red politics, green politics, or white politics. For me, the case at hand was what mattered most. [...] It wasn't about party politics, but a question of what served Hirtshals Municipality best."*
> (Knud, 21/10/24, p. 4-5)

In this way, Hirtshals did not fit the image of the conservative rural community, with collective fairness and cooperation being a prevalent ideological value:

> *"In the Hirtshals city council from 1982 and until 2007, we [the local list] had a majority. We had ten out of nineteen seats, for the entire period. So you might say, 'isn't that dangerous, because then you can just sit there and pass anything with those ten?' That was simply not done. We never passed anything with ten. We always spoke with the others and solved problems collectively."*
> (Knud, 21/10/24, p. 6)

Reflecting on the origins of those values, Knud draws on his personal experiences with socioeconomic marginalization:

> *"One of my colleagues on the parish council told me,'you'll get wiser with age'. And I* ***have*** *become wiser, understood in the way that I don't have the sharp color*[3] *anymore, but that was back then. And I think one of the reasons for that was that my father was a laborer, filling trenches after the war, and at the same time he worked at an ice factory, where he was killed in 1951, leaving my mother suddenly alone with a herd of children."*
> (Knud, 21/10/24, p. 3)

Tragedies like the one Knud's family suffered are not unusual for those living on the coast, with many industrial and marine activities occasionally claiming lives, and may offer an explanation to why attitudes of communal responsibility and care are so prevalent, even if they are not monolithic. Given that Knud was the democratically elected mayor of Hirtshals for nearly 30 years as well – until the municipal merge in 2007 – and deputy

3. Red, the color commonly associated with the political left wing in Denmark.

mayor for a number of years afterwards, it would suggest that his ethical and political values are shared by a significant number of Hirtshals inhabitants and embedded into local institutions, even after his retirement. Indeed, Linn also mentions feeling a responsibility towards carrying on the work Knud has done in helping get the highway connection and research to Hirtshals during his tenure as a consideration in the management of the harbor today:

> *"It's not that I am sitting here and making decisions to get my own way; we owe it to the people who put in a tremendous amount of work before us, and those who will be putting it in after, not just to think of the now, but what could potentially be. Because when you make a decision, and choose the path to pursue, you go towards one thing but distance yourself from another."*
> (Linn, 27/11/24, p.10)

The community rallying around its members through expressions of care for the future is something which Mads has felt during organizing the winter festival, too:

> *"All of the craftsmen down here, they made an auction, where they donated some of their art to benefit the festival, and help it get started. I hadn't expected that at all, and was very overwhelmed. It was tough starting it up, but I think* ***that*** *was what made me think I dare try this again next year."*
> (Mads, 5/5/25, p.5)

In this way, communally held values can thus be expressed through the reception of budding innovation initiatives, patterns of approval or rejection providing a potential indicator for political and ethical leanings prevalent in the collectivity. This is also the case for the harbor administration:

> *"Earlier, we were a 'yes, please' harbor, but now we have become a 'no, thank you' harbor and removed the things we don't want to mess with; anything that says right there, ink on paper, that it won't provide us any benefit and we can't unite with our core values; fisheries, aquaculture, maritime services, transport and logistics, and some energy."*
> (Linn, 27/11/24, p. 8)

So, besides an interest in specific blue-green economy industries as an economic actor, sustainability in multiple dimensions is a strongly held value, specifically expressed through manipulating technical processes towards establishing synergies between industry, coastal infrastructures, and public institutions:

> *"It's about integrating things into a system. It's also why we have to say there are a lot of things we say no to, even a lot of things that might have been interesting. 'Why the heck are you saying no to this?' it's because we need to step back and look at the big picture."*
> (Linn, 27/11/24, p. 9)

With the big picture being:

> *"I would say that we have a responsibility to society as a harbor, and if it is a role we can take, then it is our duty to do so. We would not have done our job well enough if we didn't. [...] Of course, our primary duty is to run a safe and functional harbor, that the ships arrive and leave as they should, all that, but I consider that a given. We're good at our jobs, so we also have the capacity to do other things that are just as important, but in a different context."*
> (Linn, 27/11/24, p. 20)

Where pride is an emotional driver, duty is an ethical one, and a *responsibility to society* is thus another way in which blue-green economy innovation initiatives are shaped to benefit a decidedly social sustainability agenda. When already working with a synergic approach for the purposes of bridging maritime industries, the leap towards public institutions is not very far, even if it is a relatively recent development:

> *"The harbor's role has changed drastically in the last ten years; we are now the largest economic developer in Hjørring municipality, which also helps facilitate 'this is the path we're taking and this is what we should do.' and we have had pretty good success with that. If I may brag, we have some incredibly talented people working here at the harbor, and we have a really good collaboration with Hjørring municipality that we have built further on, together."*
> (Linn, 27/11/24, p. 9)

The port of Hirtshals being municipal, but autonomous, ties it to both the collectivities of Hjørring Municipality, as well as those involving private actors in the maritime industries, allowing the organization to use its ethical and political values to evaluate *belonging* in both, and shape belonging in innovation contexts. Being the largest economic developer in the municipality affords the harbor the ability to leverage identity narratives of economic success to (re)claim influence and resources for the social and economic locations of Hirtshals, the emotional attachments and political values linking to social responsibility as part of a municipal and local geographical collectivity facilitate "nudging the parameters", and extensive experience operating in the intersection between public institution and maritime industry, all makes the organization especially relevant as a site of social innovation in the blue-green economy.

5.4 Innovation as Resistance

> *"I usually tell people: you just need to be willing to take my hand and have faith that I wish you well, and then walk with me. You might despair, and you might be disappointed – I'm also someone you need to be willing to forgive – but just keep walking with me. Because I will keep going until we're done, everything ends well, and there is something for everyone."*
> (Mads, 5/5/25, p. 24)

Combining the different elements of the politics of belonging to adjacency and future imaginaries, ways in which resistance to displacement as expressed through innovation can be demonstrated. The actors and initiatives mentioned as part of this thesis all serve to illustrate how belonging has shaped the culture, environment, and imagination of Hirtshals; Linn from the Harbor administration, representing Workforce of the Future and Nordsøen Fri Fagskole, Mads from Surf & Natur, representing Hirtshals Vinterfestival, and Knud, representing continuity in how initiatives undertaken during his tenure have laid the foundation for the future of today, similarly to how the initiatives of today lay the foundation for the possible futures of tomorrow.

In each initiative, desires for what kind of Hirtshals the collectivity/ies wish to live in are embedded, anchored in this specific geographical space adjacent to the sea, but also in the actions undertaken in order to realize that wish.

> *"It has taken three festivals before people started saying 'it's actually not a bad idea at all, that you're not just serving beer, that you're actually doing a huge project integrating all these different things. Not bad at all."*
> (Mads, 5/5/25, p. 24)

The way in which both the festival and education programs serve to resist displacement are thus by engaging with the various dimensions of belonging, actively incorporating aspects of contesting and (re)claiming what it means to belong, and presenting alternatives of what it *could* mean. Practically, this involves actively thinking with and facilitating cross-sector/actor collaborations, changing up established (technical) processes in order to both raise awareness of perceived problems facing the community, and efforts to address them:

> *"The biggest roadblock for the green transition in Denmark is a lack of qualified labor, so that's why we need Workforce of the Future, and started our school, and why we do all these projects, because we need to go out there and explain that we have just as much need for, and it's just as important to be a sorter at the fish terminal, a welder, a plumber, or a garbage collector."*
> (Linn, 27/11/24, p. 16)

The physical, institutional, and cultural distancing from maritime occupations (and other skilled trades) is one of the things that have been specifically identified as contributing to the problem of peripheralization – even within the community – and why the harbor administration decided to participate in projects concerning specifically the education of the area's youth:

> *"When we started these projects [the response] was a little bit like 'What? Why? Well, I guess at least the kids get a day trip out of it.' Now, with one of our projects, 'Workforce of the Future', I was really surprised at how little the locals here – at the school – actually knew about the harbor."*
> (Linn, 27/11/24, p. 4)

Working with processes of assimilation as a way to transcend social and economic locations by integrating the skilled trades into formal education contexts, but only partially, it becomes possible to leverage the higher status afforded the latter to elevate the former; appealing to adjacency to an established norm in order to garner acceptance for a new one. Social innovation initiatives can thus be conceptualized as a form of adjacency claim, where partial assimilation into a more advantageous social location can be an avenue through which to build legitimacy and influence through consciously manipulating the politics of belonging.

The North Sea Free Trade School, Workforce of the Future, and the other educational programs under the Youth Guarantee, might thus superficially appear simply as tools of recruitment into maritime occupations. However, the very deliberate focus on addressing negative stereotypes about marine occupations – and the people who undertake them – by reconfiguring the technical processes through which one starts an education, make them sites where (un)desired futures are made visible and actionable.

> *"When we talk politics, the topics are often very heavy, but when we're talking schools and kids and education,* ***that*** *we can grasp. So over the last two years, I don't know how many government officials we have had visit up here, but it's a lot. So it's about creating different scenes where we can spread our message. [...] We can't create growth without education and research."*
> (Linn, 27/11/24, p. 5)

The importance of being able to identify and verbalize the displacing forces at play in coastal communities like Hirtshals can therefore not be understated – especially as a way of countering potential issues of epistemic violence – something Mads has also explicitly worked with in the context of the winter festival:

> *"If you say something aloud, what you want, and you then do it – there's something exciting about that – and when people actually begin taking you seriously as you start embodying what you're saying. [...] 'We have this season called winter, and no one can do anything, and you can't make money, and it doesn't make*

> *sense'. Then I say: can't we just emphasize the things we **love** about being here, emphasize the **community**, and emphasize that we **miss** each other? [...] We have to move around our locations, and we have to change people's behavior, and our way of thinking about what a winter can be."*
> (Mads, 5/5/25, p. 2)

Here, the motivation for the winter festival as an innovation initiative is also an expression of a diagnosed problem. Like many rural coastal areas, social, artistic, recreational, and economic activities in Hirtshals are heavily tied to tourism – especially in the summer months – which can cause a variety of issues for the local community. A sudden influx of people to the area over a relatively short period of time places tremendous pressure on the local environment, infrastructure, and resource use, and risks bringing about (unwanted) changes to local culture and spaces in order to meet tourist expectations an demands (Lal Mukherjee 2023), which is something also observed in Hirtshals:

> *"someone wanted to build some high-rises and such here, which people opposed, and they say 'oh, we should just be grateful there's at least **somebody** wants anything to do with Hirtshals – we should be so happy, so happy.' Why? Should we really be for sale for whatever?"*
> (Mads, 5/5/25, p. 14)

> *"Like drinking culture from the Norway ferry just destroying the entire town, you know? 'But it's so nice that we get so much money out of it!' – more dynamics like that would sadden me. [...] Either you go all in on 'death and destruction', or you can think 'we need to solve this'. None of that 'we might not be able to', or 'we're not allowed to', because we **have** to find a solution."*
> (Mads, 5/5/25, p. 20)

The choice to make a festival during winter – by and for the local community – is thus also an expression of resistance against narratives of the 'tourist town' and the pressures exerted upon the inhabitants of Hirtshals by tourist activity. Not only is the festival designed to be a celebration of Hirtshals' culture, it is also designed specifically to serve as an innovation hub, facilitating intergenerational knowledge transfer as a way to strengthen the exchange of ideas, skills, and culture, as well as improving the general well-being, within the community:

> *"The festival is pretty complex because it operates on several layers. I want both learning processes with institutions and schools [...] there is a massive human exchange between children, adults – my age – and elders. Elders have a lot of experience, and they benefit greatly from being around children, and children, they bring something very straightforward, and then my age, well, we can do some work but also might have some experience, and I can learn something from both directions."*
> (Mads, 5/5/25, p. 12)

Creating new networks of relations, of passing knowledge and expertise between generations, institutions, and professions in Hirtshals, are therefore a deliberate consideration across all the innovation initiatives; synergic systems not only facilitating the development of the blue-green economy as a way to bring economic activity to the area, but also manipulating the politics of belonging as a form of resistance against undesirable developments of both economy *and* culture. Having close integration between economic operators, public institutions, and local inhabitants are therefore a way of turning future visions into sociotechnical imaginaries, actively embedding certain political and ethical values into the material and immaterial aspects making up Hirtshals and its community, and shaping future innovation efforts.

Discussion

Towards a Theory of Innovation as Resistance

Unifying adjacency claims, the politics of belonging, sociotechnical imaginaries, and innovation in the context of Hirthals, I have illustrated how social innovations are both diagnosing and imagining a cure to the problems of displacement and peripheralization in the blue-green economy. How through the tensions of contestation and multiplicity, *resistance* is articulated through sociotechnical imaginaries embedded into places, things, and people, across time – of which belonging is a crucial dimension – to the creation of different futures. These innovation efforts thus utilize claims of adjacency; to ocean, to land, to culture, to community, and to the self, leveraging emerging technologies and technical processes to build influence and exercise agency in broader sociopolitical contexts to counter narratives of ”rural flight” as simply a natural consequence of societal progress.

While unfolding a specific technological artifact has not been a key theme for this thesis, the transformation of *technical processes* have; as illustrated in the development of a novel integration of traditionally informal systems of apprenticeship and education for marine occupations into formal schooling systems, as well as reconfiguring local identity and community belonging through social innovation initiatives, specifically for the purpose of countering rural flight. Though I cannot prove that the social innovation initiatives around education in Hirtshals have informed the recent turn in national educational policy towards incorporating more practical elements – such as practical internship periods in collaboration with economic operators – the hybrid approach is nonetheless consistent with recently implemented national education policies (Uddannelses- og Forskningsministeriet 2024). That could, perhaps, be subject for further study; as mentioned by Linn from the harbor administration, Hirtshals frequently hosts political figures and leverage their own relatively strong position as the strongest economic developer in Hjørring Municipality to spread their message. Therefore, examining how – if at all – how ”grabbing back” education as a form of resistance on a national political scale could be a potential avenue to pursue in order to ”tie” this very locally anchored form of adjacency claims back into the state level analysis of adjacency claims.

Expanding the concept of adjacency away from the dominant geographical legalistic interpretation – as discussed in section 3.1 – to include the affective, ethical, and political dimensions of belonging, has thus provided new possibilities for utilizing the concept in the study of coastal communities and spatial justice. However, given that the utility and fundamental legitimacy of adjacency claims continues to be a contested matter in both scholarly and policymaking contexts, it begs the question of whether aligning with and reworking this theoretical concept actually helps clarify its analytical value or achieves the opposite. I worked with only *one* of the dimensions proposed by Ounanian and Howells 2024 – the others being proximity, occupancy, and mobility – for this thesis, and it is clear that a much more extensive study into each dimension, and their interactions with each other, will be required to answer that question. Belonging, and identity as part of it, is a concept with a broad array of meanings and interpretations in anthropological and related scholarship alone, which I – from my own preliminary research into each as part of settling for one to focus on – can only confirm also applies to the other proposed dimensions.

However, the openness of interpretation as presented in the original research agenda also leaves room for imagination – innovation – which I have sought to illustrate as a form of meta narrative throughout this thesis. Through analyzing the specific cases in Hirtshals with my own interpretation of what belonging means in the context of coastal adjacency, I have not only experimented with the theoretical framework upon the cases, but the cases have also served as a test of scientific validity of my analysis in return:

> Me: *"[Demonstrating the connection] is a lot of what my thesis is about. About how it isn't **just** fisheries, it isn't **just** the ocean, it isn't **just** the coast, and it isn't **just** the local community, as each their own thing running their own show, but about how we are **also** the ocean, we are **also** the coast, we are **also** the harbor, and we are **also** the local community. My hypothesis being; recognizing and using being part of a larger network and collectivity in some way helps create success."*
>
> Linn: *"That is exactly right. And, you know what, what you're saying there is exactly what I go around telling people at conferences, and it doesn't matter if it's about aquaculture, or energy, or fisheries, or logistics and transportation. What you're saying there is our everyday, and I see the success we have from working in this way."*
> (Linn, 27/11/24, p. 25)

I made a point of discussing my analytical standpoint with my key persons as part of our interactions specifically because I was just as much testing its scholarly application for myself, as I was its application upon my field of study; directly engaging my hypothesis with actors in the field as a process of falsification and validation. Now, I was fortunate that my preliminary analytical insights were largely corroborated by my participants, though they did also bring my attention to contexts in which leveraging belonging may not be fruitful:

> *"To think we can get large enterprises to move to Hirtshals, if they're rooted here in some way, that won't happen. It will only happen if the enterprise sees a benefit in doing so. That is what happened with Fjordline and the ferries [following the establishment of the highway connection to Hirtshals]; they could see a benefit. It's not because they especially care about us. It's just business."*
> (Knud, 21/10/24, p. 19)

Another relevant avenue of future research is thus also in which cases belonging and adjacency as expressed through innovation has power as a form of resistance and in which they do not. Gaining insight into where belonging is effectively leveraged can both help clarify the utility of it as an analytical concept, and as a practical consideration to aid social innovation efforts.

The Case Study

The empirical material from which my results are drawn is explicitly qualitative in nature, generated with only a handful of participants, and its generalizability may thus be limited. However, the knowledge gained from case studies – which are by definition limited to examining specific phenomena in specific contexts – is no less scientific than that which is "rules-based", that is to say, easily measurable and reproducible.

As put by Bent Flyvbjerg in his defense of the case study; *"That knowledge cannot be formally generalized does not mean that it cannot enter into the collective process of knowledge accumulation in a given field or in a society."* (Flyvbjerg 2006, p. 227). When discussing innovation in particular, generalization has also been identified as a frequent point of failure in terms of implementation; that in order to understand the dynamics of innovation, the concept should not be "essentialized", that is, separated from its specific cultural context (Pfotenhauer and Jasanoff 2017). By basing my analysis primarily on interactions with actors who are directly involved in the innovation initiatives I am studying, I have sought not to create an abstract result which can easily be cut away and examined in isolation, but rather to illustrate the point that it is by working *within* the context of peripheralized communities, and drawing upon the knowledge and resources already present in the relations between people and spaces, that the seeds of innovation and resistance are nurtured. What those seeds look like and how they are nurtured will invariably vary, so the purpose of this thesis has therefore been to conduct a theoretical and methodological experiment over how one can understand the relations between people, place, and social innovation through the lens of belonging, not the creation of a generally applicable "model of innovation".

My perspective into what one might consider the "whole" of Hirtshals is *partial*, as are the perspectives of my participants, but instead of this limitation being a point of failure, I consider it a reminder to maintain a form of scientific humility; *"As the area of light increases so does the circumference of darkness"* is a saying accredited to Albert Einstein (Rosenberg

1971, p. 199), referring to the fact that while the pursuit of knowledge expands our understanding of what we *do* know, so does it show us that there is far more that we *do not*. This does not make the pursuit of knowledge meaningless, rather it is an encouragement to remain curious; in my own case, I reflect on what I could have gained from involving different actors, or conducting my fieldwork at different times and different locations. I could have engaged with the youth of Hirtshals directly, I could have conducted my fieldwork in the Free Trades School, participated in the planning process of the winter festival, or spoken directly with the enterprises on the harborfront on the success of the initiatives – and what belonging means to them – from a business standpoint. Had I pursued these ideas, they would have invariably led to different results, which only goes to show that the process of creating and gaining knowledge is iterative, and that exercising the ability to imagine different futures is indeed as important to science as it is to innovation.

Conclusion

This thesis set out to explore how imaginaries of the future, articulated through belonging as a facet of adjacency, shape locally anchored social innovation efforts in the blue-green economy within Danish coastal communities. Through ethnographic fieldwork in Hirtshals, this thesis has demonstrated how local actors utilize innovation not simply for economic development, but as a form of resistance; a way of ”grabbing back” control, meaning, and influence in peripheralized communities. The specific initiatives examined – The North Sea Free Trade School, Workforce of the Future, and Hirtshals Winter Festival – illustrate how belonging is not a passive or personal affective condition, but one which is actively cultivated and reproduced in relationship to place, people, and purpose. These projects reveal how social innovation becomes an avenue through which communities resist narratives of decline and devaluation. They reconfigure technical processes to create new pathways for education, employment, and cultural connection, while also (re)asserting the legitimacy of local identities within broader societal, technological, and economic transitions.

By expanding the concept of adjacency beyond geographic proximity and state-centric perspective by including belonging – as simply one dimension of several – this thesis contributes to a more nuanced understanding of how coastal communities assert their rights to shape their futures. These adjacency claims – expressed through and interplay of social, cultural, and economic initiatives – serve both diagnostic and reparative functions. They diagnose the socio-economic and political pressures that lead to marginalization, while also proposing and enacting locally grounded (potential) solutions. Importantly, this thesis highlights how resistance is not about rejecting change, but rather reconfiguring it; the communities of Hirtshals are not opposed to the potential opportunities presented through blue-green economy initiatives, rather there is a strong insistence that these processes reflect and include their knowledge, values, and aspirations. This insistence manifests through the way the examined initiatives (re)link coastal heritage to educational pathways, community to celebration, and sustainability to strategy.

In conclusion, the blue-green economy is not simply a technical or economic challenge facing Danish coastal communities, it is a cultural and political one where futures are contested, negotiated, and enacted. The case of Hirtshals shows that when communities (re)claim space to imagine and innovate on their own terms, resistance can become a generative force – not simply for survival and preservation, but for renewal.

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